

UNITED STATES DEPARTMENT OF THE INTERIOR

RAY LYMAN WILBUR, Secretary

OFFICE OF EDUCATION

WILLIAM JOHN COOPER, Commissioner

BULLETIN, 1932, No. 16

BIBLIOGRAPHY OF RESEARCH STUDIES
IN EDUCATION, 1930-1931

PREPARED IN THE LIBRARY DIVISION
OFFICE OF EDUCATION

By EDITH A. WRIGHT

WITH THE COOPERATION OF
RUTH A. GRAY



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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., October, 1932.

SIR: Herewith is a manuscript entitled "Bibliography of Research Studies in Education: 1930-1931." This study records those researches which were in progress up to a year ago. It has been prepared as rapidly as our office could get in the facts.

I think it is a great advantage to people who are studying in various universities to be able to find out whether the subject on which they are working has had attention already, and, if so, where it has had attention.

I recommend, therefore, that this be published as a bulletin of the Office of Education.

Respectfully submitted.

WM. JOHN COOPER,
Commissioner.

The SECRETARY OF THE INTERIOR.

INTRODUCTORY NOTE

SCOPE OF BIBLIOGRAPHY

In presenting this fifth¹ annual compilation of research studies in education, the United States Office of Education continues its service of furnishing graduate students and others engaged in educational research an annual list of studies undertaken by universities and colleges, State and city school systems, and organizations known to be engaged in the study of special phases of education.

The present bibliography covers the period from September 1930 to August 1931, including studies completed up to September 1, 1931. In cases where exact information was not available concerning the date of completion, we have doubtless included a few studies completed after that date. The five bibliographies published by this office, together with lists of masters' and doctors' theses in education issued from 1917 to 1927, by the Bureau of Educational Research of the University of Illinois, under the direction of Dr. Walter S. Monroe, constitute a fairly complete list of masters' and doctors' theses in education for the past 15 years, and should prove useful in any research work in education about to be undertaken.

There are fewer studies by 286 listed in the accompanying bibliography than in the one for 1929-30. This, however, does not indicate in any way that research in education is becoming less popular. On the contrary, research in this field is growing at such a rate that it was thought advisable to limit the bibliography in certain respects. In the first place, we have included only those periodical references which have been reported to us. Most of the references to research studies in magazines are well taken care of in the Education Index, with which all educators are doubtless familiar. It was, therefore, considered inadvisable for us to continue the indexing of such material for the Bibliography of Research Studies in Education. However, we have endeavored to list all research studies in education reported to us, whether in magazine form or otherwise. The omission of much of the periodical material reduces this list considerably. We have also made an effort to limit the bibliography by omitting all studies which are merely the re-

¹ Earlier bulletins in this series are: 1926-27, Bulletin, 1928, No. 22; 1927-28, Bulletin, 1929, No. 26; 1928-29, Bulletin, 1930, No. 28; and 1929-30, Bulletin, 1931, No. 12.

ports of educational or psychological testing. Due to a change in the time limit, the Bibliography for 1929-30 covered 14 months, or 2 months more than the time covered by the present bibliography. Notwithstanding these limitations, the accompanying list is only 286 entries less than the previous issue, which shows very conclusively the necessity for such limitations as are practicable.

As previously stated, this list is for the school year 1930-31, up to September 1, 1931. A few lists of abstracts published by universities have been included, even though they bear a later date, as they contain, for the most part, abstracts of theses which are included in this volume. Information concerning the publisher, date, paging, etc., of each study is given so far as it was reported to us. However, some of the reports received were indefinite and incomplete. Annotations for many of the studies were made in this office; others were furnished by the persons reporting the studies. Some of the investigations in the field of play and recreation were reported by the Department of Research of the Russell Sage Foundation.

The material here assembled has been classified and indexed in the library division of the Office of Education. Contrary to the practice followed in previous volumes, the subject and author indexes are in two separate lists. While the subject index is not detailed, it should prove adequate for use with a list such as the accompanying one, which, besides being classified, contains at the end of many of the sections cross references to other material on the same or allied subjects. The index of institutions and organizations represented in the volume indicates the extent to which the various agencies are reporting.

Many of the studies listed are available for consultation in various public and institutional libraries. Printed material here mentioned may ordinarily be obtained from the publishers. The Office of Education can not supply the publications listed, other than those expressly designated as its own. Unpublished studies, which, to a great extent, are masters' and doctors' theses, are indicated by the abbreviation ms. after the number of pages, signifying that the study is in typewritten or mimeographed form. An asterisk (*) indicates those theses which are on file in the library of the Office of Education. They may be borrowed through the interlibrary loan system for a limited time. Theses not on file in this office may possibly be secured through an interlibrary loan from the institution under whose supervision the study was made.

In the Bibliography of Research Studies in Education for 1929-30, attention was called to the growing tendency of universities to issue abstracts of theses in education prepared under their supervision. We are glad to note that this practice is being inaugurated

by other institutions. These abstracts will no doubt be of great service to students of education in cases where the complete theses are not readily accessible. In the section in the present bibliography devoted to educational research will be found references to a number of these lists of abstracts issued by institutions. We trust that all universities publishing such lists will forward them promptly to this office in order that they may be included in our current bibliographies.

ANALYSIS OF SUBJECT MATTER

There are 4,365 studies listed herein, from 343 institutions and organizations. Of this number 2,877, or about 65 per cent, are masters' and doctors' theses. This is an increase of 295 over the year 1929-30; 231 more masters' theses and 64 more doctors' theses. While we feel that the list is fairly complete in regard to masters' and doctors' theses for the period covered, still we realize that there are some university departments doing graduate work in the field of pedagogy with which we have not made contact. It is hoped that as the bibliography becomes more widely known these departments will voluntarily report such studies as should be included in the list.

As this is the fifth compilation of research studies in education to be prepared by the Office of Education, it was thought desirable to include in this issue the following tables showing certain trends during the 5-year period. Table 1 gives the number of masters' and doctors' theses reported for each year.

TABLE 1.—Masters' and doctors' theses reported from 1926-27 to 1930-31

Year	Doctors' theses	Masters' theses	Total
1	2	3	4
1926-27	217	662	879
1927-28	167	1,367	1,534
1928-29	250	1,389	1,539
1929-30	323	2,250	2,573
1930-31	387	2,490	2,877

Includes 14 months.

From a total of 879 masters' and doctors' theses reported in 1926-27, the number has increased to 2,877 in 1930-31; the number of doctors' theses reported in 1926-7 was 217 as compared with 387 reported in 1930-31. Nearly four times as many masters' theses were reported in 1930-31 as were reported in 1926-27.

Table 2 shows the number of research studies in education reported to the Office of Education for each year arranged by subjects. As in the volume for last year, the subjects have been com-

bined for this table and reduced to 25 main topics. Due to the fact that in a classified bibliography of this type many entries might easily be grouped under two or more topics, the number of studies attributed to each specific subject does not represent all studies listed in the field. For instance, the number listed under the various levels,

TABLE 2.—Number of research studies in

Subject	1925-27					1927-28				
	Doctors ¹	Masters ²	Miscellaneous	Total	Approximate per cent	Doctors ¹	Masters ²	Miscellaneous	Total	Approximate per cent
1	2	3	4	5	6	7	8	9	10	11
1 Educational history and biography.....	18	65	3	86	5.50	6	33	7	46	1.91
2 Current educational conditions— United States.....	1	16	24	41	2.66		21	32	64	2.66
3 Current educational conditions— Foreign and international.....	11	8	2	21	1.36	5	13	11	29	1.21
4 Educational theory, special meth- ods.....	4	11	13	28	1.82	3	39	16	61	2.12
5 Educational psychology, child study.....	12	9	8	29	1.88	15	35	46	96	3.90
6 Testing and research.....	12	33	56	101	6.56		10	36	65	4.66
7 Special subjects of curriculum.....	37	143	119	399	10.42	29	326	158	553	23.14
8 Elementary education, including preschool.....	9	13	15	37	2.40	6	18	26	50	2.04
9 Secondary education.....	13	65	60	138	8.96	7	81	55	143	5.95
10 Teacher training and status.....	21	35	39	95	6.12	29	53	68	200	8.32
11 Higher education.....	8	25	42	75	4.55	6	27	44	77	3.20
12 School administration.....	14	33	58	105	6.82	11	96	45	152	6.23
13 School management.....	9	30	38	77	5.00	6	76	57	139	5.70
14 School buildings.....	5	6	2	13	.84		17	20	37	1.54
15 School health and physical educa- tion.....	5	6	17	28	1.82	8	51	38	97	4.04
16 Play, social aspects, child welfare.....	9	12	8	29	1.88	4	32	23	59	2.46
17 Rural education.....	9	26	14	49	3.12	3	38	16	57	2.37
18 Moral and religious education.....	10	25	10	45	2.92	13	81	21	114	4.75
19 Guidance.....	2	11	6	19	1.23	2	27	11	40	1.67
20 Vocational training, including agri- cultural education, home eco- nomics, etc.....	3	58	34	95	6.17	3	75	40	118	4.91
21 Civic and military education.....		6	3	9	.58	2	9	5	16	.66
22 Education of women.....		5	3	8	.52	1	18	3	22	.92
23 Education of racial groups.....	2	13	7	22	1.43	1	9	5	15	.62
24 Exceptional children.....	2	6	13	21	1.36	1	30	17	48	1.90
25 Education extension and libraries.....	1	8	5	14	.91	4	43	19	66	2.75
26 United States Office of Education publications.....			62	62	4.03	(5)				
27 Studies received too late for inclu- sion in classified list.....										
28 Total.....	217	662	661	1,540	100	167	1,367	869	2,403	100

¹ Includes 14 months.

² Includes testing in special subjects.

³ Does not include testing in special subjects.

elementary, secondary, and higher, would be considerably augmented if all studies in the various subjects of the curriculum were transferred to the levels to which they belong. This should be kept in mind when examining Table 2.

The special subjects of the curriculum still continue to hold the greatest interest, if we are to judge by the number of studies in the field. Ten hundred and fifty-six, or about one-fourth of the total number of studies listed in the Bibliography for 1930-1931 are classi-

fied under this heading. This is not surprising in these times when conditions are changing so rapidly, necessitating constant revision of the courses of study to meet the changing needs. An encouraging fact brought out by the table is the increasing interest in education extension and libraries including, of course, adult education. Nearly

various fields of education, 1926-27 to 1930-31

1926-27					1927-28					1928-29					1929-30					1930-31					
Doctors'	Masters'	Miscellaneous	Total	Approximate per cent	Doctors'	Masters'	Miscellaneous	Total	Approximate per cent	Doctors'	Masters'	Miscellaneous	Total	Approximate per cent	Doctors'	Masters'	Miscellaneous	Total	Approximate per cent	Doctors'	Masters'	Miscellaneous	Total	Approximate per cent	
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
10	48	10	68	2.19	5	52	15	72	1.50	20	71	13	104	2.38	1										
2	13	45	60	1.96	2	27	38	67	1.50	3	23	60	86	1.96	2										
7	16	13	36	1.18	12	35	12	59	1.25	26	53	16	95	2.18	3										
8	18	31	57	1.86	12	70	75	157	3.50	10	58	35	103	2.36	4										
18	33	74	125	4.08	19	49	92	160	3.50	29	46	39	114	2.61	5										
10	29	145	184	6.00	10	39	165	214	4.50	20	57	147	224	5.13	6										
60	383	315	713	23.26	59	606	408	1,088	23.00	73	710	273	1,056	24.20	7										
5	25	25	55	1.79	4	22	33	59	1.25	3	30	29	55	1.23	8										
8	43	53	134	4.37	12	92	81	183	4.00	12	95	70	177	4.06	9										
15	102	176	294	9.00	37	145	211	393	8.50	34	175	124	353	8.00	10										
5	25	61	91	2.97	19	37	77	133	2.75	23	48	56	127	2.91	11										
17	121	79	217	7.08	30	133	131	298	6.25	20	210	128	368	8.09	12										
14	78	123	220	7.15	12	165	208	383	8.25	8	128	146	282	6.46	13										
4	23	49	67	2.19	4	30	45	83	1.75	4	30	31	64	1.47	14										
6	60	54	120	3.81	8	102	69	200	4.25	8	134	68	211	4.84	15										
4	25	19	48	1.57	8	55	32	95	2.00	8	57	16	81	1.82	16										
3	35	22	60	1.95	2	60	25	87	1.75	8	76	24	118	2.70	17										
15	53	23	90	2.94	15	110	42	167	3.50	18	76	24	118	2.70	18										
4	18	35	57	1.86	3	48	49	100	2.00	6	73	41	119	2.73	19										
10	93	51	154	5.02	19	208	95	322	7.00	15	221	87	323	7.40	20										
9	9	5	14	.46	13	7	28	39	.50	(5)					21										
1	9	11	21	.69	4	23	12	39	.75	(0)					22										
13	15	25	40	1.23	10	32	22	64	1.50	7	49	10	66	1.51	23										
8	17	32	57	1.86	10	47	52	109	2.50	9	63	39	111	2.54	24										
16	44	35	96	3.10	7	60	56	133	2.75	8	76	45	133	3.08	25										

250	1,280	1,526	3,055	100	323	2,259	2,069	4,651	100	387	2,400	1,436	4,365	100	26										

¹ Includes references to educational sociology which were classified separately.
² Indicates sections which have been eliminated from the 1930-31 list and included under other subjects.
³ U. S. Office of Education publications are not classified separately.

ten times as many studies were reported in this group in 1930-31 as in 1926-27. Guidance has shown a consistent gain both in the number of studies and in the percentage of the total number; 19 studies, or 1.23 per cent, were listed in 1926-27 against 119, or 2.73 per cent, in 1930-31. In moral and religious education the number of studies was 118 in 1930-31 and 45 in 1926-27; however, the percentage in this group was lowest in 1930-31, being 2.70; the highest, 4.75 per cent was in 1927-28. The increase in the field of school administration

in 1930-31 is partially accounted for by the fact that studies in rural school administration have been included under this heading rather than in a separate section on rural education as was the practice in earlier volumes. Foreign education and its international aspects shows a noticeable increase over the 5-year period, with 21 studies, or 1.36 per cent, reported in 1926-27 against 95 or 2.18 per cent, in 1930-31. A consistent gain is also seen in the field of health and physical education. The percentages of studies in secondary education and the training and professional status of teachers have decreased during the period covered, secondary education decreasing from 8.96 per cent in 1926-27, to 4.06 per cent in 1930-31. Likewise, the percentage of studies reported in training and professional status of teachers has decreased during the last three years from 9.60 in 1928-29 to 8.09 in 1930-31. Possibly the national surveys in these two fields which have been carried on during the last few years have had a part in checking to a certain extent activities in these subjects.

ABBREVIATIONS

Realizing that considerable space might be saved by the use of abbreviations and the cost of publication thereby reduced, we have decided, in the case of masters' and doctors' theses, to abbreviate the name of the institution under whose supervision the study was made. For instance, George Peabody College for Teachers, Nashville, Tenn., which ordinarily would be spelled out nearly 200 times, has been abbreviated to the one word "Peabody." Thus a master's thesis completed at that institution would be designated "Master's, 1930. Peabody." Similarly "Master's, 1930. T. C., Col. Univ." designates a master's thesis completed in 1930 at Teachers College, Columbia University, New York, N. Y. The list of abbreviations, with the name and address of the institution to which each refers, is given below. We hope that these abbreviations will not prove confusing to persons using the list.

ABBREVIATIONS	INSTITUTIONS
Agr. and Tech. Coll., Greensboro, N. C.-----	Agricultural and technical college, Greensboro, N. C.
Ala. Poly. Inst.-----	Alabama polytechnic institute, Auburn, Ala
Arizona-----	University of Arizona, Tucson, Ariz.
Arkansas-----	University of Arkansas, Fayetteville, Ark.
Ark. St. T. C.-----	Arkansas State teachers college, Conway, Ark.
Boston Coll.-----	Boston college, Boston, Mass.
Boston Univ.-----	Boston university, Boston, Mass.
Brigham Young-----	Brigham Young university, Provo, Utah.

ABBREVIATIONS

INSTITUTIONS

Brookings	Brookings institution, Washington, D. C.
Brown	Brown university, Providence, R. I.
Bucknell	Bucknell university, Lewisburg, Pa.
California	University of California, Berkeley, Calif.
Catholic Univ.	Catholic university of America, Washington, D. C.
Chicago	University of Chicago, Chicago, Ill.
Cincinnati	University of Cincinnati, Cincinnati, Ohio.
Claremont	Claremont colleges, Claremont, Calif.
Clark	Clark university, Worcester, Mass.
Coll. of the City of N. Y.	College of the City of New York, New York, N. Y.
Colorado	University of Colorado, Boulder, Colo.
Colo. St. T. C.	Colorado State teachers college, Greeley, Colo.
Columbia	Columbia university, New York, N. Y.
Cornell	Cornell university, Ithaca, N. Y.
Creighton	Creighton university, Omaha, Nebr.
Denver ¹	University of Denver, Denver, Colo.
DePauw	DePauw university, Greencastle, Ind.
Duke	Duke university, Durham, N. C.
East. Ill. St. T. C.	Eastern Illinois State teachers college, Charleston, Ill.
Florida	University of Florida, Gainesville, Fla.
Fla. St. Coll. for Women	Florida State college for women, Tallahassee, Fla.
Fordham	Fordham university, New York, N. Y.
George Washington	George Washington university, Washington, D. C.
Georgia	University of Georgia, Athens, Ga.
Harvard	Harvard university, Cambridge, Mass.
Hawaii	University of Hawaii, Honolulu, Hawaii.
Hillsdale	Hillsdale college, Hillsdale, Mich.
Illinois	University of Illinois, Urbana, Ill.
Indiana	Indiana university, Bloomington, Ind.
Ind. St. T. C.	Indiana State teachers college, Terre Haute, Ind.
Int. Y. M. C. A. Coll.	International young men's Christian association college, Springfield, Mass.
Iowa	University of Iowa, Iowa City, Iowa.
Iowa St. Coll.	Iowa State College, Ames, Iowa.
Iowa St. T. C.	Iowa State teachers college, Cedar Falls, Iowa.
Johns Hopkins	Johns Hopkins university, Baltimore, Md.
Kansas	University of Kansas, Lawrence, Kans.
Kans. St. Coll.	Kansas State college of agriculture and applied science, Manhattan, Kans.
Kans. St. T. C., Emporia	Kansas State teachers college, Emporia, Kans.
Kans. St. T. C., Hays	Kansas State teachers college, Hays, Kans.

¹ University of Denver theses are available for loan only when two copies are on file in the University library.

ABBREVIATIONS	INSTITUTIONS
Kans. St. T. C., Pittsburg.....	Kansas State teachers college, Pittsburg, Kans.
Kent St. Nor. Coll.....	Kent State normal college, Kent, Ohio.
Kentucky.....	University of Kentucky, Louisville, Ky.
Lafayette.....	Lafayette college, Easton, Pa.
Lehigh.....	Lehigh university, Bethlehem, Pa.
Lynchburg.....	Lynchburg college, Lynchburg, Va.
Md. St. Nor. Sch., Frostburg.....	Maryland State normal school, Frostburg, Md.
Md. St. Nor. Sch., Towson.....	Maryland State normal school, Towson, Md.
Marywood.....	Marywood college, Scranton, Pa.
Mercer.....	Mercer university, Macon, Ga.
Michigan.....	University of Michigan, Ann Arbor, Mich.
Mich. St. Nor. Coll.....	Michigan State normal college, Ypsilanti, Mich.
Mills.....	Mills college, Mills College, Calif.
Minnesota.....	University of Minnesota, Minneapolis, Minn.
Minn. St. T. C.....	Minnesota State teachers college, Moorhead, Minn.
Mississippi.....	University of Mississippi, University, Miss.
Missouri.....	University of Missouri, Columbia, Mo.
Montana.....	State university of Montana, Missoula, Mont.
Mont. St. Nor. Coll.....	Montana State normal college, Dillon, Mont.
Muhlenberg.....	Muhlenberg college, Allentown, Pa.
Nebraska.....	University of Nebraska, Lincoln, Nebr.
N. J. St. T. C.....	New Jersey State teachers college, Trenton, N. J.
New Mexico.....	University of New Mexico, Albuquerque, N. M.
New York.....	New York university, New York, N. Y.
N. Y. St. Coll. for Teach.....	New York State college for teachers, Albany, N. Y.
N. Y. St. T. C.....	New York State teachers college, Buffalo, N. Y.
North Carolina.....	University of North Carolina, Chapel Hill, N. C.
North Dakota.....	University of North Dakota, University, N. Dak.
N. Dak. Agr. Coll.....	North Dakota agricultural college, State college, N. Dak.
Northeast Mo. St. T. C.....	Northeast Missouri State teachers college, Kirksville, Mo.
Northeastern St. T. C.....	Northeastern State teachers college, Tallahquah, Okla.
Northwestern.....	Northwestern university, Evanston, Ill.
Notre Dame.....	University of Notre Dame, Notre Dame, Ind.

ABBREVIATIONS

INSTITUTIONS

Oberlin.....	Oberlin college, Oberlin, Ohio.
Occidental.....	Occidental college, Los Angeles, Calif.
Ohio.....	Ohio State university, Columbus, Ohio.
Ohio Wesleyan.....	Ohio Wesleyan university, Delaware, Ohio.
Oklahoma.....	University of Oklahoma, Norman, Okla.
Okla. A. and M. Coll.....	Oklahoma agricultural and mechanical college, Stillwater, Okla.
Oregon.....	University of Oregon, Eugene, Oreg.
Oreg. St. Agr. Coll.....	Oregon State agricultural college, Corvallis, Ore.
Peabody.....	George Peabody college for teachers, Nashville, Tenn.
Pennsylvania.....	University of Pennsylvania, Philadelphia, Pa.
Penn. State.....	Pennsylvania State college, State College Pa.
Pittsburgh.....	University of Pittsburgh, Pittsburgh, Pa.
Purdue.....	Purdue university, La Fayette, Ind.
Queens.....	Queens college, Charlotte, N. C.
Reed.....	Reed college, Portland, Oreg.
Rochester.....	University of Rochester, Rochester, N. Y.
Rutgers.....	Rutgers university, New Brunswick, N. J.
St. Louis.....	St. Louis university, St. Louis, Mo.
Smith.....	Smith college, Northampton, Mass.
South Carolina.....	University of South Carolina, Columbia, S. C.
South Dakota.....	University of South Dakota, Vermillion, S. Dak.
S. Dak. St. Coll.....	South Dakota State college of agriculture and mechanic arts, Brookings, S. Dak.
Southeastern St. T. C.....	Southeastern State teachers college, Durant, Okla.
Southern California.....	University of Southern California, Los Angeles, Calif.
South. St. T. C.....	Southern State teachers college, Springfield, S. Dak.
Southwestern.....	Southwestern university, Georgetown, Tex.
Stanford.....	Stanford university, Stanford University, Calif.
Syracuse.....	University of Syracuse, Syracuse, N. Y.
T. C., Col. Univ.....	Teachers college, Columbia university, New York, N. Y.
Temple.....	Temple university, Philadelphia, Pa.
Tennessee.....	University of Tennessee, Knoxville, Tenn.
Texas.....	University of Texas, Austin, Tex.
Texas Christian.....	Texas Christian university, Fort Worth, Tex.
Tulane.....	Tulane university, New Orleans, La.

ABBREVIATIONS

INSTITUTIONS

Utah.....	University of Utah, Salt Lake City, Utah.
Utah St. Agr. Coll.....	Utah State agricultural college, Logan, Utah.
Vanderbilt.....	Vanderbilt university, Nashville, Tenn.
Virginia.....	University of Virginia, Charlottesville, Va.
Va. Poly. Inst.....	Virginia polytechnic institute, Blacksburg, Va.
Washington.....	University of Washington, Seattle, Wash.
Wash. St. Nor. Sch.....	Washington State normal school, Bellingham, Wash.
Washington Univ.....	Washington university, St. Louis, Mo.
Wellesley.....	Wellesley college, Wellesley, Mass.
Wells.....	Wells college, Aurora, N. Y.
West. Carolina T. C.....	Western Carolina teachers college, Cullowhee, N. C.
West. Ky. T. C.....	Western Kentucky teachers college, Bowling Green, Ky.
Western Reserve.....	Western Reserve university, Cleveland, Ohio.
Wichita.....	University of Wichita, Wichita, Kans.
Wisconsin.....	University of Wisconsin, Madison, Wis.
Wyoming.....	University of Wyoming, Laramie, Wyo.
Yale.....	Yale university, New Haven, Conn. -

BIBLIOGRAPHY OF RESEARCH STUDIES IN EDUCATION, 1930-1931

(Entries for masters' and doctors' theses are abbreviated. "Master's, 1930, Peabody" signifies a master's thesis completed in 1930 at George Peabody College for Teachers, Nashville, Tenn. A complete list of abbreviations used for institutions may be found on pages XIV-XVIII.

EDUCATIONAL HISTORY

1. **Alexander, Maude.** Public lands of Tennessee. Master's [1930] Peabody.
A history of public lands in Tennessee. The section "School lands" gives information concerning the trouble arising between the school officials and settlers in regard to the lands reserved for the use of colleges and academies.
2. **Allen, Max P.** History of Indiana State teachers college. Master's, 1931. Ind. St. T. C. 125 p. ms.
Pre-history and history of Indiana State teachers college, showing the background of the school.
3. **Baer, Jacob Aaron.** Associational origins of the National education association. Doctor's, 1931. Johns Hopkins.
4. **Bannerman, Helen.** Education in the district now known as Jersey City. Doctor's, 1931. Fordham.
The study shows an unbroken chain from present conditions back to early settlements.
5. **Behrend, Elsa.** History of public schools of New Orleans since 1860. Master's, 1931. Tulane. 150 p. ms.
A narrative of the development of public schools of all grades, based largely on records of the city school board, heretofore unused for such a purpose.
6. **Bennett, Emerson Shell.** A history of Clifford Seminary, Union, S. C. Master's, 1931. South Carolina. 80 p. ms. (For abstract see no 717.)
The purpose of this history was to collect all material possible about this private school that operated from 1881 to 1917. Student activities, the aims of the school, charter, and board of visitors, statistical data, curricula and cost, special features, and several of the early commencements in full are given.
7. **Benson, Richard M.** A comparison of the growth and development trends as between public and private secondary schools in certain western States during the period from 1890 to 1920. Doctor's, 1931. Stanford. (For abstract see no. 717a.)
In a study of the growth of public and denominational secondary schools in 21 States west of the Mississippi, the author based his investigation on the hypotheses that the public secondary schools of the West have not only shown a superiority over the denominational secondary schools established and in the numbers enrolled, but they have received a greater amount of financial support as shown by the differences in income and in the amount expended for school plants as well; and that the secondary schools operated by the Protestant church in the West have not kept pace with the rapidly increasing Catholic secondary schools during the period studied.
- *8. **Bishop, Eugene Alfred.** The development of a state school system: New Hampshire. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 160 p. (Contributions to education, no. 391.)
This study shows the development of the system of school organization, administration, and support, with emphasis upon the causes and results of varying degrees of centraliza-

* Indicates theses on file in the United States Office of Education library.

tion and decentralization of power and authority in control. Data were secured from the laws of New Hampshire; annual reports of the state commissioner of education, secretary of the state board of education, and the state superintendent of public instruction from 1862 to 1926; reports of local town and district school officers; and miscellaneous histories, town chronicles, and papers.

9. **Boyden, Arthur C.** The development of education in Massachusetts, 1630-1930. Boston, 1930. 14 p. (Massachusetts. Department of education. Bulletin 1930, no. 5, whole no. 216.)

10. **Boyle, George Kimmot.** Oxford university and the Reformation. Master's, 1931. Catholic univ. 38 p. ms.

11. **Browdy, Philip.** Social factors in the development of the elementary school system of the City of New York, 1800-1850. Master's, 1931. Coll. of the City of N. Y. 93 p. ms.

Findings: Patriotism and the belief in the power of education to make loyal citizens; upper-class demand for education of the poor; and the development of a moneyed commercial class, were the main influences in the establishment of a free, secular, elementary school.

12. **Buckner, Ruth Queen.** Development of rural education in Texas from 1906 to 1930. Master's, 1931. Colorado.

13. **Burrell, Bernice Jeannette.** The opposition to and defense of the free public high school between 1865 and 1890. Master's, 1931. Ohio. 201 p. ms.

From contemporary educational literature a study was made of the opposition to the free public high school from 1865 to 1890. Causes, specific contests, location in time, place, and social groups, arguments used by both parties, and influence of this episode of high-school history were studied. Findings: The immediate causes of the opposition were found to have been the urge for economy, following the panic of 1873; the fear of the growing power of labor, blamed by some to overeducation of the masses; and the apprehension of private schools as the public school began to rival their previous leadership in secondary education. Underlying these direct causes was the opposition of aristocratic and democratic ideals. Among the forms which the opposition assumed were general newspaper and periodical discussions; local attempts to abolish the high school through action of the board of education or by popular vote; efforts to accomplish the enactment of legislative restrictions; the institution of legal proceedings in the courts; and the submission to constitutional conventions of proposals to limit free public education to elementary branches.

14. **Butts, Louis A.** Evolution of Belleville public schools. Master's, 1931. Washington univ.

15. **Byrns, Lois E. A.** Educational opportunity offered by the medieval church to the lower classes. Master's, 1931. Wisconsin.

*16. **Clark, Duncan Ellsworth.** Nationalism in education, revealed in congressional action to 1862. Doctor's, 1931. Stanford. 225 p. ms. (For abstract see no. 717a.)

The study deals with the relations of the federal government to education from the point of view of the movement for a national university; the general government as a vast landed proprietor; federal interest in education as shown in the support and encouragement of auxiliary agencies and private educational efforts; education as a leavening force in national development; and, the culmination of four-score years of effort to commit the federal government to an avowed educational program, in the passage of the Morrill Act of 1862.

17. **Cochran, Estella Kathryn.** The history, development, and evaluation of the Hagerstown high school, Hagerstown, Md. Master's, 1931. Virginia.

18. **Conlin, James W.** A history of Union Christian college, 1835-1924. Master's, 1931. Indiana.

19. **Cox, Floyd Milton.** The development of education in Randolph county. Master's, 1931. North Carolina. (For abstract see no. 710.)

The study gives a brief history of the county, its people, geographical condition, and economic life, as well as educational conditions from colonial times to the present.

20. **Coxe, Warren W.** Development of public school organization. Review of educational research, 1: 163-72, June 1931.

A study of the economic and social influences producing a grade system of school organization, together with analysis of criticisms of this organization. Findings: The grade organization was produced by conditions in the history of our country which no longer exist.

21. **Craine, M. K.** Changes in the American college curriculum between 1825-1850. Master's, 1931. Illinois. 155 p. (For abstract see no. 699.)

College catalogues for the years 1825 to 1850; histories of various colleges; contemporary magazines; U. S. Bureau of education "Circulars of information," and textbooks were the sources of the data for this study. Changes in the entrance requirements, and in the various departments, are considered. Departmental changes revealed by the study seem to be of a "very conservative character." A bibliography is included.

22. **Curl, Lottie Moring.** History of the Georgia State college for women. Master's [1931]. Peabody. 104 p. ms.

History of the college from the introduction of the bill to establish it, through the year 1930-31. Findings: The prejudice which existed in Georgia in 1889 against higher education and practical training for girls was largely overcome by the work of the Georgia State college for women, and colleges of similar type, founded after it to do work in which it was a pioneer. That its combination of normal, industrial, and collegiate training was suited to the educational needs of the State was demonstrated by the establishment of colleges modeled wholly or in part upon it.

23. **Doist, Mother Marie Pamela.** Educational work of the Society of the Sacred Heart of Jesus in lower Louisiana, 1821-1930. Master's, 1930. St. Louis. 84 p. ms.

24. **Dunn, Gertrude E.** Development of education in Ireland parish (Holyoke, Mass.), 1780-1850. Master's, 1931. Smith.

25. **Ellison, Paul.** The legal growth of the common school system of Georgia. Atlanta, Georgia department of education, 1931. 31 p. (Georgia state school items, vol. 8, no. 2.)

This study deals, in the main, with the legal growth of the Georgia common school system, and incidentally with the historical. The first period is from the adoption of the Constitution of 1777 to 1870; the second period begins with the institution of the common school system in 1870 and runs to the present time.

26. **Emanuel, Lena L.** Colonial schools of Louisiana. Master's, 1931. Tulane.

Unpublished manuscript records in French and Spanish are used to confirm or amend published accounts of a general character.

27. **Esau, Anna P.** Educational development of Reno county. Master's, 1931. Kansas.

An historical study of community and schools in Reno county, Kans., 1872-1923.

28. **Faris, Forrest Wayne.** Early history of Washington county with special reference to its early school history and pioneer lives. Master's, 1931. Indiana. 104 p. ms.

29. **Farr, T. J.** History of the public elementary and secondary school system in Mississippi from 1798 to 1930. Master's, 1931. Colorado.

30. **Goetting, Martin Luther.** The development of high-school standards in Ohio, 1880-1930. Master's, 1931. Ohio. 150 p. (For abstract see No. 712.)

The development of high-school standards in Ohio were studied from the standpoint of college entrance requirements, legislation, standards of State department of education, and the North central association. The inspection of high schools in relation to the standards were studied briefly.

31. **Hardy, H. Claude.** Evolution and development of the office of superintendent of schools, Westchester county, New York. Doctor's, 1931. New York. 167 p. ms.

Historical and descriptive treatment of Westchester county, N. Y., from Colonial period as background to present time. Findings: The office of superintendent of schools, district, village, and city has come about by gradual evolution, influenced largely by State control.

*32. Harney, Julia C. The evolution of public education in Jersey City. Doctor's, 1931. New York. 254 p. ms.

Public education in Jersey City from its founding to 1923, with background material from Colonial times. Covers the history of private educational enterprises and of public education before the establishment of a board of education in 1852; later period under psychological and social background; buildings, colored school, evening schools, organization, attendance, teacher training and the teacher staff, curriculum, aims of the system, and educational outlook.

33. Harrison, Theta. The history of the movement for a national university in the United States. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study traces the history of the national university problem from its inception in 1775 to the present time.

34. Hefley, Jesse Lehmanowsky. Evolution of the laws of learning. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The writings of philosophers from Socrates to the present were studied to determine their viewpoints.

35. Hudson, Homer Clarence. Baptist education in South Carolina before 1860. Master's, 1931. North Carolina. (For abstract see no. 710.)

The study shows that after a long period of effort by a few leading Baptists a beginning was made in theological education in South Carolina, and institutions of higher learning for both men and women were established.

36. Hume, Maude McPherson. A comparative study of the education of women prior to the Christian era. Master's, 1931. Southern California. 90 p. ms.

37. Kandel, I. L. History of secondary publication. Boston, Mass., Houghton-Mifflin company, 1930. 577 p. (Riverside textbooks in education.)

38. Keep, Rosalind A. Fourscore years—a history of Mills college. Mills college, Oakland, Calif. Oakland, Calif., Goodhue-Kitchener printing co., 1931. 143 p.

History of Mills college from its beginning in 1852 to the present.

39. McAllister, Lowell H. A quantitative study of the growth of education in the United States. Master's, 1931. Ohio. 78 p. ms.

A study of the increased enrollment of our schools since 1870, elementary, secondary, and college. Shows the per cent of increase for each type of school for each 10-year period, and compares public and private school enrollment growth.

40. Milburn, William Stanford. Historical development of the legislative control of the elementary school curriculum in Indiana from 1816 to 1931. Master's, 1931. Indiana.

41. Moeder, Sister Monica. History of St. Benedict's college. Master's, 1931. Wichita. 154 p. ms.

42. Montana, Eduardo Fausto. Secondary education in the Philippine Islands under the Spanish régime and up to the present time. Master's, 1931. Stanford.

43. Muesse, Katherine F. A survey of primary education in Baltimore public schools from 1829 to 1929. Master's, 1931. Johns Hopkins.

44. Mulhern, James. History of secondary education in Pennsylvania. Doctor's, 1931. Pennsylvania. Philadelphia, University of Pennsylvania, 1931. 500 p.

This study deals with the entire history of secondary education down to 1900; briefer attention is paid to developments from 1900-1930.

45. Olson, Olaf E. A history of education in Alaska. Master's [1931] Washington. 96 p.

History of education from 1785 to the present. Findings: Progress has been made, comparative to the states.

*46. Pangburn, Jessie M. The evolution of American teachers college. Doctor's, 1931. T. C., Col. Univ.

In the study of the evolution of the American teachers college, data were secured from publications of the U. S. Office of education, published research studies, certain unpublished doctors' dissertations on teacher training, proceedings of professional organizations, relevant discussions or reports in educational periodicals, and the files of annual catalogues of 12 representative teachers colleges for the period from 1890 to 1930.

47. Pearson, Edna Mae. Social and economic conditions affecting the development of education in Louisiana since 1860. Master's, 1931. Tulane.

This is not a narrative of the schools, but of the conditions that have promoted or retarded the advance of education.

48. Peery, Zoma Teeman. The growth and development of the Minco schools. Master's, 1931. Oklahoma. 131 p. ms.

A narrative history of Minco schools based on original sources.

49. Palletier, Rev. Timothy John. The monastic schools of Bec. Master's, 1931. Catholic Univ. 40 p. ms.

50. Pierson, Mattie Mae. Educational history of Cherokee county, S. C., 1897-1930. Master's, 1931. South Carolina. 67 p. ms. (For abstract see no. 717.)

51. Powers, William H., ed. A history of South Dakota State college, 1881-1931. Brookings, South Dakota State college, 1931. 144 p.

*52. Riley, Emmet J. Development of the Montana state educational organization, 1864-1930. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university of America, 1931. 135 p. Bibliography: p. 132-34.

This study of the development of the state school system of Montana from its inception in 1864 to 1930 is based upon a critical examination of original sources. It is an attempt to collate and systematize a mass of scattered materials that bear upon the development of a state school system.

*53. Ross, William Edgar. The emergence of the American free public school as affected by the liberalism of the 18th century and the democratic spirit of the American frontier. Master's, 1931. New York. 70 p. ms.

Traces the rise of the high school as influenced by social factors, especially the liberalism of the 18th century and the democracy of the frontier. Findings: The present high-school system is founded on the principles advocated by the early liberals, and the democracy engendered by primitive frontier conditions facilitated the rise of universal manhood suffrage on which the development of a free system of public schools had to depend. It was the demand of the more unfortunate classes for equal opportunity that caused the development of our present school systems.

54. Selser, Robert E. History of education in Schuylkill county, Pa. Master's, 1931. Penn. State. 200 p. ms.

55. Simpson, Howard Holmes. The history of secondary education in the Southern States before 1860. Master's, 1931. North Carolina. (For abstract see no. 710.)

This study shows that the development in secondary education in the Southern States was in accordance with the environmental forces—social, political, religious and economic.

56. Singletary, Cynthia McCraw. Education in Williamsburg county, S. C., prior to 1890. Master's, 1931. South Carolina. 57 p. ms. (For abstract see no. 717.)

The purpose of this study is to show the growth and development of education in Williamsburg county and the settlement of the county in 1732 to 1890.

57. Smith, Henry Lester. National council of education. Historical notes prepared on the occasion of the celebration of the fiftieth anniversary of the Council at Columbus, Ohio, June 28-30, 1930. [Washington, D. C.] National council of education, December 1930. 47 p.

58. Talbot, Marion and Rosenberry, Lois K. M. The history of the American association of university women, 1881-1931. Boston and New York, Houghton Mifflin company, 1931. 579 p. (Study made under the auspices of the American association of university women.)

A record of the ideals and achievements of the American association of university women during the first half century of its existence. The report is a contribution to the history of education and an aid in estimating the actual and potential rôle of women in enlarging and enriching the field of scholarship and social betterment. Based upon documentary material.

59. Thibault, Sister Martha of Bethany. A comparison of the educational problems of Athens after the Persian war with those of the United States after the world war. Master's, 1931. Notre Dame.

60. Williams, Antoinette McLean. Education in Greenville county, S. C., prior to 1860. Master's, 1931. South Carolina. 49 p. ms. (For abstract see no. 717.)

The purpose of this study is to show the growth and development of education in Greenville county from the formation of the county in 1786 to 1860.

61. Wilson, William E. A history of Borden institute. Master's, 1931. Ind. St. T. C. 143 p. ms.

History of Borden institute, which was in existence from 1888 to 1905.

62. Zylestra, Cornelius. Evolution of conception of school control in New York. Master's, 1931. Michigan.

See also 581, 813, 909, 1049, 1062, 1102, 1378, 1487, 1498, 1497, 1714, 1726, 1891, 1918, 2182, 2243, 2249, 2563, 2600-2601, 2610, 2629, 2674, 2678, 2718, 2965, 3221, 3233, 3246, 3278, 3341, 3376, 3410, 3451; 3463, 3550, 3555, 3620, 3633, 3639, 3820, 3837, 3876, 3899, 4097-4098, 4114, 4188; and under Educational biography; Current educational conditions, foreign countries.

EDUCATIONAL BIOGRAPHY

63. Arrowood, Charles Flinn. Thomas Jefferson and education in a republic. New York, McGraw-Hill Book Co., 1930. 184 p.

64. Blair, Anna Lou. Henry Barnard, school administrator. Doctor's, 1931. Yale.

65. Calhoun, George N. Benjamin Jowett as an educator. Master's, 1931. Temple.

66. Carlin, Mrs. Bessie Fox. The education of Thomas Hutchinson. Master's, 1931. T. C., Col. Univ. 46 p. ms.

Biographical sketch from the point of view of the development of education.

67. Carmody, Nora. The social motive in the educational theories of Juan Luis Vives. Master's, 1931. St. Louis. 71 p. ms.

68. Cassels, Roland B. Educational philosophy of Simon Somerville Laurie, 1829-1909. Master's, 1931. Temple.

69. Crissman, Paul. The moral philosophy of John Dewey. Doctor's, 1931. Northwestern.

70. Eber, Stella A. The educational ideas of Thomas Jefferson as revealed in his writings. Master's, 1931. Pittsburgh. (For abstract see No. 715.)

Jefferson not only formulated a plan for a system of education reaching from the lowest schools to the university, but he also held definite opinions on various problems dealing with the education of the people as well as ideas on the importance of some subjects in the curriculum.

71. Eby, Frederick. Early Protestant educators; the educational writings of Martin Luther, John Calvin, and other leaders of Protestant thought. University of Texas, Austin. New York, McGraw-Hill book company, 1930. 312 p.

72. **Edelson, Leo.** Thomas Arnold, educator. Master's, 1931. Coll. of the City of N. Y. 40 p. ms.

This study attempts to place the legend of Thomas Arnold as a great educator on a sound historical basis. His writings and the related literature of the early 19th century were analysed. Conclusions: A significant disparity was found to exist between the reliable testimony as to his influence and the fragmentary remains representing his ideas on education, thus indicating that the legend of Thomas Arnold as a great educator rests upon the personality of the man rather than upon any theory or practice traceable directly to him.

73. **Eilberg, Herman.** Joseph Priestley—his educational philosophy. Master's, 1931. Temple.

74. **Gifford, Ruth.** A comparative study of certain phases of the educational theories of Plato and John Dewey. Master's, 1931. Syracuse.

75. **Goodsell, Willystine.** Pioneers of women's education in the United States; Emma Willard, Catherine Beecher, Mary Lyon. New York City, McGraw-Hill book company, 1931. 311 p. (Educational source books series.)

The study includes an account of the situation with respect to the education of women in the United States prior to 1820. Included in the study is an unpublished monograph, in the Mount Holyoke college library, of Mary Lyon's early appeal in behalf of an endowed seminary for women, in 1835.

76. **Halloway, Fred.** Objectives in education according to Rousseau. Master's, 1931. T. C., Col. Univ. 23-p. ms.

Includes a study of Rousseau's writings on education, Émile and his minor works, in the light of his educational ends and aims.

77. **Hazlett, William W.** Educational philosophy of the Rev. Robert Herbert Quick. Master's, 1931. Temple.

78. **Honeywell, Roy John.** The educational work of Thomas Jefferson. Cambridge, Mass., Harvard university press, 1931. 295 p. (Harvard studies in education, vol. 16.)

Bibliography: p. 239-95.

79. **Hutchins, M. Viletta.** Emerson; his educational ideas and their modern application. Master's, 1931. N. Y. St. Coll. for Teach. 46 p.

A biographical study with emphasis on the facts that have to do with Emerson's early education, his early experiences as a teacher, his influence as a great moral leader, and his ideas on education as they appear in his writings. Various authors are quoted to show the significance of Emerson and of his writings for the education of his own and later times.

*80. **Johnson, Laura E.** John Locke as a religious educator. Master's, 1931. New York. 81 p. ms.

A study of the life, ideals, and ideas of John Locke to evaluate him as a religious educator. Conclusions: John Locke was a very religious man with high ideals, very well educated, having a broad experience. He was a man of insight, whose influence made for progress.

81. **Lemmo, Christine H.** Joseph Payne and his educational ideals. Master's, 1931. Temple.

82. **McBride, Russell W.** Educational philosophy of Alexander Bain. Master's, 1931. Temple.

*83. **Mack, Henry W.** Borden Parker Bowne as an educational philosopher. Doctor's, 1931. New York. 255 p. ms.

Survey of the life and works of Borden Parker Bowne, comparing his views with those of leading writers in present day educational philosophy. Gives an evaluation of Bowne's works in the light of present day thought in the field.

84. **McKemie, Augustus Keaton.** The philosophy of John Dewey in its implications for education. Master's, 1931. Cincinnati.

85. **Maguire, James Francis.** The ethical principles underlying John Dewey's educational system. Master's, 1930. St. Louis. 71 p. ms.
86. **Malefyt, Paul.** The influence of Calvin upon our educational institutions. Master's, 1931. N. Y. St. Coll. for Teach. 50 p. and bibliography.
Summarizes the literature on Calvinistic influence in American education.
87. **Mason, Dorothy.** Study of the educational views, influences, and activities of Condorcet. Master's, 1931. Ohio. 188 p. ms.
88. **Morlan, George K.** John Stuart Mill's educational psychology. Master's, 1931. T. C., Col. Univ. 50 p. ms.
Covers all of Mill's writings for educational psychology, and discusses them in the light of modern theory. Findings: Mill's theories are remarkably modern. Without our apparatus for measuring human behavior, he saw what we have proved; there are little differences in intellectual capacity between sexes. As to individual differences, he was too optimistic, though his belief was in keeping with his creed of democracy. Mill also believed in greater amounts of transfer than our measurements warrant, but it is remarkable that he recognized at all that sometimes transfer did not take place. Exercise, orderly association, practice with satisfaction, purposive behavior, association psychology (concomitant learnings) are all tenets of modern educational psychology that Mill sensed and thought out with a degree of clearness almost a hundred years ago. The modernity of Mill is striking.
89. **Nuber, C. V.** Study of the educational views and activities of Colonel Francis Wayland Parker. Master's, 1931. Ohio. 70 p. ms.
90. **Olson, David.** The life and educational influence of Nicholas Frederik Severin Grundtvig. Doctor's, 1931. Western Reserve. 277 p. ms.
91. **Pape, Leslie Manock.** The naturalistic ethics of John Dewey. Doctor's, 1930. Chicago.
92. **Poret, George Cleveland.** The contributions of William Harold Payne to public education. Doctor's, 1930. Peabody. Nashville, Tenn., George Peabody college for teachers, 1930. 164 p. (Contributions to education, no. 81.)
The study is divided into two parts: First, the life of William Harold Payne; and second, his views and ideas on education. On October 5, 1887, he became president of the Peabody normal school. The name of the school was changed from Peabody normal school to Peabody normal college. While at Peabody college he raised the standards of the college, opened the library for the use of the students, built a model practice school, employed a competent faculty to care for an enrollment of 177 in 1887, which increased to 607 by 1901.
93. **Sharratt, William Bert.** The influence of Alexander Campbell upon the educational attitude of the Disciples of Christ. Doctor's, 1931. New York. 156 p. ms.
Measures the influence of Campbell by a study of Disciple colleges and the expression of religious leaders connected with this denomination. Conclusions: Alexander Campbell materially influenced the education attitude of the church through his emphasis upon the Bible as the only source of religious instruction. The presence of a liberal group within the church lessens the influence of Campbell.
94. **Storch, Sister Mary Ferdinand.** A comparison of the teaching methods of Christ and Socrates. Master's, 1931. Notre Dame.
95. **Swift, Fletcher Harper.** Emma Marwedel, 1818-1898. Pioneer of the kindergarten in California. Berkeley, Calif., University of California press, 1931. 77 p. (University of California publications in education, vol. 6, no. 3, p. 139-216.)
96. **Tyrrell, Katherine.** The influence of John Dewey upon the progressive education movement. Master's, 1931. Claremont.
97. **Watson, Genevieve Margaret.** The educational philosophy of Froebel and Dewey, compared and evaluated. Doctor's, 1931. New York. 140 p. ms.
98. **Wentworth, Eva.** Three advanced educational reformers. Master's, 1931. Southern California. 55 p.

A summary and comparison of the educational theories and contributions of Dewey, Sanderson, and Tagore.

99. Wertz, Dorothy May. Albert Stanburrough Cook as a scholar-teacher. Master's, 1931. Cornell.

*100. Wiesmann, Alfred J. A comparison of the main sociological views of education of Charles Clinton Peters and Walter Robinson Smith. Master's, 1931. New York. 70 p. ms.

101. Will, Frederick L. A study of Bertrand Russell from the point of view of education. Master's, 1931. Ohio. 110 p. ms.

Findings: A study of Bertrand Russell's psychological and social writings reveals two views of thought which have special reference to the problems of educational theory and practice. The psychological writings seem to imply a rather Herbartian educational program with an emphasis upon habit-formation (teacher emphasis). The educational and social writings directly propose an educational program characterized by freedom, initiative, and self-expression. The incompatibility of these two views of thought is readily obvious.

102. Williams, Albert Ross. Samuel K. Hoshour's contribution to education in Indiana. Master's, 1930. Indiana. 69 p. ms.

Data were divided into three distinct divisions showing a contribution to education in Indiana in the seminaries, in the field of higher education, and as State superintendent of public instruction.

103. Wittenberg, Mary Edna. A study of the ideas of Madame de Sevigne on the education of women. Master's, 1931. Stanford.

104. Wyman, H. B. An evaluation of Kilpatrick's theory of learning. Doctor's, 1931. Ohio. 153 p. ms.

See also 34.

CURRENT EDUCATIONAL CONDITIONS

GENERAL AND UNITED STATES

105. Abraham, Richard I. Survey of educational offerings of selected United States cities. San Francisco, Calif., Public schools, 1931. 3 p. ms.

106. Anderson, A. Helen. What the people of Denver have been told about the public schools. School publicity as shown by a check on Denver newspapers from June 30, 1928, to June 30, 1930. Master's [1931] Denver.

"It is the purpose of this thesis to show, by analysis and classification of stories concerning the public schools published in the newspapers of Denver, that the mere occupation of space in the daily papers is not a sufficient answer to the problem of interpretation, and that a definite need for direction in newspaper publicity for the Denver schools exists." Conclusions: (1) Public support depends on public understanding; (2) people of Denver have not been given a valid interpretation of the public school program; (3) newspaper publicity has had no direction; (4) newspaper publicity concerning the Denver public schools should be directed; and (5) newspaper publicity can be directed.

107. Baltimore, Md. Board of school commissioners. One hundred and first annual report of the Board of school commissioners of Baltimore city to the mayor and city council for the scholastic year ending June 30, 1930, and the fiscal year ending December 31, 1929. [1930.] 218 p.

Contains tables showing holding power of schools, distribution of children by age and grade, and attendance data.

108. ———. One hundred and second annual report of the Board of school commissioners of Baltimore city to the mayor and city council for the scholastic year ending June 30, 1931, and the fiscal year ending December 31, 1930. 195 p.

This report gives a detailed account of the different activities of the school system and mentions noteworthy accomplishments which have been secured.

109. **Breitwieser, J. V.** A comparison of the personnel of the first with the 69th Congress. School of education record (University of North Dakota), 16:199-203, April 1931.

An analysis of 649 biographies of the members of the first and 69th Congresses. Findings: There seems to have been no deterioration of the qualifications of the men in the 69th Congress as compared to those in the first Congress.

110. **Calkins, Thomas V.** Education of the Alaska native. Doctor's, 1931. Yale. 231 p.

111. **Doyle, John Joseph.** Demonstrable cultural differences between the States of the United States. Master's, 1931. Stanford. (For abstract see No. 717a.)

112. **Gray, R. F., and others.** Ten years of progress in the San Francisco public schools. San Francisco, Calif., Public schools [1930].

A study of the development which has taken place in the San Francisco public schools during the past decade.

113. **Grimm, L. B.** Public-school catechism for Illinois, revised. Springfield. Illinois state teachers association, 1930. 32 p.

Contains 83 questions and answers concerning educational problems in Illinois.

114. **Gwyn, Morgan Haydn.** A study of the illiteracy problem in Pennsylvania and what is being done to lessen it. Master's, 1930. Cornell.

115. **Hampton, Charles G.** The interest of the people of Indiana in public education. Master's [1931]. Arizona. 36 p. ms.

An attempt to discover what school news reaches the people of Indiana. An analysis of space and topics in representative newspapers of the State.

116. **Houston, Tex.** Independent school district. Some activities in the Houston schools (1924-1930). 1931. 106 p.

Contains information concerning evidences of achievement in the fundamental subjects and special activities in the kindergarten-primary and elementary schools.

117. **Hughes, W. F. and Holy, Thomas C.** Educational progress in Washington county. 1931. Ohio State university, Columbus. 79 p. ms.

118. **Lowden, Joseph J.** The status of Ohio city, county, and exempted village school districts as determined by measures which are indexes of school efficiency, opportunity, and effort. Doctor's, 1931. Ohio. 200 p. ms. (Abstract, p. 194-206.)

The city, county, and exempted villages of Ohio were ranked on each of the 12 measures that were selected by the superintendents of these school systems. Findings: The cities and exempted village school systems of Ohio are doing more for their pupils than the county school systems.

119. **McCabe, Martha B., comp.** Record of current educational publications. July to December 1930; January to March 1931; April to June 1931. Washington, United States Government printing office, 1930-1931. 118 p.; 105 p.; 106 p. (U. S. Office of Education. Bulletin, 1931, no 3, 9, 16)

120. **National education association.** Department of superintendence and research division. Education discussed in lay magazines, October 1, 1930, February 1931, April 1931. June 1931. 20 p., 6 p., 8 p., 11 p. (Educational research service. Circular, 8, 1930, 2, 5, 7, 1931)

121. **National society for the study of education.** The status of rural education. Bloomington, Ill., Public school publishing company, 1931. 272 p. (Thirtieth yearbook, Pt. 1)

122. **Rosenthal, Benjamin.** Educational contributions in New York State by its governors (1919-1930). Master's, 1931. Coll. of the City of N. Y. 66 p. ms.

Contributions to New York State system of education by its governors from 1919-1930. Messages, speeches, reports, articles in newspapers and magazines were the sources. Conclusions: (1) The governor of the state may be an important influence in education; (2) educational legislation is a fertile field for study.

123. San Diego, Calif. City schools. Report of the Superintendent of schools, 1929-1930. 1930. 34 p.

A summary and analysis of activities in the San Diego city schools for the school year 1929-1930.

124. ——— Superintendent's annual report, 1930-1931. 1931. 30 p.

125. Schowalter, Glenn K. Statistical data in school reports. Master's, 1931. Chicago. 71 p. ms.

One hundred reports from cities in 31 States were used. Reports were divided into three groups of 33, 33, and 34 reports for purpose of comparison of different sized cities. Population range was from 4,000 to over 1,000,000. Findings: In tabular space child accounting ranks first, finance second, scholarships third, and professional services fourth. Superintendents tend to include data that advertise themselves. Procedure used in reports is not uniform. Superintendents do not show definite purpose for presenting statistical data.

126. Stillman, M. E. A study of the Columbus boys' school. Master's, [1931] Ohio. 45 p. ms.

127. United States. Office of education. Biennial survey of education in the United States, 1928-1930. Washington, United States Government printing office, 1931. Vol. 1, 28 chapters. (Bulletin 1931, no. 20)

Contents: Chapter 1, School administration and finance, by W. S. Deffenbaugh and Timon Covert, 58 p.; chapter 2, Elementary education, by Beas Goodykoontz, Mary Dabney Davis and Mina M. Langvick, 63 p.; chapter 3, Secondary education, by Carl A. Jessen, 23 p.; chapter 4, Industrial education, by Maris M. Proffitt, 44 p.; chapter 5, Commercial education, by J. O. Malett, 48 p.; chapter 6, Homemaking education, by Emeline S. Whitcomb, 34 p.; chapter 7, Agricultural education, by H. M. Hamlin, 28 p.; chapter 8, Art education, by Royal Bailey Farnum, 26 p.; chapter 9, Music education, by Osbourne McConathy, 30 p.; chapter 10, Hygiene and physical education, by Marie M. Beady and James Frederick Rogers, 27 p.; chapter 11, Education of exceptional children, by Elise H. Martens, 38 p.; chapter 12, Adult education, by L. S. Alderman and Ellen C. Lombard, 38 p.; chapter 13, College and university education, by Walton C. John, 44 p.; chapter 14, Professional education of teachers, by Benjamin W. Frazier, 40 p.; chapter 15, Medical education, by Willard C. Rappleye, 14 p.; chapter 16, Engineering education, by F. L. Bishop, 7 p.; chapter 17, Education of certain racial groups in the United States and its territories, by Katherine M. Cook, 56 p.; chapter 18, Radio and education, by Armstrong Ferry, 23 p.; chapter 19, Library service, by Sabra W. Vought and Edith A. Lathrop, 52 p.; chapter 20, National surveys of the Office of Education, by Walton C. John, 32 p.; chapter 21, Educational boards and foundations, by Henry R. Evans, 9 p.; chapter 22, Recent progress and conditions of museums, by Laurence V. Coleman, 34 p.; chapter 23, Review of educational legislation, 1929-1930, by Ward W. Kessecker, 30 p.

128. ———. Educational directory: 1931. Washington, United States Government printing office, 1931. 171 p. (Bulletin, 1931, no 1)

129. Van Soelen, Eugene Cecil. A study of certain phases of American schools. Master's, 1931. Wisconsin.

130. Wooster, Muriel H. Philanthropy and education in New York State. Master's, 1931. N. Y. St. Coll. for Teach. 72 p.

From a study of philanthropy, past and present, in New York State, the author arrives at several conclusions among which the following are outstanding: Gifts to education should be encouraged. There has been an evolution in the art of giving. There is no evidence of harmful or even useless giving. Philanthropic contributions should not be too much restricted, and conditions controlling such gifts should be stated in general terms.

EDUCATIONAL SURVEYS

131. Bailey, Clifford Cecilia. A survey and study of Flint Springs school community, Bradley county, Tenn. Master's, 1931. Tennessee. 244 p. ms.

132. Brubaker, Harold S. A partial survey of the public schools of Jay county, Ind. Master's, 1931. Indiana. 148 p. ms.

133. Buffalo municipal research bureau, inc., Buffalo, N. Y. Report of the Buffalo school survey. Parts I and II. Buffalo, N. Y., Buffalo municipal research bureau, inc., 1930. 2 vols.

Vol. I contains the Report of the U. S. Office of education on the educational phase of the work of the Buffalo schools; Part II is the Report of the Buffalo municipal research bureau, inc., on certain phases of the business side of the schools.

134. California taxpayers' association, Los Angeles, Calif. Preliminary survey of the city government and schools of Alhambra. 1930. 6 p. ms.

135. ——— Preliminary survey of the city of Sierra Madre. 1931. 10 p. ms.

136. ——— Report on the Fresno county schools. Los Angeles, Calif., 1931. 104 p. ms. (Association report, no. 151.)

The purpose of this survey was to study the conditions existing within the educational system of Fresno county in order to discover possible improvements: (1) In the educational opportunities; and (2) by economies in administration and operation. Much of the data given in the report are for the year ending June 30, 1930, although the physical conditions reported upon were observed during the fall of 1930.

137. ——— Survey of the Pasadena city school. 1931. 331 p. (Association report, no. 119.)

A study made with the cooperation of the city schools of Pasadena, Calif.

138. Chapman, Harold B. Changes in Baltimore public schools since the Baltimore survey by Strayer and Engelhardt in 1920. In Annual report of the Baltimore board of school commissioners, 1929-1930. Baltimore, Md., 1930. p. 90-133. (Reprint.)

This study is an analysis of changes which have taken place in the Baltimore public schools as a result of the Strayer survey initiated in 1920. The recapitulation contains the 16 major recommendations that were made and tells what has been done to carry out each of these recommendations.

139. Dotson, John Andrew. The public schools in the mining community. Master's, 1931. Kentucky. 109 p. ms.

An investigation of educational facilities and conditions in the coal fields of Eastern Kentucky, and a recommended program.

140. Eichler, G. A. Report of the survey of the public schools, Northampton, Pa. State college, Pennsylvania State college, 1931. 33 p. ms.

This study describes the community of Northampton, the present school plant, the financing of education in Northampton, the teaching staff, school opportunities, and organization and administration of the schools.

141. Garner, Isaac Leonard. A study of certain phases of the educational and economic conditions of Marion county, Tenn. Master's, 1930. Tennessee. ms.

142. Hawaii. Governor's advisory committee on education. Survey of schools and industry in Hawaii. Honolulu, Hawaii, Printshop company, 1931. 156 p.

143. Hilton, Birchell S. Self survey of a small school system. Master's, 1931. Rutgers.

144. Holy, Thomas C. Survey of the schools of Springfield, Ohio. Springfield, Ohio, Public schools, 1931. 84 p.

145. Lewiston, Idaho. Public schools. Digest of the Lewiston school survey. 1930. 51 p. ms.

A report of a cooperative study carried on by the public-school teachers of Lewiston, Idaho, under the direction of the superintendent of schools, during the school year 1929-1930.

146. Miller, Bay A. A survey of the schools of Bolivar, Pa. Master's, 1931. Penn. State. 150 p. ms.

This is a typical school survey of a small district.

147. **Moore, Clarence C.** An educational survey of San Juan county, Colo. Master's, 1931. Colo. St. T. C.

In this thesis an attempt is made to study the factual conditions that exist in the San Juan county school system and to interpret these conditions.

148. **Myers, C. E., Bennett, A. L. and Peters, W. D.** Survey of Wythe county, Virginia. Richmond, Va., State board of education, 1931. 20 p. ms.

149. ———, **Garnett, W. E., and Thomas, M. W.** Survey of Montgomery county schools, Virginia. Richmond, Va., State board of education, 1931.

A 2-year experiment or demonstration in rural school reorganization. A salary schedule based upon average daily attendance and teaching efficiency and emphasis upon individual methods of instruction were outstanding features. Finding: In two years, retardation was reduced from 29 to 21 to 18 months, attendance increased 21 per cent, teachers' salaries increased 40 per cent, while unit costs for salaries decreased 19 per cent.

150. **New Jersey. Commission to survey public education.** Report of the Commission to survey public education authorized by the State legislature, 1928. Trenton, N. J., 1930. 204 p.

Senator A. N. Pierson, chairman.

The purpose of the study was to survey the activities and work of the public schools and educational institutions in New Jersey supported in whole or in part by public funds, to recommend a comprehensive program of public education and sources of revenue for its support, and to make an appropriation therefor.

151. **O'Dell, Edgar Alvin.** The development of topics in school surveys. Doctor's, 1931. Indiana. 283 p. ms.

152. **Purviance, C. E., and Waterman Ivan R.** Garfield school survey. San Francisco, Calif., Public schools, 1930. 35 p. ms. (Bulletin no. 18.)

A social and educational survey of one of the San Francisco public schools in which the pupils with few exceptions are of Italian parentage. Findings: The majority of the Garfield pupils come from homes where English is not usually spoken and where parents neither read nor write English. Approximately 60 per cent of the pupils have made slower than normal progress. The Garfield pupils on the average are below normal in mental ability and school achievement. A wide range of ability is shown in each grade and considerable overlapping of age and abilities exists between grades. Recommendations are given for adjusting school procedure to conditions peculiar to the Garfield school.

153. **Robb, E. K.** Survey of the schools of Bedford, Pa. State College, Pennsylvania State college, 1931. 84 p. ms.

154. **Smith, W. R.** Survey of the public schools of Ellwood City, Pa. State College, Pennsylvania State college, 1931. 102 p. ms.

155. **Soper, Wayne W., and Coxe, Warren W.** Kenmore (New York) survey; sections on measurements program and teaching personnel. Albany, New York State education department, 1931.

Based upon the use of standard tests and information blanks.

156. **Strayer, George D., and Englehardt, N. L.** Report of the survey of the schools of Fort Worth, Texas. New York City, Teachers college, Columbia university, 1931. 438 p. (School survey series.)

This survey covers the organization and administration of the schools, business administration, population of Fort Worth and its growth, present school plant, proposed school building program, school finance, school opportunities and their organization, professional personnel, supervisory program in Fort Worth, curriculum, and health and physical education.

157. ——— Report of the survey of the schools of Watertown, Mass., submitted to the school survey committee and transmitted by them to the Town meeting March, 1931. New York City, Teachers college, Columbia university, 1931. 196 p. (School survey series.)

Takes up the organization and administration of the schools of Watertown, Mass.; business administration of the schools; school buildings; school-building program, financing education in Watertown; supervisory program; curriculum of the Watertown schools; school organization; and professional personnel.

158. Sykes, Earl F. An educational survey of Judith Basin county schools. Master's, 1930. Montana.

159. Utah. State department of public instruction. A survey of Duchesne county schools, Duchesne, Utah. Salt Lake City, Utah, 1930. 114 p. ms.

160. Vaughan, Thomas Grady. Evaluation of instruction in 67 surveys. Master's, 1931. Peabody. 109 p. ms.

A study of reports of 67 surveys in Peabody college library. The methods most often used to evaluate instruction in the 67 surveys examined were as follows: 58 made a study of the teaching personnel; 42 used standard tests; 35, pupil accounting; 32, general impression through observation; 14, general impression through conference; 11, rating scale and check list; 8, criteria for judging; 2, analysis of lesson plans; 2, analysis of pupils' written work; and 19, miscellaneous.

161. Walker, Arthur L. A study of the learning conditions existing in the Hudson township schools as of March 13, 1930. Master's, 1931. Western Reserve. 85 p. ms.

162. Wallace, Charles S. A descriptive and statistical survey of the Lindsay demonstration school. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The Lindsay, Okla., public-school system was reorganized and operated on the new plan during the school years 1927-1928 and 1928-1929. This study is a description of the Lindsay school since its reorganization, a statement of the problems confronting those in charge of the school, and a statistical survey of the results achieved in reading and arithmetic during the 2-year period.

163. Webb, Cleon E. A limited school survey of the Worthington area of Franklin county, Ohio. Master's, 1931. Ohio. 128 p. ms.

Shows that unification of effort in a larger area is desirable for school purposes.

164. Wedgeworth, Monnie W. Survey of a small school system. Master's, 1931. Colorado.

165. Wirt, S. Edgar. The organization of schools in Arapahoe county, Colo. Master's, 1931. Denver. 86 p. ms.

This study deals with the findings of a committee which investigated organization, attendance, age-grade distribution, and pupil progress. Purpose of this portion of the survey was to examine the present organization of schools in Arapahoe county, and the present and probable future demand for school opportunity, and to present the findings of this study so that they will point the way to improvement of school opportunity by reorganization.

166. Wolfe, George Carbon. Determination of the progress for the public-school system of Williamsport, Pa.—a case study. Master's, 1930. New York. 50 p. ms.

A determination of the educational needs of the city and, in the terms of those needs, a program for its development. Findings: The schools of Williamsport compare favorably with the schools in other second-class school districts of the State in three respects: First, financial economy; second, efficiency of teaching staff; and third, vocational education. The thesis reveals a need for: First, a more comprehensive building program; second, an increase in the supervisory staff; and third, a modernization of requirements in granting salary increments.

See also 127 (20), 1825, 1826, 1845, 1848, 2410, 2508, 3634, 3712; and in Index under Educational surveys.

STATE REPORTS

167. Alaska. Department of education. Report of the commissioner of education, school biennium ended June 30, 1930. [Juneau, 1930] 79 p.

168. Arizona. Department of public instruction. Tenth biennial report of the State superintendent of public instruction to the Governor of the State of Arizona, for the period July 1, 1928 to June 30, 1930. Phoenix, 1930. 217 p.

This report gives a statistical and financial review of the schools of Arizona for the fiscal years 1928-1929 and 1929-1930, citing legislative enactments, pertaining to education, passed during the period covered by the report.

169. **California.** State department of education. Biennial report of the State department of education, including the thirty-fourth biennial report of the superintendent of public instruction and the biennial report of the State board of education for the school years ending June 30, 1929, and June 30, 1930. Part 1. Sacramento, 1931. 231 p.

170. **Georgia.** Department of education. Fifty-eighth and fifty-ninth annual reports of the department of education to the General assembly of the State of Georgia for the biennium ending June 30, 1930. [Atlanta, Georgia, 1931.] 312 p.

171. **Illinois.** Department of public instruction. Items of information relating to education, State of Illinois. Statistical data for school year 1928-1929, compiled by W. E. White. Springfield, 1930. 85 p. (Circular, no. 244.)

172. **Indiana.** Department of public instruction. Annual report for the fiscal year ending September 30, 1930. Indianapolis [1931]. 134 p.

173. **Kansas.** State department of public instruction. Twenty-seventh biennial report of the State superintendent of public instruction of Kansas for the years ending June 30, 1929 and June 30, 1930. Topeka, Kansas State printing plant, 1931. 580 p.

Part 1 gives in brief form comments on various activities within the state department of education, while parts 2 and 3 give series of statistical tables dealing with many phases of public-school work within the State.

174. **Kentucky.** State department of education. Biennial report of the superintendent of public instruction of the State of Kentucky, for the two years ending June 30, 1929. Frankfort, Ky., State journal company [1930]. Part 1, 170 p.

The laws of Kentucky provide for three distinct school units: County school unit, graded school districts, and city school districts. The greatest progress in education has been made in the city school districts.

175. ————. Biennial report of the superintendent of public instruction of the State of Kentucky for the two years ending June 30, 1930. Part 2. (Statistical) Frankfort, Ky., State journal company [1931] 487 p.

176. **Maryland.** State department of education. Sixty-fourth annual report of the State board of education, showing condition of the public schools of Maryland for the year ending July 31, 1930. Baltimore, Md., 1931. 391 p.

Studies of attendance, late entrance, withdrawals, long absences, etc., county white elementary schools, p. 19-23; county colored elementary schools, p. 181-86; teacher resignations and teacher turnover, county white elementary schools, p. 59-66; county white high schools, p. 140-46; county colored teachers, p. 200-204; teacher training for elementary schools, white schools, p. 309-23; colored schools, p. 229-32; financing the public schools, p. 246-72, 276-88; school bonds and value of school property per pupil and per building, p. 270-76, 215-18; occupations of white high school graduates, p. 119-26.

177. **Missouri.** State department of education. Seventy-ninth [eightieth] report of the public schools of the State of Missouri, school year ending June 30, 1928 [June 30, 1929]. Jefferson City [1929-1930]. 2 v.

178. ————. Eighty-first report of the public schools of the State of Missouri, school year ending June 30, 1930. Jefferson City, Mo., 1931. 393 p.

179. **Montana.** Department of public instruction. Twenty-first biennial report of the superintendent of public instruction of Montana, 1930. Helena, Mont., 1930. 92 p.

This study gives in detail the purposes for which the school revenue was spent.

180. **Nevada.** Department of public instruction. State of Nevada biennial report of the superintendent of public instruction, 1929-1930. Carson City, Nev., 1931. 89 p.

181. New York (State) Education department. Twenty-sixth annual report of the education department for the school year ending July 31, 1929. Vol. 2 Statistics. Albany, N. Y., University of the State of New York, 1930. 385 p.

182. Oklahoma. State department of education. The thirteenth biennial report of the State superintendent of public instruction and the tenth biennial report of the State board of education, July 1, 1928 to June 30, 1930. Oklahoma City, 1930. 244 p.

183. Oregon. State department of education. Twenty-ninth biennial report of the superintendent of public instruction of the State of Oregon to the thirty-sixth legislative assembly regular session, 1931. Salem, Oreg., State printing department, 1931. 125 p.

184. Pennsylvania. Department of public instruction. Statistical report of the superintendent of public instruction for the year ending July 1, 1929. [Harrisburg, 1930.] 253 p.

185. Philippine Islands. Bureau of education. Thirty-first annual report of the director of education for the calendar year 1930. Manila, Bureau of printing, 1931. 218 p.

During the year 1930, 700 new primary classes were opened in 45 provinces, extending educational opportunity to 85,000 additional children. There was a marked improvement in the quality of instruction. A personnel was provided whose entire attention is being given to the development of objectives and to the reconstruction of the present curricula. The vocational program was expanded to include an increased enrollment of 16 per cent over the preceding year in the trade, agricultural, and home-economics courses.

186. South Dakota. Department of public instruction. Twentieth biennial report of the superintendent of public instruction . . . July 1, 1928 to June 30, 1930. [Pierre, 1930.] 477 p.

187. ———. Department of school and public lands. Twenty-first biennial report of the commissioner of school and public lands for the period from July 1, 1928 to June 30, 1930. [Pierre, 1930.] 243 p.

188. Texas. Department of education. The twenty-sixth biennial report . . . 1928-1930. Austin, Texas [1931.] 506 p. (Bulletin no. 282, March 1931. Vol. 7, no. 3.)

189. Virginia. State board of education. Annual report of the superintendent of public instruction of the commonwealth of Virginia, with accompanying documents, school year, 1929-1930 Richmond, Va., 1930. 189 p. (Bulletin, State board of education, vol. 13, no. 2, September 1930.)

190. Wisconsin. State department of public instruction. Education in Wisconsin. Biennial report 1928-1930. Madison, Wis., State department of public instruction, 1930. 181 p.

FOREIGN COUNTRIES

191. Abel, J. F. Information about the certificates issued by the Scottish education department. Washington, United States Office of education, 1931. 8 p. ms. (Circular no. 38.)

This study describes the Day school certificates, lower and higher, and the Leaving certificates, and gives suggestions for evaluating them.

192. Anderson, Henrietta A. R. Supervision of rural schools in British Columbia. A review of the present system and a plan of reorganization. Doctor's, 1931. Washington. 170 p. ms.

193. Archer, E. W. The private and church secondary schools of Victoria. Master's, 1931. Yale. 202 p.

194. **Auh, Paul.** Education as an instrument of national assimilation. A study of the educational policy of Japan in Korea. Doctor's, 1931. T. C., Col. Univ.

The purpose of this study was to examine the educational machinery and technique that have been employed by the Japanese in Korea in order to point out the forces working for and against the experiment, to discover the present and to predict the future success of the policy, and to make some recommendations to help solve some of the more pressing educational problems of Korea. Data were obtained from Government documents and publications, including school textbooks, current events as recorded in daily journals and magazines, and writings by Koreans, Japanese, and foreigners bearing on the subjects. Findings: The principal purpose of common education in Korea is to make Korean children loyal subjects to Japan. Varied means are used for this objective. Three significant facts seem to indicate that the Japanese policy of assimilation has not met the success expected by the Japanese authorities. Two basic principles are suggested in the government of Korean education.

195. **Baker, Mattie Alida.** A vocabulary study of primers adopted in Sao Paulo, Brazil. Master's, 1931. Peabody. 164 p. ms.

An analytical study of the vocabulary of 10 primers adopted in the state of Sao Paulo, Brazil, in order: (1) To determine the composite vocabulary of the primers, including the number of different words with their frequencies; (2) to find to what extent the vocabulary of the 10 different primers was common; (3) to find what provision was made for repetition and retention of words; and (4) to formulate a partial basis for the selection, preparation and evaluation of first-grade reading materials in Brazil.

196. **Becker, Carl H.** Secondary education and teacher training in Germany. New York City, Teachers College, Columbia university, 1931. 53 p.

197. **Blaisdell, James.** The development of education in Mexico. Master's, 1931. Southern California. 84 p.

Based on historical literature, both in English and Spanish, on the publications of the Secretariat of public education in Mexico, and on personal observation of present-day educational institutions and conditions.

198. **Bollig, Richard J.** The German Catholic schools in southern Russia. Washington, D. C., Catholic education press, 1931. 31 p. (Catholic university of America. Educational research monographs, vol. 6, no. 2, February 15, 1931)

The study of the Germans in Russia has been sponsored by the German foreign institute at Stuttgart which makes a special study of the Germans in foreign lands. The object of this study is to aid in a diffusion of knowledge about the German Catholics in southern Russia by putting into English what has hitherto been hidden in German sources.

199. **Bruno, Louise E.** A comparison of elementary school organization in the United States and Italy. Master's, 1930. New York. 47 p. ms.

200. **Buckingham, Elizabeth.** Mexican schools, past and present. Master's, 1930. California. Berkeley, University of California. 201 p. Bibliography p. 189-201.

201. **Cabot, Stephen P.** Secondary education in Germany, France, England and Denmark. Cambridge, Mass., Harvard university press, 1930. 110 p. (Harvard bulletins in education, no. 15)

A series of lectures on European schools, delivered before the Graduate school of education, Harvard university, in the winter of 1929.

202. **Campbell, Claude Lane.** British Columbia teachers' federation. Seattle, University of Washington, 1931. 65 p. ms.

Findings: British Columbia teachers federation provides effective means for teacher participation in the administration of the schools of the province.

203. **Choy, Yoon Ho.** Reorganization of private education in Korea with special emphasis upon the rural secondary phase. Doctor's, 1930. Indiana. 139 p. ms.

The problem was to investigate the present educational system of Korea in the light of western scientific education, and to study the geographical, social, economic, and political conditions of the country with hope of reorganizing the secondary educational system so

as to meet the needs of the people. The province of Whang-Hai Do was selected as the territorial basis for the study as it is a typical province and is representative of Korea as a whole. Findings: The present educational agencies and facilities are far below the needs of the people; private elementary schools can not be established in districts where common schools are already in existence. The schools in each province should be under the control of a provincial board of education with a superintendent as the chief executive of the educational system of the province.

204. Chu, You-kuang. Some problems of a national system of education in China in the light of comparative education. Doctor's, 1930. T. C., Col. Univ.

Analyzes and clarifies certain fundamental problems that must be answered in one way or another in the organization and operation or development of a national system of education in China. Views the social and philosophical foundations of a national system as a whole, and brings out the basic principles that seem fundamental to the laying of such foundations.

205. Clark, Cynthia Anne. English lower schools in the late seventeenth and early eighteenth centuries. Master's, 1930. Northwestern.

206. Commission on medical education. Medical education and related problems in Europe. New Haven, Conn., 1930. 200 p.

The aim of the study is to present the general characteristics of medical training in European countries without endeavoring to deal with the details of instruction in individual schools or to draw comparisons. The study covers education in Great Britain, Germany, France, Austria, Switzerland, The Netherlands, Denmark, and Sweden. There are chapters on postgraduate education, and on medical practice and sickness insurance.

207. Daniels, Martha J. The separation of church and state in Mexico and its effect on evangelical educational effort. Master's, 1931. Northwestern.

208. Daskawie, M. A. Qayyum. Nationalism and education in India. Master's, 1931. New York. 165 p. ms.

A historical survey and critical evaluation of Indian education and nationalism. Findings: Present educational system is unsatisfactory. Compulsory, free and universal education on a national scale is imperative. Need of better inspection, single language, and simpler script (Roman script) is suggested. Curriculum for elementary education and educational policy for the country are also advised.

209. De Mattos, Xavier. The elementary public schools in Brazil. 1759-1827. Master's, 1931. Catholic Univ. 83 p. ms.

210. DeVette, William Anton. Educational aspects of the Dutch craft gilda. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This investigation was begun after a study of the origins of vocational education disclosed material on the subject to be available only in the language of Holland. The principal aims of the gilda were to maintain and improve craftsmanship standards. The apprenticeship system served these aims admirably. A journeyman period, during which a person was expected to round out his education by working under varying conditions, followed the apprenticeship. The execution of a masterpiece was required of all journeymen before becoming masters. Attainment of the mastery of a craft and the consequent membership in a gild made one a citizen with a right to vote, which must be exercised on both gild and municipal questions. Attendance at church was required of masters as well as apprentices and journeymen. The gilda showed a strong religious character until after the Reformation. The abuse of authority and of privileges finally brought about the downfall of the gild system.

211. Dillon, David Gibson. Irish monastic schools and scholars. Master's, 1931. Boston Coll. 73 p. ms.

212. Dinda, John P. Education in Czechoslovakia with emphasis on urban and secondary schools. Master's, 1931. Western Reserve. 62 p. ms.

213. Djung, Lu-Dzai. Democratic tendencies in the development of modern education in China. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study gives a comprehensive description of the educational movements tending toward democratic tendencies in recent years in the chaos of Chinese political and social conditions.

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*214. Douglas, J. Leonard. Education in Czechoslovakia. Master's, 1931. New York. 40 p. ms.

A study of elementary, secondary, and university education; and the Czechoslovakian constitution. Gives a general summary of education as it exists in Czechoslovakia to-day.

215. Ebaugh, Cameron Duncan. National system of education in Mexico. Doctor's, 1931. Johns Hopkins. Baltimore, Md., Johns Hopkins press, 1931. 149 p. (Studies in education no. 16.)

216. Elliott, Arthur Elwood. Paraguay, its cultural heritage, social conditions, and educational problems. Doctor's, 1931. T. C., Col. Univ. New York City. Teachers college, Columbia university, 1931. 210 p. (Contributions to education, no. 473.)

A study of the educational, social, and economic conditions of the country, as influenced by the composition of the population, and the health of the people, and religion. The objective of "missionary education" and how it can be realized are discussed.

217. Eppinger, Anna Marie. German children's literature. Master's, 1931. Boston Univ.

218. George, Raymond C. The development of chemistry in German high schools. Master's, 1931. Syracuse.

219. Glinz, Leslie Albert. The development of public secondary education in Manitoba. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study takes up the background of public secondary education; its expansion; secondary school teachers; the development of administrative practices; and the development of the program of studies, and examinations.

*220. Goss, George E. Some contributions of the American young men's Christian association to physical education in Europe from 1918 to 1928. Master's, 1931. New York. 138 p. ms.

This study aims to set forth some of the contributions in the field of physical education of the American Y. M. C. A. to the peoples of the countries of Europe without regard for color, class, or creed.

221. Graziana, Guido. Physical education under the Fascist régime. Master's, 1931. Int. Y. M. C. A. Coll. ms.

222. Heavin, Albert William. The professional and social status of teachers in England and Wales. Master's, 1930. Indiana. 234 p. ms.

The problem was to determine the professional and social status of teachers in England and Wales as evidenced by their training, working conditions, remuneration, tenure and retirement, solidarity and social prestige. Findings: The national government tries to keep a proper balance between the supply and demand of teachers by limiting the number of students who may enter teacher training colleges and by free maintenance of prospective teachers; the universities are cooperating in the training and certification of teachers; training courses for elementary teachers vary from two to four years in length; training for the secondary teacher consists of regular three year academic degree course in a university; supervision of instruction as is known in America is very uncommon in England and Wales; the tenure of elementary teachers is very secure; a period of probation precedes permanent appointment; superannuation is now provided for all teachers.

223. Horton, Arthur G. A study in sociological integration. Master's, 1930. T. C., Col. Univ. 114 p. ms.

Part 1 is a consideration of basic factors involved, such as heredity, environment, impulses and instincts, habits, intelligence, etc. This is followed by a specific attempt in Part 2 to make a sociological integration of Soviet Russia. Findings: A comprehensive community can be known and studied by its basic life functions; such as, government, economics, education, family, religion and culture. The community can be integrated by a proper coordination of these several basic, descriptive, behaviouristic life functionings so that it can better adjust itself to the status quo and better adjust itself to the aim ideal, such as a real democracy.

224. Hsu, Jennie. A critical analysis of certain problems in the higher education of village women in China. Doctor's, 1931. T. C., Col. Univ.

It is the purpose of this study to show: (1) The personal problems of Chinese students which are recognized by presidents and deans of women in colleges educating women in

China, by women students who are studying China at present, and by women students who are studying in American colleges and universities; and (2) to show how these problems are related to administrative practices in the colleges and to influences outside of the colleges.

225. Hsueh, Hung-Chih. Secondary education in China—a statistical presentation. Master's, 1931. Stanford.

226. Hung, Ko-Wong. New emphases for the Chinese elementary school: a study of increasing school efficiency. Master's, 1931. Stanford.

227. Jivanayakam, Daniel. Training teachers for English schools in Travancore. Doctor's, 1931. T. C., Col. Univ.

The purpose of the study was to evaluate the present policies and practices of the training college at Trivandrum, which trains teachers for the English schools of Travancore and Cochin, India, with a view to suggesting means for improving these policies and practices in accordance with accepted standards. It was found that the present crisis in India has an educational bearing and that the task of training teachers for new India gathers importance accordingly.

228. Kammerer, Violet Gould. Development of public education in Mexico since 1920. Master's, 1931. Southern California. 59 p.

A study of recent improvements, especially with respect to the adaptation of education to family and community life, based on published materials secured from the Mexican ministry of education.

229. Kardos, Lillian Iona. Education in Hungary before and after the World War. Master's, 1931. Southern California. 75 p.

A general account based on the literature, on correspondence with the ministry of education, and on interviews with educated Hungarian emigrants in Los Angeles.

230. La Fontainerie, Francois de. French liberalism and education in the eighteenth century. Doctor's, 1931. T. C., Col. Univ. New York City, McGraw-Hill book company, 1932. 385 p.

The purpose of the study was to make available to students of the history of education the important documents to which reference is frequently made in general works on the subject, together with such historical data, biographical notices, and explanatory notes as are necessary to understand them.

231. Langford, Howard D. Educational service: its functions and possibilities. Doctor's, 1931. T. C. Col. Univ. New York City, Teachers college, Columbia university, 1931. 212 p. (Contributions to education, no. 509.)

A study of the functions and possibilities of educational service in the Province of Ontario, Canada. An attempt is made to get a clearer understanding of the functions and possibilities of educational service by examination of two tendencies prominent in an educational program; by analysis of the probable results of the tendencies to determine which is the more valuable educationally; and by discussion of possible ways of strengthening the more helpful tendency and making it prevail.

232. Lee, Yui Yong. A proposed plan for the training of leaders for the program of religious education in the Protestant churches of Korea. Master's, 1930. Presbyterian theological seminary, Chicago, Ill.

233. Lewis, Randall McGill. A study of conditions in Chinese rural elementary schools. Master's, 1931. Cornell.

234. Liu, King Yuen. Chinese education under "The three principles of the people." Master's, 1931. Stanford.

235. Liu, Snowpine. The needs of China in physical education. Master's, 1931. Int. Y. M. C. A. Coll. ms.

236. Lochhead, Jewell. The education of young children in England. Doctor's, 1931. T. C., Col. Univ.

The problem was to ascertain the present scope and function of schools which provide care and training for English children between the ages of two and seven years, and to make an analytical study of their organization, curricula, methods of teaching, and educational theory, comparing these with educational practice in the United States. Observations were made in English schools during a period of five months in 1928-1929.

representative schools being selected for study. Findings: The results of the investigation reveal the fact that the general trend in the education of young children in the three types of schools studied, infants' schools, nursery schools, and kindergartens, is somewhat different from the more progressive tendencies in childhood education in the United States.

237. Long, Mabel E. Education in Bulgaria. Master's [1931]. T. C., Col. Univ. 33 p. ms.

This study gives a brief history of education in Bulgaria, present curriculum in gymnasia, class-room methods in gymnasia, and possible improvements. The findings showed very good academic training, few modern methods, little emphasis on vocational guidance, and that gymnasia come far from filling needs of the majority of the population.

238. McCain, Rea. Travel in Italy as a part of the education of the English gentleman during the Renaissance. Doctor's, 1931. New York. 192 p. ms.

239. McKee, William J. New schools for young India. Doctor's, 1930. Columbia. Chapel Hill, University of North Carolina press, 1930. 435 p.

This is a critical study of ancient, pre-British, and British education in India to discover its strength and weaknesses with reference to present-day demands and needs. The outstanding experimental schools are described and their contributions evaluated. The study summarizes the steps that need to be taken and the specific objectives and items that need to be included in the curriculum in order to make it functional in the lives of village children.

240. McMurry, Ruth Emily; Mueller, Max; and Alexander, Thomas. Modern foreign languages in France and Germany. The training of teachers and methods of instruction. New York City, Teachers college, Columbia university, 1930. 516 p. (International Institute of Teachers college. Studies, no. 9.) Bibliography: p. 501-508.

241. Marshall, M. V. Education as a social force as illustrated by a study of the teacher-training program in Nova Scotia. Cambridge, Mass., Harvard university press, 1931. 161 p. (Harvard bulletins in education, no. 18.)

This study aims to show how the teacher-training institutions can be intimately related to the life of the people. It was proposed to state the criteria by which a program of teacher training may be evaluated; to evaluate the present provisions for teacher training in Nova Scotia in the light of the criteria and in the light of the social setting; and to propose a constructive program for training teachers which considers all factors bearing on such a provincial provision.

242. Mathew, Cheruvathur Cheru. A study of American agricultural extension work and its application to the villages in the native state of Cochin (India). Doctor's, 1931. T. C., Col. Univ.

A study was made of agricultural extension work in the United States, with a view to introducing a similar course in Cochin, India, in order to increase production and raise the standard of the life of the people. An attempt was made to construct a workable program of adult education suitable to the needs and resources of the state. On the basis of this study, an outline of extension work for the State of Cochin is made.

243. Matthews, Roderic Donald. Post-primary education in England: a study of the relation of the board of education to the provision for post-primary education in England, 1902-1929. Doctor's, 1931. Pennsylvania. Philadelphia, Pa., Williams brothers, 1931. 200 p.

The chief contribution of this study is the portrayal of the increasing centralization of the power of the State over secondary education in England.

244. Milam, Ava B. A study of the student homes of China. New York City, Teachers college, Columbia university, 1930. 98 p. (International Institute of Teachers college. Studies, no. 10.)

The purpose of this study was to survey the facts regarding Chinese family life in the families from which college students and students from other higher schools come in order to have a background for starting courses in home making and organizing a home economics department in Yenching university, Peiping, China. 1,270 Chinese families were studied between October 1922 and March 1923.

245. Nabholz, Hans. The organization and administration of German universities. Master's, 1931. New York. 76 p. ms.

An interpretation of the organization and administration of present-day German universities. Findings: The new university statutes of 1928 have broadened the academical self-administration by increasing the parts of the administrative mechanism. The principle of administration has remained the same.

246. Nelson, Caroline. Superstition and fears of East Indian school children. Master's, 1930. Nebraska.

Lists of superstitions and fears common to children in the United Provinces, India, were collected, then these lists were submitted to school pupils to discover relative frequencies of the fears. There is some evidence that fears of those who had attended mission school were less than those of other children.

247. Nicholas, Catherine Kate. A brief study of the development of some of the educational enterprises existent to-day in India including Burma. Master's, 1931. Southern California. 97 p.

An historical survey of the various types of schools in India—native, Buddhist, Christian, and those under British government, with some evaluation and criticism of each.

248. Obara, Kuni. The place of the Japanese family in religious education. New York City, New York university [1930]. 92 p. ms.

A study of how the old Japanese religious training can be used for Christian education, by: (1) readjusting the old religious habits to new Christian education, and (2) slow and careful training of the people.

*249. Parker, Beryl. The Austrian educational institutes. Doctor's, 1931. Columbia. Vienna and Leipzig, Austrian federal publisher for education, science and art, 1931. 185 p.

250. Radtke, Bruno. Some observations on German and English education in elementary and secondary schools. Lawrence, Kans., University of Kansas, 1931. 86 p. (Kansas studies in education, vol. 2, no. 1, June 1931.)

Describes the development of education in Germany and in England since 1918.

251. Reiner, Ralph Oliver. The organization and administration of modern public education in Korea. Master's, 1931. Southern California. 248 p.

An account of the establishment and development of modern education in Korea under the Japanese colonial government, covering the period from 1908 to 1929, based chiefly upon official publications of the Governor general of Chosen, which include extensive statistical tables, descriptive matter of a general nature, and copies of the educational ordinances issued by the government.

252. Rieger, Eliezer. Selection of a Hebrew spelling vocabulary. Master's, 1931. Chicago. 128 p. ms.

A study of the Hebrew word-frequencies in the written discourse of children and adults in Palestine and in various literary sources. Findings: The 2,008 commonest words in written Hebrew; and the degree of correspondence between the highest word frequencies in Hebrew, English, French, and German.

*253. Rose, Hildegard. Education in modern Germany. Master's, 1931. New York. 113 p. ms.

The purpose of this study was to investigate the present status of changes and trends in the system of education introduced in Germany after the revolution of 1918. Findings: There are two groups of forces at work in shaping modern German education; one makes for greater unity, while the other makes for better distinctions. Equality of education is extended only to the equally endowed, and not to everybody.

254. Royer, Mary Neuhouser. Education of village children in a central province mission, India. Master's, 1931. Peabody. 94 p. ms.

A study of school work of the American Mennonite Mission, Dhamtari, C. P., India against a brief background study of Indian education and village life, general and local. Findings: The American Mennonite Mission in recognition of the fallacy of educating from the top down and the consequent necessity of reconstructing the elementary curriculum to meet the challenge of the Indian village, is attempting to overcome the limitations of the present Government prescribed literary curriculum in three ways: (1) By introducing the required work through village situations experimentally; (2) by supplementing the

regular curriculum with village activities outside the classroom; and (3) by constructing a new curriculum for subnormal children, not subject to Government requirements. It was found that Government was favorable to experimentation. The Mission is centering attention on educating teachers for the village schools. The suggestibility of the present situation for a new village curriculum was interpreted in the light of a study made by Miss Lucy Gage's class in Evaluation of curriculum materials, in the summer of 1931, at George Peabody college for teachers.

*255. Sadiq, Issa Khan. Modern Persia and her educational system. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 135 p. (Studies of the International institute, no. 14.)

The author has tried to find out whether the present system of education responds to the needs and aspirations of the country and if not what steps should be taken to attain Persia's ideals. It was found that a number of undesirable outcomes could be attributed to the present system, which is a mixture of the old and new order, such as belief in fate, docility, individualism, contempt for industrial pursuits, and superstition.

256. Shannon, Kenneth Coleman. A survey of physical education in the Germany of to-day. Master's, 1931. Peabody. 80 p. ms.

257. Shipp, Frederic Thomas. A Christian education program for the Korean Y. M. C. A. Master's, 1931. Stanford.

258. Singer, Lillian M. Survey of the salient advances in the secondary school system of France since the World War (1920-1930). Master's, 1931. Coll. of the City of N. Y. 126 p. ms.

This study gives a brief history of the lycée and college. It deals with the changes the last decade has wrought in the curriculum, baccalaureate examinations, scholarships, tuition, improvement in teaching and democratization.

259. Soudah, Peter E. The work of Western education in the Near East. Master's, 1930. Michigan.

260. Speers, James M., jr. Problems incurred in the establishment of a health protection program in China. Master's [1931]. New York. 59 p. ms.

261. Stayer, Jessie Lee. The control of education in the German Empire. Master's, 1931. Pennsylvania. 44 p. ms.

262. Stob, Ralph. Platonism in English educators and theologians. Doctor's, 1930. Chicago.

263. Thomas, H. H. Plan for developing a curriculum of religious education for mission schools in West Africa. Master's, 1931. Kansas.

Description and evaluation of objectives, curriculum, and methods in mission schools in Sierra Leone, British West Africa, with reference to religious and moral education. A plan was devised for revision based upon principles and practices in America.

264. Turosienski, Severin. Bibliography of material for evaluating foreign credentials. Washington, D. C., U. S. Office of education, 1930. 32 p. ms. (Circular, no. 21.)

The list is classified under two main headings: General and by countries, arranged in alphabetical order.

265. Van Doren, Alice B. Teacher training and extension work for village schools in India. Master's, 1930. T. C., Col. Univ. 40 p. ms.

The problem was to work out types of training and extension work connected with situations arising in home and village life, especially among members of the Christian community. Suggests simplified forms of training better adapted to conditions in the rural community.

266. Wallace, Fraser Melvin. A statistical analysis of the British Columbia junior matriculation examination marks and a suggested improvement in the marking system. Master's, 1931. Washington. 99 p. ms.

267. Wang, Feng-Gang. Japanese influence on educational reform in China from 1895 to 1911. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study examined the proposition that the real impetus towards the introduction of Western civilization into China came chiefly from Japan, and that from 1895 to 1911 the

predominant influence on educational reform in China was Japanese. The study was based on an investigation of original sources in Chinese, Japanese, and in English. Japanese influence was directed on Chinese education through Japanese teachers employed in Chinese schools; Japanese literature translated and printed in the Chinese language; and Chinese students studying in Japan. After the Revolution of 1911 Japanese influence on Chinese education waned, and American and European influences began to rise.

268. West, Ralph E. A constructive program of religious education for Aoyama Gakuin. Master's [1931]. New York. 60 p. ms.

Deals with the present condition of Aoyama Gakuin (Mission school in Tokyo, Japan) and suggests a plan for making the teaching of religious education in that school more effective. Finds that the teaching in this institution can be made much more effective by the use of more modern methods.

269. Wilcox, George M. Education in modern Greece. Doctor's, 1931. T. C., Col. Univ.

The problem was to study and describe the educational system in Greece, and to consider problems in Greek education and suggest solutions. Findings: There is a widespread and genuine appreciation of education in Greece; schools and enrollments have increased rapidly in recent years; a considerable number of children of elementary school age are not enrolled in the schools; administration of education is scattered among at least five of the national ministries; textbook control is rigorous; enlightened provision is made for the care of teachers by means of pensions and sick benefits; school buildings are frequently very crowded and are sometimes unsanitary; secondary education is predominantly classical; there is a high percentage of nonpromotion in secondary schools of all types; methods of instruction are formal and aim primarily to have pupils learn prescribed subject matter; an extension of opportunities for vocational education, especially at the secondary school level, is the greatest need of Greek education. Enrollment in institutions of higher learning shows that professional training is predominately for the legal profession.

270. Wright, Margarita. An experimental course of study in the school sciences on the basis of activities adapted to an elementary school in Mexico subject to state requirements. Master's, 1931. Claremont.

271. Zanelli, Louis J. Italian model schools. Master's, 1931. Coll. of the City of N. Y. 42 p. ms.

A critical survey of Italian model schools and such progressive schools as the Asilo Agazzi, the Agro Romano, the Montessori, the Montesca, the Salvoni, etc. Findings: These schools have had a tremendous influence on the reconstruction of Italian education. They were particularly influential in the Gentile reform of 1923.

See also, 273, 2387, 3341, 3585.

INTERNATIONAL ASPECTS OF EDUCATION

272. Gentry, Curtis G. Teaching international civics in the public schools. Master's [1931]. New York. 100 p. ms.

A study of the needs of instruction in international civics because of the growing interdependence of the nations. A survey of 100 cities east of the Mississippi shows that very little teaching is being done to meet the need.

273. Harper, Heber Beece. A comparative study of student opinion in some European and American universities regarding certain international problems. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 255 p.

The problem consisted of an attempt to make an objective study of the opinions of university students in the United States and several European countries, concerning some major international problems. Two questionnaires were formed, one containing 124 items, and the other additional items, making a total of 352 questions. Forty-two different groups in 18 different institutions used the test. Institutions in England, France, Germany, Austria, Czechoslovakia, Denmark, and Switzerland, in addition to the American group, used the test. Nearly 2,000 questionnaires were filled out with 124 responses on short forms, and 352 on long forms. Findings: There is a strong trend toward constructive internationalism. From the standpoint of American raters the German-Austrian students have a lower internationalism score and a higher nationalism score than do

the others. There are definite nationalistic trends among practically all the groups in connection with important specific problems. Pedagogical students seem to be more internationally minded than nonpedagogical students.

*274. **Hauck, Arthur A.** Some educational factors affecting the relations between Canada and the United States. Doctor's, 1931. T. C., Col. Univ. Easton, Pa., Lafayette college, 1932. 100 p.

The purpose of this study was to appraise the amount of information and the attitudes of representative groups of secondary students of Canada relative to the United States and of similar groups of American students relative to Canada by means of an exploratory test and student compositions; and to find out what provision is made in the elementary and secondary schools of Canada and the United States to inform the pupils of each country about the history, ideals, commercial and industrial life of the other and about their relations as neighbor nations. Data were secured from an exploratory information and attitude test given to more than 1,000 students in their final year of secondary school in representative schools in various sections of each country; 830 brief compositions about the United States written by Canadian students, and 805 compositions about Canada written by students in high schools of the United States; and 77 American and Canadian history textbooks used in the elementary and secondary schools of the United States and Canada, and 28 geographies used in the elementary schools. Data indicate that Canadian students have much more information about the United States than have the American students about Canada.

275. **Kandel, I. L.** Essays in comparative education. New York City, Teachers college, Columbia university, 1930. 235 p. (Studies of the International Institute, no. 11.)

276. ——— ed. Educational yearbook of the International Institute of Teachers college, Columbia university, 1930. New York City, Macmillan company, 1930.

277. **McClure, Charles Haven.** The contribution of English literature to a secondary school program of education for world peace. Master's, 1930. Indiana. 182 p. ms.

The purpose of the study was to determine whether or not the traditional secondary school subject of English literature contains sufficient material to justify its being taught as an instrument for the promotion of the ideal of world peace and goodwill; and to determine a selection of those authors from 1611 to 1929 whose social idealism and political interests spurred them to express definite views concerning the folly and misery of war. Findings: Some 40 authors representing a fairly evenly distributed historical range from 1611 to 1929 have written or spoken as unalterably opposed to war and in favor of a league of mankind.

278. **Neumann, G. B.; Kulp, D. H. II, and Davidson, Helen.** Test of the international attitudes. New York City, Teachers college, Columbia university, 1931.

*279. **Pearlman, Harry.** The influence of immigration on the development of American nationalism. Master's, 1931. New York. 88 p. ms.

This study attempts to bring about a better understanding between the native American and the foreigner, and to show the great contributions of the immigrants and to point the way to true Americanisation. The study gives in some detail an historical treatment of immigrant backgrounds, followed by an evaluation of the positive and negative factors introduced by immigration. The modern concept of adult education, particularly in its effect upon the diffusion of different cultures and the development of American nationalism was stressed emphatically.

280. **Penningroth, Paul W.** A study of public opinion of international relations in certain communities. Doctor's, 1931. T. C., Col. Univ.

This study describes a cross section of life in several communities with particular emphasis on public opinion on international relations. Two communities of 2,000 and 46,000 population were selected by criteria which aimed to secure some degree of homogeneity and similarity with other communities of like size. Findings: Local interest is pre-eminent. The proportion of residents interested in international affairs is about the same for the two communities. The work of societies interested in world problems has not directly filtered down to the small community to any important extent.

281. Shepperd, E. Eugenia. Attitudes toward foreign countries shown in popular magazines. Master's, 1931. Chicago. 115 p. ms.

Analysis of amount of material, subject matter, and attitude, of references to other countries in a sampling of the 16 American magazines of largest circulation. Findings: There is much material on art, characters, landscapes, and cities, but little insight. England and France are best known. Asiatics and North American aliens are least favorably regarded.

282. Stoker, Spencer Longshore. A study of efforts to promote international understanding through the schools. Doctor's, 1931. Stanford. 332 p. ms. (For abstract see no. 717a.)

The study takes up the international exchange of professors, the international exchange of students of higher education, the encouragement of the study of foreign culture and of international problems, the establishment of scholarships, the international systems of equivalence of studies and degrees, international student contacts, and the granting of international travel concessions to students. In an effort to advance international understanding through the lower schools emphasis has been placed on instruction in the existence and aims of the League of Nations, an impartial or conciliatory approach to the teaching of history, a campaign against books containing elements of chauvinism or hatred, and the encouragement of direct and indirect contact of pupils. Exchanges of students, and group visits, and international correspondence have been encouraged.

283. Swanson, Thelma. Teaching world citizenship in high school English classes. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to make some contribution toward the program of education for world friendship and understanding.

284. Symons, Farrell. Courses on international affairs in American colleges. 1930-1931. Boston, Mass., World peace foundation, 1931. 353 p.

This survey was undertaken to find out what courses bearing on international affairs are being offered, and the significance of the rôle they play in the colleges of the United States. Data were secured largely from college catalogues.

285. Wilson, Kate Eleanor. Material to be used in the teaching of internationalism. Master's, 1931. Kans. St. T. C., Pittsburg.

EDUCATIONAL THEORY AND PRACTICE

286. Brashears, James F. Educational terminology. Master's, 1931. Colorado.

The purpose of this study was to discover educational terms or concepts which are most frequently used in educational writings.

287. Childs, John L. Education and the philosophy of experimentalism. Doctor's [1931]. T. C., Col. Univ. New York, Century company, 1931. 264 p.

The aim of this study is to inquire into the adequacy of experimentalism as a guiding philosophy of education in the light of various criticisms. Books and articles on the philosophy and educational implications of experimentalism were studied. Findings: The philosophy of experimentalism has its deeper roots in certain general tendencies in modern life and thought. It is preeminently a philosophy of method. The experimentalist believes that freedom is an achievement not a datum.

288. Clugston, Herbert A. Theories of learning. Master's, 1931. Colorado. 115 p. ms.

Developmental and integrative study based on available experimental literature. Findings: Learning is dependent upon the nature of the impulse to learn, the nature of the situation, and the nature of the response.

289. Corey, Stephen M. and Duff, Helen. The effect of motivation upon the intelligence-achievement relationship. Greencastle, Ind., DePauw university, 1931.

290. Davis, Charles Ellsworth. Changing theories in education. Master's, 1931. Colorado.

291. Falter, Rev. Clement Marcellus. The present day demand for a philosophy of education. Master's, 1931. Catholic Univ. 52 p. ms.

292. **Flemming, Cecile White.** Cooperative efforts of principal and psychologist. In National education association, Department's of elementary school principals. Tenth yearbook, 1931. p. 328-33.

This study attempts to present briefly a cooperative effort by principal and psychologist, to emphasize the values of integrating the activities of principal, teachers, and the psychological service to obtain more adequate knowledge of the pupils of a given group for the purpose of improving their adjustment on the basis of the factors revealed, and of improving the pupils' skill in study and the teachers' direction of learning. It presents the results of the teachers' analysis of pupils' needs, describes the techniques used in the remedial program, and summarizes in subjective and objective terms, the results obtained in the improved adjustment, in the acquisition of reading skills, and in more effective learning.

293. **Giesing, Mrs. Edna.** The influence of the initial error theory on education. Master's, 1931. Colo. St. T. C.

The investigation attempts to determine to what extent modern educational practice is being influenced by the initial error theory.

294. **Guiang, Pedro G.** A comparative study of textbooks in principles of teaching. Manila, P. I., Bureau of education, 1931.

Fifty-two books dealing with principles of teaching were surveyed to find out: (1) The authors most often mentioned; (2) the topics dealt with in the works of the authors that are mentioned most frequently and should therefore belong to a course in principles of teaching; (3) the book which embodies these topics and thus meets the needs of the students taking the course. Findings: (1) The first 10 authors mentioned most frequently are Thomas, Strayer and Norworthy, Bagley, Cubberley, Parker, Thorndike, Dewey, Earhart, McMurry, and Charters; (2) the topics dealt with in the works of the authors that are mentioned most frequently are: The teachers' opportunities, responsibilities, philosophy of education; Objectives of education; Organization and control; General principles of learning; Types of learning; Technique of teaching, and Measuring results; and (3) Thomas' Principles and technique of teaching, embodies these topics.

295. **Leitzell, Hazel Grace.** Education students' ideas on certain questions of instructional technique. Master's, 1931. Southern California. 344 p.

Gives tabulations of several thousand individual contributions made by students, with an effort to determine the degree of uniformity and of individuality in the contributions, each of which is a proposed solution for some specific teaching difficulty.

296. **Ludwick, Ethel Gage.** Self-realization; the concept in modern educational theory. Master's, 1931. Southern California. 78 p.

An analysis and compilation of ideas relating to the concept of self-realization in education as expressed by several contemporary philosophers and educators.

297. **Mulhall, Sister Leonita.** The genesis and growth of the progressive movement in education. Doctor's, 1931. Cincinnati. (For abstract see no. 698.)

The purpose of this study was to investigate the nature and extent of the philosophical, psychological, and pedagogical principles as demonstrated in the educational endeavors of that period of the Renaissance from 1300 to 1600, and to contrast the findings with the theories, principles, and methods of the progressive movement in education in the United States from 1898 to 1930.

298. **Osburn, W. J.** A study of the content of textbooks in principles of teaching. Columbus, Ohio, State department of education, 1931.

299. **Paul, Joseph B.** A study of the relative effectiveness for learning of a 55 and 30 minute class period. Doctor's, 1931. Wisconsin.

300. **Read, Violet Caroline.** Sources and evaluation of elementary teaching aids. Master's, 1931. Oklahoma. 145 p. ms.

301. **Skaggs, E. B., and others.** Further studies of the reading-recitation process in learning. New York City, Columbia university, 1930. 38 p. (Archives of psychology, no. 114.)

Contents: Optimum number of readings before introducing reading-promptings in verbatim learning, by E. B. Skaggs and S. Grossman, p. 5-14; Relative effect of interspersing a recall at different stages of learning, by Louise O. Krueger, p. 15-25; Optimal effect of a recall during learning, by Wm. C. F. Krueger, p. 26-34; Summary statement of the status of experimental investigations to date, by the authors, p. 35-37.

302. Weidemann, C. C. The indeterminate statement. Lincoln, University of Nebraska, 1931. 4 p. ms.

Describes and illustrates the nature of the indeterminate statement. Findings: The indeterminate statement is neither entirely true nor entirely false, but doubtful as to whether true or false.

303. ——— The relative classroom discussion value of the determinate and indeterminate statement. Lincoln, University of Nebraska, 1931. 7 p. ms.

Presents examples of the use of 40 indeterminate statements and 120 true-false statements, arbitrarily defines the true-false and indeterminate statements, and indicates that the indeterminate statement causes class discussion to a degree greater than the true-false statement.

304. Zimmer, Edward, jr. Pragmatism, behaviorism, and idealism as educational philosophies. Master's, 1931. New York. 86 p. ms.

A study of the comparative ability of pragmatism, behaviorism, and idealism to cope with the problem of educational aims and procedure. Findings: The inability of pragmatism and behaviorism to cope with the problem and the adequacy of idealism in dealing with it.

See also 34, 477, 1820; and under Educational biography; Special methods of instruction; Special subjects of curriculum.

SPECIAL METHODS OF INSTRUCTION AND ORGANIZATION

ABILITY GROUPING

305. Carruth, Irby B. An attempt to reduce the individual variations of pupils in homogeneous groups. Master's, 1931. Chicago. 133 p. ms.

306. Cleary, Adele C. Homogeneous versus heterogeneous grouping. Master's, 1931. N. Y. St. Coll. for Teach. 72 p.

This study summarizes the findings of a number of recent experiments attempting to discover which if either of the forms of class organization indicated in the title is superior. While the results are not all on the side of either one, the weight of the evidence seems to be somewhat greater on the side of homogeneous grouping. Problems arising in connection with the determination of a method of selection are discussed and the advantages and disadvantages of both types of organization are given.

307. Connett, Marguerite. Ability grouping in English in junior high school. Master's, 1931. Oklahoma. 72 p. ms.

Findings: While the pupils in the high group average higher in a given trait, and the low group lower, the study reveals no appreciable decrease of individual differences in this group.

308. Dellinger, Anne Den Bleyker. Results of placing children in ability groups in the elementary schools of Pittsburg, Kans. Master's, 1930. Kans. St. T. C., Pittsburg.

309. Galligan, Harold Henry. An experiment in reclassification in a small elementary school based upon measurements of intelligence and achievement. Master's, 1931. Brown. 49 p. ms.

A study to determine by a program of capacity and achievement testing what reclassification would be necessary to secure homogeneous grouping on the basis of the Providence class personnel chart. Findings: Even under the limitations set by the administrative problems of a small school (two classes of each grade) a marked decrease in the MA, CA, IQ and achievement range in a given grade can be attained.

310. Gray, Robert F. Organization of homogeneous instructional groups at Aptos and Presidio junior high schools. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

Mental, reading, and arithmetic tests were given all prospective junior-high-school pupils entering the Aptos and Presidio junior high schools, before they left their elementary schools. By grouping the pupils homogeneously, it was possible to limit the range in each group to approximately two years chronological age and a year and a half mental age, except in the highest and lowest groups.

311. Hegener, A. L. A study of the grouping of pupils in a general senior high school according to like purpose. Master's, 1931. Michigan.

A study is made of this virtually unique plan, comparing its advantages with the ability-grouping objectives (also rarely found in a senior high school) by means of marks, intelligence test scores and questionnaires to pupils and teachers.

312. Hodges, Alice Sinon. The experimental basis of ability grouping. Master's, 1931. Tennessee. ms.

313. Howard, Walsie G. Grouping of first grade children. Master's, 1931. Oklahoma. 75 p. ms.

A study was made of the possibility of grouping children according to ability in first grade reading. Findings: Pupils overlap in different groups almost 100 per cent, except in the trait used as a basis for grouping.

314. Hughes, W. Hardin. How homogeneous is a homogeneous group? Pasadena, Calif., Public schools, 1930. Nation's schools, 6: 21-25, October 1930.

315. Kemmerer, W. W. and Aaron, Sadie. The determination of the best procedures or homogeneous grouping in the junior and senior high schools by using the results of intelligence and achievement tests, the teacher's marks, a pupil's age and social maturity, and the interests and vocational choices of the students without combining these factors into one weighted quotient. Houston, Texas, Independent school district [1930] ms.

316. Nestor, James Henry. Group ability as a basis for school reorganization. Master's, 1931. Boston Coll. 49 p. ms.

317. Segel, David. An investigation of the objective factors which may be used in homogeneous grouping or the prediction of success in individual subjects in junior and senior high schools. Long Beach, Calif., City schools, 1931. (For abstract see no. 717 b.)

This study attempts to ascertain the best methods of homogeneous grouping in subjects in junior and senior high schools by a study of the literature on the subject and by direct investigation.

318. Symonds, Percival M. Homogeneous grouping. Teachers college record, 32: 501-17, March 1931.

319. Turney, A. H. Status of ability grouping. Educational administration and supervision, 17: 21-42, 110-27, January, February 1931.

The alleged advantages and disadvantages of homogeneous grouping and the criteria of its success are reviewed. Many of the studies and experiments reported in educational literature are examined in the light of these criteria.

320. Walter, Ralph. A study of the classification of the elementary school pupils of New Rochelle, N. Y. New Rochelle, N. Y., Public schools, 1931. 13 p. ms.

The purposes of the study were: (1) To ascertain the facts concerning the homogeneity of the elementary school classes as they now exist, and (2) to analyze the data obtained from all the schools and attempt to discover a formula or technique which would give a greater degree of homogeneity throughout the city.

See also 410; and under Individual instruction.

ACTIVITY PROGRAMS

321. Bethel, Willa Imogene. Activities carried on in the home-rooms of platoon schools. Master's, 1931. Oklahoma. 76 p. ms.

Findings: The following subjects should be taught in home-room: Grade 1, reading, language, phonics, writing, spelling; Grade 2, the same, omitting phonics and including arithmetic; Grade 3, the same as grade 2; Grades 4, 5, 6, reading, language, arithmetic, spelling, and writing.

322. California. State department of education. California curriculum commission. The activity program and the teaching of reading, manual for

kindergarten and primary teachers. Washington, United States Government printing office, 1931. 95 p. (U. S. Office of education. Bulletin, 1931, no. 2.)

323. **Hambert, Nona Choata.** Activity work in public schools. Seattle, University of Washington. 1931. 120 p. ms.

Findings: Activity school is an important means to effective learning. The work must be carefully planned and should be checked to denote achievement. There is need for a basis of uniformity upon which to judge merits of work. There should be a change in teacher training.

324. **Hissong, Clyde.** An evaluation of "the activity concept" in education. Doctor's, 1931. Ohio. 162 p. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university. p. 174-83.)

The purpose of the study was: (1) To discover the principles underlying the present activity movement, (2) to determine the influence of traditional concepts in shaping the trends of the movement, and (3) to see if in the light of the present knowledge of the child and his relation to his environment the movement rests upon a defensible foundation. It has been shown that the activity movement has made certain contributions in harmony with the unitary concept, but that there are definite limitations that must be remedied if the activity movement is to go forward on a defensible foundation.

325. **Jones, Lillian Sara.** A study of the activity program in elementary schools. Master's, 1931. Southern California, 168 p.

An analysis of the literature and of courses of study, summarizing the historical development, basic principles, curriculum organization, teaching methods, and other aspects of the activity program.

326. **Lewerenz, Alfred S.** Behavior of pupils in activity versus formal rooms. In California educational research and guidance association. Proceedings, 1931.

An analysis of pupil behavior on an objective basis in which results from activity rooms are contrasted with those from formal rooms.

327. **Roome, Elizabeth.** A study of the principles of education underlying "activity" or "project" teaching in progressive elementary schools. Master's, 1931. North Carolina. (For abstract see no. 710.)

Statements of practice in progressive elementary schools were compared with statements of carefully validated principles of education, and, where the relationship could plainly be seen, a principle was recorded as being basic to practice. The conclusions from this comparison call attention to the close relationship that exists between most of the characteristic practices of the progressive elementary schools and the most fully approved principles of education.

328. **Ziebarth, Rev. Leo Francis.** Expressive activities and their value in the elementary school curriculum. Master's, 1931. Catholic Univ. 44 p. ms.

See also 982, 8286.

CONTRACT AND UNIT PLANS

329. **Cain, Flossie E.** Study and comparison of the unit plan of teaching with two classes. Master's, 1930. T. C., Col. Univ. 12 p. ms.

A study was made of the unit plan of teaching literature with a slowly moving group and a bright group to find what each group would do. The slow group under the plan did better work and of a more intensive kind than the bright group, which held its own.

330. **Crofoot, Mentha Lucina.** A study comparing methods and results of teaching through daily assignments with class instruction and through the Morrison unit plan with individual guidance. Master's, 1931. Washington. 106 p. ms.

Students show somewhat better results from daily assignments and recitations than from Morrison unit plan. Difference is more evident as period of recitation is lengthened. Pupils do not show so high a degree of mastery under Morrison unit plan as under daily recitation plan. Gain is more evident in spelling than in grammar for the class having the daily recitation plan.

331. **Dial, Henry Franklin.** Comparative results of traditional type recitation and the contract plan. Master's [1931]. Peabody. 78 p. ms.

332. Hawk, Frank Hagen. A comparative study of the Dalton laboratory and traditional methods. Master's, 1931. Southern California. 63 p.

A study of the progress of two matched classes in ninth-grade general science, one of 13 and the other of 14 boys at Whittier State school, in which the contract and recitation methods were tested in a rotating group experiment.

333. Hornbeck, Blanche E. A critique of the Dalton laboratory school. Master's, 1931. Ohio. 98 p. ms.

A definition of the plan, an examination of its outstanding modifications, and an evaluation of its contributions to education. Findings: Certain inadequacies were revealed, the most outstanding being: (1) It does not provide sufficiently for individual growth through participation in community interests; (2) it fails to provide sufficiently for situations in which the social heritage may be used and understood; (3) it does not provide for the modern theory of interest; (4) it provides for individual differences in rate of learning, but neglects differences in interests and abilities; and (5) it fails to provide adequately for training in reflective thinking.

334. Lockhart, Everett Isaac. Methods of teaching by contracts. Master's, 1931. Southern California. 163 p. ms.

335. Loy, Mrs. Anna. The evolution of the ideas or concepts underlying project method of teaching. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to bring about a more intelligent understanding of the project method through a study of the evolution of the ideas underlying this method.

336. McGinnis, Olive W. Problem solving situations in two types of elementary schools. Master's, 1931. Ohio. 145 p. ms.

An investigation of the progressive schools compared and contrasted with the old-type school with reference to the furnishing of problem situations (grades 1-4). Findings: The progressive schools furnish far more problems than the old school, as shown by observational data. Interviews with teachers show the teachers of the old school do not have true concepts of problem situations and their attitudes toward problem situations are not recommendable.

337. Maxon, A. L. Comparison of matched groups of pupils separated by one term in school progress, in doing an identical unit of work. Schenectady, N. Y., Public schools, 1930. 11 p. ms.

The study deals with 4 units of subject matter, 6 classes of children, 4 teachers, and 3 distinct levels of ability.

338. Thompson, William Hertzog. Progress in the elementary school subjects in a demonstration school conducted by the Ohio State university under the Dalton plan. Doctor's, 1931. Ohio. (Abstract, 9 p.)

Data indicate that a controlled situation fails to show any consistent support for the contention that the Dalton laboratory plan is conducive of superior achievement in the common school branches.

339. Virginia committee for research in secondary education. The unit assignment in secondary education. University, University of Virginia, 1930. 48 p. (University of Virginia record extension series, vol. 15, no. 4, October 1930. Secondary education in Virginia, no. 10.)

This bulletin contains the proceedings of the fourth annual meeting of the Virginia committee for research in secondary education, held at the University of Virginia, August 7-8, 1930.

See also 352-353, 998, 1028-1029, 1289, 1316, 1353, 1370, 1380, 1397, 1408, 1427, 1429, 1437, 1491, 1547, 1598, 1607, 1631, 3604, 3733, 3760, 3797, 3814, 3872-3873, 3878, 4163.

HOME-ROOMS

340. Good, Iris Cleva and Crow, Jane. Home-room activities. New York, N. Y., Professional and technical press, 1930. 350 p.

Covers fully the philosophy of this rapidly expanding field and gives over 100 practical, instructive, and entertaining programs for every occasion. Contains an annotated bibliography.

341. [Goodall, U.] Suggested program for freshman home-rooms, Morrison R. Waite high school. Toledo, Ohio, Public schools, 1930. 58 p. ms.

342. O'Brien, George M. The development of a home-room program in an average junior high school. Master's, 1931. Wisconsin.

343. San Diego, Calif. City schools. Home-room organization in San Diego city secondary schools. 1931. ms.

A summary of home-room organizations and practices in San Diego city secondary schools.

344. Sauvain, Edward. A comparative study of two home-room plans. Master's, 1931. Pittsburgh. (For abstract see no 715.)

The home-room plan as used in the Schenley high school, Pittsburgh, Pa. in which the pupil remains with the same teacher-counselor throughout his entire high-school life, is compared with the temporary plan in common use under which the students are assigned to new groups under new home-room teachers at the beginning of every semester or year. Data were secured from 21 men and 23 women who had had from 4 to 30 semesters of experience as home-room teachers under the permanent plan, and from 4 to 42 semesters experience under the temporary plan. The consensus of their opinion was that the permanent plan better enabled the home-room teacher to become well acquainted with the individual student and with his family background, and to be helpful to him, especially in guidance.

345. Thompson, Carl Vernetta. A study of the home-room activities of the senior and 4-year high schools of Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of the study was to secure definite knowledge concerning current home-room practices in Ohio 4-year and senior high schools; to learn the attitude of Ohio school men upon the home-room project; and to prepare suggestive outlines of organization and activities for the home-room.

346. Winnetka, Ill. New Trier township high school. A study of adviser room scholarship for the second semester 1929-1930. 1930. 7 p. ms.

This report gives the adviser a record of the scholarship performance of his adviser group; it furnishes the adviser chairman with a complete record of the scholarship performance of the adviser groups under his direction; and it gives the administration of the school a composite picture of the scholarship performance of the entire school.

See also 821, 8022.

INDIVIDUAL INSTRUCTION

347. Cleveland, Ohio. Board of education. The special schools and curriculum centers . . . for the school year 1929-1930. 1931. 208 p.

The special schools represent Cleveland's effort to provide for the individual differences in children, both physical and mental. The discussion of the curriculum centers indicates Cleveland's approach to the basic problem of all educational effort.

348. Detroit, Mich. Public schools. Individualization experiment. [1931] 9 p. ms.

The purpose of the experiment was to secure evidence as to the relative effectiveness of six different types or degrees of individualization. An attempt was made to compare the effects of different procedures upon typical children under regular conditions in average Detroit schools. The study involved 13 elementary schools, including in their combined memberships, in grades 1 through 4, nearly 13,000 pupils.

349. Flemming, Cecile White. Pupil adjustment in the modern school. New York City, Teachers college, Columbia university, 1931. 101 p.

This study presents a program of pupil placement and adjustment in a modern school, concerned fundamentally with the fullest possible development of each of the individual children committed to its care. The discussion includes such topics as the functions of a division of psychological service and pupil adjustment in relation to the philosophy and the fundamental purposes of the modern school; factors involved in the classification and adjustment of children; the integration of interests and activities of a school staff for effective remedial work and constructive adjustment; directing pupils' study; responsibility for superior children; dynamic pupil records and reports.

350. Gray, Daphrene K. Coaching the adolescent: A study of the technique of providing for the individual differences among pupils of intermediate grades. Master's, 1931. St. Louis. 84 p. ms.

351. Hutcheson, H. E. A descriptive study of various means of individualized instruction. Master's, 1931. Ala. Poly. Inst. 85 p. ms.

Administrative and instructional methods and devices which seek to provide instruction adapted to individual needs are reviewed by a superintendent with a view to their adaptability to a consolidated rural school.

352. Roseman, William P. An experimental study of a plan to provide for individual difference through the differentiated unit contract procedure. Master's, 1931. Wisconsin.

353. Tener, Estella Bowen Culp. To prove that a unit credit system of individual instruction will function in rural schools. Master's, 1931. Stanford.

354. Tewel, Donald E. Evidences regarding the advisability of certain types of individualization employed in selected rural schools. Master's, 1931. Nebraska. 138 p. ms.

Forty-nine rural schools in Virginia with 55 teachers and 227 pupils, three rural schools in Michigan, and 16 in Oklahoma were visited and studied by questionnaires.

355. Williams, Florence Sunshine. A course in high school as adapted to the individualized study plan. Master's, 1931. Stanford.

356. Windes, E. E. Principles governing subject matter adjustment to individual differences in ability to learn in academic high school subjects. University of Virginia record extension series, Secondary education in Virginia, 12: 14-23, April 1931.

This article gives general concept of ability to learn; characteristic differences in ability to learn; a classified statement of significant characteristic differences between bright, average, and dull pupils; and principles governing subject matter adjustment to bright, normal, and dull pupils in the academic high school subjects.

357. Zubin, Joseph. Some effects of incentives—a study of individual differences in rivalry. Doctor's, 1931. T. C., Col. Univ.

The study aimed to throw light upon the following questions: (1) Does rivalry for a prize produce measurable increments in the speed of children's work when compared with speed of work under non-rivalry conditions?; (2) Are there reliable individual differences in these increments?; (3) Is there any relation between the increment in speed under rivalry conditions and other factors? A group of 115 children in the sixth, seventh and eighth grades were studied and compared with a control group of 102 children from the same grades. Findings: The incentive of a prize produced a definite measurable increase over the nonincentive conditions in the speed of work of children. The variation in incentive speed was consistently smaller than the variation in nonincentive speed.

See also 882, 982, 1021, 1090, 1275, 1277, 1286, 1316, 1448; and under Ability grouping.

METHODS OF STUDY

358. Gatchel, Domer F. An experiment with the how-to-study course in high school. Master's, 1931. Southern California. 80 p.

359. McNelly, Alston E. Evaluation of how to study in John Hay high school. Master's, 1931. Western Reserve. 81 p. ms.

360. Parker, Rose E. The evaluation of a technique of study for college students. Doctor's, 1931. Wisconsin.

Specific study material to be used in connection with a basic textbook entitled Introduction to education was prepared and used under control conditions with the view of determining the value of the material. Investigation was continued three years. Findings: The study material was found to be of value even when simply put into the hands of students and its use made a voluntary matter. It was of more value to the middle group of students than it was to the very superior or very inferior.

361. Skodak, Marie P. Study habits of pupils in forms 7 and 8 of a private school for girls. Master's, 1931. Ohio. 85 p. ms.

Observation was made of study habits of pupils in the different study rooms and different study periods, comparison was made of percentage of study with intelligence test scores, grades, and achievement. Study of number of hours spent in home study. Findings: Pupils in forms 7 and 8 do not differ a great deal in study habits. There is positive correlation between grades, intelligence and achievement, but not significant correlation either + or - between these and hours of study at home and percentage of time spent in study at school.

362. Wait, W. T. An experiment in teaching college freshmen how to study. Greeley, Colorado State teachers college, 1931.

PLATOON SCHOOLS

363. Barnes, Jessie B. The place and function of the auditorium as the integrating and socializing center in an elementary platoon school. Master's, 1931. Southern California. 137 p.

364. Case, Roscoe David. The platoon school in America. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study describes the growth of the platoon school from one school in one city to its present use in over 200 cities. Data indicate that about two-thirds of the cities using the platoon school system adopted it in order to provide better schools for the children, while the other third expected to save money or relieve congestion in the schools.

365. Greenwood, Ernest E. An evaluation of the platoon plan of school organization. Master's, 1930. Utah. 60 p. ms.

. See also 321, 1674, 3190, 4304.

RADIO IN EDUCATION

366. Ahrendt, Myrl Howard. The use of radio in educational institutions. Master's, 1931. Wichita. 104 p. ms.

367. Anderson, Walter A. A survey of radio listeners of Minneapolis. Minneapolis, Minn., Public schools, 1931. 23 p. (Minneapolis public school bulletin.)

A questionnaire study of 4,375 radio listeners in Minneapolis to determine: (1) How much they listen; (2) when they listen most; (3) what kind of programs they prefer; and (4) what kind of programs they would like to listen to more. Conclusions: Much leisure time is spent listening to the radio. The fact that in the evening hours education must compete with the best programs the commercial advertisers can secure makes the radio situation, as education is related to it, even more complex, because education is not demanded at the expense of entertainment and emotional thrill. However, the radio listener is interested to some extent in programs of an educational nature, and is asking for more programs of the better type in classical music, good drama, and educational lectures.

368. Blom, E. C. The radiocasting of public-school programs. Louisville, Ky., Public schools, 1930. 31 p. ms.

A study dealing with the administration of program, studies, technique, outcomes, and types of programs which should be useful for persons who contemplate carrying on this kind of work.

369. Bury, Sister Mary Adelgunda. The use of radio in the elementary school. Master's, 1931. Catholic Univ. 56 p. ms.

370. Denzler, Verena A. The procedure used in the development of radio lecturers with a series of lectures suitable for public school broadcasting hours. Master's, 1930. T. C., Col. Univ. 67 p. ms.

The study takes up stories dealing with the historical and literary background on the Scandinavian peninsula, and in England, France, Holland, and Italy, to find stories suitable for broadcasting purposes for children in the third and fourth grades.

371. **Harrison, Margaret B.** Radio in rural school. A preliminary report of a study made in 1929-1930. New York City, Teachers college, Columbia university, 1931. 103 p.

The report presents an account of the various activities involved in the investigation, including listings of available broadcasts sent to cooperating teachers, visits to schools to observe and confer with teachers regarding their use of radio programs, the securing and compiling of teachers' reports of resultant activities, and several studies of the values of various types of programs.

372. **Institute for education by radio.** Education on the air. First year-book. Columbus, Ohio State university, 1930. 400 p.

373. **Jarvis, Emerson D.** The administration of the use of radio lessons. Master's, 1931. Indiana. 183 p. ms.

374. **Koon, Cline M.** Growth of educational broadcasting for classroom use. Doctor's, 1931. Ohio. 763 p. ms.

Traces historically the growth of the classroom use of the radio in the United States, Great Britain, and Germany; states the problems involved; and sets forth what appears to be the best current practice. Findings: The radio is already an important social factor. It has many potential classroom uses, but extensive research will be necessary before its true educational value can be determined. Lack of funds adequately to finance educational broadcasting is the principal handicap to the development of the educational broadcasting movement.

375. **Santa Monica, Calif. City schools.** Use of radio in Santa Monica city schools. 1930. 9 p. ms. (Report, no. 5) (For abstract see no. 717 b.)

The report gives a summary of the replies of school principals to a radio questionnaire. At the beginning of the school year, 1930-31, the installation of a radio in each school was authorized. The first term's work was mainly a period of experimental listening in, with all schools listening in to some extent. After a period of two months the first check was made by obtaining reactions from teachers and pupils.

376. **United States. Department of the interior. Advisory committee on education by radio.** Report of the Advisory committee on education by radio appointed by the Secretary of the Interior, Washington, D. C. Columbus, Ohio, F. J. Heer printing co., 1930. 246 p.

See also 127 (18), 3132.

VISUAL INSTRUCTION

377. **Abbott, Mary Allen, and Flemming, Cecile White.** Children's responses to the motion picture—The Thief of Bagdad. A study of the fifth and sixth grades of the Horace Mann school, Teachers college, Columbia university. International review of educational cinematography, 3: 65-80, 157-64, 241-64, 469-82, January-March, May, 1931.

This study includes a report of the audience reactions to the film "The Thief of Bagdad" by 107 boys and girls of superior intelligence in the fifth and sixth grades of Horace Mann school. The experimental results indicate that on the basis of the motion-picture test used, the mentally more mature the audience, and the better their skill in reading, the better is their understanding of a 12-reel film such as the picture studied.

378. **Bard, C. L.** The administration of projector apparatus in secondary schools of Ohio. Master's, 1931. Ohio. 112 p. ms.

A study of 215 high schools of Ohio, involving the administration of projected pictures and their application to the high-school curriculum. Findings: 35-mm projector is used most; teachers do not preview films; students do not prepare for films; pupils are not held for facts learned; money comes from the school board.

*379. **Davis, Helen Caldwell.** Specific values of educational films used as supplementary aids in instruction. Doctor's, 1932. Chicago. 171 p. ms.

(Note: This study was originally reported to us as completed in 1931 and therefore is included in this list. After the Bibliography was ready for the printer, a copy of the dissertation was received showing the later date.—Ed.)

This investigation is an analysis and comparison of the answers written in an essay-type test by two groups of children to determine whether the group using the film gained

the same kind of information as the group studying under other forms of instruction. A total of 866 items of information were given in answers to 35 essay-type questions on four units of subject matter. Data indicate that the film was more effective than other forms of instructions in presenting items of the type dealing with action or activity; and that other reforms of instruction were more effective for items of the type dealing with objects. The film does not have greater effectiveness for children of one mental level than for those of another.

380. Feeney, Lutie A. Methods of economizing time in visual education. Master's, 1931. Southern California. 67 p.

A compilation of specific methods in reading, designed to reduce the time required for using visual methods of teaching.

381. Garman, John T. Visual education projection apparatus and other visual aids used in teaching. Master's, 1931. Temple.

382. Grant, Robert J. The use of plastic clay as a means of teaching visualization in orthographic projection. Master's, 1931. Iowa. 127 p. ms.

383. Hinman, Stanley T. Value of pre-knowledge of tests in stimulating pupils to observe and retain facts presented in motion pictures. Master's [1931]. New York. 50 p. ms.

Experimental study of 560 elementary school children. Findings: The use of tests to stimulate interest and attention is of no material value. Pre-knowledge of tests may cause a change in the type of attention from involuntary to voluntary and thereby shorten the span of attention. Tests may exert an inhibiting force detrimental to the learning process. This is especially marked in pupils of higher intelligence rating.

384. McIntire, George. The status of visual instruction in the secondary schools of Indiana. Master's, 1931. Indiana. 64 p. ms.

385. Phillips, Howard William. An experimental study in the use of motion-picture films in the classroom. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The study was made in the U. S. Grant junior high school, Youngstown, Ohio. The two classes, of 29 pupils each, were equated as to mental ability, and knowledge of the subject matter through objective tests. One class was the experimental or film group, the other class was the control or non-film group. Eight units in general science were studied by both groups. Data indicate the film group had made greater progress during the 59 days of the study.

386. Porter, Elfa McWilliam. Retention of motion-picture materials as determined for lower-grade children. Master's, 1930. Iowa.

*387. Reitze, Arnold W. The organization, functions, and administration of a city department of visual aids. Master's, 1931. New York. 189 p. ms.

A study of visual aids departments throughout the United States. Some 148 persons submitted data. Findings: When properly organized and administered a visual aids department is one of the most valuable departments in a school system.

388. Sabin, George. A critical survey of experiments in visual education in the elementary and the high school . . . their value and their findings. Master's, 1931. Coll. of the City of N. Y. 148 p. ms.

A critical evaluation of 28 studies in visual education in the light of technique and results. Findings: Visual aids are used in a large range of subjects—history, geography, drawing, Latin, cooking, physics, reading, penmanship, shopwork, health education, civics, nature study, and general science.

See also 989, 1357, 1383, 1395, 1419, 1467, 1490, 1566, 1585, 1590, 1627.

EDUCATIONAL PSYCHOLOGY AND CHILD STUDY

389. Abernethy, Ethel M. Comparison of retention values in motor and ideational learning. Charlotte, N. C., Queens college, 1930.

The purpose of the study was the comparison of two series, one motor, the other ideational, in retention values when the same degree of thoroughness of learning was reached for the two series. Two groups of subjects were employed. The two types of learning are similar except for the predominance of the motor element in one.

390. **Ackerson, Luton.** Children's behavior problems. A statistical study based upon 5,000 children examined consecutively at the Illinois institute for juvenile research. 1. Incidence, genetic and intellectual factors. Chicago, Ill., University of Chicago press, 1931. 268 p. (Behavior research fund monographs, 1.)

In an attempt to evaluate the causal relationships in undesirable behavior, data were obtained from the child's parents or guardians, and from the clinic's examining staff of psychiatrists, psychologists, pediatricians, social, and recreational workers. The incidence curves for either chronological age or intelligence quotient level varied with the trait in question. The average number of behavior problems per child increased with age to about 12 years, followed by a decrease and a further rise at the seventeenth year. These trends were more noticeable among children of IQ ranges 80-159 than for the subgroup of lower intelligence.

391. **Alexander, James B.** A study of pupils who show marked discrepancy between ability and achievement. Master's, 1931. Colorado.

*392. **Arrington, Ruth E.** Interrelations in the behavior of young children. A technique for studying the social, material, and self components of undirected activity. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 100 p. (Child development monographs.)

A method for the simultaneous observation, by two persons, of several different aspects of undirected activity, was evaluated in terms of the reliability of the observers, the consistency of the results, and the significance of the results. The types of behavior studied were: (1) Use of material; (2) physical activity; (3) absence of overt activity; (4) talking; (5) physical contacts with persons; (6) laughing; and (7) crying. The subjects of the investigation were 20 nursery school children, ranging in age from 18 to 32 months, observed at the Child development institute, Teachers college, Columbia university. The findings indicate that the technique used is a highly reliable and useful tool for determining norms of behavior toward persons, things and self, for discovering individual differences, and for evaluating interrelations in the several types of behavior investigated.

393. **Balley, Babette Frances.** An experimental study of the ability of children to make comparisons from memory. Master's, 1931. Stanford.

394. **Balken, Eva Ruth.** Affective, volitional, and galvanic factors in learning. Doctor's, 1930. Chicago.

395. **Barker, Roger Garlock.** The adaptability of knowledge gained in one maze situation to other maze situations. Master's, 1931. Stanford.

396. **Bayley, Nancy.** A study of the crying of infants during mental and physical tests. Berkeley, Calif., Institute of child welfare, University of California. 1931.

Sixty infants, observed repeatedly at monthly intervals from 1 through 12 months, were observed for crying (during mental and physical tests). The amount of crying was slightly less at six months than either earlier or later, but the causes of crying varied greatly with age. There is no evidence of periodicity in emotionality during this age range.

397. **Bellows, Roger Marion.** The relationship of actism, functionalism, and Gestalt psychological theory: A contrast. Master's, 1931. Ohio. (For abstract see no. 712.)

The purpose of this study was to ascertain and to show the relationships existing between the schools of the act functional and Gestalt psychological theory.

398. **Bogard, Herman.** Fundamentals in the learning process. Master's, 1931. Wisconsin.

399. **Bowers, Henry.** Studies in visual imagery. American journal of psychology, 43: 216-29, April 1931. (Reprinted.)

400. **Brooks, Fowler D.** Effect of transfer of training upon organization of traits. Greencastle, Ind., DePauw university.

401. Bush, Ruth. The effect of practice on the speed of free association in children. Master's, 1931. T. C., Col. Univ. 30 p. ms.

This study was designed to find the degree to which speed of free association can be increased through intensive practice, and to investigate the relative influence of maturation and training. Practice in free association was given during a period of three and one-half months to 16, 10 and 11 year old children. An equivalent control group was measured at the beginning and at the end of the practice period. The results of this study, supplemented by later measurements, will be included in a later publication of a more extended study of maturation and training.

402. Cameron, Wellington Jaffray. An apparatus and technique for studying the reactions of newborn infants to external thermal stimuli. Master's, 1931. Ohio. (For abstract see no. 712.)

A total of 503 thermal stimuli were applied to 20 infants between the ages of 7 hours and 18 days. Data indicate a high variability of reactions to the same stimuli.

403. Castner, Burton M. Development of fine prehension in the infant: A study of prehensory reactions to the pellet, at advancing age levels. Doctor's, 1931. Yale.

404. Clarke, Mary Gesner. The relation of various factors in development as revealed by deviations in repeated measurements. Detroit, Mich., Merrill-Palmer school [1930]

* 405. Collmann, Robin Dickinson. The psychogalvanic reactions of exceptional and normal children. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers College, Columbia University, 1931. 88 p. (Contributions to education, no. 469.)

Gives results of an experimental investigation, research and resulting statistical examination of the data secured from a study of the psychogalvanic reactions of children—intellectually gifted, intellectually deficient, and emotionally unstable; using a certain list of stimuli. The differences, if any, between the reactions of each group and a normal group were determined.

406. Conkle, Byron Hawkins. A history of fatigue studies in their relation to education. Master's, 1931. Stanford.

407. Corey, Stephen M. Certain ambiguous terms in educational psychology. *Journal of educational psychology*, 22: 131-39, February 1931.

Through an examination of literature on the subject, much ambiguity in use of learning, intelligence, etc., was found.

408. ——— A statistical summary of certain factors in recent experimental studies of learning and memory. DePauw university, Greencastle, Ind. *In Illinois academy of sciences. Proceedings*, 1931.

409. ——— and Potthoff, E. F. Standardized test in educational psychology. DePauw university, Greencastle, Ind. Bloomington, Ill., Public school publishing company, 1931. 28 p.

Examination of texts and construction of test.

410. Cureton, Edward E. and Dunlap, Jack W. Some effects of heterogeneity on the theory of factors. *American journal of psychology*, 42: 608-20, October 1930.

A study of the effect of race and sex heterogeneity, in case of heterogeneous group of 396 and homogeneous sub-group of 87. Statistical formula was developed. Findings: Heterogeneity increases group and general factors, and reduces special factors.

411. Fales, Evaline Elisa. Sex differences in interest in vigorous and quiet activities. Master's, 1931. Mills.

412. Finch, F. H. Age of parent and IQ of offspring. Minneapolis, University of Minnesota, 1931.

Scores of over 400 children of highly homogeneous socio-economic group were correlated with parental ages. Findings: No evidence of any relationship between age of parent and IQ of child was found.

413. Fisher, Mary S. Case studies of normal children. *Childhood education*, 5:428-33, April 1931.

A detailed analysis of the conduct and problem behavior of a 3-year old child. The case study gives instructive suggestions as to changes in diagnosis and therapy growing out of more thorough understanding of the child.

414. Ford, Charles Alfred. The effect of psychopathy upon the constancy of intelligence quotients and the rates of intelligence growth. Doctor's, 1931. Ohio. (Abstract, 14 p.)

It was found that psychopaths tend to lower coefficients of correlation; that more psychopaths vary by larger amounts than do nonpsychopathic or normal cases as repeated in the literature; that nonpsychopathic cases vary as much as some of the psychopathic ones; that the fact that a child has a variable IQ is not evidence of psychopathy; that 70 per cent or more, of all cases used in this study have significant deviations from the straight-line growth curve; and that one can not predict on the basis of an IQ what a following IQ will be nor the direction of the change, except that retarded children are more likely to decrease their IQ if tested sufficiently long after the original test.

415. Freeman, Frank S. Power and speed: their influence upon intelligence. 1931. Cornell.

A study to determine the rôle of the two factors named. Findings: Speed is a real factor in a small but persistent group. Some intelligence tests call on speed more than others.

416. Freeman, E. G., jr. and Platt, F. A study of growth and body build during the first month of life. New York City, Teachers college, Columbia university, 1931. 8 p. ms.

Measurements of height, weight, and of a large variety of bodily dimensions were made on 90 newborn children. Data were analyzed in terms of sex differences and differences in type of bodily build.

417. Gesell, Arnold L. The guidance of mental growth in infant and child. Yale clinic of child development, Yale university, New Haven, Conn. New York, The Macmillan company, 1930. 322 p.

418. ——— The teacher-child relationship. Yale university, New Haven, Conn. *Understanding the child*, 1:7-9, 1931.

419. Gohring, Dorothy. Individual differences in the emotional responses of newborn infants. Master's, 1931. Mills.

420. Guiang, Pedro G. A critical evaluation of the course in educational psychology in normal schools. Manila, P. I., Bureau of education, 1931.

An evaluation of the present course and method of presenting the course in educational psychology in Philippine provincial normal schools by finding out: (1) the qualification of teachers; (2) the text most commonly used; (3) the topics dealt with in the course as taught in the Philippines; and (4) the topics duplicated in other courses. Findings: (1) Of the 21 teachers in educational psychology none majored in psychology, only one minored in it; (2) Gates' Psychology for Students of Education is the most commonly used text in the 54 normal schools in the United States that offer the course; (3) learning occupies 13 per cent of the total space; the nervous system, 9.9 per cent of the total space; school subjects, 77.1 per cent of the total space; and (4) many topics in the course are duplicated in content methods classes.

421. Guilford, Ruth B. and Worcester, D. A. A comparative study of the only and non-only child. *Pedagogical seminary and Journal of genetic psychology*, 38:411-26, December 1930.

A study of 21 only and 141 other children, grade 8A, in a junior high school in Lincoln, Nebr. Many traits were compared. Findings: The only child was generally superior.

422. Halverson, Henry M. An experimental study of prehension of infants by means of systematic cinema records; from the Clinic of child development, Yale university. Worcester, Mass., Clark university, 1931. (*Genetic psychology monographs*, vol. 10, nos. 2-3, p. 107-286, 1931.)

423. Hanson, Edith Miriam. The effect of the continuous operation of one mental function upon the efficiency of certain other mental functions. Master's, 1931. Southern California.

424. Henry, E. R. Development of a series of comprehensive diagnostic tests in educational psychology. Doctor's, 1931. Ohio. ms.

425. Hessler, Muriel. A study of some of the factors which determine the speed of young children. Master's, 1930. Smith. ms.

426. Hicks, James Allan. The acquisition of motor skill in young children. An experimental study of the effects of practice in throwing at a moving target. Iowa City, The University, 1931. 80 p. (University of Iowa studies. Studies in child welfare, vol. 4, no. 5, June 1, 1931. New series 204.)

This study presents an analysis of the methods used by 60 children, ages 3 to 6, in throwing a ball at a moving target under highly standardized conditions.

427. Hildreth, Gertrude H. Psychological service for school problems. Yonkers-on-Hudson, N. Y., World book company, 1930. 317 p.

This book is designed as a practical guide for psychologists and school administrators, particularly with reference to measurement and pupil adjustment. The phases of the work discussed include characteristics of measurement and the administration of tests, pupil classification, clinical study and educational treatment of exceptional children, diagnostic and remedial work, educational and vocational guidance, experimentation and research record keeping.

428. Hudson, Maude Chapin. Progression in movement as a basis of higher organized activities. Nashville, Tenn., George Peabody college for teachers, 1931. 93 p. ms.

Study of progression of movement from birth to 12 years, giving tabulations and illustrations. Findings: Movements of activities of higher organization are based on early acquired movements.

429. Hyde, Eleanor. An analysis of seasonal variation in children's sleep. Master's, 1931. Ohio. 43 p. ms.

An analysis, experimental and statistical, of seasonal variation in sleep in terms of motility during sleep. Seasonal variation and sex differences are found. The quietest sleep was during the winter months; the greatest motility during the autumn months.

430. James, Alpha A. An experimental investigation of children's interests as revealed by responses to pictures. Master's, 1931. Southern California. 92 p.

A study of the responses of 75 boys to 12 standardized pictures, 6 representing tenderness and 6 cruelty, for purposes of comparing the responses of delinquent boys in a state school with a second group of boys in a private military academy, and a third group of boys in a public school.

431. Jasper, Constance. A study of the responsiveness of children to rhythm by regular repetition in 2-dimensional design forms. Master's, 1931. Iowa.

This investigation is an attempt to study the variation in response of young children to rhythm repetition in pictorial and abstract design. There were 112 subjects including children from the preschool laboratories of the Iowa child welfare research station and the first grade of the University elementary school.

*432. Jensen, Kai. An objective investigation of the sucking and swallowing reactions in newborn infants under controlled stimulation. Doctor's, 1931. Ohio. (Abstract, 14 p.)

An apparatus was designed and constructed which recorded time, sucking curves, and the pressure-volume changes involved in the feeding reaction. The apparatus was calibrated before and after each feeding of all infants. The nipples were calibrated once every three days. A preliminary exploratory investigation was conducted from March 18 to April 30, and the investigation proper from June 17 to July 12. The infant was observed for at least 5 minutes before and 10 minutes after each feeding period. The results of the investigation indicate that stimulation of almost any group of receptors by almost any kind of stimulus will lead to a response in almost any part of the organism which is set to respond.

433. **Jersild, A. T.** Memory for the pleasant as compared with the unpleasant. *Journal of experimental psychology*, 14: 284-88, June 1931.

Fifty students were asked to give an itemized account of all pleasant and unpleasant experiences of a preceding 8-week period. Three weeks later, without previous warning, they were asked to recount the same items. Findings show a statistically reliable advantage of memory for the pleasant.

434. ——— A note on the pleasures and unpleasures of college men and women. *Journal of abnormal and social psychology*, 26: 91-93, April-June, 1931.

Itemized descriptions of all pleasures and unpleasantnesses occurring during a preceding 3 week period were submitted by 51 college men and women. The results are classified under general headings and a table showing the relative contribution of various situations, and showing sex differences, is presented.

435. ——— *and others.* The relative influence of training and maturation on the development of the child. New York City, Teachers college, Columbia university, 1931. 80 p. ms.

Over 300 children, ranging in age from 2 to 11 years, were used in a study, by the equivalent group method, to find the degree to which a child's capacity can be influenced by special training as compared with the influence of normal growth. Two mental, 2 musical, and 4 motor performances were used. The experimental children were given intensive practice during a period of from three and one-half to seven months. The controls were measured at the beginning and at the end of the practice period. After the lapse of an additional period of time both groups were again tested and compared to find whether the practice children maintained their advantage or whether the differences between the groups had been leveled by the normal process of development.

436. **Kelly, Albert E. and Templeton, William B.** Effect of position in the family upon adolescent behavior. Ann Arbor, University of Michigan, 1930. Three hundred and thirty-six cases were studied.

437. **Ketterlinus, Eugenia.** Learning of children in adaptation to minor reversals. Doctor's, 1931. Johns Hopkins.

438. **Leadingham, Grace.** Interests of the low IQ adolescent. Master's, 1931. Southern California. 135 p.

A study based on questionnaire responses of 486 pupils selected from 10 high schools in Los Angeles.

439. **Leuenberger, Harold W.** Objective tests as teaching devices in educational psychology classes in a State teachers college. Master's, 1930. Colo. St. T. C.

The purpose of the study is to determine the value of objective tests as teaching devices in educational psychology classes in Colorado State teachers college.

440. **Lo, Lun.** The rate of learning of children of different ages. Master's, 1930. Chicago.

This study is an experiment on the rate of learning of 320 American school children from 7 to 14 years of age. Ten Chinese words and their equivalent English meanings are used as the learning material.

441. **Lumley, Frederick Hillis.** An investigation of responses made in learning a multiple-choice maze. Doctor's, 1931. Ohio. 94 p. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 247-52.)

Findings: Subjects tend to anticipate responses which would be correct in the future. This anticipation tendency varies with the degree of learning.

*442. **Lupica, Benedict.** The development of a conception of relaxation through its values in various activities. Master's, 1931. New York. 57 p. ms.

The development of a conception of relaxation through the values of relaxation in various activities. Findings: A number of relaxation principles applicable to the ordinary man, to education and science, and to physical education and industry were found.

443. **McHale, Kathryn, and Manwell, Elizabeth Moore.** The infant. A bibliography. Washington, D. C., American association of university women, 1930-31.

444. **McHale, Kathryn, and Manwell, Elizabeth Moore.** The toddler. A bibliography. Washington, D. C., American association of university women, 1930-31.

445. **MacLatchy, Josephine.** Studies of childhood. Washington, D. C., International kindergarten union, 1930. 69 p. (Research bulletin) (Printed by the Association for childhood education, formerly International kindergarten union, Washington, D. C., 1931.)

Proceedings of research conference held during the Memphis meeting of the International kindergarten union.

Contents: Introduction, by Ernest Horn; Research in child development, by George D. Stoddard; Developments from the field, by Mary Dabney Davis; The kindergarten and later school achievements, by Harry A. Greene; Scientific study of the kindergarten, by Winifred E. Bain; Early measures to prevent reading disability, by Helen Coe Clowes; Number ideas of young children, by Josephine H. MacLatchy; Summary, by Alice Temple.

446. **McLaughlin, Eugene Lawrence.** The function concept. Master's, 1931. Boston Coll. 35 p. ms.

447. **MacNitt, Reginald DeKoven.** Introversion and extroversion in the high school; their relation to age, sex, academic success, and leadership. Doctor's, 1930. Michigan. Boston, Mass., Gorman press, 1930. 224 p.

A study of 964 junior and senior high school pupils in the Lincoln school, Milwaukee, Wis., and of 721 junior high school pupils from the Ann Arbor, Mich., schools.

448. **McBuer, Duncan.** The pretest as a stimulus to learning activity. Master's, 1931. Stanford.

*449. **McTeer, Wilson.** A study of certain features of punishment in serial learning. Doctor's, 1931. Chicago. Journal of experimental psychology, 14: 446-52, 453-76, August, October 1931. (Reprinted.)

The study describes a new device for serial-order learning. The principal question studied is to determine whether electric shock punishment in a 10-unit finger-response multiple-choice serial-order learning problem would result in more or less efficient learning than when no punishment is used. Data are based on records taken on 90 male subjects, each of whom learned three number combinations, one per day at the same hour on three successive days. They ranged in age from 17 to 35 years, and varied in scholastic standing from sophomore to third year graduate students. They were divided into three groups, control, or no punishment group; ankle group, or punishment on the ankle; and finger group, or punishment on the finger. Findings: The electric shock of the intensity here used resulted in a more cautious attitude on the part of the learners in the experiment. In comparing the data of the first trial with later trials, it was found that the punished groups were significantly more cautious in the exploratory initial trial than in the later trials. There seemed to be little difference in the effect of ankle punishment when compared with finger punishment.

450. **Marpole, Clare Harry.** The comparative influence of expert and majority opinion at various age levels. Masters, 1930. Iowa.

451. **Miles, Dwight Warren.** Preferred rates in rhythmic response. Doctor's, 1931. Johns Hopkins.

452. **Miller, Vernon Lemont.** Studies on the critical frequency limen for visual flicker in children. Doctor's, 1931. Ohio. 85 p. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 253-61.)

Study of age, sex, and individual differences in the critical frequency limen for visual flicker, and the influence of loss of sleep upon the limen. Thirty-four girls and 44 boys were studied. Results indicate that the critical frequency limen for boys is higher than for girls, in general, although there is some overlapping. Age is not a factor. Practice raises the limen. Loss of sleep raises the limen for some and lowers it for others.

453. **Moggie, Maurice Charles.** A self-checking group experiment in rational learning. Master's, 1931. Kans. St. Coll. 29 p. ms.

Two large classes in beginning psychology furnished the subjects. There were 30 complete records secured.

454. **Morse, Marion Elizabeth.** Standard experiments in textbooks of educational psychology. Master's, 1931. Yale.

455. National research council. Child development abstracts and bibliography. Vol. 5, nos. 1-6, with subject indexes. Washington, D. C. Committee on child development, National research council, 1931.

Contains abstracts selected from current issues of psychological and medical magazines.

456. Nelson, Virginia Lafayette. An analytical study of child learning. Doctor's, 1931. Johns Hopkins.

457. Nottingham, R. D. An experimental study of mental ability in relation to the menstrual cycle. Master's, 1931. Ohio. 79 p. ms.

458. Ortleb, Ruth. The influence of practice on a child's performance in color naming. Master's, 1931. T. C., Col. Univ. 30 p. ms.

This study was designed to investigate the relative influence of maturation and training on the development of individual differences. Two equivalent groups of seventeen 6 and 7 year old children were used, one as an experimental and the other as a control group.

459. Patrick, James R. The effect of emotional excitement on rational behavior as demonstrated by the quadruple-choice method. Doctor's, 1931. North Carolina. (For abstract see no. 710.)

The apparatus of this investigation consists of a room-like enclosure with one entrance and four exit doors. The entrance door closes and locks itself after the subject has entered. Of the four exits only one is unlocked on any given trial and the subject is to find out, in a trial-and-error fashion, which is the unlocked door and thereby gain exit through it. The unlocked door varies from trial to trial. The rational principle is manifested by human subjects, normal adult university students, when they show that they take cognizance of the ever-varying unlocked door principle. Under nonexciting conditions the students when put through the apparatus for 100 trials show a preponderance of the type-A reaction, which is the rational inference principle objectively classified. Under emotion exciting conditions their reaction dropped to that of an infantile level.

460. Pearson, Charles T. A device for recording electrically the psychogalvanic reflex. Master's, 1930. Nebraska. 18 p. ms.

Description of an electrical recording device.

461. Pintner, Rudolf. Intelligence and month of birth. Journal of applied psychology, 15: 149-54, April 1931.

A study of the relationship between the IQ and the month of birth. This study with about 5,000 cases showed no months particularly favorable.

462. Reece, Jennie A. A pictorial study of children's behavior in response to environment. Master's, 1930. Cornell.

*463. Reed, Helen Joy. The influence of a change of conditions upon the amount recalled. Doctor's [1930]. Chicago. Journal of experimental psychology, 14: 632-49, December 1931. (Reprinted.)

The problem was to determine the extent to which recall is dependent upon the conditions that prevailed or when those conditions had been changed in definite, prearranged ways. The experiment was conducted at Southern Methodist university during the school year 1929-30 for about two months. Scores were obtained for 78 students completing both parts of the test form. Data indicate that learning scores are affected by the posture assumed at the time of learning; they are a function to some extent, of the sensory mode of presenting the stimulus series, the auditory method being preferable in the group in which the comparison was possible; they are independent of the form of the response used in apprehending the material. Recall scores are unaffected by a shift in the kinaesthetic situation as produced by the assumption of a different posture at the recall test; they are lowered, and the number of high and perfect scores markedly decreased by a change in the sensory mode of presenting the stimulus words at the recall test; they are unaffected by a change in the form of the response demanded at the time of the recall test.

464. Renaud, A. J. A critical analysis of matching exercises. Master's, 1931. Iowa. 135 p. ms.

465. Richardson, Helen. The growth of adaptive behavior in infants: an experimental study at seven age levels. Doctor's, 1931. Yale.

466. **Rosencrans, Florence Deborah.** A study of temper as a symptom of maladjustment. Master's, 1930. Ohio. (For abstract see no. 712.)

This was a study of the temper situation and an effort at remedial work. An examination was made of 30 subjects who showed temper behavior in the home, at school, or at play; 28 of the subjects were junior-high-school pupils.

467. **Row, Elmer Alvin.** How to make training transfer. Master's, 1931. Southern California. 109 p.

A compilation and description of practical devices and methods, obtained through interviews with teachers, intended to show how training can be made to transfer, apply, or function, outside of the specific setting in which it is given.

468. **Ruch, Floyd Leon.** The differentiative effects of age on human learning. Doctor's, 1931. Stanford. (For abstract see no. 717.)

This study defends the author's hypothesis that "the aged as compared with the young learners show the greatest deficit in those tasks, the learning of which involves the most extensive reintegration or reorganization of previously existing partial patterns." Three age groups of 40 individuals each were caused to learn five tasks under uniform objective conditions.

469. **Sanders, Edwin Chandler.** Study of immediate recall of pleasant and unpleasant experiences as measured by responses to pictures. Master's, 1931. Southern California. 70 p.

A study based on brief descriptions of 14 pictures, 7 pleasant and 7 unpleasant, recorded by 127 boys of junior-high-school age, in 8 different types of schools after a brief exposure of the pictures on a screen, the whole series being viewed before any descriptions were written.

470. **Scales, William Drewry.** A critique of the James-Lange theory of emotion in the light of modern psychology. Master's, 1930. Iowa.

471. **Schick, Helen Florence.** The effect of practice on the bi-manual production of rhythmic patterns at various tempos. Doctor's, 1931. Ohio. (Abstract, 11 p.)

Of the 25 subjects used in this experiment, 16 followed the auditory method, and 9 followed the visual method. The results tend to show that rhythmic patterns at various tempos may be learned with practice. The effect of practice on the bi-manual production of these patterns is: To decrease the length of the adjustment time between tempos and rhythmic patterns; to increase the accuracy of an individual in tapping simultaneously with a series of clicks or in following a standard tempo; to increase the percentage of regular grouping; to show more marked accentuation; and to increase the percentage of taps in which both hands tap simultaneously rather than with the non-preferential hand preceding the preferential hand.

472. **Scoe, Hjalmar J.** The development and training of bladder control in infants. Doctor's, 1931. Iowa.

The general plan in the training program was first to build a schedule emphasizing daily regularity for the infant and second, to reduce the effects of as many interference factors as possible. In the main experimental groups 40 mothers with infants ranging in age from 8 to 18 months cooperated.

473. **Seagoe, May Violet.** Factors influencing the selection of associates. Master's, 1931. Stanford.

*474. **Skalet, Magda.** The significance of delayed reactions in young children. Doctor's [1931] Johns Hopkins. Baltimore, Md., Johns Hopkins press, 1931. 82 p. (Comparative psychology monographs, vol. 7, no. 4, Serial no. 34, February 1931)

Four methods for measuring delayed reactions in young children were formulated in order to answer certain questions centering around the general problem. The children's responses after several trials gave interesting data as to the relative mnemonic values of the stimulus given and the previous responses made by the child. Sixty preschool children were used in this investigation—49 were in the Child Institute at Johns Hopkins University, 11 were obtained from the Arbutus Methodist nursery school. The first group ranged in age from 2 to 5½ years; the second group from 3½ to 5½ years.

475. **Skeels, Harold M.** A study of some factors influencing formboard accomplishment of two and three year old children. Master's, 1930. Iowa.

476. **Skillin, Veda Rozella.** A statistical study of some abnormalities of pregnancy, with relation to their effect upon the child. Master's, 1930. Kans. St. Coll.

477. **Smeltzer, C. H.** An experimental evaluation of certain teaching procedures in educational psychology. Doctor's, 1931. Ohio. 358 p. ms.

A study involving 752 students and 13 instructors. A number of innovations were introduced into the teaching procedure and evaluation. Findings: Independent of methods of classroom presentation, procedures by which a course is better adjusted to individual differences, motivation, and the orientation of the student with reference to his progress and difficulties, do have a distinct effect on learning. The passing point is the most critical point in connection with educational standards; in the present investigation evidence was obtained showing that the experimental procedures employed might permit raising the passing point more than a fourth.

478. **Smith, Henry Lester and Krueger, Levi McKinley.** The psychology of human relationships: individual and social. A source book. Bloomington, Indiana university, 1931. 107 p. (Bulletin of the School of education, vol. 7, no. 4, March 1931)

This source book was compiled to present as much available material as possible to students interested in the psychological aspects of human relationships. Part 1 deals with the psychology of the individual; part 2 with the psychology of social relations; and part 3 with the psychology of national and international relations.

479. ——— and **Littell, Harold.** The philosophy of human relations: individual and collective; a source book. Bloomington, Indiana university, 1931. 328 p. (Bulletin of the School of education, Indiana university, vol. 7, no. 3.)

480. **Smith, Lois Z.** An experimental investigation of young children's interest and expressive behavior responses to single statement, verbal repetition, and ideational repetition of content in animal stories. Master's, 1931. Iowa.

The study was undertaken to develop an experimental technique for measuring and comparing the interest and expressive behavior responses which two, three and four year old children derive from single statement, verbal repetition, and ideational repetition of content in animal stories. Findings: Verbal repetition of content was found more interesting than single statement or ideational repetition. Interest in ideational repetition was greater for older than younger subjects and was found more closely related to mental than chronological age.

481. **Smith, Madorah, and others.** Effects of race, sex, and environment on the age at which children walk. Pedagogical seminary and Journal of genetic psychology, 38: 489-98, December 1930.

A study was made of the differences between children of different races and sexes in Hawaii in age at beginning to walk, with comparisons with investigations on the mainland. 725 cases were studied. Findings: Consistent sex differences in favor of girls; no significant racial differences were found in all groups studied. Children began walking earlier than in previous investigations, which might be due to climatic differences.

482. **Staley, Leo Gordon.** A historical and comparative study of act and Gestalt-qualitat psychologies. Master's, 1931. Ohio. (For abstract see no. 712.)

The result of this study is to show that the Gestalt-qualitat theory is more closely related to the present-day psychological theory which tends to see things as a whole and not in isolated parts. Act psychologists look to a process or activity which is impalpable, unanalyzable, indescribable, intangible, and obscure, to explain mind.

483. **Stephens, J. M.** The effect of different stimuli upon preceding bonds: an examination of the law of effect. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 83 p. (Contributions to education, no. 493.)

The study attempts to show that bonds are affected by subsequent conditions, that the concept of backward action is inherent in adaptive learning. Fifty-six college students were asked to try to hit a target which they could not see. They were told by various means whether they were or were not right. In this type of learning the subsequent conditions do not act merely as cues for decisions, but affect the learning in some additional way.

484. Stevens, Nora. Children's interests are revealed by their responses to stories. Master's, 1931. Peabody. 53 p. ms.

This study was made with 25 children in first grade of State teachers college demonstration school, Hattiesburg, Miss. Findings: (1) The type of stories first-grade children like to hear are modern fanciful stories, realistic stories, folk tales, experience stories and Bible stories taken from the life of Christ; (2) the factors of interest in stories first-grade children like are surprise, plot, repetition, dramatic action, animalness, childishness, humor, familiar experience, fancy, imagery, realism and conversation; (3) first grade children are interested in nature, but not in hearing factual type of nature story; (4) the stories first-grade children like classify under the following subjects—animals, people, mechanical forces, forces of nature, and Bible stories.

*485. Stroud, James Bart. The rôle of muscular tensions in stylus maze learning. Doctor's, 1930. Chicago. Journal of experimental psychology, 14: 606-31, December 1931. (Reprinted.)

Part 1 takes up the study of the factors which influence the expression of tension; Part 2 deals with the relation of tension to the speed of learning; and part 3 deals with the effect of induced tension upon the speed of learning. Findings: There seems to be a consistent positive relation between tension and the difficulty of the task; significant changes in tension occur with progress in learning; there is considerable evidence that a positive relation obtains between tension and the speed of learning; tension in the hand operating the stylus is increased by the artificially induced tension in the other hand; the rate of learning is materially affected in a positive way by artificially inducing muscular tensions; there is an increase of muscular tensions during effortful activity, and these tensions are valuable in activity of the kind involved in learning mazes.

486. Strozier, Clifford Andrew. A comparative study of city school children and rural school children. Master's, 1931. Oklahoma. 123 p. ms.

The rural schools of Kay county, Okla., have less than nine months of school. The average length of term is 8.45 months, based on the average of the 11 schools chosen at random for this study. The rural schools put forth less effort than do the city schools in behalf of their children in the way of educational opportunities. City school children have greater native abilities than do rural school children. The rural child has achieved less than the city child has in the various subjects studied in the elementary grades of the schools of Oklahoma. Rural school children are older chronologically, but younger mentally and educationally than the city school children.

487. Stuart, Herman N. A genetic study of sensori-motor and conceptual thinking of nine to twelve-year-old children. Doctor's, 1930. Iowa. 167 p. ms.

A study of rate of progress of certain fundamental growth tendencies in children between 9 and 15 years of age. Findings: Sex differences were significant; socio-economic status was not significant. Mathematical judgment correlated with selective judgment, ethical concepts, and logical thinking.

488. Thompson, Henry Royer. An experimental study of ocular dominance. Master's, 1931. Stanford.

*489. Thurstone, L. L. and Jenkins, Richard L. Order of birth, parent-age and intelligence. Chicago, Ill., University of Chicago press, 1931. 185 p. (Behavior research fund monographs.)

The first part of the study deals with data selected from over 10,000 case records of the Illinois institute for juvenile research and examined with reference to the relation between birth order, parent age, and intelligence. The second part is an extensive review of the literature pertaining to birth order and parent age in their relation to the incidence of various diseases, crime, and insanity. Data indicate that intelligence increases on the average with order of birth in the same family; parents of nearly the same age have children who are slightly brighter on the average than parents who differ widely in age.

490. Updegraff, Ruth. The visual perception of distance in young children and adults: a comparative study. Iowa City, University of Iowa, 1930. 102 p. (University of Iowa studies in child welfare, vol. 4, no. 4, November 1, 1930.)

The aims of this study were to investigate the acuity in visual perception of distance of 4-year old children, to study the influence on this acuity of the two factors, size of the retinal image and linear perspective, and to compare the resulting data with other data

similarly obtained through experimentation with adults. The technique and findings of this study are unique in that they relate to age ranges of children which have not been held susceptible to a standard laboratory approach.

*491. Vickery, Katherine. The effects of change of work on the work decrement. Doctor's [1930] Peabody. Nashville, George Peabody college for teachers, 1931. *Journal of experimental psychology*, 14:218-41, June 1931. (Offprinted.)

The study attempted to determine whether under certain well-controlled conditions there exists a work decrement in two types of mental activity, and if such a decrement exists, if it may be reduced or eliminated by change from one type of mental activity to another. The experiment was made on 80 college women divided into four groups equated on basis of scores made on an Otis self-administering test of intelligence. Cancellation and equation tests were used. Results shown by the cancellation test are contradictory among themselves. The equation test shows a definite work decrement resulting from conditions of continuous work. There is a decided probability that change of work is effective in reducing the work decrement in the more complex types of mental activity.

*492. Vogel, Marie. A study of immediate and delayed recall of seventh, eighth, and ninth grade pupils. Master's, 1931. New York. 90 p. ms.

A total of 156 seventh, eighth, and ninth grade pupils were used in a study of immediate and delayed recall. The particular phases of immediate and delayed recall investigated were those of grade, age, and sex differences. Findings: Recall is a highly specialized function for all types of materials learned. Girls had better recall than boys in both immediate and delayed recall. In the logical materials there was less sex difference than for other materials used. In all of the tests there was a greater degree of variability among higher grades than lower grades. Boys varied more than girls. In all series the first presented was the first recalled, the middle of a series proved most difficult. Pupils having good immediate recall were good in delayed recall; quick learners were also good in retention.

493. Wallace, Robert F. The effect of temporal distributions of practice on the efficiency of learning "paired associates." Doctor's, 1931. Ohio. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 373-79.)

494. Wallick, Ray G. Sex differences in sequential and nonsequential connection forming. Master's, 1931. Temple.

495. Washburne, Vera Z. The impulsions of adolescents as revealed by their written wishes. Master's, 1931. Syracuse.

496. Washington child research center. [Abstracts of research studies] 1928-1931. Washington, D. C., 1931. 95 p.

Contents: (1) Sex education of children by parents, by Miriam S. Dillon, p. 34-35; (2) Effects of ultra-violet radiation upon blood changes and the physical growth of children, by James H. Hibben and Mandel Sherman, p. 35-36; (3) Effects of practice upon the ability of young children to hit a stationary target, by J. Allan Hicks, p. 37; (4) Achievement tests for preschool children, by J. Allan Hicks and Adelia Boynton, p. 38-39; (5) Relation between the noon meal and the afternoon nap of nursery school children, by Helen R. Nebeker, p. 39-40; (6) Relationship between the personalities of parents and the personalities of their children, by Miriam N. Partridge, p. 40-41; (7) Mountaineers, by Mandel Sherman, p. 41-42; (8) Study of the relationships in the Appalachian mountains, by Mandel Sherman, p. 42-44; (9) Some factors affecting the night sleep of children, by Margaret Richie White, p. 44-45; (10) Ability of nursery children to recognize names, by Adelia Boynton, p. 48; (11) Sex interests among nursery school children, by Miriam S. Dillon, p. 49-50; (12) Sex conflicts as causative of some behavior traits among children, by Miriam S. Dillon, p. 50-51; (13) Spontaneous drawings of preschool children, by Marion Harris, p. 51-52; (14) Reasons parents give for wanting children to enter nursery school, by J. Allan Hicks, p. 53-54; (15) Social manners of children, by J. Allan Hicks and Katharine E. Appleman, p. 54-55; (16) Evasions of preschool children, by Ruth M. Hovey, p. 55-56; (17) "Berns" rating scale for social behavior of young children, by Margaret Karr, p. 56-58; (18) "Nervousness" and

nutrition, by Helen R. Nebeker, p. 58-59; (19) Factors influencing attendance of nursery school children, by Margaret Richie White, p. 59-60; (20) Problems of individual children as seen by parents and teachers, by Margaret Richie White, p. 61-62.

497. Williams, Marvie L. The effect of frequent classroom testing on the learning and retention of subject matter. Master's, 1931. Cincinnati.

498. Wilson, Clara Owaley. A study of laughter situations among young children. Doctor's, 1931. Nebraska. Lincoln, University of Nebraska, 1931. 90 p.

The object of this study is to determine in what kinds of situations laughter is a factor among children, what age-differences are shown, and what other influences affect laughter among them.

499. Winsor, A. Leon. Observations on the nature and mechanism of inhibition. Psychological review, 37: 399-411, September 1930.

An analysis of the nature and mechanism of inhibition comparing Pavlov's and Cannon's theories in the light of the facts presented. The data seemed to support Cannon's theory that inhibition is a subcortical rather than a cortical function.

500. Wolfe, Helen M. Conditioning as a function of the interval between conditioned and the original stimulus. Doctor's, 1931. Ohio. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 392-99.)

501. Worcester, D. A. The schoolroom attitudes and achievements of only children. Pedagogical seminary and Journal of genetic psychology, 38: 475-80, December 1930.

A study of a large grade school, kindergarten to sixth grade. Findings: Only children were generally superior.

502. Yang, Bergson. A comparative study of various schools of psychology with special reference to behaviorism. Master's, 1930. Ohio. 175 p. ms.

Gives a comparison and criticism of all schools of psychology. The author thinks that behaviorism is preferable to other schools for four reasons: (1) Concrete data; (2) objective method; (3) explains the learning processes in terms of conditioning; and (4) avoids all teleological and inherited concepts, "as purpose, instinct, etc.

See also 288, 1084, 1681; 2062, 3412, 3797; and under Preschool education.

TESTS AND TESTING

PSYCHOLOGICAL TESTS

503. Alhambra, Calif. City schools. Report on Tressler minimum essential test; report on Detroit word-recognition test; results of the Pintner-Cunningham primary mental test; the measurement of intelligence by drawings. 1931. 7 p. ms. (Educational research and guidance bulletin, vol. 3, no. 3, April 1931.)

504. Allen, C. H., and Allen, Lena. Objective measuring of reasoning progress among sixth grade pupils. Cullowhee, N. C., Western Carolina teacher's college, 1930.

This study is an attempt to find out to what extent sixth-grade pupils may be improved in reasoning efficiency through use of the Economy remedial exercise cards (Greene, Studebaker, Knight, Euch.) Pupils were given initial test in reasoning (Test 5, Stanford achievement test, advanced examination, form B.) Regular drills were given by the critic teacher with the Economy remedial exercises and a retest at the end of the experiment. Results show the value of the Economy remedial cards.

505. Ayer, Edith. A study of intelligence tests. Fresno, Calif., Public schools, 1931. (For abstract see no. 717b.)

A comparison was made of the IQ's obtained from Terman group tests given to 50 pupils in the high sixth grade and repeated with the same pupils in the high ninth grade. More than three-fourths of the pupils showed a lower IQ in the high ninth grade than they did in the high sixth grade.

506. **Barthelme, Harriet M.** The validation of intelligence tests elements. Doctor's, 1931. T. C., Col. Univ. New York City; Teachers College, Columbia university, 1931. 91 p. (Contributions to education no. 505.)

This study evaluates methods of validating intelligence test elements and presents data concerning the relations of type of element, validity, difficulty, and type of scoring key. A brief statement is given of the historical background of the problem, indicating various methods of validating intelligence test elements that have been employed by various persons. Data consisted of grade 3-8 pupil responses on approximately 400 McCall multi-mental elements together with comprehensive criterion scores including various intelligence and achievement tests, and grade 6-8 pupil scores on approximately 700 intelligence test elements of the usual recognitions and recall varieties, likewise with criterion scores.

507. **Brooks, Fowler D.** Constancy of group-test intelligence quotients in high school. Greencastle, Ind., DePauw university, 1931.

508. **Campbell, William A.** A correction to the accomplishment quotient technique. Master's, 1931. Colorado.

509. **Conrad, H. S., and Jaffa, A. S.** A quantitative comparison of four intelligence tests. 1930. California. 115 p. ms.

Findings: Preschool tests are found to be less reliable than tests for school children. Differences in validity among the various tests are not striking.

510. **Corey, Stephen M.** The operation of chance factors in the equation of groups. Greencastle, Ind., DePauw university, 1931.

511. **Cowen, Anna Emma Wunsch.** Recent developments in mental testing in colleges. Master's, 1931. Brown. 99 p. ms.

A brief historical summary is followed by a summary of related literature published for the most part from 1925 to 1930. Emphasis is placed on the uses of test results rather than on the tests themselves. The testing movement in colleges, which began about 1918, continues to grow and the various uses to which test results are put increase in number. Increasingly elaborate studies of a personnel sort involve more and more of educational measurement techniques.

512. **Cross, A. J. Foy.** The practice effect on a standard intelligence test. Master's, 1931. Nebraska. 35 p. ms.

Investigations of ninth and tenth graders who had had no training previous to the experiment on intelligence or objective tests. Findings: Practice has positive effect which persists at least seven months.

*513. **Gureton, Edward E.** Errors of measurement and correlation. Doctor's, 1931. T. C., Col. Univ. New York City, Columbia university, 1931. 63 p. (Archives of psychology, no. 125)

The problem was to examine into the assumptions which underlie the principal formulas of correlational psychology, to point out the limitations in methods of test construction and application implied by these assumptions, to discover the conditions under which the number of assumptions necessary is a minimum, to devise modified formulas under such conditions, to devise checks for the consistency of assumptions with data, and to derive the standard errors of important functions.

514. **Deal, Bohnye Elizabeth.** Weight discrimination as a test of intelligence at the lower mental levels. Master's, 1931. Stanford.

515. **Denslow, Lorenzo Carl.** The Denslow maze test. Master's, 1931. Southern California. 106 p.

An attempt to design an intelligence test that will eliminate as far as possible the influence of general information and test the individual's power of comprehension and generalization, with preliminary conclusions based on results of 200 cases correlated with a variety of criteria.

516. **Diley, F. B.** Scholastic records of students failing a general intelligence test. *School and society*, 33: 311-14, February 23, 1931.

517. **Dillon, Louise Elinor.** A statistical analysis of the individual tests in years 8, 9, and 10 of the Stanford-Binet scale. Master's, 1931. Catholic Univ. 52 p. ms.

518. Engelhart, M. D. Techniques used in securing equivalent groups. *Journal of educational research*, 22:103-09, September 1930.

519. Engle, T. L. A study of the comparative mental abilities and scholastic achievements of academic, commercial, and vocational students. Michigan City, Ind., Public schools, 1931. 16 p. ms.

Compares 148 academic, 117 commercial, and 74 vocational students on the bases of IQ's and school marks. Comparisons were made on four subject groups; academic, commercial, vocational, and score. Findings: Both IQ's and school marks show that academic students rank highest, commercial students next, and vocational students lowest. Academic subjects seem to be the most difficult, vocational subjects easiest, and commercial subjects seem to offer difficulty commensurate with the abilities of the students taking them.

520. Finch, F. H. Sex differences in IQ change. Minneapolis, University of Minnesota [1931].

Compares scores of some 200 students on intelligence tests given at an interval of four years, one at high school entrance, the other at graduation.

521. Foran, T. G. The meaning and measurement of validity. Washington, D. C. Catholic education press, 1930. 27 p. (Catholic university of America. Educational research bulletins, vol. 5, no. 7.)

522. Gatal, Benito. A comparative study of the contents of various intelligence tests. Manila, P. I., Bureau of education, 1931.

The contents of six intelligence tests were examined in order to help the teachers in the choice of test material to suit particular needs. Findings: No one kind of content is common to the 6 tests; "analogies" and "logical selection" are in 5 of them; "arithmetic" and "mixed sentences" in 4. The Thorndike intelligence examination college entrance Form B, Part I, has the greatest number of different kinds of tests, while the Terman group test of mental ability contains the greatest number of items. The Terman group test excels the others in having the greatest number of different kinds of tests with no less than 11 nor more than 80 items.

*523. Gordon, Hans Cochrane. The specific nature of achievement and the predictive value of the IQ. An investigation of the limitations placed upon the predictive values of Otis IQ's by the variation in the achievements of twelfth-grade students in their different subjects. Doctor's, 1931. Pennsylvania. Philadelphia, University of Pennsylvania, 1931. 147 p.

This study investigates the inaccuracy in the prediction of achievement in 16 different high-school subjects. Two estimates of general ability were used: the Otis intelligence quotient, and the average score in five subjects. Findings: It is concluded that the IQ from a single intelligence test is not a satisfactory index of probable achievement in many high-school subjects.

524. Grover, C. C. Report on results of Kuhlmann-Anderson intelligence test and the Stanford reading test in the high sixth grade, fall semester, 1930. Oakland, Calif., Public schools, 1931. 8 p. ms.

525. Hall, Berdena. Differences in intelligence and achievement. Master's 1931. Claremont.

526. Hellman, J. D. and McKee, Paul. The relative influence of mental age and grade placement upon achievement. Greeley, Colorado state teachers college, 1931.

Mental and educational tests were given to about 1,000 school children of Hibbing, Minn.: (1) To find out how much children of the same grade who differ two years in mental age differ in achievement; (2) to compare this difference in achievement with the difference in achievement found for children who are of the same mental age but differ two years in grade location; (3) to determine whether the large individual differences which now obtain among school children under the present influences of the school are due chiefly to differences in mental age or to differences in the amount of school training as represented by differences in grade location.

527. Hyde, Richard E. Some psychological concepts underlying measurements. In Oklahoma academy of science. Proceedings, vol. 9, 1931. Norman, University of Oklahoma, 1931.

A questionnaire study of the psychology of the examinee. The findings are suggestive rather than conclusive, and show the desirability of a new criterion in selecting tests; and the effects of different forms of tests upon pupils' study habits.

528. Joltin, Alfred. Changes in the validity coefficients of test items with limited and unlimited time. Master's, 1931. Coll. of the City of N. Y. 44 p. ms.

Experimental study of the effect of time on the validity coefficients of the "seeing relationship" and "factual" test items. Conclusions: To obtain greatest validity, tests containing these two groups of items should be administered under conditions of limited time.

529. Keen, Angelina Myra. An analysis of the specific effect of practice on retests with the Stanford Binet. Master's, 1931. Stanford.

*530. King, Leo Hamilton. Mental and interest tests, their evaluation and comparative effectiveness as factors of prognosis in secondary education. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 124 p. (Contribution to education, no. 444.)

In this study an attempt was made to use 19 mental tests and 47 interest factors as determinants for the prediction of the scholastic ability of individual secondary school students in English, mathematics, and science. The mental tests were classified into two groups, one with a random combination of the tests, and the other with a selective combination; the interest factors were classified in three groups, designated as English-interest, mathematics-interest, and science-interest. Findings: The mental tests with random grouping are effective for predicting individual grades in English, mathematics, and science within definite limits; the non-verbal intelligence tests possess little value as compared with the verbal type; interest tests are inferior to the mental tests as indices of ability, but show definite values for differential prognosis; the mental tests with random grouping show greater efficiency for prognosis, in combination with the interest tests, than when either group is used separately; the reliability of the interest factor is much less than that of the mental tests.

531. Lewerenz, Alfred S. Group cooperation test. Los Angeles, Calif., City schools, 1931.

532. Lewin, Lillie. Mental ability of high eighth-grade pupils. San Francisco, Calif., Public schools [1930].

As a means of facilitating the classification of pupils entering high school, the Terman group test of mental ability is administered to all pupils leaving the high eighth grade of the San Francisco public schools each term. Tests were administered to 1,606 pupils distributed throughout the city in 29 elementary schools during May 1930. Findings: A range of two years exists between the median abilities of the lowest and highest eighth grades of the elementary schools. The median ability of the pupils tested is 14 years, three months. Approximately one-half the eighth grades of the city are now in junior high schools and each new term provides junior high school opportunities for a greater number.

533. Lincoln, E. A. The reliability of the Lincoln hollow-square form board, and a comparison of hollow-square scores with Stanford Binet mental ages. Journal of applied psychology, 15: 79-81, February 1931.

A reliability coefficient of $.952 \pm .007$ was found by the Spearman-Brown method, using a group of rather large variability. Like other performance tests, the hollow square does not give scores closely related to Stanford Binet mental ages, the coefficients averaging around .50 in separate chronological age groups. Two tables summarize the results.

534. Lomax, Martha. Predictability of the precision with which pupils work as determined by two widely used intelligence tests. Master's, 1931. New York St. T. C. 18 p.

In this experiment intelligence tests were given to 279 pupils in the seventh, eighth, and ninth grades in two schools for the purpose of finding whether degree of accuracy in intelligence test scores might not be more significant for certain purposes than raw scores or intelligence quotients. Precision (per cent of accuracy) and raw scores showed the highest correlation, precision and intelligence quotients the second highest. Below these were the correlations of precision with teachers' estimates, term marks, etc., all of which were positive and high enough to be significant.

535. Long Beach, Calif. City schools. Intelligence test survey in elementary and junior high schools. 1931.

Blue prints showing the distribution of intelligence for the entire school and for each class have been made for all elementary and junior high schools.

536. McCall, William A. Multi-mental scale, form 2. New York City, Teachers college, Columbia university, 1931.

537. McClure, W. E. The status of psychological testing in large city public school systems. *Journal of applied psychology*, 14: 486-96, October 1930.

The purpose of the study was to find out the number of cities having separate psychology departments and to determine in the cities not having separate psychology departments which of the departments already established were rendering psychology service; also to find out what types of tests are being used, when they were first given in the system, and to what extent they are being given.

538. McFadden, J. H. Differential responses of normal and feeble-minded subjects of equal mental age, on the Kent-Rosanoff free association test and the Stanford revision of the Binet-Simon intelligence test. Doctor's, 1931. North Carolina. (For abstract see no. 710.)

In this study 529 subjects were tested with the Stanford revision of the Binet-Simon intelligence test; 507 were given the Kent-Rosanoff free association test, and 232 of these 507 were given the Stanford achievement test. Four mental age groups are included in the study, the mental ages being 6, 7, 8, and 9. Each MA group includes a normal and a feeble-minded group of about 50 subjects each, which are compared with each other. In general, normals and feeble-minded of a given MA resembled each other in their responses, and differed from normals or feeble-minded of other MA's.

*539. McGeoch, Grace Oberschelp. The intelligence quotient as a factor in the whole-part problem. Doctor's, 1930. Chicago. *Journal of experimental psychology*, 14: 333-58, August 1931. (Reprinted.)

This is a study of the learning and retention after 24 hours of two types of material. Lists of 10 paired associates and poems of 12 lines were used with two groups, in which were 30 nine and ten year old school children, a gifted group with a mean IQ of 151 and a normal group with a mean IQ of 99. Three learning methods were involved. Data indicate that the whole method is reliably superior to the pure part in the learning and retention of both types of vocabulary with both gifted and normal groups; the only difference between the whole and progressive part methods with either type of material is the superiority of the whole with the normal group in the learning of the nonsense syllable English pairs; the only reliable difference between the progressive part and pure part methods is the superiority of the progressive part with the gifted group in the learning of the nonsense syllable English vocabulary; the gifted group learned and retained more and are less variable than the normal group, with both types of material.

540. McMahan, Grace Ellen Marie. An inquiry concerning the nature of the Binet ingenuity test. Master's, 1930. Nebraska. 42 p. ms.

Findings: Ability to solve an "ingenuity problem" is associated with the several high-school subjects, with higher intellectual ability, with less blocking of responses, and with less time required in solutions of these problems, although there is not a marked degree of association with any one of these factors.

541. Maller, Julius B. The computation of simple correlations. New York City, Teachers college, Columbia university, 1931. 4 p.

This pamphlet is intended as a guide for use with the Institute of Social Experimentation correlation chart. It describes in detail the preparation of a scattergram and the machine operations involved in the computation of correlations, means, sigmas, etc. It is intended for use by those who have had little or no training in statistics.

*542. Mallett, Effie B. Binet tests and the school progress of 560 children. A study of the progress of children in the primary grades over a period of years. Master's, 1931. New York. 27 p. ms.

The purpose of this study is to determine to what extent a Binet test is valuable in predicting school progress and in determining school placement of children seeking admission to the first grade. Binet tests were given to 560 children in the first grade, and a progress record kept for four years for the children tested. Findings: It seems safe to conclude that there is a high degree of relationship between Binet tests given to

first-grade children and their school achievement over a period of years. In this study the test seemed to predict with a rather high degree of accuracy about 90 per cent of the cases.

543. **New Hampshire. State board of education.** Results of tests in intelligence, silent reading and English forms, in 1930, and a study of the graduates of 1929. Concord, N. H., 1930. 10 p. ms.

544. **Patterson, M. Rose.** Report on the February 1931 testing program to incoming junior high school pupils. Baltimore, Md., Department of education, 1931.

A survey of intelligence, reading and arithmetic.

545. ——— Report on the intelligence of pupils entering senior high schools in February, 1931. Baltimore, Md., Department of education, 1931.

A survey of intelligence for white and colored schools in the different courses.

546. ——— Report on the September 1930 testing program to incoming junior high school pupils. Baltimore, Md., Department of education, 1930.

A survey of intelligence, reading, and arithmetic.

547. ——— Report on the September 1930 testing program to incoming senior high school students. Baltimore, Md., Department of education, 1930.

A survey of intelligence and reading.

548. **Pintner, Rudolf.** Intelligence testing; methods and results. New York City, Henry Holt and company, 1931. 555 p.

A description of tests, methods and results of intelligence testing, with bibliographies.

549. **Reinhart, Sister Miriam.** A scale for measuring the G factors in intelligence. Baltimore, Md., Williams and Wilkins, 1931. (Catholic university of America. Studies in psychology and psychiatry, vol. 2, no. 5.)

550. **Richardson, Clarence T.** The effect of practice on intelligence test results among high school students. Master's, 1930. Indiana. 69 p. ms.

The ninth year pupils of Frankfort high school were divided into three groups: Group A received Otis self-administering tests of mental ability, Forms A and B, three months apart, during which interval six achievement tests were taken; Group B, received Otis tests on the same dates as Group A, and in the interval between them, they received three intelligence tests; Group C received Otis tests on the same dates as Groups A and B. Findings: There was on the average a positive practice effect on the results of all tests following the first, even though the subjects had had previous experience with practice pads and achievement tests; the positive practice effect was not universal nor could the effect be predicted in an individual case; practice on intelligence tests improves one's chance of reaching any critical score or rank as determined by another somewhat similar intelligence test.

551. **Ross, C. C., and Gard, Paul D.** Two modified methods of administering two standardized group intelligence tests. Lexington, Ky., University of Kentucky, 1930. 115 p. (Bulletin of the Bureau of school service, vol. 2, no. 4, June, 1930.)

This study was undertaken to see if group intelligence tests could be administered in such a way as not to consume the test book. The methods tried were the answer-sheet method and the dictation method. Findings: The regular method of administering the two standardized intelligence tests used in this study is slightly more reliable than is the answer-sheet method, and the latter is slightly more reliable than the dictation method.

*552. **Rust, Metta Maund.** The effect of resistance on intelligence test scores of young children. Doctor's, 1931. T. O., Col. Univ. New York City, Teachers College, Columbia university, 1931. 79 p. (Child development institute. Monograph no. 6.)

One hundred 8-year old children, ranging in IQ from 100 to 175 with a mean of 132 were studied to find the degree to which resistance affects intelligence test scores and the extent to which such resistance can be overcome. The Kuhlmann and the Merrill-Palmer scales were used. The results were further studied to find which tests were most frequently refused, and the relationship between resistance and intelligence scores. Comparative data on the two scales were also obtained.

553. Santa Monica, Calif. City schools. Intelligence survey. Grades 1B and 4B. First term study completed September 1930, 6 p. ms. Second term study completed January 1931, 7 p. ms. (Report, no. 2, 10.)

The Detroit first-grade intelligence test was used for grade 1B, and the National intelligence test for grade 4B. The general purpose of testing for mental ability is to aid in the classification of children, according to their degrees of intelligence. Distributions were made showing the score, chronological age, mental age, and the intelligence quotient. According to the results of these tests, 1B and 4B pupils in Santa Monica may be classified as normal.

554. ——— Terman group test survey, grade 6-A. 1931.

555. Saum, Anna Lois. The relative significance of time as a factor in intelligence tests at the college level. Master's, 1930. Ohio. (For abstract see no. 712.)

Subjects for this study were 110 women and 88 men from the general psychology classes, during the academic year 1929-30. On entering the university in the fall, the students were given Form 14 of the psychological test under the prescribed time-limit conditions. Later they were given Forms 13, 15, and 16 of the test under work-limit conditions. The work-limit test was found to be a slightly better prediction of scholastic success than the time-limit test.

556. Sawyer, Clifford B. A comparison of the Detroit and Kuhlmann-Anderson intelligence tests as applied in the Grand Forks public schools. Master's, 1931. North Dakota. 60 p. ms.

Findings: An examination of all the data presented shows that from a statistical point of view there is little to choose between the two tests. A study of the results by grades seems to favor the Kuhlmann-Anderson, but averaging all the correlations seems to show a slight advantage in favor of the Detroit.

557. Scovill, M. S. A comparative study of the performance of normal and feebleminded subjects on the Healy pictorial completion test II. Master's, 1931. Ohio. 33 p. ms.

558. Segel, David. Automatic prediction of scholastic success by using the multiple regression technique with electric tabulating and accounting machines. Long Beach, Calif., City schools, 1931. Journal of educational psychology, 22: 139-44, February 1931.

This study shows the use of the Hollerith tabulating machine in automatically predicting scores, where many cases are involved, from regression equations previously worked out and adapted to the tabulating machine.

559. ——— Index numbers and IQ equivalents for the Thurstone psychological examination and the Iowa high school content examination. Long Beach, Calif., City schools, 1930. 3 p. ms.

560. Senour, A. C. Influence on intelligence of three years of intensive general instruction. East Chicago, Ind., Public schools, 1931. 2 p. ms.

The correlation and analysis of Stanford-Binet IQ's of 26 pupils of a retarded-ability group before and after three years of intensive general instruction with one sympathetic, capable, and inspiring teacher. Conclusions: The coefficient of correlation was $0.665 \pm .078$. The coefficient is influenced by conditioning factors. Instruction had little if any influence on basic mental abilities as represented by Stanford-Binet IQ's.

561. Soper, Wayne W. Test survey. Albany, New York State department of education, 1931. 42 p. ms.

Intelligence tests in the elementary and high school. Findings: Pupils were found to be doing work of less than standard grade caused partly by immaturity due to early entrance. Retardation was pronounced.

562. Strauss, Samuel. Some results from tests of scientific thinking. Master's, 1931. Chicago. 94 p. ms.

Two tests were administered on some of the elements of scientific thinking to 1,300 high school and 165 college students. Findings: (1) Certain elements of scientific thinking are better mastered than others; (2) boys and girls are equal in their ability to use the elements of scientific thinking; (3) less than half of the students improve in the ability to use these elements with the rise in grade status from the eighth to the sixteenth

grade; (4) there is no improvement in scientific thinking with rise in chronological age alone; and (5) there is a positive, but not high, correlation between the IQ and scientific thinking.

*563. **Street, Roy F.** A Gestalt completion test: a study of a cross section of intellect. Doctor's [1931]. T. C., Col. Univ. New York City, Teachers college. Columbia university, 1931. 34 p. (Contributions to education, no. 481.)

The problem was to construct a picture completion test, to determine the relationship of this test to other completion tests, and to furnish some data relevant to the hypothetical concept of a unitary factor in tests of intellect. Test items were constructed by applying the laws of perception as proposed by the Gestalt psychologists. Selection of suitable items was accomplished by determining the percentage of successful responses in a sample population of 740 children in grades three through nine. The test and four selected completion tests were administered to a sixth grade population. Findings: Correlations between verbal and pictorial tests were small. The Gestalt completion test seems to be measuring a very specific capacity probably involved in the perceptual process.

564. **Sunderland, Wilda.** A comparative study of the intelligence of a unit of enlisted men of the United States Navy and high-school students. Master's, 1931. Claremont.

565. **Sweet, Florence A.** A block test for memory span. Master's, 1931. Ohio. 120 p. ms.

Two groups of subjects, 189 first-grade children and 72 college students, were given the variation Knox cube test graded from easy to hard. Girls and women were found to be superior on the easier tests, and boys and men were found to be superior on the more difficult tests.

566. **Symonds, Percival M.** A comparison of statistical measures of overlapping with charts for estimating the value of bi-serial r . Journal of educational psychology, 21: 586-96, November 1930.

567. **Thompson, K. L.** Intelligence and state tests in Jersey City. A 3-year survey, 1928-1931. Jersey City, N. J., Public schools, 1931. 20 p.

568. ——— Intelligence and state tests in Jersey City, 1929-1930. Jersey City, N. J., Public schools, 1931. 29 p.

569. ——— Intelligence and state tests in Jersey City. Jersey City, N. J., Public schools, 1931. Term-ending January 31, 1931, 30 p.; term ending June 30, 1931, 40 p.

570. ——— Survey of intelligence, achievement and socio-economic status in six Jersey City schools. Jersey City, N. J., Public schools, 1931. 18 p.

571. ———, **McMackin, Frank J., and Henshaw, Jay I.** Jersey City high schools—survey of intelligence and achievement. Jersey City, N. J., Public schools, 1931. 10 p.

572. **Trigg, Charles Wilderman.** An analysis of individual responses to the items of the Terman group tests, Form A. Master's, 1931. Southern California. 132 p.

A statistical study of the responses of 780 pupils to each of the 185 test elements to determine the internal consistency of the tests with respect to order of difficulty, correlation between test divisions, etc.

573. **Upshall, C. C., and Masters, H. V.** Table of probable errors for certain inter-percentile ranges. Bellingham, Washington State normal school, 1931. 5 p. ms. (Bureau of research studies, no. 8.)

This study gives the formula for finding the probable error of an inter-percentile range.

574. **Urquhart, Helen Lowe.** The construction and validation of a homonym completion test. Master's, 1931. Brown. 58 p. ms.

The investigation deals with a modified form of the well-known sentence completion type of test-item used in general intelligence testing. This new form makes use of homonyms and hence is quite objective. Available lists are mentioned. Findings: A carefully constructed test was found superior in predicting English composition to a general intelligence test and to an elaborate English test of the objective sort. It was not quite as good as the others in predicting general academic averages for freshmen.

*575. Wheat, Leonard B. Free associations to common words: a study of word associations to 25 words picked at random from the 500 most commonly used words in the English language. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 48 p. (Contributions to education, no. 498.)

A list of 25 words was given to 1,323 children in grades 4-8 in two New York city public schools in an attempt to obtain more knowledge about the construction and use of free-association tests. Findings: There are distinct differences in the responses between grades 4, 5, and 6, and slight differences between grades 6, 7, and 8. The scores for the various age groups closely parallel the scores of the different grades in which the ages are usually found. Different kinds of stimulus words get different percentages of common responses, uncommon responses, and failures to respond.

576. Wood, Ernest Richard. A graphic method of obtaining the partial correlation coefficient and the partial regression coefficients of three or more variables. Chicago, Ill., University of Chicago, 1931. 72 p. (Supplementary educational monographs, no. 37.)

The purpose of this study was to simplify the partial correlation method to such an extent that clerical help, after very little training, can be relied on to obtain partial correlation coefficients, the partial regression coefficients, and the partial regression equations of three or more variables.

See also 309, 315, 396, 404, 409, 412, 414-415, 424, 427, 439, 461, 489, 595, 609, 627, 1792-1793, 1801, 1919, 2082, 2102, 2280-2282, 2444, 2466, 2477, 2490, 2907, 2911, 2913, 3046, 3202, 3536, 3551, 3910, 3962, 4046, 4048, 4213.

EDUCATIONAL TESTS

577. Alhambra, Calif. City schools. Report on Stanford achievement test 2A-8A inclusive, October 23, 1930. 1931. 5 p. ms. (Elementary research and guidance bulletin, vol. 3, no. 2, February 1931. Elementary school issue.)

This is a study of the results of the Stanford achievement test in the various schools and grades, using the IQ as a check as to what should be expected.

578. Allen, Richard D. Achievement survey of all of the core subjects with new type tests in each grade. Providence, R. I., Public schools, 1931.

579. Barr, A. S., and Gifford, C. W. The measurement of concepts. Chicago, Ill., Chicago normal college, 1931. 12 p. ms. 5 printed test sheets.

The tests are the result of a Ph. D. thesis, by C. W. Gifford, directed by A. S. Barr at the University of Wisconsin, and completed in 1928. The thesis established the criterion on which these various series of tests are being constructed. Series A of the American history word meaning tests was published in September 1930 by the Public school publishing company, Bloomington, Ill.

580. Bromer, Max. Question versus the statement form of the true-false test. Master's, 1931. Coll. of the City of N. Y. 114 p. ms.

The two forms are compared on three items—the retention of responses, the tendency towards "true" or "false" answers, and reliability. Conclusions: (1) For college level the statement form is recommended; and (2) for elementary school level the question form is recommended.

581. Budlong, Martha Williamson. Preliminary steps in the construction of a true-false test in the history of education. Master's, 1931. Brown. 68 p. ms.

A detailed analysis of seven texts in the history of education of the "general sort," i. e., not "period" histories. Findings: Tables show the relative amount of emphasis given to each of seven major divisions in the content material for each text examined and for all combined. On the basis of "average emphasis" a test of 200 true-false items was constructed.

582. Buros, Francis C., and Buros, Oscar K. Expressing educational measures as percentile ranks. Yonkers-on-Hudson, N. Y., World book company, 1930. 27 p. (Test method helps, no. 3.)

The purpose of this manual is to provide a simple device for expressing test scores of a group as percentile ranks and for interpreting them conveniently.

583. Calvert, T. B. Report of January testing in social science, language usage, mathematics, foreign language and natural science. Muncie, Ind., Public schools, 1931. 15 p. ms. (Bulletin, no. 55.)

A comparison of achievement in these subjects with September achievement in the same fields.

584. ——— Survey tests, September 1930, in junior and senior high schools. Muncie, Ind., Public schools, 1930. 10 p. ms. (Bulletin, no. 50.)

This report carries an appraisal of achievement in the field of social science, English usage, algebra and Latin in certain sections in junior and senior high schools.

585. Carreon, Manuel L. First central primary schools survey. Manila, P. I., Bureau of education, 1931.

Grades 1, 2, and 3 in 19 divisions were tested with the Philippine educational achievement tests, series A, B, and C, Form I. Findings: Comparisons between different divisions in median scores show differences in achievement.

586. ——— Third biennial central-normal-academic survey. Manila, P. I., Bureau of education, 1931.

Grades four and seven (elementary), second and fourth year (secondary) classes in 40 divisions and insular schools were tested with the Philippine educational achievement tests, series A, B, C, advanced examination, form III. Findings: Some progress during the year in classroom instruction is shown by a comparison of the tentative Philippine norms for the years 1929 and 1930 central-academic-normal survey.

587. Carter, Homer L. J. Development of certain tests in minimal statistics for teachers. Master's, 1931. Ohio. 65 p. (For abstract see no. 712.)

A minimal list of 24 statistical terms has been compiled and three forms of certain tests in minimal statistics have been constructed in accordance with data determined by this study and three forms of a vocabulary test based on the results of the study in statistical terminology, have been developed.

588. Clemons, Howard H. Competitive testing of high school subjects. Master's, 1931. Chicago.

A study of the trends in amount of competitive testing of high school academic subjects, the kinds of tests used, and the results thought to accrue from such testing.

589. Cole, Robert D. Educational achievement in North Dakota city, town, and rural schools. Grand Forks, N. Dak., University of North Dakota, 1931. 53 p. (School of education bulletin, no. 9; Departmental bulletin, vol. 15, no. 2, April 1931.)

The report gives the results of a number of new Stanford achievement tests given in the fall term of the year 1929, and an interpretation of the results. Results of the tests in city, town, and rural schools were compared.

590. Crawford, John B. A comparison of the seventh and eighth grades in the six-six and eight-four school systems of Kosciusko county. Master's, 1930. Indiana. 42 p. ms.

Indiana composite achievement test was given to the eighth grades in the spring of 1928. A different form of the same test was given to both the seventh and eighth grades in the spring of 1929. Standardised tests in English, algebra, and biology were given in the spring of 1929 to the pupils who passed the Indiana composite achievement test in 1928 and continued their work in the high school. Findings: There is no significant difference in the amount of retardation and retention in the two types of schools; the seventh-year pupils of the 8-4 schools show relatively the highest degree of achievement in every subject on the Indiana composite achievement test; the eighth grade of the 8-4 schools made the highest average score in 8 subjects out of the 9. The pupils of the 6-6 schools have a better opportunity to participate in extracurricular activities, and have more privileges of using the high-school equipment.

591. Crawford, John Raymond. Age and progress factors in test norms. Doctor's, 1931. Iowa. 188 p. ms.

This is a study of the influence of chronological age, mental age, and rate of school progress upon test norms. Data from 7,668 sixth-grade pupils on these three factors and on a reading and an arithmetic test were used. The use of test norms established on three intelligence groups within each chronological year group is more valid and justifiable than the use of norms established by conventional methods.

592. Dearborn, Mich. Fordson public schools. Composite report upon the achievement and progress of Fordson school district pupils in the principal subjects as measured by standard tests. 1930. 9 p. ms. (Bulletin, no. 51.)

An analysis of the results of a continuous testing program.

593. DeTurk, Ruth O. Comparative study of test scores in Winfield high school, 1928-1929. Master's, 1931. Kansas.

Correlation of test scores in state contest in 1928-1929, with Columbia research bureau educational tests, IQ's and teachers' marks in five subjects in Winfield high school.

594. Educational records bureau. The educational achievement and intelligence of independent school children, 1929-1930. New York, N. Y., Educational records bureau [1931]. 141 p. (Educational records bulletin, no. 6.)

The Bureau's reports enable the independent schools to see themselves from a new angle and in a new light, and to clarify the point of departure for considering changes in policies and practices.

595. Evanston, Ill. Public schools. A summary of the educational activities, Evanston public school district 75, Evanston, Ill., 1929-1930. 89 p. ms.

Contains the report of educational and psychological tests for 1929-30.

596. Everly, L. L. A report on the city-wide educational tests given to the pupils of the St. Paul public schools, November 1930. St. Paul, Minn., Department of education, 1931. 13 p. ms.

597. Gates, Arthur I., and others. Modern achievement tests. New York City, Teachers college, Columbia university, 1931.

598. Goltry, Thomas K. An empirical study of a technique for assigning letter grades to objective test scores. Master's, 1931. Iowa. 102 p. ms.

599. Gray, Robert F. Construction of junior high school achievement tests. San Francisco, Calif., City schools, 1931. (For abstract see no. 717b.)

Committees on test construction were formed in the fields of English, mathematics, general science, and social science. Their chief aim is the development of tests in each of the fields that will meet the objectives set by the San Francisco high-school courses of study.

600. Hazelton, Earle Foote. A statistical comparison of the abilities and accomplishments of the R. O. T. C. and non-R. O. T. C. boys in the Los Angeles city schools. Master's, 1931. Southern California. 185 p.

Based on IQ, scholarship, and citizenship records of 1,352 boys in four high schools, classified by half-grades.

601. Holck, Elma Anna. Achievement of high school seniors in Arapahoe county. Master's, 1930. Denver. 89 p. ms.

The Sones-Harry achievement test was used in four high schools of Arapahoe county to solve the problems: (1) Are the high schools accelerating as many students as our tests indicate that they should? (2) are they able to locate the brightest students and to make adequate provision for their proper advancement? (3) which course attracts the ablest students graduating from the high school? (4) is there any light upon maladjustment of subjects? and (5) achievement of seniors coming from rural and city high schools.

602. Hood, Helen V. Report on Stanford achievement test 2A to 8A grades, inclusive, 1930. Alhambra, Calif., High school, 1931.

603. Houston, Texas. Independent school district. The report of group test results and the use of the standard deviation of the difference to determine the significance of the variations between classes. 1931. 14 p. ms. (Research bulletin, no. 8,204.)

This report contains three types of information concerning the results of the city-wide testing program of January 1931: (1) The city medians for each grade in terms of score, age, and grade status; (2) a comparison in terms of grade status of Houston medians and the standards of the corresponding grades in 12-year systems and the estimated standards for the grades if 12 years' work is actually done in 11 years; and (3) a comparison between the medians earned by the individual schools and the city medians.

604. **Houston, Texas.** Independent school district. The report of group test results and the use of the standard deviation of the difference to determine the significance of the variations between classes. 1931. 8 p. ms. (Research bulletin, no. 8213.)

This report includes three types of information concerning the results of the city-wide testing program of April and May 1931: (1) The city medians for each grade in terms of test score, educational or mental age, and grade status; (2) a comparison in terms of grade status of Houston medians earned in January and May 1930 and in January and May 1931, together with a comparison of the Houston medians with the standards of the corresponding grades in 12-year systems, and the estimated standards for the grades if 12 years' work is accomplished in 11 years; (3) a comparison of the medians earned by the individual schools in the testing survey of April and May 1931 with the city medians.

605. **Howie, Thomas W.** Study of the Carnegie foundation professional education tests of May 1930 in Temple university. Master's, 1931. Temple.

606. **Johnson, Charles L.** Results of a survey-testing program of achievement in the Dunkirk Indiana high school. Master's, 1931. Wisconsin.

607. **Jones, Vernon, and Crook, Mason.** Educational tests. Worcester, Mass., Clark university, 1931. 28 p.

This article is a review of the developments in the field of educational tests during the year 1930. The article is organized around such headings as the following: The development and use of tests for survey purposes; the development and use of tests for diagnosis; the development and use of tests for prognosis and guidance; the use of tests for improving marks and marking systems. A bibliography of 168 titles is appended.

608. **Kolb, Joseph Wilbur.** A comparative study of the achievement of pupils from rural and village schools. Master's, 1931. Indiana. 133 p. ms.

609. **Lewin, Lillie.** Summary of testing program—high third grade. (End of Spring term, 1930.) San Francisco, Calif., Public schools, 1930. 9 p. ms. (Bulletin, no. 19, September 1930.)

A survey of mental, reading, and arithmetic abilities in the high-third grade of the San Francisco public schools. This survey includes 2,992 pupils in 62 schools. The findings emphasize the wide range of abilities to be met in pupils entering the low fourth grades. Homogeneous instructional groups, cases for special promotion, and cases for further diagnosis were selected on the basis of this survey.

610. ——— Summary of testing program: 1. Utilization of tests and measurements in the San Francisco public schools; 2. Reading and arithmetic abilities in the high-fourth, high-fifth, and high-sixth grades. San Francisco, Calif., Public schools, 1930. 30 p. ms. (Bulletin, no. 20, October 1930.)

Part 1 of this study describes the testing program in the San Francisco public schools and discusses the utilization of test results in improving instructions. Part 2 is a survey of reading and arithmetic in the high-fourth, high-fifth, and high-sixth grades. Remedial steps based on the results are given. Pupils of the high-fourth, high-fifth, and high-sixth grades are on the average, above their chronological ages in reading and arithmetic abilities. A need for curricular adjustments is shown in schools having exceptionally high or low ability.

611. **McAnelly, J. R., Booth, C. E. and Ludeman, W. W.** Tests bulletin for South Dakota curriculum revision programs. Springfield, S. D., Southern State teachers college, 1931. 75 p. ms.

Suggested test programs for elementary schools, test lists, and remedial program for each subject, such as arithmetic, reading, etc., are given.

612. **McDonough, Leo Francis.** An evaluation of the technique for determining optimum administration time of a test. Master's, 1931. Iowa. 21 p. ms.

613. **McKenna, John C.** A comparison of certain methods of testing ability. Master's, 1931. Iowa. 76 p. ms.

614. **Mallory, Clara.** Testing and classification program of elementary grades. Beaumont, Texas, Board of education, 1931. 20 p.

615. **Mansfield [Ohio?] City schools.** Results of tests in reading, arithmetic, writing, music. 1931. [83 p. ms.] (Test bulletin, no. 1, 1930-1931.)

616. **Martin, Paul E.** Survey of pupil achievement, grades 7-10. Compton union district, Calif., Public schools [1930].

Each student in grades 7 to 10, inclusive, was given a Stanford achievement test. The results were studied to discover weaknesses in instruction and as a basis for individual guidance.

617. ——— Survey of pupil achievement, grades 9-12. Compton union district, Calif., Public schools [1930].

Pretests were given at the beginning of the semester followed by achievement tests at the close of the semester. The improvement of individuals and classes was compared.

618. **Moise, Marian.** Results of the 1930-1931 Stanford achievement tests. New Orleans, La., Orleans parish school board, 1931. 5 p.

619. **Munson, J. I.** Achievement in reading, arithmetic, and handwriting in Lead, Deadwood, Spearfish, and Whitewood, South Dakota. Master's, 1931. Nebraska. 115 p. ms.

The study covers grades 3 to 8, inclusive.

620. **Myers, Charles Everett.** Pupil achievement in Virginia rural schools. Richmond, Va., State board of education, 1931. 52 p. ms.

A study of 108,072 test scores (school achievement and mental ability) for fall and spring in grades 4 to 7 from 64 Virginia counties, together with certain data on pupil characteristics, teacher qualifications and school organization. Challenges certain popular educational standards such as length of term, consolidation, certification, etc.

621. **Obrien, F. P.** What we test in school and how we test. University of Kansas bulletin of education, 3, 11-17, April 1931.

Deals with the prevailing tendency of school tests to emphasize memory, formal skills, unrelated facts and routine habits and to neglect more important outcomes of instruction. Objectivity is emphasized more than quality in tests. Prevailing tests reflect teaching emphasis and give directions to study procedure.

622. **Odell, C. W.** Educational measurement in high school. New York, The Century company, 1930. 641 p.

Describes various types of standardized or commercially available tests for the high school subjects.

623. **Ohio. State department of education.** Every pupil test. Columbus, The F. J. Heer printing company, 1931. 55 p.

Report of December 2, 1930.

The purpose of the Every Pupil Test is to challenge, stimulate, and encourage boys and girls, classroom teachers, principals, and superintendents.

624. **Osburn, W. J.** Wisconsin inventory tests for grades 9-12, and Teachers' manual. Columbus, Ohio State department of education, 1931.

625. **Patterson, M. Rose.** Summary of results of standardized tests—junior and senior high schools, white and colored—January 1, 1927 to December 31, 1930. Baltimore, Md., Department of education, 1930.

This summary gives the city-wide median for each test in each grade given during this period.

626. **Patton, Melvin Glenn.** A survey and testing program in Kershaw school district, Kershaw, S. C. Master's, 1930. Virginia.

627. **Philadelphia, Pa.** Board of public education. Survey test in arithmetic, Grade 8B—March 1930, 5 p. ms. (Bulletin no. 158); Survey test in seventh grade American history, Grade 11A—February 1930, 3 p. ms. (Bulletin no. 159); Senior high schools—per cents of pupils rated satisfactory, Second report period, June 1930, 6 p. ms. (Bulletin no. 160); Junior high schools—per cents of pupils rated satisfactory, Second report period, June 1930, 7 p. ms. (Bulletin no. 161); Philadelphia mental ability test—Form A-11, Grades 6B and 8B, April 2, 1930, 10 p. ms. (Bulletin no. 162); Survey test in geography, Grades 6B, 6A, 5B, May-June 1930, 14 p. ms. (Bulletin no. 163); Handwriting test—May 1930, 4 p. ms. (Bulletin no. 164); Philadelphia silent reading test—comprehension and rate. Grades 7 to 12, May 1930. 6 p. ms. (Bulletin no. 165);

Subject promotion rates in senior high schools, June 1930. 8 p. ms. (Bulletin no. 166); Subject promotion rates in junior high schools, June 1930. 9 p. ms. (Bulletin no. 167); Survey test in history, Grades 7B and 8A, June 1930. 6 p. ms. (Bulletin no. 168); Survey tests in American history, June 1930. Grades 11A and 11B. 7 p. ms. (Bulletin no. 169); Controlled experiment in study type reading, February 7-June 12, 1930. 9 p. ms. (Bulletin no. 170); Survey testing, June 1930. Elementary schools—Grades 1-6. 9 p. ms. (Bulletin no. 171); Philadelphia English test—part 4, form A. Grade 8B, June 1930. 8 p. ms. (Bulletin no. 172); Philadelphia diagnostic test in algebra, June 1930. Part 1, form B, Grade 8B; part 2, form B, grade 9A; part 3, form A, grade 9B. 16 p. ms. (Bulletin no. 173); Philadelphia test in mechanical drawing, part 1, form A, June 1930. 4 p. ms. (Bulletin no. 174).

628. **Philippine Islands.** Bureau of education. The second biennial rural-vocational survey. Manila, 1930.

Fifty-one divisions and insular schools, grades 3 to 7, elementary and first to fourth years, were tested with the Philippine educational achievement tests, series A, B, and C, form 2.

629. **Pintner, Rudolf.** Educational achievement tests for grades 4 to 8; Forms A-B; manual of directions. New York City, Teachers college, Columbia university, 1931.

These tests consist of four forms of equal difficulty and two alternates to prevent copying.

630. **Portland, Oreg. Public schools.** Creation of standardization of Portland achievement tests in language, Form A and B; History, Form A and B; Arithmetic, Form A and B. [1931.]

631. **Provost, Clarence Lewis.** An analytical study of achievement of elementary school children. Master's, 1931. Mississippi.

The Kuhlmann-Anderson intelligence tests and the Stanford achievement tests were used in the investigation of grades 4 to 8 of a particular school.

632. **Rosebrook, Wilda M.** Some psychological observations in a private school for girls. Doctor's, 1931. Ohio. 139 p. ms.

An analysis of educational achievement as measured by four consecutive Stanford achievement tests. Findings: The highest mean subject quotient in reading, arithmetic, history, and dictation tends to be reached at 13 years of age, for both "superior" and "normals" on Kuhlmann-Anderson test. It was found that there were about 76 chances out of 100 that the superior girl will gain more points in total educational quotient than the normal girl; there are 58 chances out of 100 that the individual superior girl will make a positive gain; there are 56 chances out of 100 that the normal girl will make a positive gain; there are 95 chances out of 100 that the mean gain of the superior girls will be positive rather than negative; and there are 99 chances out of 100 that the mean gain of the normal girls will be positive rather than negative. The mean IQ of the lower school, Forms 1-6 was 118; the mean IQ of the upper school, Forms 7-12 was 109 (IQ computed with 16 as basic age), and 117 (IQ computed with 14 as basic age.)

633. **Ryland, Helena Mabel.** Standard tests and measurements in high school: What is Tennessee doing with them? Master's, 1930. Tennessee. ms.

634. **St. John, Charles W.** Educational achievement in relation to intelligence, as shown by teachers' marks, promotions, and scores in standard tests in certain elementary grades. Cambridge, Mass., Harvard university press, 1930. 219 p. (Harvard studies in education, no. 15.)

Selected bibliography: p. 198-208.

The facts brought out by this study indicate: (1) That between IQ and the quality of educational achievement there is clearly a positive correlation; (2) that school progress is correlated positively with IQ to a marked degree; not determined in terms of any single index; (3) that in both the quality of achievement and the rate of progress through the grades there are many and often marked exceptions to the general rule of correlation; (4) that the achievement of boys is in all respects lower, on the average, than that of girls, and the correlations between IQ and achievement are also lower for boys; (5) that educational achievement is much less constant than is IQ; and (6) that

on the one hand the marks in effort and on the other hand the achievement-test scores correlate with other achievement criteria about as highly as IQ does.

635. **San Francisco, Calif. Public schools.** Principals' and teachers' handbook on utilization of test results for use in the San Francisco public schools. 1931. 19 p. ms. (Bulletin, no. 30.)

While this bulletin is designed primarily for San Francisco teachers, it has information of general value on the utilization of test results. It emphasizes the use of test records as a basis for homogeneous instructional groups.

636. ———— **Surveys of achievements in the San Francisco public schools (H3, H4, H5, and H6 grades).** 1931. 15 p. ms. (Bulletin, no. 25.)

A survey of reading and arithmetic ability in grades 3 to 6, inclusive, in the San Francisco public schools. This survey includes 10,577 pupils. Findings: Considerable overlapping of abilities between the various grades is in evidence. In every grade the median reading ability exceeds the median chronological age. Exceptionally high and low abilities are more prevalent in reading than in arithmetic.

637. **Santa Monica, Calif. City schools.** New Stanford achievement survey. 1931. 14 p. ms.

This survey was given at the close of the first semester. The findings of the survey were favorable, as indicated by the fact that the medians of most grades exceed the norms.

638. ———— **Report of general achievement survey, May 1931.** 35 p. ms. (Report no. 19.)

The following tests were used in the achievement survey: Detroit word recognition test, Form A, grade 1A; Haggerty reading examination, Sigma I, grade 2A; Monroe silent reading test 1 and test 2, grades 3-6 inclusive; Woody-McCall mixed fundamentals, Form 2, grades 3-6 inclusive; Morrison-McCall spelling scales, List 7, grades 3-6, inclusive. The general trend in achievement is a favorable one according to the results of this survey.

*639. **Serven, Edward J.** The relationship of height and weight and educational achievement of school children. Master's, 1931. New York. 114 p. ms.

A total of 1,682 boys and girls, ranging in age from five to 16 years, in a city in New Jersey were examined. Data obtained on 1,502 children, 798 boys and 704 girls, indicate that intelligence or school achievement does not seem to be comparable to a simple physical trait such as height or weight.

640. **Shriber, Joseph H. and Davis, Robert A.** The ability and achievement of pupils in El Paso county, Colo. Boulder, University of Colorado, 1930. 68 p.

A study was made of the 46 schools of El Paso county, Colo. Findings: Chronological age-grade analysis indicates that the pupils in the county are on the whole similar to those elsewhere; the mental abilities of the pupils in the county compare favorably with those of representative American school children. The pupils are slightly below national standards in school achievement. Results indicate that twelfth-grade pupils are practically normal in all subjects covered by the Sones-Harry achievement test. Pupils in the county are not achieving in proportion to their abilities.

641. **Stenquist, John L.** Semi-annual instructional survey—city-wide test results for all classes as of September 1930—all elementary schools—white and colored. Baltimore, Md., Department of education, 1930. 40 p. ms.; February 1931, 37 p. ms.

Reports on results of primary and intermediate tests.

642. **Van Kirk, Edward Russell.** The relationship existing between scholastic grades of smokers and nonsmokers in a secondary school. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Questionnaires were prepared and distributed to the boys in the Ebensburg and Creson high schools. The returns were divided into groups of 40 smokers and 40 nonsmokers from each of the four classes. The various grades were taken from the school records. The average, median, mode, and standard deviation are all slightly in favor of the nonsmokers, with the differences statistically reliable.

643. **Van Wageningen, M. J.** Scales for measuring abilities involving the use of language among kindergarten and first-grade children. Minneapolis, University of Minnesota, 1931. 30 p. ms.

Based on individual testing of 850 kindergarten and first-grade pupils. The scales may be used to measure attainments as a basis of predicting success in learning to read.

644. Van Wagenen, M. J. Scales for measuring ability to see relations, range of general information, reading vocabulary and composition vocabulary. Minneapolis, University of Minnesota, 1931. 80 p. ms.

A study of the difficulties of items based on 800 cases in grades 4, 6, 8, and 12. Findings: These scales may be used for measuring attainment or progress of pupils in the above functions in grades 8 through 12.

645. Walters, F. C. "Test" Hispano-Americano de habilidad y aprovechamiento. Rio Piedras, P. R., University of Puerto Rico [1930].

A test of general ability and achievement of school children from grades 8 to 12.

646. Woody, Clifford. Results of the May testing programs in the elementary and high schools of Michigan, 1931. Ann Arbor, University of Michigan, 1931. 47 p. (Bureau of educational reference and research bulletin no. 140, August 30, 1931.)

This report gives the results of the testing programs which were carried on in the elementary and high schools of the State of Michigan during the second week of May, 1931. In both the elementary and high schools, achievement was found to be superior to that in 1930.

647. Yeager, Lillian Elene. The variability in achievement of school children. Master's, 1931. Colorado.

648. Young, Katie Cantrell. An evaluation of certain new-type tests. Master's [1931]. Peabody. 85 p. ms.

A study of nine sets of new-type tests, containing 690 test items as used in a course in methods in the department of education. Findings: The tests were valid, reliable, and objective.

See also, 116, 155, 309, 315, 391, 496 (4), 497, 526, 567-571, 1810, 1830, 2040-2041, 2081, 2094, 2105, 2119, 2435, 2470, 2905-2906, 2908, 3056, 3218, 3344, 4055, 4057, 4062, 4670, 4076, 4104, 4106, 4163, 4174, 4253; and under Special subjects of curriculum, and in Index under Tests.

TESTS OF SOCIAL ADAPTATION

649. Arendell, John Everett. Measuring the results of a telic program of training for ethical character. Master's, 1931. Peabody. 141 p. ms.

Findings: It was found that a telic program of training for ethical character is superior to a purely incidental one.

650. Arnold, Dwight Lester. Certain traits and tests of emotional and school achievement. Master's, 1930. Ohio. 74 p. ms.

The study deals with the relation of traits to achievement in 55 high-school seniors in Westerville high school. Findings: Most tests of emotion are not indicators of achievement. Rating scales have value in predicting achievement.

651. Bell, George Henry. An experimental study of character from the standpoint of conflict and self-control. Doctor's, 1931. Southern California. 313 p.

An examination of various psychologies of character, followed by an experimental study of resistance to breakdown in several types of tests, resulting in a concept of character as a product of conflict and self-control.

*652. Bradshaw, Francis Foster. The American council on education rating scale; its reliability, validity, and use. Doctor's, 1930. Columbia. New York City, Columbia university, 1930. 80 p. (Archives of psychology, no. 119.)

Bibliography: p. 71-74.

This study aims to summarize briefly the tested knowledge concerning the construction, reliability, validity, and uses of rating scales as a personnel tool; to furnish an understanding of the reliability and validity of this scale under varied types of normal use; and to offer a description of procedure to be followed in constructing and testing a rating scale for use in educational personnel procedure.

653. Burton, William Hollis. The measurement of the socio-civic intelligence of high-school students. Doctor's, 1931. Cincinnati.

654. College entrance examination board. Commission on scholastic aptitude tests. Fifth annual report of the Commission on scholastic aptitude tests. New York City. College entrance examination board, 1930. 28 p.

This is an appendix to the thirtieth annual report of the secretary. It includes a discussion of the registration, scoring, and validity of the 1930 test and is illustrated by tables showing distributions, correlations, tetrad differences, persistence of individual idiosyncrasy, etc.

655. Cornell, Ethel L. Measurement of trait differences in relation to their importance for classification of pupils. Albany, New York State education department, 1930. 6 p. ms.

Comparison of two methods of measuring individual deviation in traits shows discrepancies when stated in terms of educational age and Sigma deviation from the mean. Findings: Results raise the question of validity of comparing pupils' achievement age in different subjects.

656. Cowdery, Karl M. The outlook in the measurement of interests. Personnel journal, 9: 178-83, August 1930.

657. Cutright, Prudence and Shoemaker, W. A. Is the rating or marking of character traits practicable. Minneapolis, Minn., Public schools, 1930. Educational method, 10: 158-61, December 1930.

Compares scores in deceit, determined in an objective manner, with teachers' marks on reliability (194 cases) and on social attitude (139 cases). Findings: Teachers' marks on traits are unreliable.

658. Donnelly, Harold I. Measuring certain aspects of faith in God as found in boys and girls 15, 16, and 17 years of age. Doctor's, 1931. Pennsylvania. Philadelphia, University of Pennsylvania, 1931. 118 p.

The purpose of this study is the development of an instrument which will measure certain phases of faith in God as found in boys and girls in the last three years of high school, grades 10, 11, and 12, or in the senior department of the church school. The test has four parts. Part 1 tests the pupil's vocabulary as related to faith in God; part 2 attempts to discover whether or not faith in God is effective in the conduct of the pupil; part 3 seeks to measure the pupil's attitude of trust or confidence in God; and part 4 deals with the content of the pupil's belief about God. The test was given to 506 Protestant church school pupils and 192 high-school pupils. The test was later revised and given to 632 Protestant church school pupils and 294 high-school pupils.

659. Edwards, Margaret E. Standardization of a social intelligence test on university women at both extremes of social competence. Master's, 1931. Ohio. (For abstract see no. 712.)

The purpose of the study was the standardization of a test of social intelligence on about 100 women students, and standardizing statistically the significant differences between six tests. Findings: The weighted sum of the six tests correlates with objective criterion of social competence.

660. Eurich, Alvin C. An analysis of self-ratings on studiousness traits. Journal of applied psychology, 14: 577-91, December 1930.

An attempt to evaluate a self-rating scale of studiousness traits. Findings: The self-rating scale of 100 items did not differentiate between the good and poor students. Nine items of the scale did show a significant difference.

661. Geary, Catherine E. A technique for measuring moral standards by means of scales. Master's, 1931. Penn. State. 106 p. ms.

An elaborate set of scales, comparable with those used in rating English composition, were devised for measuring degree of badness of bits of conduct in respect to four elements of the moral code. The scales are to be used in measuring the relation of motion pictures to moral standards. It was found possible to develop scales that would have reliabilities in the upper nineties. Also the approvals of different groups who contributed to the making of the scales showed high intercorrelations among groups.

662. Geer, Gladys McDowell. The reliability and validity of the Northwestern university introversion-extroversion test. Master's, 1930. Northwestern.

663. Hughes, Clara Blanche. An analysis of the interrelation of parts of the school of education aptitude test. Master's, 1931. Southern California.

A statistical study based on the intercorrelations of the parts of the tests.

664. **Hughes, W. Hardin.** Refining the estimate of personal qualities. Pasadena, Calif., City schools, 1930. *Nation's schools*, 7: 55-60, February 1931.

The purpose of this article is to present a technique for rating personal qualities and to show something of the practical method of applying it. This scale includes the traits of industry, accuracy, initiative, reliability, cooperation, leadership, and physical vitality.

665. **Jersild, A. T.** A study of personality. *Journal of abnormal and social psychology*, 25: 115-20, 1930.

This study was designed to find the degree to which various traits and characteristics lend themselves to discriminate measurement, and to find the correlation between various traits. Forty-two girls, members of one of the author's classes at Barnard college, were subjects. Measurements were made of general intelligence, social intelligence, emotional stability, and ascendance-submissiveness by means of tests and inventories; all the students rated one another for amiability, personal appearance, and ascendance-submissiveness. Tables showing averages, variability, and intercorrelations are given.

666. **Kulp, D. H., II, and Davidson, Helen H.** Can Neumann's "Attitude indicator" be used as a test? *Teachers college record*, 32: 332-37, January 1931.

667. **Lewerenz, Alfred S.** Measurement of pupil behavior. Los Angeles, Calif., Public schools [1931].

A measure of group initiative for use in activity rooms.

668. ——— and **Steinmetz, Harry C.** Orientation test concerning fundamental aims of education. Los Angeles, Calif., City school district, 1931. 20 p.

669. **Lewis, F. LaMonte.** Development of moral judgment test. Master's, 1931. Syracuse.

670. **Lincoln, E. A. and Shields, F. J.** An age scale for the measurement of moral judgment. *Journal of educational research*, 23: 193-97, March 1931.

This article reports the first attempt to measure a character trait by the use of an age scale. The scale is described and sample items are included. The study reports a series of reliability coefficients, and the results of correlations between the age of responsibility and Stanford Binet mental ages.

671. **Lozier, Orville Owen.** The use of tests and measurements in the church school. Master's, 1931. Brown. 75 p. ms.

A survey of available measuring instruments of the objective sort in the field of religious education. Some of the tests are described in detail. The bibliography contains references to other bibliographies. Findings: A remarkable growth has taken place in the application of measurements in this special field.

*672. **McCormick, Mary Josephine.** A scale for measuring social adequacy. Doctor's, 1930. Catholic Univ. Washington, D. C., National Catholic school of social service, 1930. 73 p. (*Social science monographs*, vol. I, no. 3, October 15, 1930.)

Bibliography: p. 64-67.

The object of the present study is to devise a measuring instrument adapted to the quantitative study of social adequacy. The scale consists of four major divisions dealing with neighborhood, social history, material and cultural conditions in the home.

673. **Maller, Julius B.** A group test of cooperativeness. Teachers college, Columbia university, New York, N. Y. New York City, Association press, 1930.

The purpose of the study was the validation of a reliable instrument for measuring group loyalty. Findings: Cooperativeness was found normally distributed and subject to change through instruction.

674. ——— The self-marking test, forms A-S and B-S, and Manual of directions. New York City, Teachers college, Columbia university [1930]. 64 p.

This is a group-test of honesty in school work. The Manual presents the principles upon which the test is constructed and the results of testing 938 pupils of grades 7-8.

675. ——— Tests of sports and hobbies. New York City, Association press, 1931.

A test of trustworthiness, for use with young people and adults, composed of 11 sub-tests and 100 questions. A key giving the answers to all questions is inserted in each test blank.

676. Miller, Elsie Laura. Some of the problems involved in measuring the outcomes of Bible teaching. Master's, 1931. Boston Univ.

*677. Minard, Ralph Day. Race attitudes of Iowa children. Doctor's, 1930. Iowa. Iowa City, University of Iowa, 1931. 101 p. (University of Iowa Studies, new series no. 217. Studies in character, vol. 4, no. 2, December 15, 1931.)

A test for measuring race attitudes was designed and administered to 1,352 pupils in 7-12 grades in Iowa cities. Sex, socio-economic status and intelligence showed little correlation with race attitudes.

678. Moise, Marian. An experiment in the measurement of personality and intelligence. Master's, 1931. Tulane. 40 p. ms.

This experiment attempts to ascertain the general trend toward some sort of correlation of the traits of introversion and extroversion, with the emotions of anger and fear, and with intelligence as determined by intelligence test scores. Sixty-one students of the Sophie Newcomb college of Tulane university recorded their anger and fear reactions for two years. They were rated by two of their instructors on introvert-extrovert qualities. In this experiment, any relationship among the traits measured is purely a chance relationship.

679. Nesbitt, M. K. Personality rating in a test situation. Master's, 1931. Ohio. 52 p. ms.

680. Olson, Dorothy and Jones, Vernon. An objective measure of emotionally-toned attitudes. Pedagogical seminary and Journal of genetic psychology, 39: 174-96, June 1931.

Involuntary reactions in connection with words and sentences on various controversial issues were recorded on a kymograph record. It was found that the presence of strong prejudice toward race, religion, economic-political issues, and issues in the field of social relations, could be detected with a fair degree of success by means of the apparatus.

681. Rosander, A. C. Can attitudes be measured? Phi delta kappan, 13: 75-79, 90-94, October 1930.

Discusses the psychological issues involved in the measurement of attitude; that is, the exact meaning of the term, the formulation of a valid indicator of attitude, and the possibility of a mental unit of measurement.

682. Schlorff, Paul W. An experiment in the measurement and modification of racial attitudes in school children. Doctor's, 1930. New York. 76 p. ms.

This study involved the determination of a scale of "social distance," by which the nationality attitudes of an experimental group of high school pupils were measured at the beginning of the experiment; the setting-up of a special curriculum designed to modify attitudes selected for the experiment; and re-measurement of the experimental group, against the scale, at the conclusion of the experiment, to determine the extent of change in attitude.

Findings: Racial attitudes (as well as changes in these attitudes) may be measured by means of a scale, objectively determined through statistical procedure. The resources of the public school may be effectively employed in the modification of these attitudes, through the use of certain curricular material, properly designed and applied. The techniques and procedures here employed are applicable in the measurement and modification of other social attitudes.

683. Smith, Randolph B. The measurement of inferiority feelings at the high-school level. Doctor's, 1931. Minnesota.

Report of the development of an instrument for measuring inferiority feelings at the high-school level; a discussion of item analysis, reliability, validity, norms, etc.

684. Stout, Grace Farwell. An account of the construction of the Northwestern introversion-extroversion test and its use in 100 cases. Master's, 1930. Northwestern.

685. Strang, Ruth. Measures of social intelligence. American journal of sociology, 36: 263-69, September 1930.

"Social intelligence," which is frequently defined as "ability to deal with people" has two aspects, not necessarily related—the knowledge aspect and the fundamental aspect. Measurements of these two aspects have been devised; (1) Paper and pencil tests to

measure knowledge; and (2) real situations used as tests rating scales, questionnaires, and photographs to ascertain the extent to which an individual reacts in a social way or possesses certain skills or traits judged to be useful in social situations. There is need for testing further the reliability and validity of these measures and for improving those which seem to be most useful in differentiating the individual who can get along with other people from the one who lacks this ability.

686. Weber, C. O. The nature and measurement of emotional age levels. Aurora, N. Y., Wells college [1931]. 25 p.

A continuation of an attempt to construct an objective test that will establish age levels of emotional maturity. The present, the third revision of this test, was given to 250 cases drawn from grades 6, 8, 10, and 12 of the Auburn school system, to 145 university freshmen, to 80 sixth-grade cases in New York City, and to 90 women prisoners at Auburn women's prison. The test consists of 8 sub-tests, three of which are modified forms of the Pressey X-O test, the others are original tests based on some one or other of well-known psychological attainments in the field of instincts and emotions. McDougall's theory of primary and blended emotions, for instance, forms the basis of one test. Results: This test gives exceptionally high correlations with chronological age (+.709) and with intelligence (+.799). Reliability of the test, based on retests, is +.775. The test correlates with judge's estimates of maturity on the average of about +.300. The average emotional age of the women felons was 14.5 years, their average mental age (Otis intelligence test) being 12 years. There was a negative correlation between scores of the emotional age test and the seriousness of the offense, i. e., emotional immaturity is positively related to seriousness of offense.

687. Yepsen, Lloyd N. The objective estimation of social adjustment. Doctor's, 1931. Ohio. 250 p. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 401-12.)

The study gives a technique for the measurement of social adjustment through the use of the adjustment score card. Findings: Social adjustment can be measured and the results presented in quantitative form.

See also 278. 496 (17), 570, 3506-3507, 4204.

EDUCATIONAL RESEARCH

*688. Agunod, Nemesio L. The bureau of research and reference in American school systems. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 80 p.

689. Alexander, Carter. Educational research. 3d ed. enl. and rev. New York City, Teachers college, Columbia university, 1931. 115 p.

690. Angrist, Charles K. The technique of library research for students of education. Master's, 1931. Coll. of the City of N. Y. 113 p. ms.

Organizes, enumerates and annotates various library facilities. General and specific miscellaneous suggestions for students of education are given. Conclusions: A limited objective study indicated that the proper sequence in which to use library facilities can be suggested only when a specific problem is presented.

691. Barr, A. S., and Rudisill, Mabel. An annotated bibliography on the methodology of scientific research as applied to education. Madison, University of Wisconsin, 1931. 129 p. (University of Wisconsin, Bulletin of the Bureau of educational research, no. 13.)

692. Chapman, Harold B. Educational investigations concluded or in progress, Baltimore public schools, October 1931. Baltimore, Md., Department of education, 1931. 16 p. ms. (Vol. 4.)

693. Chicago. University. Register number. Doctors of philosophy June 1893-April 1931. Chicago, University of Chicago press, 1931. 174 p. (Announcements, vol. 31, no. 19, May 15, 1931.)

694. Colorado. University. Abstracts of theses for higher degrees, 1931. Boulder, 1931. 75 p. (University of Colorado studies, vol. 19, no. 1, December 1931.)

695. Edwards, Mrs. E. D. Digest of theses accepted in partial fulfillment of requirements for higher degrees in education at the University of California, December 1930. *University high school journal*, 11: 14-19, May 1931.

696. Eells, Walter Crosby. Publication of educational research. *Journal of educational research*, 23: 31-42, January 1931.

697. Franke, Paul R., and Davis, Robert A. Changing tendencies in educational research. *Journal of educational research*, 23: 133-45, February 1931.

Analysis of articles in 13 representative educational magazines (a total of 2,837 articles) as distributed by decennial periods beginning in 1890. Findings: There has been a phenomenal growth in educational research during the past 39 years. Each level, especially the elementary, showed a marked increase.

698. Good, Carter V., Collins, Walter L., and Gregory, Chester A. Abstracts, graduate theses in education, Teachers college, University of Cincinnati, 1927-1931. Cincinnati, Ohio, University of Cincinnati, 1931. 396 p. Vol 1.

699. Gregg, R. T., and Hamilton, T. T. Annotated bibliography of graduate theses in education at the University of Illinois. Urbana, Ill., University of Illinois, 1931. 80 p. (*University of Illinois bulletin*, vol. 28, no. 40, Bureau of educational research bulletin, no. 55.)

700. Houston, Texas. Independent school district. Bulletins prepared and distributed by the research department, Houston independent school district, 1929-1930. 1931. 5 p. (*Research bulletin*, no. 8208.)

701. Indiana State teachers college, Terre Haute. Abstracts of unpublished masters' theses, Indiana State teachers college, 1929-1930. *Teachers college journal*, 2: 161-74, July 1931.

702. Indiana university. News letter, Alpha chapter, Phi Delta Kappa. Bloomington, 1931. 59 p. ms.

This issue of the News letter presents brief summaries of the theses presented to the School of education at Indiana University in June and October 1930, for the master of arts, master of science, and the doctor of philosophy degrees.

703. Kansas State teachers college, Pittsburg. An author index to the research work of Kansas educators in recent years. *The Technic*, vol. 14, no. 3, January-February, 1931. 40 p.

704. La Salle, Jessie. Annual report 1930-1931, educational research divisions 1-9. Washington, D. C., Public schools, 1931. 43 p. ms.

Contents: Part 1, section 1: Extent of the educational research work in the elementary schools; section 2: extent of the educational research work in vocational and secondary schools; Part 2, section 1: lower primary reading survey, test 1-1A and 1B; section 2, lower primary reading survey, test 2-1B and 2A; section 3, lower primary reading survey, test 3-2A and 2B; Part 3, age-grade study.

705. Los Angeles, Calif. City schools. Fourth yearbook of the division of psychology and educational research. 1931. 176 p. (School publication, no. 211.)

Contents: (1) History and present status of the organization of the division, p. 7-10; (2) Guidance in high schools, p. 11-16; (3) Secondary school curriculum development, p. 17-42; (4) Coordination of employment and curriculum for low mentality minors, p. 43-62; (5) Elementary school counselors, p. 63-66; (6) Special classes in elementary schools, p. 67-124; (7) Psychological clinic, p. 125-48; (8) Nursery school and parent education, p. 149-58; (9) Digest of research studies, p. 159-74; (10) Statistical section, p. 175-76.

706. Mikesell, Homer Earl. The educational research activities of the State of Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of the study was to present a clear picture of the agencies, methods, and results of educational research as it is conducted by agencies of the government of Ohio, and to suggest ways and means for the improvement of the administration of this function. Data were secured from personal interviews with those in charge of educational research activities, and by reference to current research publications.

707. **Minnesota. University.** Collegiate educational research, University of Minnesota, the report of the Committee on educational research for the biennium 1928-1930. Minneapolis, 1931. 148 p. (Bulletin, vol. 34, no. 7, February 2, 1931.)

This study gives a history of collegiate educational research at the University of Minnesota. It includes a bibliography of faculty publications from 1916-1930.

708. **National education association. Department of superintendence and Research division.** Questionnaire studies completed, bibliography, no. 1, 1928-1929, 1929-1930. Washington, D. C., 1930. 27 p. ms. (Educational research service circular, no. 9.)

A bibliography of completed questionnaire studies by investigators throughout the country, limited to questionnaires sent to superintendents of schools. Includes only those studies which have been published or duplicated in quantity.

709. **New York (State) Education department.** Bibliography of research studies in education (New York) completed since September 1929. Albany, 1930. 23 p. ms.

710. **North Carolina. University.** Research in progress, July 1930-July 1931. Chapel Hill, University of North Carolina press, 1931. 116 p. (University of North Carolina record, No. 276. Graduate school series, no. 25. October 1931.)

711. **O'Brien, F. P.** Ten years of research and service in the University of Kansas bureau of school service and research, 1920-1930. Lawrence, Kans., University of Kansas, 1930. 36 p. (University of Kansas Bulletin of education, vol. 3, no. 1, October 1930.)

712. **Ohio State university.** Abstracts of theses presented by candidates for the master's degree at the August convocation, 1930, and at the December and March convocations, 1930-1931. The graduate school. Columbus, Ohio State university press, 1930-1931. 263 p. 124 p. (Abstracts of masters' theses, nos. 4 and 5.)

713. **Oklahoma. University.** Abstracts of theses for higher degrees in the graduate school, 1930, with an appendix giving the titles of theses presented prior to 1930. Norman, 1931. 106 p. (University of Oklahoma bulletin, new series no. 501.)

714. **Peters, Charles C., and Struck, F. Theodore, eds.** Abstracts of studies in education at the Pennsylvania State college. State College, Pennsylvania State college [1931]. 96 p. (Studies in education, no. 2.)

715. **Pittsburgh. University.** The graduate school. Abstracts of theses, researches in progress, and bibliography of publications, vol. 7. Pittsburgh, Pa., 1931. 472 p. (University of Pittsburgh bulletin, vol. 28, no. 4, December 1931.)

716. **Smith, H. L.** The growing demand for research workers in bureaus of educational research. Bloomington, Indiana university, 1931. 24 p. ms.

717. **South Carolina. University.** Abstracts of theses for higher degrees, 1931. Columbia, University of South Carolina, 1931. 55 p. (Bulletin no. 213, October, 1931.)

717a. **Stanford university.** Abstracts of dissertations, Stanford university, 1930-31. Vol. VI. Stanford University, Calif., 1931. 240 p. (Stanford university bulletin, fifth series, no. 118, July 31, 1931.)

717b. **Touton, Frank C.** Research projects of the secondary school level carried on in California cities during 1930-1931. California quarterly of secondary education, 7: 88-111, October 1931.

718. **Umstadtd, J. G. and Grinnell, J. E.** Abstracts of masters' and doctors' theses in education, University of Minnesota, July 1, 1928, to July 1, 1929. July 1, 1929, to July 1, 1930. Minneapolis, University of Minnesota [1931].

27 p., 35 p. (Eta chapter, Phi Delta Kappa, Educational research bulletin nos. 1 and 2.)

719. Virginia. University. Research studies. University, University of Virginia, 1931. 100 p. (Record extension series, vol. 15, no. 10, April 1931. Secondary education in Virginia, no. 12.)

720. Weersing, Frederick J. and Haynes, Benjamin B. Annotated index of theses and dissertations in education. Los Angeles, University of Southern California, 1931. 91 p.

Supplement for 1931, 23 p.

721. Whitley, Robert Love. The case study as a method of research. Doctor's, 1931. New York. 873 p. ms.

Examination of the literature on the case study method; discussion of methods used by the writer in a study of 60 problem and delinquent boys and 50 narcotic drug addicts. Studies were made of a public school dealing with problem boys, of several groups of boys in a boys club situation in relation to program and personnel of the club, and of several boys "in the open."

722. Whitney, F. L. The organization, scope, and cost of a department of research. In American association of teachers colleges. Ninth yearbook, 1930. p. 114-20.

A survey is reported of the status of organized educational research in 13 state teachers colleges.

723. Wright, Edith A. Bibliography of research studies in education, 1928-1929. Washington, United States Government printing office, 1930. 308 p. (U. S. Office of education. Bulletin, 1930, no. 23.)

724. ——— List of educational research studies in city school systems, no. 1. Washington, D. C., United States Office of education, 1930. 85 p. ms. (Circular, no. 18.)

This circular includes three lists: The first, giving information concerning 373 completed studies; the second, listing 209 studies now in progress; and the third, listing studies contemplated for the school year 1930-31. One hundred and one cities are represented in the three lists.

725. ——— List of educational research studies of state departments of education and state education associations, no. 1. Washington, D. C., United States Office of education, 1931. 40 p. ms. (Circular, no. 31.)

The list contains studies recently completed and those reported as in progress. The items are classified by subject.

726. ——— Organization and functions of research bureaus in city school systems. Washington, United States Government printing office, 1931. 14 p. (U. S. Office of education. Leaflet, 1931, no. 2.)

One hundred and eighteen cities having organized bureaus of educational research are listed. Nearly 50 per cent of these bureaus have been organized during the period from 1925 to 1930 inclusive.

See also 1893, 1930, 3212-3213, 3290, 4143.

SPECIAL SUBJECTS OF CURRICULUM

READING

727. Anderson, Will D. Free reading versus directed reading. Master's [1931]. Chicago.

Two groups of children of equal ability were chosen. One group was taught by the method of free reading, the other by the method of directed reading. Some advantages were observed for the method of free reading.

728. Avison, Florence. Creative reading in the first grade. Master's, 1931. Hawaii. 128 p. ms.

Findings: Study shows need for new criteria of success in creative reading, and necessity for more adequate background on the part of teachers.

729. **Bailey, Mary.** Modern trends in first grade reading. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Data were secured from recent writings on the theory and practice of reading, from comparison of representative courses of study from a wide range of cities, and from questionnaire replies from a wide range of representative city systems. An experiment was carried out in a first-grade room in Tulsa, Okla., during the school year 1929-30, with 100 of the activities used in teaching first-grade reading. Findings: Reading activities give the child an inspiration for wholesome use of leisure time; interest in reading activities provides intelligent participation in personal and social growth.

730. **Barbee, Robbie Mealus.** Reading objectives in the primary grades. Master's, 1931. Peabody. 75 p. ms.

Analysis was made of the reading objectives found in 55 references, including scientific investigations, books on the teaching of reading, magazine articles, yearbooks, bulletins, and teachers manuals. The objectives were selected and classified as to frequency of mention. Findings: All the objectives found in the various sources of current literature seem to harmonize with the three general objectives set up by committees on reading of the National Society for the Study of Education. The objectives found in teachers manuals, courses of study, and books seem to have a greater degree of harmony than those found in scientific studies, bulletins and magazine articles. In all the sources one objective, "To cultivate a desire to read," appeared in at least one-half the references, 8 appeared in one-third of all the sources, 14 occurred in one-fourth of the sources, and 78 in less than one-fourth of all sources. To cultivate a desire to read occurred the greatest number of times of all the objectives given in the various sources.

731. **Belmont, Mass.** Public schools. Results of the Gates reading tests given in November 1930 and May 1931. 1931. 14 p. ms.

732. **Bennett, Herschel.** Remedial work in reading in the intermediate grades. Master's, 1931. Iowa. 86 p. ms.

733. **Berry, Betty T.** A study of reading comprehension at the college freshman level. Doctor's, 1931. Southern California. 245 p.

An analysis of reading comprehension into its constituent abilities and a report of experimental procedures for improving certain of these abilities.

734. **Birdsall, Agnes.** A study of mental characteristics of superior and retarded readers. Master's, 1931. Michigan.

735. **Broom, Mybert Eustace.** An analysis of certain factors affecting reading achievement at the college level. Doctor's, 1931. Southern California. 276 p.

An analysis of the influence of general information, temperament, personality traits, and emotional disturbances upon silent reading achievement; with an account of a remedial reading program evolved from data assembled during the course of the study.

736. **Brown, Gertrude.** Curriculum in intermediate grade reading and language. Emporia, Kansas State teachers college, 1930.

737. **Budge, Lillian M.** Analysis of study questions and directions in primary readers. Master's, 1931. Chicago. 126 p. ms.

Analysis of basal texts to determine relative emphasis of various types of training to develop abilities and habits. Findings: In general, recently published readers are following the lines set down by scientific study.

738. **Calvert, T. B.** Report on use of new Stanford achievement test in reading, form V, grades 3B and 9A, September 1930. Muncie, Ind., Public schools, 1930. 8 p. ms. (Bulletin, no. 47.)

Reports results in terms of grade-scores by schools and by grade sections for Muncie, Ind.

739. ——— Report on the use of the new Stanford achievement test in reading, form V, grades 3B to 9A, January 1931. Muncie, Ind., Public schools, 1931. 10 p. ms. (Bulletin, no. 52.)

Reports achievement of 4,233 pupils in grades 3B to 9A, inclusive, in both paragraph and word meaning and compares January achievement with September achievement.

740. **Cooper, Ruby.** A determination of the amount of overlapping in the content of elementary readers. Master's, 1931. Claremont.

741. Cox, Beatrice. An evaluation of suggestions for developing a readiness for reading. Master's, 1931. Peabody. 62 p. ms.

Thirty-one courses of study were analyzed for suggestions. These elementary school courses were judged to be the best in the Curriculum construction laboratory, Teachers college, Columbia university. They were organized into a rating sheet and sent to 100 first-grade teachers. Evaluation was made on these returns. Findings: (1) Building a background of experience and (2) developing expression through the medium of symbols are regarded by course of study makers as more important in developing a readiness for reading than are the mental, emotional, social, and physical factors. The courses of study having a unified program for the kindergarten-primary grades and the activity curriculum were the only courses of study giving suggestions for developing the six factors considered essential by the committee on reading readiness for developing a readiness for reading. These two types of study seem to offer the best guide to the first-grade teacher.

742. Crawford, Pearl. Diagnostic study of learning difficulties in reading. Master's, 1931. Ohio. 128 p. ms.

743. Crocker, Wesson M. A survey of reading achievement in the schools of Lafayette county. Master's, 1931. Mississippi.

The investigation revealed, regardless of type of school, an imperative need of improvement in the teaching of silent reading.

744. Cruise, Pearl G.; Courtney, Beulah; and Mitchell, Mattie. An extension course in diagnostic and remedial measures in reading, in Ness and Hodge-man counties, Kans. Hays, Kansas State teachers college, 1930. 60 p. (Bulletin, vol. 20, no. 2. Contributions to education, no. 10.)

745. Curran, Helen L. An analytical study of the free reading of Aledo high school pupils. Master's, 1931. Chicago. 68 p. ms.

The voluntary reading of 270 high-school pupils during the first semester of 1930-1931 was studied. Findings: Three-fourths of the books chosen by high-school pupils were not among recommended books.

746. Davidson, Helen P. An experimental study of bright, average, and dull children at the four-year mental level. Worcester, Mass., Clark university, 1931. Genetic psychology monographs, vol. 9, nos. 3-4, March-April, 1931. p. 119-289.

This study was undertaken to determine to what extent children with a mental age of four years could learn to read; and whether bright, average, and dull children, all of this mental age, would learn to read equally well under the same experimental conditions.

747. Davis, Hazel. Present status of policies relative to promotion from first-grade reading to second-grade reading. Master's, 1930. Nebraska. 84 p. ms.

This is an investigation of current policies of promotion from first-grade reading to second-grade reading in the public schools of Nebraska. It includes conclusions and recommendations based on current opinion and practice and the findings of research.

748. Davis, Jennie G. A critical study of the materials and methods of B-7 reading. Master's, 1931. Southern California. 141 p.

An analysis of the literature relating to the teaching of reading for the purpose of arriving at some definite conclusions as to the best aims, materials, and methods for the B-7 grade.

749. Dearborn, Walter F. Ocular and manual dominance in dyslexia. Cambridge, Mass., Harvard university, 1931. 9 p. ms.

A study of the amount of right and left ocular and manual dominance in dyslexia of 100 children compared with 376 children from the general school population. The amount of left and mixed dominance was found to be appreciably greater among children with extreme reading disability. An explanation is given of how left or mixed dominance may add to the difficulty of learning to read.

750. Denver, Colo. Public schools. Report on city-wide reading tests given in elementary schools, October 1930. 1931. ms.

The Denver primary reading test was given in Grade 2 and the Greene-Noon reading test in Grades 3 to 6 inclusive to a total of 15,803 pupils. City medians and quartiles were computed by total test and by parts. The data were analyzed to discover difficulties

of pupils at the beginning of the semester. Graphs and forms are found in the report to be used to aid in diagnosis of difficulties in individual schools and classes.

751. ——— Report on results of reading tests in Grades 10 and 11 of the senior high school. 1931. ms.

The Nelson-Denny reading test was given to social science classes in the senior high schools (Grades 10 and 11) to aid in discovering reading difficulties in social science. Tabulations of percentile ranks accompany the study.

752. **Eurich, Alvin C.** The relation of speed of reading to comprehension. *School and society*, 32: 404-406, September 20, 1930.

A study to determine the relation of speed of reading to comprehension. College students were used as subjects. Findings: The relation between speed and comprehension is dependent upon the manner in which each is measured. The average of 26 correlations reported in this study was 0.81, which indicates a positive but not close relationship between rate of reading and comprehension.

753. **Fitzsimmons, Ethel M.** Study of the ability of high-school seniors and college freshmen to read directions. Master's, 1930. Nebraska. 53 p. ms.

The ability to read directions was found to be rather greater than that expected from the collecting of opinion. It seemed to be clear that special training in the reading of directions is desirable.

754. **Foran, T. G. and Bock, Robert T., jr.** The reliability of some silent reading tests. Washington, D. C., Catholic education press, 1930. 23 p. (Catholic university of America. Educational research bulletins, vol. 5, no. 6.)

This is a report of a study undertaken in the seventh grade in which 2 forms of each of 6 tests were administered to 83 pupils in order to determine the reliability of several silent reading tests which had been recently published. It includes a summary of previous investigations on the reliability of reading tests and brief descriptions of the tests used.

755. **Frazer, Laura.** The relative difficulty of primary readers. Baltimore, Md., Public schools, 1930. 9 p. ms.

An attempt to classify according to difficulty the list of available primary readers, based upon records kept by primary teachers in Baltimore for a period of two years.

756. ——— Suggestions for teaching reading to slow children. Baltimore, Md., Public schools, 1930. 38 p. ms.

A series of suggestions and reports of individual practice gathered from many teachers and made available for the use of all teachers of dull pupils in Grades I and II. The material was contributed during 1929-30 by a group of first-grade teachers of dull children.

757. **Freitas, Lorraine A.** A vocabulary study of the third grade readers used in Hawaii. Master's, 1931. Colo. St. T. C.

The purpose of this investigation was to make a contribution toward the problem of determining whether third-grade children in Hawaii are being taught words in reading that are considered present needs and that are of most permanent value in life situations outside the school.

758. **Gates, Arthur I.** What do we know about optimum lengths of lines in reading? *Journal of educational research*, 23: 1-7, January 1931.

The study involves a critical review of previous studies and the results of an investigation by the author. In a study in which children during their first year were required to read lines of varied length instead of lines of the same length, it was found that no length showed to marked advantage. Children accustomed to reading lines of varied lengths developed an adaptability not possessed by those whose reading was confined to lines of a narrow range in length.

759. ——— and **Peardon, Celeste Comegys.** Practice exercises in reading. For four types of reading. New York City, Teachers college, Columbia university, 1931.

760. **Gibbon, Benjamin H.** A study of the use of teacher-made tests in the improvement of pupil achievement. Master's, 1931. Southern California. 120 p.

Based on an investigation of the literature and an analysis of the experiences of teachers in two elementary schools, including an account of the construction of two tests in reading comprehension.

761. Gillentine, Flora Myers. A controlled experiment in fifth-grade reading. Nashville, Tenn., George Peabody college for teachers, 1930. 118 p. (Contributions to education, no. 78:)

762. Gladden, Adelaide L. The status of remedial reading in junior and senior high schools of the United States. Master's, 1931. Southern California. 186 p.

A study of the history or development of remedial reading, types of reading disabilities, methods and materials for their treatment, and organization of the work; based on the literature, on interviews, and on questionnaire returns from a number of representative school systems.

763. Good, Robert Louis. The relation between reading ability and junior high school success. Master's, 1931. Southern California. 69 p.

The relation between scores received in the reading comprehension division of the Stanford achievement test, Form A and subsequent marks in academic and shop subjects.

764. Gray, Robert F. and others. Selection of reading materials for "Z" groups in junior high school. San Francisco, Calif., Public schools [1930].

"Z" pupils were roughly defined as those pupils whose age is approximately one year below the median reading age of pupils of their grade. This group included about one-fourth of the total number, the proportion of pupils falling in it varying from school to school.

765. Haggerty, M. E. and Eurich, Alvin C. Examiners' manual for the Minnesota reading examination for college students. Minneapolis, University of Minnesota press, 1930. 18 p.

An evaluation of the Minnesota reading examination for college students. Findings: Reliability coefficients for the test are Part I—.91, Part II—.78, Entire test—.87. Validity coefficients and norms have also been determined.

766. Haun, Mrs. Frances. Relationship of reading ability to other factors of school progress. Master's, 1931. Peabody. 81 p. ms.

Comparison of results of standardized tests and school grades in English with 150 third-year high school pupils. Findings: Substantial correlation was found between reading ability and intelligence, vocabulary, and examination grades; low correlation was found between reading ability and monthly averages.

767. Hermans, Mabel C. An experiment in free reading. Los Angeles, Calif., City schools, 1931.

A study made to determine the efficacy of a free reading experiment.

768. Hilliard, George H. and Barnes, Marcillene. The effect of specific drill on reading ability. Elementary school journal, 31:417-26, February 1931.

769. Himes, Dora Wignall. Administering a remedial program in reading and arithmetic. Master's, 1931. Oklahoma. 96 p. ms.

It was found that the type of instruction used in Garvin county was not producing the quality of work which would enable the children to complete the eighth grade in the number of years that they should. After a survey of conditions was made in October, 1929, a remedial program in reading and arithmetic was undertaken. Two groups, each having 22 teachers and 361 and 362 pupils respectively were compared. The teachers of the first group were given instruction in teaching reading and arithmetic for 36 consecutive weeks, and the teachers of the second group were allowed to teach as they had been teaching. At the end of the period of instruction a second test was given and the results of the two groups were compared. It was found that the groups whose teachers had had instruction in teaching reading and arithmetic for the 36 weeks had made great gains over the other group.

770. Hogoboom, Grace W. An experimental study of the value of remedial reading for slow-learning pupils. Master's, 1931. Southern California. 78 p.

A controlled experiment with three groups of slow-learning pupils to ascertain what value, if any, would result to them from remedial reading. Conclusions are based upon scores received in initial and final tests.

771. Houston, Texas. Independent school district. A study in increased silent reading—high fourth grade. 1930. 2 p. ms. (Bulletin, no. 8115.)

722. Houston, Texas. Independent school district. A study of effect of increased volume of reading on reading achievement (experimental group low-fifth grade) control group high-fifth grade. 1930. 3 p. ms. (Research bulletin, no. 8117.)

773. ———. A study to increase speed in reading in a high-second grade. [1930.]

774. Indiana. Department of public instruction. Tentative course of study in reading for Indiana schools. Kindergarten and grades one to six. Fort Wayne, Ind., Fort Wayne printing company, 1930. 112 p. (Bulletin no. 107 A-4.)

775. Jacobson, Paul B. The experiments with work-type reading exercises given in the ninth grade of the high school. Doctor's, 1931. Iowa. 431 p. ms.

776. Jones, Mrs. Bertha Mahurin. Present day tendencies in the methods of teaching first grade reading in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Check lists were sent to 160 superintendents of Oklahoma, to be checked by the primary teachers. 79 replies were received. Visits were made to 16 schools. Findings: A large majority of the Oklahoma primary schools are providing the pre-primer method; the story method and creative cooperative group stories are being used; teacher-made helps are being used, as are silent reading comprehension tests; individual needs and capacities are being provided for through correct groupings.

777. Kiefer, Gladys L. Growth of phonic ability in the first grade. Master's, 1931. Iowa. 114 p. ms.

778. Lammel, Rose. Intermediate-grade children's concepts of scientific terms found in readers used to develop skill in reading. Master's, 1930. Colo. St. T. C.

The purpose of the study is to discover whether the reading of subject matter facilitates the proper conception of the scientific terms involved.

779. Lawrence, Arta Frances. A study in first-grade reading vocabulary. Master's, 1931. Stanford.

780. Leasure, Mrs. Fannie Myrtle. Analysis of objectives and methods of teaching reading in the primary grades. Master's, 1931. Indiana.

781. Lee, J. Murray, and Clark, Willis W. Standardization of the Lee-Clark first-grade reading test. Burbank, Calif., City schools, 1931.

782. Leuenberger, Claire S. A case study in diagnostic and remedial reading. Master's, 1931. Colo. St. T. C.

This investigation evaluates diagnostic and remedial individual instruction as compared with ordinary schoolroom methods.

783. Lewerant, Alfred S. Vocabulary grade placement of typical newspaper content. Los Angeles educational research bulletin, 10:4-5, September 1930.

Findings: Definite strata of difficulty exist within the content of a newspaper; the wording of comic strips and accounts of murders represent the simplest elements of nonadvertising content; editorials written for a newspaper popular with the working class are formulated at a level at least two years below the editorials prepared for a daily subscribed to by the professional and employing classes; writers whose comment on politics and world news is popular with the public seem to simplify their subject matter; local news seems to fall at the mid-point in the range of reading difficulty.

784. Lewin, Lillie. Reading ability in the low second grade as measured by the Gates primary reading test. San Francisco, Calif., Public schools, 1930. 3 p. ms. (Bulletin, no. 22, November 1930.)

A survey of the low-second grade reading abilities involving 70 schools and 2,340 pupils. Findings: San Francisco pupils on the average are making better than normal progress in reading in the low-second grade, but a need for much remedial work exists in the lowest quarter.

785. Long Beach, Calif. City schools. Reading and literature. Course of study for grades 4, 5, and 6. 1931. 193 p.

786. ———— Word analysis exercises for grades 1, 2, and 3. Supplement to course of study in reading and literature for kindergarten and grades 1, 2, and 3. 1931. 244 p.

These exercises are based on the stories in the basal reading books.

787. Lowe, Emma Hermann. Vocabulary compiled from fourth grade basal state adopted readers. Master's, 1931. Peabody. 200 p. ms.

Findings: Dates of publication vary from 1912 to 1929. They range in dates of adoption from 1920 to 1931. The number of different words in the basal readers varies from "The Winston's fourth reader," the smallest, with 3,332 words to "The study reader," the largest, with 5,842 words. There is a difference of 2,510 words in the two readers. The composite vocabulary has a total of 18,193 words.

788. Ludden, Sarah C. The improvement of reading in rural schools through teachers in service. Master's, 1931. Iowa. 111 p. ms.

789. McAnulty, Ellen A. and Clark, Willis W. A study of primary reading tests. Los Angeles educational research bulletin, 10: 6-10, January 1931.

A detailed analytical study of the principal reading tests in elementary schools.

790. McBride, Charles E. The value of the McCall-Crabbs test lessons in teaching reading in the third, fourth, fifth, sixth, and seventh grades. Master's, 1930. Indiana. 54 p. ms.

The National intelligence test was given to grades 3-7 of the Surprise and Cortland Schools; all pupils were given the Thorndike-McCall reading test, and the Stanford achievement reading test near the beginning of the first semester. Reading test lessons were used in the first semester in the Cortland school, and in the second semester in the Surprise group in teaching. Findings: Reading test lessons are of value in teaching reading in the grades studied. The range of gain was not so great when test lessons were used as when no test lessons were used.

791. McLemore, Sallie Stevens. Relation of rate and comprehension in reading in sixth grade. Master's [1931]. Peabody. 23 p. ms.

This study was made with 25 sixth-grade pupils in Demonstration school, Hattiesburg, Miss., State teachers college. Findings: (1) There is a high positive correlation between rate and comprehension in silent reading; (2) correlation is present but low between rate of silent reading and oral reading; (3) the relation between rate and comprehension varies in individuals.

*792. McNee, Marcia Agnes. Factors related to reading achievement of college freshmen. Master's, 1931. Chicago. 121 p. ms.

A study of 257 college freshmen enrolled at the University of Chicago during the fall quarter of 1930-1931. Findings: Intelligence is a conditioning factor in reading achievement as shown by the fact that 84.19 per cent of the poor readers and none of the good readers were found in the four lowest percentile ranks. A significant degree of relationship was shown between the scores on the three sections of the Sones-Harry high-school achievement test and reading achievement.

793. McPherson, Ruth Hale. An analysis of folk-lore material found in elementary readers. Master's [1931]. Peabody. 109 p. ms.

A study was made of the folk-lore material found in 12 series of basal readers used in the United States in 1930. Findings: Nearly all of the readers used some folk-lore material. Folk tales, nursery rhymes, and traditional fairy tales were used more than other types. A total of 633 folk-lore selections were found. The folk-lore material was distributed in the different readers as follows: primers, 93 selections; first readers, 160 selections; second readers, 208 selections; third readers, 172 selections. The Story and study series contained the smallest per cent of folk-lore material and the Bobbs-Merrill series, Everyday classics and Reading literature contained the largest per cent of folk-lore material. A total of 158 nursery rhymes were found. These rhymes were taken chiefly from Mother Goose. A total of 84 fables were used taken chiefly from Æsop. There were less myths and legends found than any other type as folk-lore material. In all of the 48 readers only 66 selections were duplicated. A total of 52 selections were found adapted from the original folk-lore. Story hour primer (revised) devoted 22 pages to material in which folk characters were used in selections different from true folk-lore. England contributed 37 selections, Norway 37 and India 22 selections.

794. **Mann, Annette.** Study of the results of special methods in the teaching of reading. Baltimore, Md., Department of education, 1931. 5 p. ms.

A study of the reading materials for junior high school pupils who are mentally and socially mature enough to understand and enjoy books read normally by older children but who have not acquired the reading skills necessary to read for themselves.

795. **Mann, F. Josephine.** The effect experimentally determined of work-type training in reading upon the kind of achievement which is measurable by an objective test. Master's, 1931. Johns Hopkins.

796. **Mansfield [Ohio?] City schools.** Report of the standardized tests in reading given in grades three, four, five, six of the Mansfield city schools during the month of May, 1930. 20 p. ms.

Comments and suggestions on the May reading survey.

797. **Miller, Tom B.** The Syracuse reading test. Master's, 1931. Syracuse.

798. **Muncie, Ind. Public schools.** Report on the use of new Stanford reading scales, Form X, 1931. (Bulletin no. 61.)

799. **Oregon. State department of education.** Preliminary reading course, music, nature study, elementary schools. Salem, State printing department, 1931. 24 p.

800. **Patterson, Dwight Donald.** The nature and scope of reading of the twelfth-year pupils in certain high schools of Indiana county, Pa., 1928-1929. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

It was the purpose of this study to determine: The attitude of pupils toward required reading in the high school; amount of reading which was done by high-school pupils; type of reading material chosen by high-school pupils when making unguided selection; source of the reading material of the high-school pupils; time spent in reading; purposes the pupils had in mind when they read. Using the standard median for rate and comprehension in reading based on Monroe's Standardized silent reading test 3, form 1, the 410 pupils were divided into four groups. Findings: More than 90 per cent of the pupils read the required classes only; the number of books read varied from none to 200 or more; among books, late fiction was most popular; the school furnished most of the books read and the home furnished the magazines and newspapers in the greatest quantity; pupils spent 2 hours at school and 1 hour at home daily reading required material; about 1 hour each week-day and 2 hours on Sunday were spent in recreatory reading; approximately 75 per cent of the pupils read for pleasure as their primary purpose.

801. **Patterson, M. Rose.** Growth in reading ability of certain junior high pupils. In Baltimore, Md. Board of school commissioners. Report, 1930-1931. p. 100-104.

A follow-up of 9A pupils who were tested in reading in the 7B grade.

802. **Phillips, D. H.** Two hundred words offering comprehension difficulty to certain pupils of Detroit central high school. Master's, 1931. Michigan.

803. **Porter, Frederick W.** Comparative results from first-grade reading systems. Greenfield, Mass., Public schools, 1930. ms.

804. **Reading, Pa. Public schools.** Diagnostic and remedial study in reading, grades 1-6. 1931. 19 p. ms.

805. **Robinson, Francis P.** Analysis and treatment of reading inadequacies in college freshmen. Master's, 1930. Iowa.

806. **Robinson, B. R.** Two centuries of change in the content of school readers. Nashville, Tenn., George Peabody college for teachers, 1930. 116 p. (Contributions to education, no. 59.)

The aim of this investigation is to show the change in the distribution of content in the public-school readers during the last two centuries. The study is based on the examination of 1,422 readers.

807. **Ross, Maurice B.** Results of the administration of Form 1 of the Los Angeles elementary reading test. San Diego, Calif., City schools, 1931. 9 p. ms.

A graphic summary and analysis of achievement in reading of grades 4, 5, and 6 in the San Diego city schools, as measured by Form 1 of the Los Angeles elementary reading test.

808. San Francisco, Calif. Public schools. Reading ability in the low second grade as measured by the Gates primary reading tests. 1931. (Bulletin, no. 27.)

A survey of reading ability in the low second grade based on the results of the Gates primary reading tests, types 2 and 3. This survey is used as a basis for a remedial program on primary reading.

809. ——— The remedial reading program in the primary grades (spring term, 1931). 1931. 3 p. ms. (Bulletin, no. 31.)

A report on the progress of 237 primary pupils who were selected on the basis of low reading ability. Findings: On the basis of the Gates primary reading tests, types 1 and 3, this group showed the following gains at the end of a three months' interval—Q₁ 2.5 months; median 5.6 months; Q₃ 9.7 months.

810. Schlichting, Martin H. Methods of improving reading achievement among college and university students. Master's, 1931. Chicago. 74 p. ms.

A comparative study of two methods for improving silent reading achievement of undergraduate and graduate students. Findings: (1) Motivation alone, as defined in this investigation, is ineffective as a method of improving the reading achievement of college and university students; (2) specific methods of practice in silent reading, in addition to motivation, are more or less effective in improving reading achievement among graduate and undergraduate students; (3) specific methods of practice, as used in this investigation, are more effective with some groups than with others; (4) instruction in the principles of silent reading and assisting the individual student in overcoming persistent reading difficulties, in addition to practice reading, is more effective in improving silent reading achievement than practice reading alone; (5) the practice reading may be combined with courses in psychology, education, and probably most effectively with a course in How to study.

811. Segel, David and Stoker, Dora D. An investigation of the value of reading tests for diagnostic purposes. Long Beach, Calif., City schools, 1931.

This study revealed that the present standardized diagnostic reading tests are capable of diagnosing groups of pupils in regard to certain aspects or approach of the reading problem but are not as yet sufficiently valid to cover all phases of reading.

812. Smith, Carrie S. Analysis of silent reading ability, elementary grades—Kilby training school. Master's, 1931. Peabody. 39 p. ms.

Analysis of silent reading ability in grades 4, 5, and 6 of the Kilby training school, Florence, Ala., as obtained by giving the Sangren-Woody reading test. Findings: Each grade is above norms in Parts I, II, V, VI, and VII, while each falls below the norm in part III. In Part V grades 4 and 5 are approximately coincident with the norms while grade 6 falls to that of grade 5. There is considerable overlapping from one grade to another. A large percentage of the pupils are below the normal chronological ages for the reading ages of their respective grades. A process of gradual improvement in reading ability from grade 4 through grade 6 is indicated.

813. Smith, Nila Banton. An historical analysis of American reading instruction. Doctor's, 1931. T. C., Col. Univ.

In order to trace and analyze the successive developments in American reading instruction, a study was made of reading materials used in America from 1620 to 1931, including reports and bulletins of school boards; courses of study; yearbooks and proceedings; magazine articles; histories and diaries; professional books; teachers' manuals; investigations, hornbooks; spellers and readers. The findings were grouped under aims and objectives, method, materials, and were treated historically. A classified bibliography of 1,150 titles is given covering the literature of American reading instruction.

814. Sohn, Clara. Vocabulary ratings of a sixth-grade class and amount of reading done. Master's, 1931. Chicago.

815. Spurgin, W. H. The improvement of reading of 22 poor readers. Master's, 1931. Chicago. 110 p. ms.

Use of readers and commercial seat work with 22 poor readers in grades 2-4, inclusive. Findings: Improvement was brought about in all cases.

816. Stevens, Grace. The achievements in reading of children in Seventh Day Adventist parochial schools. Master's, 1931. Nebraska. 37 p. ms.

The Illinois examination was used. In general the parochial schools were somewhat inferior to public schools in reading and there were rather wide variations in achievement from one section of the country to another.

817. **Stingley, Alie Leroy.** The detection of incongruous words and following directions as measuring techniques in reading. Master's, 1931. Cincinnati.

818. **Stone, Robert Burnard.** The relation of reading ability to high school marks. Master's [1931]. Peabody. 42 p. ms.

Thirty-four students of the Connersville high school, Connersville, Tenn., were studied through grades 5 to 12, inclusive. Teacher's estimate of reading ability, grades 5, 6, 7, and 8, was correlated with marks made by the same students in high school. Then teacher's estimate of reading ability through grades 5, 6, 7, and 8 was correlated with reading ability in high school as determined by six standardized tests. Lastly, reading ability in high school, as determined by six standardized tests, was correlated with marks made in high school. Findings: (1) Correlation of 0.547 between teacher's marks in grammar school reading and marks made in high school; (2) correlation of 0.58 between teacher's marks in grammar school reading and the average composite reading ability scores; (3) correlation of 0.504 between average composite reading ability scores and marks made by students in high school.

819. **Storer, Elizabeth Wood.** Tests for the prediction of reading success and reading failure on the primary level. Master's, 1931. Boston Univ.

820. **Taylor, James H.** Methods of determining readability and legibility of certain standard-type faces. Master's, 1931. Ohio Wesleyan.

821. **Teegarden, Anna Lorene.** Seeing things backwards: A study of the relation between the tendency to reversal in reading and other clinical symptoms in first-grade children. Doctor's, 1931. Ohio. 239 p. ms.

An effort to distinguish clinically between the child with a strong tendency to reverse symbols, and less degrees of the tendency. Two hundred and fifty-eight first-grade children were tested in September for reversal tendency, studied clinically, and comparison was made with actual reading progress at end of school year. Findings: Reversal tendency, lateral dominance, experience, and intelligence are independent factors in beginning reading. They combine to form various clinical pictures from which the experienced worker can distinguish children who will find reading difficult.

822. **Wallace, Clara M.** Questions teachers ask about primary reading. Des Moines, Iowa, Department of public instruction, 1931. 91 p. (Reading and study bulletin, no. 1.)

This bulletin is based on the findings of a questionnaire sent the county superintendents calling for a list of the questions most frequently asked by teachers about teaching reading, as well as a list of the difficulties and weaknesses in reading revealed to county superintendents by their visitation and testing work.

823. ——— Questions teachers ask about reading and study in intermediate and upper grades. Des Moines, Iowa, Department of public instruction, 1931. 48 p. (Reading and study bulletin, no. 2.)

This study covers the questions teachers ask in grades 4-8.

824. ——— Remedial exercises for reading and study in high school subjects. Des Moines, Iowa, Department of public instruction, 1931. 28 p. (Reading and study bulletin, no. 3.)

This bulletin is a supplement to the state elementary course of study on reading.

825. **Warnke, Evelyn M.** A diagnostic study of 25 cases of "non-readers." Master's, 1931. Minnesota. 109 p. ms.

A search, by means of battery of standardized tests, for any common factors accounting for reading difficulties of cases said to be severely retarded, and recommendations for remedial treatment of each individual case studied. Findings: A few cases were not retarded; if mental age is used as criterion, they were merely wrongly graded; in other cases some evidence of emotional complications was found; some had changed schools during primary grades. No factor common to all was found; there was probably more than one cause in each case. All can probably learn if individual remedial measures are used.

826. Weber, C. O. Evaluation of results of a reading period. Wells college. Aurora, N. Y. Journal of higher education, 2: 299-305, June 1931.

During the school year 1929-30 Wells college introduced a period of independent study at the end of each semester, resembling the reading periods introduced at Radcliffe, Harvard, and in certain departments at Cornell university. This study aims to gage the value of this experiment, on the basis of a student and faculty questionnaire, and on correlational studies, employing the grades of students, intelligence scores, etc.

827. Weimer, Carleton E. A study of the effect of reading drill upon intelligence scores. Master's, 1931. Hawaii. 148 p. ms.

Findings: Reading ability contributes more to intelligence than intelligence contributes to reading ability.

828. Wilson, Will Bruce. A study to determine the effects of supplementary reading upon the reading ability of school children. Master's, 1931. Indiana. 53 p. ms.

See also 301, 322, 445, 524, 543-544, 546-547, 609-610, 615, 619, 627, 636, 644, 662, 1187, 1210, 1215, 1239, 1245, 1285, 1471, 1524, 1551, 1553, 1560, 1592, 1704, 1827, 1835, 2094, 2439, 2445, 2963, 3718, 3802, 4212; and under English literature.

HANDWRITING

829. Beale, Beulah P. Survey of handwriting instruction in 24 cities. Baltimore, Md., Department of education, 1931. 6 p. ms.

This report contains a summary of the replies to a questionnaire sent from Baltimore to 24 cities which have a population of 300,000 or over. The purpose of the inquiry was to discover prevailing practice in the administration of handwriting instruction.

830. Beggs, Vernon L. A study of the relative efficiency of different methods in teaching handwriting. Master's, 1931. Chicago. 32 p. ms.

Approximately 300 fourth, fifth, and sixth grade pupils were studied, comparing drill and diagnostic methods of teaching handwriting. Findings: Marked superiority of the diagnostic method on the basis of quality was found. Freeman's method was employed as the diagnostic method in contrast with the Palmer and modified Palmer method.

831. Breidenbaugh, Vachel Ellis. A study of improvement of handwriting and spelling of college students carried on under two different methods of instruction. Master's, 1931. Indiana. 100 p. ms.

832. Bullock, A. E., Herriott, M. E. and Weersing, F. J. Penmanship ability of secondary school pupils. Los Angeles, Calif., Public schools, 1931. (For abstract see no. 717b.)

Data were secured from the scores of 6,181 junior high school pupils. The quality of the girls' writing is superior to that of the boys' at all levels. Quality of handwriting improves throughout the high school.

833. Hamtramck, Mich. Public schools. Course of study in handwriting, grades 3 to 6. 1931. 27 p. ms. Self helps in handwriting, grades 3 to 6. 1931. 12 p. ms. Individualized instruction in handwriting. 26 charts.

834. Hinds, A. M. Sixth A worksheet plan in handwriting. Louisville, Ky., Public schools, 1931. 12 p. ms.

Data secured from questionnaires sent to all teachers having classes that were using the work sheet plan in handwriting, indicate that some necessary adjustments must be made in the work sheets and that their merits warrant a continuation of their use.

835. Muncie, Ind. Public schools. Handwriting appraisal for May, 1931. (Bulletin no. 64.)

836. Newland, T. Ernest. An analytical study of the development of illegibilities in handwriting from the lower grades to adulthood. Doctor's, 1931. Ohio. 105 p. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 262-74)

This study involved over 1,307,000 letters; 42,284 illegibilities; and 2,381 different persons' writing. High concentration of frequencies on a few forms—for both letters and numerals—was found. Remedial possibilities are suggested.

837. Pardoe, Nellie E. An experiment to test the validity of movement drills in handwriting. Master's, 1931. Pittsburgh. 67 p. ms.

Experimental rotation group method was used with 278 subjects from grades 2 through 6; time control, 16 weeks. American handwriting scale by West was used. Scores were assigned by students from handwriting classes at State teachers college, California, Pa., by the A. N. Palmer company, New York, N. Y., and by the P. A. Peterson company, Greensburg, Pa. Summary of results shows the no-drill periods to be slightly more favorable than the drill periods.

838. Pennsylvania. Department of public instruction. Commercial course in handwriting for junior and senior high schools. Harrisburg, 1930. 86 p. (Bulletin, no. 54.)

839. Rinsland, Henry Daniel. The practical handwriting scales (nine scales from grades 1-8). Dallas, Texas, Practical drawing company, 1931.

Nine standardized scales of handwriting were studied. Grades I, II, III have a pencil scale for each grade; grades III-VIII have scales in pen and ink. Five qualities were determined for each scale and to each have been assigned letter grades, points, and per cents. The same grades have been assigned to speed scores from grades I-VIII. Teachers manual and graph of progress accompany the scales.

840. St. Louis, Mo. Public schools. Penmanship. Part 1, Revised curriculum, p. 2-62; part 2, A service bulletin, p. 63-107. Public school messenger, 28: no. 8, September 9, 1930. (Curriculum series.)

841. Shoen, Harriet H. The case method applied to the remedial teaching of handwriting in the high schools. Master's, 1931. T. C., Col. Univ. 90 p. ms.

The study contains an historical survey of psychological studies in the field of handwriting, a report of the use of Doctor Pressey's diagnostic charts in the classroom, a card system for recording cases and progress devised by author, and a definite description of 30 cases and their treatment, illustrated by photostats of the changes in handwriting that accompanied the treatment over uniform periods of time for each case. Cases were chosen from approximately 400 studied by the author.

842. Striker, Clifton Edward. An analysis of errors found in handwriting. Master's, 1930. Indiana. 74 p. ms.

Two samples of handwriting were secured from pupils enrolled in grades 4A, 4B, 5A, 5B, 6A, 6B, and 7A of the Bedford, Ind., city schools. The samples were analyzed for malformation of letters according to Pressey's Chart for diagnosis of illegibilities; and for errors according to Freeman's Chart for diagnosing faults in handwriting. Quality of line received the lowest average score for all samples; letter formation was second with spacing ranking third.

843. Watters, Mrs. Garnette. Use of diagnostic charts in handwriting. Hamtramck, Mich., Public schools, 1930.

This is a study of grades 3B to 6A. The experimental group worked on its own problems with diagnostic charts; the control group worked on formal handwriting lessons with diagnostic charts.

844. Weisser, Elizabeth. A diagnostic study of Indian handwriting. Master's, 1930. Denver. 159 p. ms.

Problems: (1) To compare the legibility and speed of the handwriting of white children, full-blood Indian children, and mixed-blood Indian children in reference to age and grade; (2) to compare the various phases of handwriting, as slant, alignment, quality of line, letter form, and spacing as displayed in the handwriting specimens of white children, full-blood Indian children, and mixed-blood Indian children; and (3) to determine, if differences exist, whether or not these differences are racial.

845. West, Paul V. The practice material for grading on the American handwriting scale. New York, N. Y., A. N. Palmer company, 1930.

Contents: A guide for practice grading; 7 sets of handwriting specimens, grades 2 to 8; 14 record blanks (one for each grade, on both the 7 and 15 step scale); 1 key to standard ratings (7-step scale); 1 key to standard ratings (15-step scale).

846. Whytock, N. B., Fritch, C. L. and Celeen, Mrs. I. O. Handwriting survey, grades 3-8. Glendale, Calif., City schools, 1931. (For abstract see no. 717b.)

The purpose of the study was to determine the extent of improvement in handwriting since 1926, and to determine the number of pupils in grades 7 and 8 no longer in need of formal handwriting instruction.

See also 615, 619, 627.

SPELLING

847. Archer, C. P. More evidence on the teaching of spelling rules. Moorhead, Minn., State teachers college, 1931. 10 p. ms.

848. Atlanta, Ga. Public schools. Atlanta minimal spelling list, grades 1 through 6. Atlanta, Ga., Board of education, 1931. 17 p.

Analyses of textbooks and experimental try-out in a list of 1,665 words. On the basis of a try-out of children's spellings the words are assigned to the grade by the end of which they should be mastered. The entire list is printed in alphabetical order with the grade placement opposite each word. Separate lists have also been published for each grade.

849. Bartges, N. L. Teacher-correction versus pupil-correction methods of marking spelling papers. Master's, 1930. Penn. State. 60 p. ms.

A controlled experiment covering grades 5, 6, 7, and 8, with a total of 219 pupils. The pupil-correction method was found to give better results, on the average, in every grade and on every ability-level. The pupil-correction method proved relatively most superior for pupils of the lower intelligence levels, while for the higher intelligence levels there was little difference.

850. Bixler, H. H. Standard elementary spelling scale. Atlanta, Ga., Board of education, 1930.

This scale includes difficulty values for approximately 2,500 words which are common to the spelling vocabulary of two of four scientifically constructed spellers. The values indicate the per cent of students within a range of three grades who were able to spell each word.

851. Bruce, Jeanette Louise. A study of the use of the hyphen in certain compound words. Master's, 1930. Iowa.

852. Brusck, James F. Spelling curriculum analysis. Sacramento, Calif., Public schools, 1931. 34 p.

*853. Coleman, William H. A critique of spelling vocabulary investigation. Doctor's, 1931. T. C., Col. Univ. Greeley, Colorado State teachers college, 1931. 119 p. (Colorado State teachers college education series, no. 12.)

The purpose of this study was to determine to what extent vocabulary researches have solved the problems of content and grade placement of the spelling curriculum. A brief summary of the generally accepted principles of curriculum construction, so far as they pertain to the subject of spelling, was made. Findings: A comparison of spelling curricula revealed the fact that the differing principles of grade placement followed by the several spelling authorities operated to produce wide divergencies in the grading of words. Disparity to a greater or less extent was found in the comparison of all research lists.

*854. Cook, Walter Wellman. The management of general spelling ability involving controlled comparisons between techniques. Doctor's, 1931. Iowa. Iowa City, University of Iowa, 1931. 112 p. (University of Iowa studies. Studies in education, vol. 6, no. 6. New series no. 221, February 15, 1932.)

The problems dealt with are: The selection of test items with regard to difficulty and discriminating power; the selection of a test technique for presenting the items; and a method of determining the optimum number of items to be included in a test which is to be administered in a given length of time, or the optimum administration time for a test of given length. The investigation is divided into three distinct experiments: The first deals with the selection of test words with regard to difficulty and discriminating power, and the establishment of the optimum administration time for list dictation spelling tests; the second deals with the establishment of the optimum administration time for and the subsequent evaluation of six self-administering techniques when spelling ability is defined in terms of the number of correct spellings of a limited group of frequently used words; the third deals with the evaluation of six self-administering test techniques when spelling ability is defined in terms of the percentage of correct spellings in first draft schoolroom writing. In the first experiment complete test records were secured for 46 eighth-grade pupils in four large Iowa school systems. A total of 835 eighth-grade pupils from 16 Iowa school systems were used in the second experiment. Six spelling tests was administered to 196 ninth-grade pupils in the third experiment.

855. **Everson, Helene.** Appraisal of a course of study in spelling. Master's, 1931. Iowa. 135 p. ms.
856. **Frazier, Charles F.** Comparative analysis of word lists from eleven elementary school spellers. Master's, 1931. Wisconsin.
857. **Gates, Arthur I.** An experimental comparison of the study-test and the test-study methods in spelling. *Journal of educational psychology*, 22: 1-19, January 1931.
Approximately 2,000 pupils in grades 2 to 8, inclusive, were studied during the school year. The results showed a slight general advantage in favor of the test-study plan.
858. **Grabau, Earl Lawrence.** A study of the multiple choice type of spelling test. Master's, 1931. Iowa. 136 p. ms.
859. **Haynie, Weldon Keiller.** The frequency of occurrence of words under spelling rules. Master's, 1931. Oklahoma. 65 p. ms.
One method of determining the value of spelling rules was investigated by determining the frequency of the occurrence of the rules as applied to approximately 3,500 words used in a spelling book. The textbook chosen was the Rinsland spelling book with 3,543 different words, representing a sampling of 26,000 running words from 10-word studies. There are 14 major rules used in the study; these represent all rules used in five modern spelling books. It was found that, in one book investigated, a rule covering 1,641 words does not occur; in another of the books, another rule covering 1,145 words does not occur. On the other hand, three rules covering 43 words and one rule covering no words appear in still another book. Two books use a rule covering only 14 words. Data indicate that certain spelling rules are being taught which are worthless; that other rules are being over-emphasized; and some valuable rules are being omitted in certain textbooks.
860. **Heilig, Irma.** The persistency of initial errors in spelling. Master's, 1931. Colo. St. T. C.
The study is made to try to discover whether the immediate correction of the error plus the concentrated attack on remedying the exact difficulty, offset any possible disadvantages of an initial misspelling.
861. **Highberger, Harriet.** A study of spelling errors in the case of the Jones 100 demons. Master's, 1930. Colo. St. T. C.
The purposes of this study were: (1) To discover the different forms of misspelling used by 100 unselected pupils in each of the fourth, fifth, sixth, seventh, and eighth grades in spelling Jones' 100 demons; (2) to determine whether or not there is a common form of misspelling each of these words; and (3) to determine the commonest hard spot in each of the 100 words as used by the pupils involved in this investigation.
862. **Iles, Reuben Edgar.** Case studies in spelling disabilities. Master's, [1931]. Chicago.
Diagnosis and remedial treatment of 23 cases of poor spellers by the case-study method to ascertain the proper procedure in dealing with poor spellers.
863. **King, Luella M.** Learning and applying spelling rules in grades three to eight. Doctor's, 1931. T. C., Col. Univ.
The purpose of this study was to determine the desirable grades for teaching certain rules in spelling as judged by their frequency of application to the spelling words of a grade, the distribution throughout the grades of words governed by these rules, the number of exceptions, and the ease of learning the rules. Findings: Efficiency in learning to state and apply the rules increased from grade to grade; scores by mental ages were very similar to those of the grade having the same average mental age; scores on nonsense words had the same general errors as the real words, but they usually ran lower.
864. **Lee, J. Murray.** An evolution of supplementary spellers in use in Burbank. Burbank, Calif., City schools, 1931.
865. **Leistra, Peter A.** Incidental learning in spelling. Master's, 1931. Iowa. 128 p. ms.
866. **McMahon, Nannette L.** The effect of omitting the *r* sound of words in habitual pronunciation upon the spelling of those words. Master's, 1931. Iowa. 155 p. ms.

867. Madden, Mable C. The persistence of the initial error in spelling. Master's [1931]. Chicago.

Persistent spelling errors were studied from three standpoints: (1) Recurrence of errors in the same words; (2) recurrence of identical misspellings; and (3) recurrence of identical letter errors.

868. Miller, Elwyn L. To determine the effect of stressing word meaning in the teaching of spelling. Master's, 1931. Iowa. 61 p. ms.

869. Mounts, Francis M. A critical evaluation of the vocabularies of three spelling textbooks. Master's, 1931. Iowa. 137 p. ms.

870. Muncie, Ind. Public schools. Spelling achievement reports for May 1931. (Bulletin no. 62.)

871. Nolte, Karl F. Measuring progress in spelling as taught by student teachers under critic supervision in the Hudson school. Master's, 1931. Iowa. 158 p. ms.

872. Potter, Walter Dewey. An analytical investigation of studies in spelling. Master's, 1931. Peabody. 54 p. ms.

An analytical investigation of studies made in spelling from 1888 to 1931; a comparative study of types of spellers from 1844 to 1931. Findings: Later spelling lists are shorter and are scientifically selected and arranged according to psychology of learning, mental growth of child, and words which the child can and will use.

873. Rhodes, Sarah Gertrude. A comparison of five second and third grade spelling lists. Master's, 1931. Peabody. 45 p. ms.

Findings: Of the 2,033 different words tabulated, 287 appeared in five lists, 312 in 4 lists, 317 in 3 lists, 378 in 2 lists, and 789 in 1 list. The longest vocabulary (1,556 words) exceeded the shortest (938 words) by 618 words. The largest number of running words (5,916) exceeded the smallest number (1,071) by 4,845 words. Five hundred and ninety-nine of the 2,033 words were found in 80 per cent of the lists. The 14 words having the highest frequency showed a difference of 219 in the range of frequency. Tests revealed indicate that when the method of vocabulary studies is better standardized there will be more agreement among complers in the three factors investigated.

874. Ritter, Olive P. Words suitable to be taught in spelling in the first grade. Master's, 1931. Iowa. 147 p. ms.

*875. Sartorius, Mrs. Ina Craig. A study of various bases of generalization in teaching spelling. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 65 p. (Contributions to education, no. 472.)

The purpose of the study was to make an analysis of a list of words which are presumably the ones that children should learn to spell by the end of the eighth grade. It was found that about 4,000 words appear in the actual spelling lessons undertaken in the first eight grades. Twenty commonly used spellers published since 1920 were studied with reference to the rules used. The results of the analysis show accurately the frequency of visual appearance of word elements, the consistency or inconsistency of pronunciation of visual word elements, the consistency of the application of rules to words, the grade frequency and the exceptions of words to a given rule, the frequency of common errors, and the frequency by grade of words in which such errors might occur.

876. Scott, Joseph G. The effect of lesson notes on learning spelling. Master's, 1931. Oklahoma. 69 p. ms.

The Hinsland spelling book, with notes at the end of the assignment, was used as a text. An experiment was conducted in the public schools at Ardmore, Okla., using 138 fourth and fifth grade pupils, in an attempt to evaluate the notes. The pupils were divided into two groups, a lesson-note group, and a no-lesson-note group. The groups were rotated every two weeks. On an average, the lesson-note group showed 3.83 per cent improvement over the no-lesson-note group with a critical significance of 2.297.

877. Senour, A. C. Spelling survey by sampling. East Chicago, Ind., Public schools, 1930. 2 p. ms.

The effectiveness of spelling instruction by test-teach-test method was sampled during the week of March 3-7, 1930. All pupils in grades 3B-5B were tested with pre-test, instructional test, and final test.

878. **Shaw, Florence.** *Methods used by children in studying spelling.* Master's, 1931. Peabody. 29 p. ms.

One hundred and seventy-eight children of the intermediate grades in the Peabody demonstration school and Calvert public school of Nashville, Tenn., were studied. Findings: (1) Children are aware of making use of definite methods in studying spelling; (2) the methods of the best spellers differ most from those used by the poor spellers in the number of sense impressions involved; and (3) the study practices recommended by authorities in the field of spelling are the practices of the majority of the best spellers.

879. **Simmons, Ernest P. and Bixler, Harold H.** *Standard high school spelling scale (revised).* Atlanta, Ga., Smith Hammond company, 1931. 63 p.

Percentages of correct spellings for grades 9, 10, 11, and 12 are reported for 2,910 common words. The per cent of correct spellings increases at approximately equal steps from grades 9 to 10, 10 to 11, and 11 to 12. The data for each word in each grade are reported.

880. **Smith, Richard.** *A study of the value of spelling rules.* Master's, 1931. Colo. St. T. C.

This study is undertaken for the purpose of finding out what spelling rules are likely to be of most value as a device in teaching spelling in the elementary school.

881. **Stoker, Dora D.** *Survey of pupil spelling ability, grades 2A-6A.* Long Beach, Calif., City schools, 1931.

882. **Urquhart, Cora.** *Spelling notebook based on individual instruction.* Norfolk, Va., Public schools, 1930. 46 p.

883. **Ury, William K.** *Spelling difficulties arising out of the variety of spellings for certain consonant and vowel sounds.* Master's, 1931. Iowa. 33 p. ms.

884. **Weems, Byron W.** *An analysis of the vocabularies of six spellers.* Master's, 1931. Oklahoma. 28 p. ms.

The spellers selected for this study were: Jones spelling book, Breed-French speller, McCall speller, Growth in spelling, Rinsland spelling book, and Fundamentals in spelling. All the authors of these spellers claim the vocabularies were based on extensive scientific research. A composite alphabetized list of the six spellers was made. A study of the list shows that the fewest number of words used by an author is 3,822, and the largest number is 4,896. The average vocabulary agreement is about 50 per cent. The per cent of words common to all of these spellers is only 20.9.

See also 252, 831, 925.

ENGLISH LANGUAGE

GRAMMAR AND COMPOSITION

885. **Adams, Jewel Crouch.** *A comparative analysis of senior high school English texts.* Master's, 1930. Oklahoma. (For abstract see no. 713.)

A comparative analysis of four recent sets of 2-series English composition texts for high schools giving, as exactly as possible, the actual percentage of content in each volume devoted to stated divisions of subject matter; checking the amount and stress of content presented with current criteria in school curriculum to show to what extent the material offered in texts meets the demands; and, by comparison with texts of other periods, showing tendencies in textbooks in recent years.

886. **Akron, Ohio.** *Public schools. Courses of study in English for the high schools.* 1931. 76 p. (Publication no. 7.)

887. ———— *English course of study.* 1930. 36 p. (Publication no. 2.)

This course of study covers oral and written composition from the primary through the sixth grade, inclusive.

888. **Alexander, Gerald Leo.** *A diagnostic study of English usage in the Parke county high schools.* Master's, 1930. Indiana. 124 p. ms.

The problem was to reveal general and specific weaknesses in the use of certain phases of the English language, as they existed in November 1929, among 750 Parke county high school students, and to make suggestions of a remedial nature to the county in general. Form 3 of the Pressey diagnostic tests in English composition was given to each of the 750 pupils of the 10 Parke county high schools. Findings: Parke county was, in every case, below the national performance on the tests. The 39 classes differ considerably from each other in their ability on the different tests, and on different items of the same test.

889. **Alvey, Edward, jr.** A training procedure for teachers of English, based upon analyses of objectives, outcomes, and activities. Doctor's, 1931. Virginia.

The purpose of the study was: To determine the valid objectives of the literature course in the secondary school; to determine the specific outcome sought in the teaching of literature in general and in the teaching of the special types of literature; and to set up desirable procedures for the teaching activities involved, and to establish a technique for training teachers to perform effectively these activities. Objectives and outcomes were determined through analyses of state and city courses of study, texts on principles of secondary education and special method, and high-school English texts. Relative frequency and emphasis were considered in compiling final lists of objectives and outcomes. The training course is based upon observation and participation in the teaching of typical units in the public-school course, for which desirable teaching procedures are formulated and learning exercises provided.

890. **Appel, Ruth P.** Diagnostic and remedial measures in tenth-year English. Master's, 1931. Northwestern.

891. **Archer, C. P.** Correcting errors in written English. Moorhead, Minn., State teachers college, 1931. 12 p. ms.

892. ——— Errors in oral English. Moorhead, Minn., State teachers college, 1931. 8 p. ms.

893. ——— Errors in written English. Moorhead, Minn., State teachers college, 1931. 8 p. ms.

894. **Ash, Irwin Oda.** An experimental evaluation of the stylistic approach in teaching written composition in the junior high school. Doctor's, 1931. Cincinnati. (Abstract, 24 p.)

The purpose of this investigation was: (1) To make a critical study of the stylistic phases of composition writing, and (2) to determine, in so far as possible, the degree to which a knowledge of technical grammar contributes not only to the grammatical correctness of composition writing but also to the stylistic factors which insure a well-written composition.

895. **Barker, Roland.** A practical worksheet approach to the teaching of English in secondary schools. Master's, 1931. Harvard. 81 p.

896. **Barnhart, L. D.** Report of oral English survey. Cleveland, Ohio, Shaker Heights schools, 1931. 53 p. ms.

This survey purposed determining the amount of time and effort which should be expended upon oral English training in the elementary and secondary schools. Oral English included speech training, oral reading, and dramatics.

897. **Beatty, Charles L.** Comparison of difficulty of Rinsland language inventory tests with Rinsland language practice exercises. Norman, University of Oklahoma, 1931. 38 p. ms.

The difficulty of each question in a 400-sentence English test was compared with 20 sentences of the same English form in a practice exercise. The test and exercises covered 100 rules for punctuation, capitalization, and grammar. Difficulty was measured in terms of standard deviation. Findings: The practice exercises were consistently easier than the tests; that is, sentences for practice on a rule were easier than sentences testing the rule.

898. **Beecher, Paul Edwin.** A study of achievement in English of Utah high school seniors. Master's, 1931. Utah. 80 p. ms.

899. **Betts, Emmett A.** An experimental appraisal of certain techniques for the study of oral composition. Doctor's, 1931. Iowa. 87 p. ms.

The purpose of the study was the development and appraisal of an instrument for the electric recording of oral activities of pupils, and the appraisal of five techniques as instruments for use in the study of oral language activities. The instrument proved to be economical and dependable, and it recorded with an accuracy of 99.7 per cent, while court reporters and shorthand reporters were able to record accurately only 80 per cent and 53 per cent, respectively.

900. **Bowyer, Dorothy Shaw.** A study of language errors in the elementary grades. Master's, 1931. Denver. 140 p. ms.

The study is directly related to the results of a test in elementary language forms given in 56 Denver public schools. The schools had various types of environment from the most

menger to those of luxury. A total of 22,697 children participated in the testing program and represented grades from 3B to 6A. Findings were built upon grade groups rather than upon the individual child. Tests were given in the classrooms under the direction of the classroom teacher or the principals, and were scored and graded by the classroom teacher.

901. **Broening, Angela M.** Content, materials, and procedures in the English curriculum, grades 7-12, experimentally determined. Baltimore, Md., Department of education, 1931.

The research studies set up in this investigation are based on data accumulated for the annual reports of the Department of Education, from the city-wide testing programs, and from results of the supervision of English in secondary schools.

902. ——— Promotional standards in secondary English. Baltimore, Md., Department of education, 1930.

An analysis of the identical elements in the statements received from the teachers of English in the secondary schools in Baltimore when asked to write out "on what bases they judged pupils ready for promotion."

903. **Bush, Fred R.** Standards of attainment in language. Master's, 1931. Chicago. 85 p. ms.

This is a 3-semester experiment in the teaching of English grammar to determine standards of attainment. Conclusions: Definite standards of attainment are advisable and obtainable according to group abilities.

904. **Cadden, Anna Josephine.** The function of English in vocational education. Master's, 1931. Marywood. 57 p. ms.

905. **Campbell, Edith Jessie.** A study of theme-writing in grade nine. Master's [1931] Peabody. 70 p. ms.

An investigation of theme-writing as it is presented in 12 ninth-grade English textbooks published since 1925. Findings: Very little attempt is made to correlate English with other subjects in the school curriculum by suggesting subjects for written themes which might be used in other than English classes. Pupils' themes when they are used as models for written composition are more stimulating than are literary masterpieces. The methods suggested by authors of ninth-grade English textbooks for the motivation of theme-writing may be grouped into four divisions—appeal to social instincts, appeal to practical desires, appeal to personal interests, and appeal to creative ability.

906. **Campbell, Pera.** A psychological analysis of the causes of children's errors in capitalization. Master's, 1931. Ohio. 77 p. ms.

From a study of one class of high-school ninth-grade pupils, it was found that the causes of errors in capitalization are: (1) Carelessness and indifference; (2) an inability on the part of the children to apply the grammatical rules which they know; and (3) the inconsistent use of capitals by the public.

907. **Campbell, Thomas J.** Textbook rules of punctuation and capitalization. Master's, 1931. Wisconsin.

908. **Carter, Audrey Louise.** Methods of selection and evaluation of textbooks in English composition used in high schools. Master's, 1931. Southern California.

909. **Carter, Lucile Mae.** An experimental study comparing the regular course and procedure for retarded pupils in the tenth grade English with a course and method adapted to these pupils. Master's, 1931. Southern California. 85 p. ms.

910. **Cesander, Paul K.** A study of pupil usage as a factor in the grade placement of certain items of punctuation. Doctor's, 1931. Iowa. 537 p. ms.

This is a study of the punctuation situations arising in the writing done by fourth, sixth, and eighth grade pupils, supplemented by an investigation of 11 series of elementary language texts. The guide used was a result of the detailed examination of seven representative style-manuals of publishing houses. Three-fourths of the total usage was found to be limited to 30 different specific punctuation situations with about 45 per cent. error even in the eighth grade. The textbooks were found to include many infrequently used and to exclude many frequently used items.

911. Ching, J. Frederic. Evaluation of the effectiveness of certain English courses given in Oakland high schools in relation to freshman scholarship achievement. Oakland, Calif., Public schools, 1931. 9 p. ms.

The purpose of the study was to evaluate the effectiveness of such courses as dramatic arts, journalism, and public speaking as taught in the Oakland high schools in relation to freshman scholarship achievement at the University of California. All students graduating from Oakland high schools during the past six semesters were studied.

912. Cockhill, Lowell E. A study of pupil usage as one factor of certain items of punctuation in grade seven. Master's, 1931. Iowa. 142 p. ms.

913. Coddling, Clair L. Vocabulary studies: a comparative study of various sized dictionaries and word-lists as sources of vocabulary tests. Master's, 1931. North Dakota.

914. Coffman, Fred S. A correlation between intelligence and achievement in English in Princeton junior-senior high school. Master's, 1931. Pennsylvania. 64 p. ms.

*915. Coleman, J. H. Written composition interests of junior and senior high school pupils. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 115 p. (Contributions to education no. 494.)

The purpose of the study was to determine the topics pupils prefer to write about when free to suggest their own titles, and when selecting titles from a list representing different categories of interest, and to determine the types of discourse they prefer. Data were obtained from about 5,000 pupils.

916. College entrance examination board. Résumé of the Report of the Commission on English. 1931. 19 p.

A study of the restricted and comprehensive English examinations of the College entrance examination board—their history, procedures, prognostic value, comparison with other instruments, etc., with recommendations to the Committee of review of the College entrance examination board.

917. Cooke, Ovis Olevea. Improvement of grammar in Oklahoma high schools. Master's, 1931. Oklahoma. 76 p. ms.

918. Denver, Colo. Public schools. English expression. Elementary school, grades 3, 4, 5, and 6. 2d rev. ed. 1931. 91 p. (Course of study monograph, no. 18.)

919. ——— English, junior high school, grades 7, 8, and 9. 2d rev. ed. 1931. 123 p. (Course of study monograph, no. 9.)

920. ——— Speech correction, elementary school, grades 1-6. 1931. 62 p. (Course of study monograph, no. 80.)

921. Dickson, Belle L. The present status of instruction in phonics. Master's, 1931. Chicago. 126 p. ms.

An analysis was made of the contents of 18 reading manuals published since 1925. Findings: Phonics is a valuable aid to independent and accurate word recognition and pronunciation. It should, however, always be kept subordinate to the meaning.

922. Doney, Russell. Results of the progress language test given in junior high school. Kalamazoo, Mich., Public schools, 1930. 9 p. ms.

From this study it was found that, with few exceptions, the most frequent English errors are not the same as the spoken errors.

923. ——— Results of progress language test given in later elementary grades. Kalamazoo, Mich., Public schools, 1930. 9 p. ms.

*924. Ferguson, Jean May. Predicting achievement in college composition. Master's, 1931. Chicago. 49 p. ms.

This study attempts to discover a method of predicting future achievement from a knowledge of the student's present mental ability and achievement. Data were secured from a study of 610 freshman students enrolled in Crane junior college, Chicago, during the first semester of the school year 1930-31. Findings: It is possible by means of a

regression equation to predict accurately the semester-mark in English composition of 38 per cent of the students included in the study; and it is possible to predict for 72 per cent of the students the mark below which their achievement will not fall.

925. **Fitzgerald, James A.** The vocabulary, spelling errors, and situations of children's letters written in life outside the school. Doctor's, 1931. Iowa. 517 p. ms.

926. **Fogler, Sigmund.** An investigation into the effectiveness of a progressive method of teaching the mechanical aspects of second year English composition in a city high school. Master's, 1931. Coll. of the City of N. Y. 89 p. ms.

Groups, equated on bases of IQ, ability in mechanics of composition, and socio-economic status, were taught by different methods for 40 lessons. There is a high correlation between intelligence, home conditions and ability in the formal aspects of composition. Method is not the deciding factor in the learning of the formal elements tested.

927. **Fries, M. Anysia.** A survey of punctuation situations in eleventh grade themes. Master's, 1931. Iowa. 56 p. ms.

928. **Geissler, William R.** Teaching written English. Master's, 1931. Temple.

929. **Gregorson, A. J.** The relative oral and written language abilities of certain school children. Master's, 1931. Iowa. 86 p. ms.

930. **Gruwell, Jessie Louise.** An experimental study of the relation of handedness to speech. Inglewood, Calif., City schools, 1931.

931. **Hackett, William Arthur.** A study of the present status of English instruction in the mountains of Kentucky, with a proposed plan of reform. Master's, 1931. Ohio. 100 p. ms.

From this study it was found: (1) That English instruction in the mountains of Kentucky is at a low ebb; (2) that the reason is the isolation and lack of resources of the hills; and (3) that the State must take over the reclamation task if instruction is to be made effective in any field.

932. **Hall, Mabelle.** Pupil-appraisal versus teacher-appraisal of compositions. Master's, 1931. Chicago. 133 p. ms.

An evaluation of two methods of appraisal to determine whether pupil-appraisal or teacher-appraisal is more effective in the elimination of language errors and in producing general composition ability. Findings: Pupil-appraisal is more effective in eliminating language errors and in determining general composition ability.

933. **Hall, Nelle Kathryn.** An English course for demoted students of Iowa State college. Master's, 1931. Iowa St. Coll. 160 p. ms.

934. **Heber, O. J.** English survey. Listing types of errors as to frequency. Royal Oaks, Mich., Royal Oaks schools, 1931.

A study of grades 1 to 8, showing certain errors in English which should be stressed, by changing the time allotment according to needed remedial work in the subject.

935. **Henegar, Mrs. Hazel Ruth Gibbs.** A study of the common errors found in tenth-grade composition. Master's, 1931. Tennessee. 98 p. ms.

936. **Hiler, Grace A.** The relation of the mastery of certain punctuation usages and knowledge of the rules represented. Master's, 1931. Iowa. 121 p. ms.

*937. **Hoppes, William C.** The development of written expression among children of elementary-school grades. Doctor's, 1931. Chicago. 144 p. ms.

The study was based on the analysis of 2,694 compositions written by children in the third, fourth, fifth, and sixth grades. Findings: Development between third and sixth grades was found in the following aspects of written expression: (1) Number and length of sentences; (2) proportions of various types of sentences and clauses; (3) use of inverted order, verbal phrases, compounds of unrelated numbers, and misplaced modifiers; (4) apprehension of word meaning; (5) ego-centrism, and (6) imagination. The evidence was interpreted as constituting significant facts and implications which might be utilized in formulating a systematic course of instruction in written language.

938. Horral, A. H., *and others*. English course of study, grades 1 to 6. San Jose, Calif., School department, 1931. 40 p.

939. Hunt, Helen Lucile. The formulation and validation of a set of principles to guide the making of a senior high school English curriculum. Master's, 1931. Wisconsin.

940. Illinois. University. College of education. Members of the senior class. A project in fourth-year English composition. A description of the university high school. Prepared under the direction of H. G. Paul, Liesette McHarry, and Dorles Stutzman. Urbana, University of Illinois, 1930. 36 p. (Bulletin no. 53.)

941. James, Lillie. Reactions of a reader to the 1930 comprehensive examinations in English of the College entrance examination board, with suggested objective forms for this examination and a plea for objective rating. Master's, 1931. Harvard. 101 p.

942. Jamieson, Ramona. Mechanical errors in the Oklahoma college placement test in English. Master's, 1930. Oklahoma. (For abstract see no. 713.)

This study is an analysis of the mechanical errors in 600 themes of the English test given to freshmen in September 1929. The phases examined are: Sentence blunders; incorrect verb forms; wrong uses of pronouns, adjectives, and adverbs; misspelled words; violation of the rules of the period, comma, colon, semicolon, dash, question mark, and quotation marks.

943. Jennings, Rosa Schreurs. English interests of eighth-grade vocational boys. Master's, 1931. Cincinnati.

944. Kansas. State department of education. Course of study for high schools. Part II-English. Issued by Geo. A. Allen, jr. Topeka, 1930. 113 p.

945. Kauffmann, Helen Eleanor. Content for general language course. Master's, 1931. Stanford.

946. Kelley, Victor Harold. An experimental study of certain techniques for testing word meanings. Doctor's, 1931. Iowa. 180 p. ms.

This is a study of the reliability and validity of five techniques for testing the word meaning knowledge possessed by children, validity being established on a common testing-time basis with each test allowed its optimum testing time. The matching and multiple-choice tests were found to be the best, but none of the techniques could be considered as adequate for measuring the word-meaning knowledge of individual children.

947. Kelly, Virginia. The relationship between knowledge of the rules of English grammar and ability to apply these rules to written work. Master's, 1931. N. Y. St. Coll. for Teach. 20 p.

A comparison of ratings of compositions for grammatical corrections with scores on standardized tests designed to measure knowledge of grammar, shows varying degrees of ability to apply grammatical rules even when the rules are known. Central tendency of scores indicates "knowledge" of 11 and 12 grammatical rules. Amounts of difference indicate where emphasis should be placed in teaching.

948. Kennedy, Helen Louise. Persistency of error in certain common verb forms in grades 5, 6, 7, and 8. Master's, 1931. Iowa. 138 p. ms.

949. Kiskadden, Margaret. An experiment in vocabulary study in the David B. Oliver high school, Pittsburgh, Pa. Master's, 1931. Harvard. 222 p. ms.

"A study designed to measure the increase in English vocabularies on a limited number of definite words which two classes would make in a semester's time, one class studying the words in class and outside under direction, the other class studying only so far as their personal desires encouraged them to. Statistics were compiled with the idea of coming to conclusions about the relative value of classroom study in vocabulary and the personal desires of students to increase their vocabularies on their own responsibilities, and suggestions were made as to the devising of ways and means of helping students increase their vocabularies voluntarily."

*950. Klein, Charlotta. Frequency in the use of adjectives and the correlation between the use of adjectives and the intelligence quotient in a 5A class. Master's, 1931. New York. 41 p. ms.

This study took into consideration all adjectives both descriptive and limiting used in a 5A class in Brooklyn, N. Y. There is no actual correlation between IQ and frequency in the use of adjectives, but a positive correlation exists between IQ and the use of good adjectives.

951. Kline, E. E. Comparison of certain types of test in English mechanics. Master's, 1931. Iowa. 43 p. ms.

952. Klopp, W. J. and Woodward, B. D. Grammar by rule or practice. Long Beach, Calif., City schools [1930].

Findings: Five units have been developed for the purpose of improving the recognition and use of the commonly used grammatical elements in oral and written composition. Two semesters' experience with the units, with approximately 200 cases, showed an improvement in applied grammar of 20 per cent over control groups numbering 300 pupils.

953. Kremer, Josephine. An analysis of sixth grade children's letters. Master's, 1931. Iowa. 42 p. ms.

954. Large, John Ellis. Young Pegasus. Master's, 1930. T. C., Col. Univ. 34 p. ms.

An experiment in creative writing and thinking conducted at the Garden City public school. Finding: All normal children are potential artists. With the proper criticism, environment, and guidance this artistry can be made articulate.

955. Larkin, John Lawrence. A study in prediction in the first year college English classes of the University of Arizona in 1929-1930. Master's [1931]. Arizona. 64 p. ms.

A statistical study making use of the American council psychological test scores of freshmen, scores on Iowa placement English training test, and scholastic grades of Arizona freshmen for prediction of English grades. Findings: By partial correlation technique those portions of the tests which together make the best predictive tests were determined.

956. Larson, Elsie Ruth. An evaluation of current practices in the teaching of composition. Master's, 1931. Southern California. 283 p.

This study is based on an analysis of the aims of composition as stated in the literature on the subject; a study of classroom practices as revealed by teachers' responses to a questionnaire; and a questionnaire study of pupils' attitudes and interests with respect to composition.

957. Leno, Fred T. An experimental method of teaching composition. Doctor's, 1931. Fordham.

958. Lewerenz, Alfred S. A measure of vocabulary interest. Los Angeles, Calif., City schools, 1930.

A measure for determining the vocabulary interest of a textbook by means of a check list of words of known interest.

959. ——— Vocabulary diversity. Los Angeles, Calif., City schools, 1931.

960. ——— Vocabulary grade placement formula. Los Angeles, Calif., City schools, 1931. 1 p.

A measure for determining the grade placement of vocabulary in textbooks using verbosity as a basis.

961. ——— Word appreciation test. Los Angeles, Calif., City schools, 1931. 3 p.

A measure of an individual's appreciation of word meaning and a possible measure of imagination.

962. Love, Virginia May. The value of the North Carolina high school senior examinations in English and reading as a prediction of the first two college grades in English. Master's, 1931. North Carolina. (For abstract see no. 710.)

Data were obtained from the freshmen classes entering the University of North Carolina in the autumn of 1927, 1928, 1929, and 1930. Their scores on the English usage and reading comprehension sections of the North Carolina high-school senior examinations were correlated with each other and with the first two grades in college English to determine their degree of usefulness as a prediction of success in college.

963. **McAdow, Ida B.** An experiment in teaching English grammar incidental to composition. Master's, 1931. Southern California. 111 p.

A study of the aims and methods of teaching grammar followed by the report of a controlled experiment with six sections of tenth-grade students, with results stated in terms of gain in post-test over pre-test.

964. **McBroom, Maude.** A course of study in written composition for the elementary grades. Iowa City, University of Iowa, 1931. (Abstract in University of Iowa service bulletin, vol. 15, no. 11, March 14, 1931. 4 p.)

This course of study has been built around the different life situations in which children use composition. Only the commonest skills were included in the course.

965. **McCulloch, Mary.** A study of the written English equipment of freshmen entering the Point Pleasant high school, Point Pleasant, W. Va. Master's, 1931. New York. 43 p. ms.

Investigation of the written English equipment of 199 freshmen entering the Point Pleasant high school. Pupils were found to be on a par with national standards in mechanics, but below in sentence structure.

966. **MacMillan, Junia Nave.** An analysis of the literature relating to the teaching of English grammar. Master's, 1931. Southern California. 104 p.

A comprehensive survey of the scope, objectives, curriculum organization, course content, and teaching methods, with critical evaluation of present procedure and recommendations for improvement.

967. **McMindes, Maud.** An analysis of the vocabulary of the Hays junior senior high school students in written composition. Hays, Kansas State teachers college, 1930. ms.

968. **Maher, Florence Igerne.** Practices in the teaching of business English in the secondary schools of the United States. Master's, 1931. Southern California. 130 p.

A study of the place and purpose, curriculum organization, course, content, and methods of teaching, based on an analysis of the literature and on questionnaire returns from 132 high schools and 11 junior colleges.

969. **Mao, Yen-Wen.** A study of enrollments in English courses in Michigan high schools. Master's, 1931. Michigan.

970. **Martin, Eva Toma.** A study of the achievement of Terre Haute freshmen in the mechanics of English composition. Master's [1931]. Ind. St. T. C. 166 p. ms.

Determination of proficiency of ninth-grade students of Terre Haute public schools in English composition. Findings: Most prevalent and persistent errors revealed in the combined Preasey tests agree to a large extent with those in the common "vocabulary of errors"; great improvement was noted in every school in the city; freshmen in the city in spring test were superior to those in ninth and tenth grades in the nation; time and effort of pupils and teachers were expended more economically because they had definite goal; mastery of uses in common error list is quite within the ability of normal freshmen; emphasis in drill exercises should be upon simple usages that occur in original writings; efforts made throughout the city to gain correctness in mechanics of writing seemed justified.

971. **Martin, William Henry.** The written vocabulary of pupils in the senior high school. Master's, 1931. Oklahoma. 124 p. ms.

The writing vocabulary of the pupils of the senior high school was collected by obtaining from schools 675 different writings from nearly that number of pupils. The total number of words and the frequency of each word were counted and the words alphabetically arranged. The total number of running words counted in grade 10 was 15,613 and the number of different words, 6,034; the number of running words in grade 11 was 15,365 and the number of different words, 6,020; the number of running words in grade 12 was 15,520 and the number of different words, 6,112. The 1,000 most frequently used words are listed and the frequency placement indicated for each word. The lists are compared with Thorndike's and Horn's lists. There is a striking disagreement between the lists.

972. **Matthews, James Andrew.** The writing vocabulary of seventh and eighth grade children. Master's, 1931. Oklahoma. 86 p. ms.

The writing vocabulary of seventh and eighth grade children was collected by obtaining from the English department of Capitol Hill junior high school, Oklahoma City, Okla., 738 different writings from the same number of pupils. The total number of running words and the frequency of each word were counted, and all the words arranged alphabetically in loose-leaf notebooks. The total number of running words for grade 7 is 30,058 and for grade 8 is 30,082. The number of different words is 2,636 in grade 7 and 3,070 in grade 8. The 1,038 most frequently used words in grade 7 and the 1,136 most frequently used words in grade 8 are listed, and their frequencies recorded. The lists are compared with Thorndike's and Horn's lists. There is a significant disagreement between these lists.

973. **Mayme, Emily Louise.** A study of sentence structure in pupils' themes in the four years of high-school work. Master's, 1930. Iowa.

974. **Melsian, Ruth.** Material and a method for teaching English composition. Master's, 1930. Iowa.

975. **Moran, Francis Edward.** The salvation of grammar. Master's, 1931. Notre Dame.

976. **Muncie, Ind., Public schools.** Appraisal of language usage achievement. 1931. (Bulletin no. 65.)

977. **Muriel, Sarah Evans.** The presentation of grammar in senior high school composition textbooks. Master's, 1931. Peabody. 25 p. ms.

An analysis of current practice in the teaching of grammar to pupils in the last years of high school, as it is revealed in eight composition textbooks published in the United States from 1925 through 1930. Findings: The range in proportion of space devoted to grammar is from 0 per cent to 50 per cent, with the average amount for the seven books 18 per cent; the objectives are the elimination of language errors, the mastery of sentence structure, and the artistic use of grammatical information; inductive and deductive methods are used about equally; a double terminology is often used; the sentence is the unit of instruction; rules and examples are used more extensively than any other teaching device; the average amount of space devoted to exercises is 41 per cent; the subject matter of the exercises is that of the pupils' everyday life; some provision is made for individual differences; slight attention is given to oral exercises; only one text provides diagnostic tests.

978. **Nelson, Mary Bertina.** The correlation values of English in the secondary school. Master's, 1931. Stanford.

979. **New York (State) Education department.** Rural school syllabus committee. Handbook for rural elementary schools. English group. Albany, N. Y., University of the State of New York press, 1930. 212 p. (Curriculum bulletin no. 1.)

980. **Norton, Winona.** Inventory of errors in sentence structure. Master's, 1931. Denver.

All texts in high-school rhetoric and grammar published in the past 20 years were checked for types of sentence errors mentioned. A test containing 300 items was constructed giving examples of all errors found. The test was given to grades 7, 10, and 12. Errors were classified and listed according to difficulty.

981. **Nowlin, E. W.** The vocabulary of sixth-grade children's themes. Master's, 1931. Colo. St. T. C.

This study is intended to be an aid in determining the words used most frequently by elementary-school children in writing, grade by grade.

982. **Olsen, Effie May.** A study of group activity versus individual effort in sixth-grade English and arithmetic. Master's, 1931. Southern California. 51 p.

983. **Patterson, Valma M.** Reliability and validity of certain techniques of tests in English composition. Master's, 1931. Ohio. 91 p. ms.

An intensive investigation of punctuation usage in proof-reading tests and free writing by a limited number of high school and college students. Results indicate that: (1) The opportunities for specific usages in proof-reading tests are not sufficient to indicate students' ability in punctuation, and (2) the relation between performance in proof-reading tests and free writing appears very loose. The statistical method used here promises interesting results for further study of the second conclusion.

- *984. Pease, George Kent. A study of the grammar usages and errors and their treatment from seventh through twelfth grades in Woodbridge (N. J.) high school. Master's, 1931. New York. 95 p. ms.
A survey of written composition in the seventh through the twelfth grades, in a small high school of a typical New Jersey community. Conclusions: Study of grammar needs revision toward simplification and deletion of much teaching of nonessentials.
985. Perkins, Reba N. A program for the supervision of written composition. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)
This study attempts to analyze the material of the field, to develop a study guide or method of studying in the field addressed to the pupil, to harmonize the underlying principles of the system with accepted theory and practice in psychology and education, and to evaluate the system through experiment and diagnostic studies. A total of 812 pupils, of whom 544 were unselected college freshmen, and 268 high-school pupils of the eleventh and twelfth years, were used in the experiment. Results, expressed in terms of scale scores, show that the experimental group has a slight but consistent superiority over the control group.
986. Peters, William S. The kinds and frequency of punctuation errors in senior high school students' composition. Master's, 1930. Northwestern.
987. Philippine Islands. Bureau of education. Secondary course in English composition. (1930 revision.) Manila, 1930. 106 p.
988. Price, Helen. A series of lessons on the use of the dictionary and vocabulary building. Master's, 1930. T. C., Col. Univ. 47 p. ms.
The study covers vocabulary development for the first three grades.
989. Purdy, Rena A. Methods of using visual aids to teach primary language. Master's, 1931. Southern California. 88 p.
A compilation of specific suggestions derived from interviews with teachers and from professional reading.
990. Qualley, Lawrence E. The effect of the teaching of specific punctuation rules on punctuation usages. Master's, 1931. Iowa. 75 p. ms.
991. Ragsdale, Lydia D. The mechanical errors in the writing of college freshmen of the five state teachers colleges in Illinois. Master's, 1931. Illinois.
992. Rains, Verna Mae. A more effective method of teaching English grammar. Master's, 1930. T. C., Col. Univ. 12 p. ms. and charts.
A study of the sophomore English classes with no division of sections by methods of instruction. Findings: A diagnostic and an achievement test are necessary adequately to aid the teacher and the individual in mastering the minimum essentials of English.
993. Reed, Marian Elizabeth. The English curriculum in junior colleges. Master's, 1931. Stanford.
994. Reilly, Marie A. An analysis of abilities in English language of high-school pupils. Master's, 1931. Colorado.
995. Riddle, C. C. The vocabulary of fifth-grade children's letters. Master's, 1931. Colo. St. T. C.
The purpose of this investigation is to make a small contribution to the selection and grading of a spelling vocabulary.
996. Biley, Margaret. Relative achievements of A, B, and C classes in English. Master's, 1931. Kansas.
One hundred and sixty-six freshmen and sophomores were distributed on the usual bases employed by the school into A, B, and C sophomore groups and two freshmen B groups. Achievement as measured by certain standard tests was analyzed with reference to the several groups.
- *997. Robacker, Earl F. The relation of formal and of creative teaching to results in creative writing. Master's, 1931. New York. 77 p. ms.
The study deals with 290 cases in a controlled experiment involving junior high schools in four cities offering unusual cultural advantages. Findings: A high IQ is commensurate with outstanding creative ability and achievement in school systems where creative teaching is stressed; whereas in schools having nothing to do with creative education.

tion, there seems to be no relation between IQ and creative ability or achievement. The implication of the study is that schools of the old, (formal type are by no means living up to their educational possibilities.

998. **Robinson, Elizabeth and Lyman, R. L.** Units in English correlated with vocational guidance. Public schools, Louisville, Ky. North central association quarterly, 5: 528-34, March 1931.

A course was devised including the following units, each designed to occupy the class for one week: (1) Ideals of business; (2) characters of successful men; (3) choosing a vocation; (4) salesmanship; and (5) other vocations.

999. **Rollins, M. Florence.** A history of the teaching of English in the high school with Altoona as a type. Master's, 1931. Penn. State. 46 p. ms.

This study is based on secondhand materials as far as general history of teaching English is concerned, but Altoona history is based on school records, examination of old textbooks, and recollections of old persons in the city.

1000. **Rothenberg, Julius G.** The adaptability of progressive methods to the high schools of New York with special reference to the teaching of English. Master's, 1931. Coll. of the City of N. Y. 110 p. ms.

The writer has integrated and described progressive principles and practices, and, aided by authoritative opinion, has speculatively evaluated their adaptability to the city system. Findings: Many progressive methods are adaptable to the city system, while others are inapplicable; their introduction is slow and difficult; not all teachers are well enough equipped for progressive teaching; much progressive literature is fallacious, wildly speculative, or valueless to the public-school teacher.

1001. **St. Louis, Mo. Public schools.** English. A service bulletin to supplement the revised course of study in oral and written composition for kindergarten and grades 1 through 6. Public school messenger, 28: no. 6, September 6, 1930. 88 p. (Curriculum series.)

1002. **San Mateo, Calif. District junior college.** Probation and disqualification of students; entrance test scores second semester 1930-1931; students failing English A course; language aptitude and achievement tests; and others. 1931. 8 p. ms. (Vol. 3, no. 8.)

"This study did not undertake to discover why students fail, but to find what relation test scores and recommending units have to failure."

1003. **Sawyer, Elsie.** The comparison of a D-11-1 section of pupils in English with a C-11-1 section during the spring semester of 1930. 1930. Junior college, Pasadena, Calif.

This study, carried out in the eleventh grade in the Pasadena junior college, consisted in determining the relative ability of the two groups as determined by mental tests, a study of their work habits and attendance records, and the progress made in the respective classes.

1004. **Schlegel, Elsie S.** Size of vocabulary of junior high school pupils in written composition. Master's, 1931. Kansas.

The writing vocabularies of 262 pupils in junior high school were determined on the basis of compositions written by them in 25 minutes.

1005. **Schmeuser, Henrietta K.** An evaluation of the written compositions of 100 students of English in the West night high school. Master's, 1931. Cincinnati.

1006. **Schoonmaker, Bertha.** A comparative study of the sentence structure of pupils in the junior and senior high schools. Master's, 1930. New York. 93 p. ms.

Findings: Pupils both in the junior and in the senior high school showed an inability to make clear sentences; they failed to write unified sentences. Of 1,948 sentences written by 333 pupils in junior high school, 832 were simple, 245 compound, and 841 complex. In the senior high school, 2,318 sentences were written by 333 pupils, of which 799 sentences were simple, 476 compound, and 1,036 complex.

1007. **Semmes, Sister Catherine.** The teaching of English to foreign-born students. Doctor's, 1931. Fordham.

1008. Senour, A. C. Administration of Clapp-Young self-marking English test. East Chicago, Ind., Public schools, 1931. 10 p. ms.

A study to determine the ability of sixth-grade pupils to recognize 100 typical English errors and the relative difficulty of the errors. Findings: Percentage of error on the 100 possible errors ranged from 5 for choice between isn't and ain't, to 83 for choice between she and her as predicate nominative. Approximately one-half of the pupils failed to appreciate or recognize the need for capitalizing the first word in a direct quotation.

1009. Serenius, Carl Arnold. An analytical and empirical study of certain techniques employed in vocabulary testing. Doctor's, 1931. Iowa. 557 p. ms.

1010. Sharp, W. S. The vocabulary of fourth grade children's letters. Master's, 1931. Colo. St. T. C.

This study is for the purpose of aiding in selection and grading of a spelling vocabulary.

1011. Smith, Linda. A comparison of oral and written uses of verbs and verbals by school children. Master's, 1931. Iowa. 78 p. ms.

1012. Soper, Stanley Livingstone. A study of the group method of teaching English in the Manhattan junior high school. Master's, 1931. Kans. St. Coll. 101 p. ms.

Findings: The group method has made a uniformly favorable showing on all the tests applied.

1013. Stephens, Sara. A comparison of the achievement in English of the pupils in whose homes English is the only language spoken with those in whose homes a foreign language is also spoken. Master's, 1930. Kans. St. T. C., Pittsburg.

1014. Stoker, Dora D. and Segel, David. An inventory of secondary English usage. Long Beach, Calif., City schools, 1931. (For abstract see no. 717b.)

The Long Beach inventory test of English usage was given to 6,132 pupils in grades 7 through 14 of the Long Beach schools.

1015. Strayer, Lois Curry. Language and growth: the relative efficacy of early and deferred vocabulary training, studied by the method of co-twin control. Worcester, Mass., Clark university, 1930. p. 209-319. (Genetic psychology monographs, vol. 8, no. 3, September 1930.)

This is part of a dissertation for the doctor's degree in Yale University.

The subjects for this study were identical twins whose behavior under detailed study from the time they were a month old had been shown to be remarkably similar. The findings in the present experiment seem to indicate rather consistently in the field of language that a maturational difference of even five weeks has a definite influence on the relative effectiveness of training.

1016. Stuelke, Myrtle Viola. A comparison of an oral with a written practice method in English. Master's, 1931. Southern California. 87 p.

An equivalent group experiment with comparison of results in terms of test scores.

1017. Symonds, Percival M. Practice versus grammar in the learning of correct English usage. Journal of educational psychology, 22: 81-95, February 1931.

1018. ——— Real topics for writing and speaking. School review, 38: 765-75, December 1930.

1019. ——— and Daringer, Helen F. Studies in the learning of English expression: Sentence structure. Teachers college record, 32: 50-64, October 1930.

1020. Thomas, Charles Swain and others. The junior and senior high school curriculum in English. Cambridge, Mass., Harvard university, 1930.

A very full discussion of the principles and practices in secondary-school English.

1021. Tormey, Gertrude Josephine. Individual instruction vs. class instruction in English grammar and punctuation in the tenth grade. Master's, 1931. Washington. 85 p. ms.

Findings: Individual method is not superior to class instruction method of teaching English grammar in the tenth grade.

1022. **Troutt, Madge M.** Written vocabulary of children. Master's, 1931. Chicago. 262 p.

A study of 110,000 words from the eastern section of the United States. The findings were along the line of geographic difference, increase in grade usage, and difficulty.

1023. **Trundy, Helen M.** A study of obscure personalities as revealed through creative composition. Master's, 1930. New York. 51 p. ms.

The study deals with the compositions of three first-term classes at Alexander Hamilton high school—all repeating English 1. It showed that pupils' interests and experiences are fruitful sources of live composition material. A course of study in English was devised to guide the natural desire for self-expression.

1024. **Tucker, Frances Lorsey.** A study of the prevailing practice in teaching composition in grades 7, 8, and 9. Master's, 1931. Wichita.

1025. **Tyre, Amy.** Junior high school pupils and the newspaper vocabulary. Master's, 1931. Nebraska. 93 p. ms.

A study of 10,000 running words in front-page articles; comparison with Thorndike list.

1026. **Van Horn, Alta.** Revision of grammar material in Bulletin B, State department of education of Nebraska. Master's, 1931. Nebraska. 85 p. ms.

1027. **Weersing, Bata Bernis.** The organization of thought as an aim in teaching English composition. Master's, 1931. Southern California. 128 p.

A systematic study of the evidence submitted by various leaders as to the primacy of organization of thought as an aim in composition, followed by a brief treatment of materials, methods, etc., designed for the realization of this aim.

1028. **Westacott, Nellie Emma.** Reorganization of 9A grammar based on the Morrison theory of unit learning. Master's, 1931. Wichita. 267 p. ms.

1029. **Widney, Mattie Celeste.** The semester and unit-period plans of high school English teaching in Texas. Master's, 1931. Oklahoma. 51 p. ms.

1030. **Wiley, Lulu May.** The words in second grade children's writings. Master's, 1931. Oklahoma. 46 p. ms.

1031. **Wilkins, Georgine L.** A comprehensive summary of freshman English in colleges. Master's, 1931. N. Y. St. Coll. for Teach. 57 p.

Facts from a number of sources are brought together in this summary, which deals with such problems as English requirements for admission to college and university, the articulation of courses in English, and present tendencies in freshmen English courses.

1032. **Wilkinson, Lelia Alcott.** A study of students taking English 0 at the University of Nebraska. Master's, 1930. Nebraska. 48 p. ms.

Findings: English 0 students at the University of Nebraska for the most part do not succeed in courses in English following the 0 course, nor do they succeed in other courses, such as science and foreign language.

1033. **Winter, Sarah A.** Errors in English and non-English themes in junior high school. Master's, 1931. Nebraska. 91 p. ms.

A study of written work of 337 pupils—matched variables.

1034. **Wolfe, Dael Lee.** The relationship of linguistic structure to analogic change in artificial linguistic material. Doctor's, 1931. Ohio. 40 p. ms. (Abstract reprinted from Abstracts of doctor's dissertations, no. 6, Ohio State university, p. 380-91.)

1035. **Wormley, G. Smith.** A controlled experiment in the teaching of English grammar. Master's, 1930. T. C., Col. univ. 15 p. ms.

The purpose of the study was to find out if better results in the use of certain verb forms are obtained by devoting definite periods to formal drill than by emphasizing the forms only as they occur in the daily language use. Better results were obtained with the type of drills given than through mere emphasis on the correct usage during the daily classroom activities.

See also 223, 207, 543, 575, 584, 599, 627, 630, 642-644, 736, 1079, 1123, 1773, 2206, 2378, 2943, 3317, 3344, 3364, 4051, 4343.

ENGLISH LITERATURE

1036. Beagle, Boyd M. An experiment to determine the value of technical analysis in teaching appreciation of poetry. Master's, 1931. Penn. State. 33 p. ms.

Sixty-four high school pupils were paired for learning ability on the basis of intelligence quotients. Considerable technical analysis of the type advocated in Hayward's "The appreciation lesson" was used with the experimental groups and very little such analysis with the control group. Differential attainment was measured by the Abbott-Tabue test and the Lagassa-Wright tests. Advantages were invariably with the experimental group (the one having the technical analysis) by differences that were, on the whole tests, more than three times their standard error.

*1037. Biderman, Muriel N. Content and method of literature books used in the secondary schools of New York City from Colonial period to 1925. Master's, 1931. New York. 54 p. ms.

The purpose of this study was to determine whether or not the study of literature in the secondary schools from the colonial times until 1925 had as its aim the development of grammatical sentence structure, or the development of the ideals and ideas and problems of the people, as found in the literature. Findings: Literature as taught in the past was grammar, not literature, for literature aids in the development of solving and judging of life problems; grammar does not.

*1038. Boynton, Mary Louise. A study of the vitalization of the teaching of literature. Master's, 1931. New York. 83 p. ms.

This study is based on the writer's experience as teacher and student; reports from 40 college students, representing 12 colleges, and from 100 high-school students; a mirroring of class rooms in California, Ohio, and New York State, and a consideration of extracts from literature on the subject. Conclusions: Young people's interest in literature comes first as a result of the personality of the teacher; second, through careful selection of material; third, through presentation. Young people's dislike for literature comes from too much notebook work; too much ground covered in too short a time; uninterested teacher; and a tendency to use literature to teach lessons rather than train emotions.

1039. Burton, A. J. An experiment in class size in English literature. Des Moines, Iowa, Public schools [1930]. 4 p. ms.

The problem was to answer the question "What is the effect of class size on pupil achievement in the study of 'Julius Caesar' as far as it can be measured by teachers' estimates and objective tests?" Findings: From an examination of the achievements of the pupils in the six classes studied, there is no evidence that one size is outstandingly more efficient than any other size where the technique of instruction is not modified to meet special conditions.

1040. Carroll, Ella Augusta. How to cultivate in children a love for literature. Master's, 1931. Marywood. 40 p. ms.

*1041. Choate, Ernest Alfred. The relation of the literary background recommended by courses of study to that found in current literature; a comparison of the literature advocated by courses of study in grades four to twelve in the public schools of the United States with that alluded to in the most widely read literature in the United States. Doctor's, 1930. Pennsylvania. Philadelphia. 1930. 72 p.

The purpose of this study was to investigate the relationship between the inclusion of literature in the curriculum and the reading of the general public. The inquiry aims to ascertain the type of literary background the courses of study in literature of the public schools recommend, and to compare it with the literary background the great mass of readers meet.

1042. Davis, Ruth Etta. A survey course in English and American literature with emphasis on historical and social backgrounds. A teaching course to be given in a normal school. Master's, 1931. Boston univ.

1043. Dickinson, M. C. Implications of Dewey's philosophy found in the current publications on the teaching of literature. Master's, 1931. Ohio. 112 p. ms.

1044. East, Mrs. Margaret A. Biography for the college freshman. Master's, 1931. Colo. St. T. C.

The study tried to determine by means of critical study, and student rating, the value of specific biographies in relation to their use in college freshman English classes, and to urge a wider use of the biography as a literary type. The study presents a list of biographies suitable for the use of college freshmen.

1045. **Fall, Anedra Maybel.** Deficiencies in knowledge of English literature as shown by the Iowa academic meet test of 1930. Master's, 1930. Iowa.

1046. **Fuller, Mabel Blanche.** The value of the study of recent poetry in the junior high school. Master's, 1931. Boston Univ.

1047. **Graham, Alpha.** A comparative study of two methods of presenting poetry to children in grades three, six, and nine. Master's, 1931. Pittsburgh. 65 p. ms. (For abstract see no. 715.)

In an attempt to determine whether it is better to read poetry to children or to permit them to read it for themselves, an experiment was made with groups of children in grades three, six, and nine. Two groups were selected in each grade by equating pupils on a basis of the "New Stanford achievement" composite reading scores. Neither form of presentation showed any marked superiority over the other.

1048. **Higdon, Lena Franklin.** Teaching of poetry according to English journal, vols. 1-18. Nashville, Tenn., George Peabody college for teachers, 1931. 248 p. ms.

Survey of articles of first 18 volumes of the English journal, dealing with the teaching of literature in general and the teaching of poetry in particular, from the viewpoint of: (1) Objectives, (2) principles, (3) technique, (4) equipment. Findings: From 1912 to 1918 the teaching of English underwent a gradual development. The objectives of 1912, including engendering appreciation of the form of poetry, were gradually changed to an objective of engendering the development of appreciation—the emotional reactions which are guided by the intelligence.

1049. **James, Jean E.** An historical study of the place of poetry in secondary courses in English prescribed by the University of the State of New York. Master's, 1931. N. Y. St. Coll. for Teach.

From various sources, such as reports of Regents' convocations, syllabus revisions, and Regents' examinations, facts were gathered for this study, the nature of which is indicated by the title. Changes in educational theory supporting the teaching of poetry are traced, and ways in which these changes were followed by changes in practice, are shown.

1050. **Jenkins, Lily S.** A study of some of the literature on creative expression through literature in the junior high school. Master's, 1931. Washington Univ.

1051. **Landt, Georgetta Shippy.** A comparative analysis of seven junior high school literature texts. Master's, 1931. Oklahoma. 157 p. ms.

1052. **Levinson, Rose.** The development of the objectives of literature teaching in the secondary schools. Master's, 1931. Brown. 75 p. ms.

A survey of the professional literature, periodicals, textbooks, treatises, and reports of committees published during the past 50 years to discover by statement or implication the conception of the purposes of literature teaching held by educational leaders and writers. In turn, instruction in literature during the nineteenth century has stressed grammatical corrections, rhetorical power, and appreciation. During the decade 1910 to 1920 the aims of literature teaching were becoming more largely social and civic and less technical and aesthetic. The present trend is to attempt to formulate specific and definite objectives such as development of reading skill and inculcation of social and dramatic ideals.

1053. **Morrison, Antoinette.** Technique for teaching the novel. Master's, 1931. Southern California. 123 p.

An outline of the principal methods of solving certain practical problems facing the teacher of the novel, derived from interviews with teachers and a study of the professional literature in the field.

1054. **Mosburg, Gladys E.** An analysis of ninth grade literature texts. Master's, 1931. Peabody. 123 p. ms.

Nine literature books were studied to investigate the policies of editors in editing their texts to determine the amount of prose and poetry used, and the type of study helps found. It was concluded that editors choose a wide variety of literary material with a

balance of standard classics and fresh modern readings; that 67 per cent of present texts are devoted to prose selections and 33 per cent to poetry; that, of 417 authors listed, 124 have a page-space of 10 or more pages devoted to them; that of these 417 authors, 38 have five or more selections listed; that, of 814 different selections, 69 occur more than once; and that every author utilizes study helps, there being a variety of 27 different and distinctive helps found in the series.

1055. Myers, Helen M. Language of Sir Walter Scott. Master's, 1931. Michigan.

*1056. Myers, Marian. How the study of English can reinforce the guidance of ninth graders. Master's, 1931. New York. 38 p. ms.

The study takes up various phases of literature and oral and written English as used in junior high schools in South Orange, N. J. Findings: Autobiographies, extensive reading, school newspapers and magazines, in fact any English not too formalized and looking toward the student's future, is valuable guidance material when presented inspirationally.

1057. Nissly, Mary Louene. The implications for the teaching of poetry of the variant theories of mind. Master's, 1931. Ohio. 86 p. ms.

The study involves the theories of mind, the substantive-mind theory, mental-states theory, behaviorism, and pragmatism, and their implications for the teaching of poetry in the schools.

1058. Peery, Marguerite. A critical study of classroom practices and methods in teaching American literature. Master's, 1931. Southern California. 192 p.

1059. Peterson, Charlotte Montague. An analysis of objective studies relating to the teaching of English literature in secondary schools. Master's, 1931. Southern California. 200 p.

The findings relate to all the more important aspects of the problem, such as aims, curriculum organization, course content, pupils' interests in reading, teaching methods, and teacher preparation.

1060. Pledger, Maude Myrtice. Children's interests as revealed by their poetry. Master's, 1931. Peabody.

Analyses of 1,670 poems written by children. Findings: Children's chief interests as shown by poetry were nature, people, and pleasant personal experience.

1061. Rogers, Vera Mayme. Extensive reading procedures in the teaching of literature. Master's, 1931. Southern California.

1062. Scott, Wilma. Social backgrounds for the study of English literature. Master's, 1931. Colo. St. T. C.

The purpose of the study was to determine the social condition of the English people during the period from 1066 to 1400 A. D.; to find out how the people lived, what they ate, how their goods were manufactured, and all other facts concerning their home life, in order to add new and increased interest to the study of English literature.

1063. Shelby, Huey Lee. A study of ten volumes of college poetry. Master's, 1931. Peabody. 142 p. ms.

An examination of the subject matter and content of 10 volumes of poetry, written by college students. Findings: Versatility in subject matter and form and an almost complete absence of radicalism in style and thought are the chief characteristics of the poetry examined.

1064. Shreves, Anne E. Poetic values and children's choices. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to enrich the curriculum and to improve teaching method in the elementary school in the field of poetry.

1065. Simmons, Jessie J. American poetry since 1900 for senior high school. Master's, 1931. Colo. St. T. C.

This study aims to determine, in a manner as objective as practicable, for use in the senior high school, a list of American poems since 1900 which are most representative of our changing times and can be included in approximately 10 lesson units.

1066. **Smith, Betha C.** Contribution of literature in secondary school program toward development of child as a social being. Master's, 1931. Ohio. 112 p. ms.

The different types of literature were considered and the possibilities of each for meeting the demands of present-day changing society.

1067. **Snook, Mildred D.** A study in comprehension difficulties of students in the literature studied in grade 11. Master's, 1931. Syracuse.

1068. **Stephens, Eleanor.** The social background for the study of English literature. Master's, 1931. Colo. St. T. C.

This investigation attempts to determine the social background of the people of England during the period from 700 to 1062 A. D., in order to add new and increased interest to the study of English literature.

1069. **Stewart, Annarah L.** A survey of recognized educative values and methods of stimulating creative verse-writing in secondary schools and colleges. Master's, 1931. Colo. St. T. C.

It is the purpose of this investigation to prepare a book of methods for teachers of English in secondary schools and colleges by making available in unit form scattered information from books and periodicals and unpublished methods from teachers in the field.

1070. **Stickle, Doris Louise.** Analytic and synthetic methods of teaching literature. Master's, 1931. Chicago. 95 p. ms.

Eight selections of literature (prose and poetry) were taught to three eighth-grade classes. Findings: (1) Teaching method influences comprehension slightly; (2) comprehension influences appreciation to some extent; (3) method of teaching greatly influences appreciation; (4) the synthetic method proves most advantageous to the average class.

1071. **Swisher, Florence.** An approach to literature through the principles of the fine arts. Master's [1931]. T. C. Col. Univ. 31 p. ms.

This study included the teaching of literature as an art; extensive study of literature; one year's study of the fine arts; detailed study of six novels and twelve volumes dealing with the various forms of fine art. Findings: All the forms of the so-called fine arts have as the fundamental principle the same approach to design and composition. Literature should be studied as an art and not as a science.

1072. **Thel, Caroline Hanna.** A comparative study of two methods in the teaching of the House of seven gables. Master's, 1931. Pittsburgh. 88 p. (For abstract see no. 715.)

In this experiment two classes of eleventh-grade students were chosen. In the first section, group A, were 16 girls and 16 boys; in the second section, group B, there were 18 boys and 18 girls. Both classes ranged in age from 15 to 19 years. Group A was taught by the objective-test method and group B by the recitation method. The results of the final objective test showed a higher average of appreciation for group B recitation method.

1073. **Williamson, Luella.** Criteria for selection and placements of long prose fiction in the high-school English course. Master's, 1931. Ohio. 75 p. ms.

In this study the modern theory of interest was discussed, the characteristics and interests of adolescence were described, then numerous novels were suggested for various grades which in the view of the criteria might well be placed in the high-school English course.

1074. **Ziegler, Caroline Louise.** The value of test-determined teaching in two elements of literary appreciation. Master's, 1931. Johns Hopkins.

See also 277, 785-786, 889, 8538, 3538, 4322; and under Libraries and reading.

FOREIGN LANGUAGES

ANCIENT LANGUAGES

1075. **Brown, Arthur J.** Word list of Latin proper names. Philadelphia, University of Pennsylvania [1931]. 36 p. ms.

Word count of Latin and English classics to find proper names most widely used. Fifty proper names are found of measurable reliability as to frequency and range.

1076. Chicago, Ill. Board of education. A course of study in Latin for junior and senior high schools. Grades 8-9. 1931. 76 p. (Bulletin L-L89.)

1077. Cotham, Margaret. Texas high schools. The teaching of Latin. Austin, Texas State department of education, 1931. 98 p. (Bulletin, vol. 7, no. 8, no. 291, August 1931.)

1078. Flanigan, M. Gonzaga. The construction of practice exercises and study instruction for first-year Latin. Master's, 1931. Iowa. 58 p. ms.

1079. Gall, Herman O. A study of the effect of first-year Latin on English usage. Master's, 1931. Washington Univ.

1080. Hunsberger, Byron K. Errors in Latin word knowledge. Doctor's, 1931. Pennsylvania. 750 p. ms.

Study of types of errors in multiple choice and recall forms of same Latin test of 150 words. Conclusions: Pupils are prone to respond to superficial resemblances of words; more are misled by resemblance to other Latin words than to English words.

1081. Huntsberger, Mrs. Elizabeth and Grinstead, Wren Jones. An experimental study of the value of the functional method in beginning Latin as compared with the traditional analytical method. Philadelphia, University of Pennsylvania [1931].

A study of knowledge of vocabulary, syntax and inflection, and of comprehension ability, attained at end of the first half semester, based upon objective tests given to 150 eighth-grade students in Springfield, Mass.

1082. Huse, Olive M. The influence of the Classical investigation on first-year textbooks in Latin. Master's, 1931. Chicago. 80 p. ms.

Comparison of 12 outstanding Latin books written before investigation and 12 written since. Findings: Many changes have been made in Latin books, which are probably due in large part to the Classical investigation.

1083. Johnson, Isabelle Lavinia. A study of the dative of purpose in Caesar. Master's, 1931. Peabody. 67 p. ms.

This study was made of the seven books of the Gallic War and the three books of the Civil War. All material available was used which pertained to the dative of purpose, such as similar studies made by others previously, grammars, and texts. Comparison and judgment of all this material was then made in order to reach the purpose of this thesis: to formulate a more exact, and therefore a more helpful, rule for the dative of purpose to be used by first-year and second-year Latin pupils.

1084. Johnsonius, A. L. Trends in the teaching of Latin. Master's, 1931. Chicago. 75 p. ms.

An analysis of 16 first-year Latin texts over the period from 1895-1931 showed definite trends to make Latin practical rather than formal and disciplinary.

1085. Kennedy, Leo R. Retention of certain Latin syntactical principles by first and second year Latin students after various time intervals. Doctor's, 1930. Nebraska. 298 p. ms.

The Pressey test in Latin syntax was given to high-school students at various stages in their study of Latin, and was repeated after intervals varying from three months to a year. A very complete analysis of retention was made for each pupil and for each item of the test. A considerable degree of retention was found.

1086. Knight, Blanche. Latin as viewed by Latin students in Norfolk high school. Master's, 1931. Nebraska. 56 p. ms.

Questionnaire study of why 463 high school students had studied Latin; why 223 of them had not taken all the Latin available in the Norfolk, Nebr., high schools; and whether, if the opportunity were presented again, these 463 students would, or would not, elect Latin again, and why.

1087. Ladd, Robert Lee. A study of the Latin curricula of certain teachers' colleges. Master's, 1931. Peabody. 76 p. ms.

A study was made of catalogues from 49 4-year State teachers colleges, requirements of State departments of education, standards of the North Central association of colleges and secondary schools and the American association of teachers' colleges, the recommendation of the Classical investigation, and certain recent Latin textbooks. It was found that

of the 35 teachers colleges which provide for a major in Latin, 34 have the facilities for the training of secondary teachers of Latin, according to the state laws for the certification of teachers, the standards of the North Central association of colleges and secondary schools, the standards of the American association of teachers colleges, and the recommendations of the Classical investigation. The poorly equipped prospective secondary teacher will be among those graduates who complete a minor or less in Latin. A better standard of state certification laws is the greatest immediate need to insure definite and high quality of training in the teaching fields of prospective teachers of the general or "blanket" certificate. ✓

1088. **Lee, Athena Jones.** An experiment in classroom procedure in exploratory Latin. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was to try a classroom procedure which had been suggested as one of a group of procedures connected with a plan for developing competence in thinking. Four groups, classified according to mental age and treated as two pairs, were used in the experiment. The group of higher mental age was the control group of each pair. A questionnaire was used with the pupils to learn from the control groups how they study, and from the experimental groups both how they study and whether the experimental method used caused increased amount of study showing a greater degree of self responsibility or a less amount of study because the teacher did not see the work. The results favored the experimental side consistently, indicating that common work with individual rating of results has merit as a classroom procedure, bringing learning by imposing on the student the necessity of thinking for himself.

1089. **Lee, Josephine Lillian.** An achievement test for second year Latin. Master's, 1930. Indiana. 99 p. ms.

The problem was to develop an achievement test for tenth grade Latin in the high schools of Indiana which will meet the needs of the present program in second year Latin, supplement the test for ninth grade Latin already developed, and conform to the qualities required for standard achievement tests.

1090. **Lincoln, Abraham Lucius.** Individualized instruction in first year Latin. Doctor's, 1931. Rutgers. 158 p. ms.

1091. **Linkfield, Hazel Frances.** The construction of objective tests for first year Latin. Master's, 1931. Wisconsin.

1092. **McCormick, Elizabeth.** Methods of teaching Latin vocabularies. Master's, 1931. Penn. State.

This is a comparison between the drill method of teaching vocabularies and the incidental method. A correlation was worked out between vocabularies and general appreciation of Latin.

1093. **Murphy, Arthur James.** Latin in the junior college. Master's, 1930. Brown.

1094. **Pace, Virginia.** Correlation between two-year Latin vocabulary and the Spanish word book. Master's [1931]. Peabody. 334 p. ms.

This study was made to determine the advisability of a pupil studying two years of Latin in high school before studying Spanish. Findings: 57 per cent of the Spanish and Latin words used were alike etymologically and semantically. From these figures it seems that Latin is a worth-while foundation for Spanish.

1095. **Pear, Aldean.** Critical study of certain first-year Latin textbooks. Master's, 1931. Michigan.

1096. **Rainey, Dorothy Genevieve.** The cumulative effect of figures of speech on stylistic beauty and power in Vergil's Aeneid. Master's, 1930. Iowa.

1097. **Reading, Pa. Public schools.** Prognosis study of pupils electing Latin. 1930. 2 p. ms.

1098. **Schmitt, Brother Oswald.** A controlled experiment on the teaching of the Latin noun and verb forms by the formal and the informal method. Master's, 1931. Notre Dame.

1099. **Waterman, Florence.** Studies and tests on Virgil's Aeneid. Cambridge, Mass., Harvard university press, 1930. 122 p. (Harvard bulletins in education, no. 17.)

1100. William, Brother A. Latin—the true basis of liberal education. Master's, 1931. Boston Coll. 71 p. ms.

1101. Woerner, Myrtle Frieda. A study of the teaching of junior high school Latin. Master's, 1930. Indiana. 68 p. ms.

1102. Woodford, Burton Hadley. Trends in Latin from the early middle ages to 1931. Master's, 1931. Wichita. 166 p. ms.

1103. Woodring, Maxie Nave and Sabin, Frances E. Enriched teaching of Latin in the high school. A source book for teachers of Latin listing low cost illustrative and supplementary materials. New York City, Teachers college, Columbia university. 1930. 144 p. (Enriched teaching series, no. 6.)

1104. Wright, Wendell W. A study of the Indiana Latin achievement tests. In High school principal's conference, Indiana university. Proceedings, 1930. p. 44-61. (Indiana university bulletin, vol. 7, no. 2, November 1930.)

The test was used by a large number of schools at the end of the 1929-30 school year. Approximately 400 pupils' papers were secured from classes in small, medium, and large sized schools selected at random. The average per cent of achievement on all of the 288 items was 51 per cent.

See also 584.

MODERN LANGUAGES

1105. Abramowitz, Noah. Trend in the experimental studies in modern foreign languages. Master's, 1931. Coll. of the City of N. Y. 171 p. ms.

Survey of experimental studies in the literature (1917-June 1930) dealing with the objectives, content, methods, and prognostic and achievement testing in modern foreign-language instruction.

1106. Baron, Samuel. The psychological basis of vocabulary teaching in foreign-language instruction. Master's, 1931. Coll. of the City of N. Y. 96 p. ms.

Formulation of psychological principles involved in the learning of a foreign language. The author applies these principles specifically to vocabulary instruction. Conclusions: (1) The elementary student inevitably reinterprets foreign-language material in terms of established linguistic habits and symbolic processes in his mother tongue; (2) such unconscious translation is the only means by which he comes to understand a foreign language; and (3) the real nature of this implicit process must be understood by the teacher in order to make his teaching most effective.

1107. Bewley, Ruth Lynette. Spanish course of study for the Everett high school. Master's, 1931. Washington. 56 p. ms.

The study includes objectives, procedure, and content of Spanish I, II, III, and IV.

1108. Booth, Russell Brown. Status of French in Georgia accredited high schools. Master's, 1931. Peabody. 89 p. ms.

From a survey of public accredited high schools of Georgia to ascertain the status of French in each, it was found that French, Spanish, and German are taught, but that French is more prevalent than either of the other two languages.

1109. Brayton, Laura. A survey of the existing conditions in regard to modern-language placement. Master's, 1931. Colo. St. T. C.

The purpose of the study was to determine the existing conditions in the placement of modern languages in public schools.

1110. Brown, Floy Evelyn. Laboratory exercises for Las primeras lecciones de Español. Master's, 1931. Peabody. 60 p.

1111. Buda, Robert. A French cultural test. Master's, 1931. Coll. of the City of N. Y. 58 p. ms.

The author constructed a French cultural test and administered it to several high school and college French classes. Although cultural information was obtained only incidentally in the classroom, the test differentiated between those who studied French for a longer or shorter period of time. In college and high-school classes the test differentiated between the 1½-year and the 4-year groups.

1112. **Cheydleur, Frederic D.** A preliminary report on the use of placement tests in modern languages at the University of Wisconsin, 1928-1930. *Modern language journal*, 15:262-80, January 1931. (Reprinted.)

The tests used in modern languages at Wisconsin in 1928 and 1929 for placement purposes were the American council alpha tests in French, Spanish, and German. The French form, which resembles the other two, is made up of four parts: A vocabulary section of 75 items of the multiple-choice type and based on Henmon's 400,000 word count; a grammar section of 50 items; a silent reading section consisting of seven carefully graded selections with 28 questions on them to be answered in English to test comprehension; and a free composition part, based on a picture, to be corrected or scored by means of a composition scale. The history of 395 entrants in French, 65 in Spanish, and 71 in German, all of September 1928 was followed through for one semester to learn the value of the tests. The predictive value of the tests was established. The final grades of the students showed that their immediate classification by the results of the American council alpha French test administered in September 1928 would have been justified.

1113. **Dorff, Esther Aina.** An analysis of the professional literature relating to the teaching of French. Master's, 1931. Southern California. 75 p.

A review of books, periodicals, and other literature, relating to the teaching of French in the United States, including such aspects as its history, aims, and values, methods of instruction, course content, testing procedures, and teacher training.

1114. **Eckstat, Charles.** Reading as an objective in the teaching of French in secondary schools, with special application to New York City. Master's, 1931. Coll. of the City of N. Y. 46 p. ms.

A survey of recent investigations into the objectives, results, and the importance of reading in modern-language teaching. Conclusions: A 2-year language course can give, at best only a reading knowledge of the language studied.

1115. **Eisenlohr, Henrietta S.** Laboratory exercises for Vos's Essentials of German. Nashville, Tenn., George Peabody college for teachers [1931]. 60 p. ms.

Conversational exercises were made to facilitate the learning of the German language.

1116. **Fegtly, Edna L.** Production of a graded reading list for high school German classes. Master's, 1931. Iowa. 26 p. ms.

1117. **Fife, Robert Herndon, comp.** A summary of reports on the modern foreign languages, issued by the Modern foreign language study and the Canadian committee on modern languages, with an index to the reports. New York, The Macmillan company, 1931. 261 p.

This summary is in no wise intended to take the place of the reports of the modern foreign language study and the Canadian committee on modern languages, but to indicate their character and to direct those whose time is limited to the topics of their particular interest. After an account of the organization and progress of the inquiry, an effort is made to give a brief analysis of each of the volumes, and to show the contribution which each makes to our knowledge of present conditions in modern-language teaching and to their improvement.

1118. **Fontaine, Julia Belle.** An analysis of the Columbia research bureau French test with a view to shortening it for more effective use at Northwestern university. Master's, 1930. Northwestern.

1119. **Graham, Verda Ruth.** The cultural content of elementary Spanish readers commonly used in high schools. Master's, 1931. Colorado.

1120. **Grebanier, Karl J.** Reading comprehension in French and its possible measurement. Master's, 1931. Coll. of the City of N. Y. 102 p. ms.

Development and measurement of reading comprehension in French. A sample test in measurement of reading comprehension was constructed. Conclusions: The modified direct method seems to be best for the teaching of reading. There are certain types of questions which are very common in reading lessons and measurement. The frequency of occurrence in the vocabulary of the text and class work is important.

1121. **Grover, C. C.** Oakland classification test in French, Part I—Comprehension. Oakland, Calif., Public schools, 1931. 6 p. ms.

1122. Grover, C. C. Oakland classification test in Spanish, Part I—Comprehension. Oakland, Calif., Public schools, 1931. 5 p. ms.

1123. Hill, Margaret E. Construction and analysis of tests in French covering first three years of the Cleveland plan of teaching French. Master's, 1931. Western Reserve. 137 p. ms.

1124. Hood, Helen Vander Veer. A report on the American council Spanish test as used with B10 Spanish classes. Alhambra, Calif., City schools [1930].

The American council Spanish test was given to all B10 Spanish classes in May 1930. Findings: The B10 class showed improvement over previous classes in vocabulary and grammar, but it was still below standard in silent reading.

*1125. Huse, Howard Russell. The learning of foreign languages. Doctor's, 1931. Chicago. Chicago, Ill., University of Chicago libraries, 1931. 19 p. (Reprinted from "The Psychology of foreign language study," University of North Carolina press, Chapel Hill, 1931.)

The study shows that there is no present agreement universalized in practice as to what to teach; there is no agreement and little scientific information as to how best to teach any details of the subject; a determination of these points has been complicated by dozens of different aims. The direct values are relatively unimportant; the indirect values are uncertain of attainment, and not necessarily dependent on the subject matter itself.

1126. Kansas. State department of education. Course of study for high schools. Part 6, Foreign languages. Topeka, 1930. 36 p.

1127. Lavrischeff, T. I. and Rutledge, E. E. Studies in some phases of teaching foreign language in some of the Oakland public schools. Oakland, Calif., Public schools, 1931. (For abstract see no. 717b.)

The study shows that teachers of foreign languages are well qualified; and that their average length of teaching experience is 10½ years.

1128. Legall, Mrs. Evangeline. Correlation between various foreign languages and English, with intelligence held constant. Master's [1931]. Penn. State.

A study of at least 500 cases at Pennsylvania State college.

1129. Mead, Bernice C. Correlation of certain non-intellectual traits with achievement in high school French. Master's, 1931. Ohio Wesleyan.

A study by simple correlation of achievements, measured by American council beta French test; of traits measured by Woodworth-Mathews personal data sheet; and Pressey X-0 test. Findings: Two low positive and one negative correlation.

1130. Meade, Ruth Elizabeth. Preparation of supplementary reading material for first-year French. Master's, 1930. Iowa.

1131. Mitchell, Helen Elizabeth. Scaled achievement tests for the scientific method in beginning French. Master's, 1931. Peabody. 131 p. ms.

The study involved the construction of objective graded and scaled tests of the completion-sentence type to provide adequate measurements of achievement in first-year French grammar. These tests comprehend the contents of Part I, La famille Dupont and first French book, by Louis Marchand. They include 25 tests of the completion-sentence type, their retests, and keys for objectivity of scoring.

1132. New York (State) Education department. Tentative syllabus in modern foreign language. Albany, N. Y., University of the State of New York press, 1930. 138 p.

1133. Newton, Pauline Lydia. The status of modern languages in the junior colleges of Kansas. Master's, 1930. Kans. St. T. C., Emporia. 112 p. ms.

A survey of the status of modern languages in the junior colleges of Kansas.

1134. Osborne, Florence Manley. A study of the training and classroom methods of teachers of French in the secondary schools and junior colleges of California. Master's, 1931. Southern California. 92 p.

1135. **Parker, Jessie Allen.** An investigation of the progress in the comprehension of French through silent reading. Master's, 1931. North Carolina. (For abstract see no. 710.)

The American council alpha French was given to the three sections of freshman French at Campbell college. Sections A and C were controlled sections and were taught by the oral-translation method. Section B was the experimental section and was taught by the silent-reading method. The results showed that in the vocabulary test the experimental section made the greater gain. In the grammar test, and the silent-reading test, the controlled section made the greater gain.

1136. **Pennsylvania.** Department of public instruction. Courses of study in modern languages. French, German, Spanish. Harrisburg, 1930. 71 p. (Bulletin 55.)

1137. **Rosenfelder, Fannie.** An experiment in direct method. Louisville, Ky., Board of education, 1931. 1 p. ms.

Findings: The interest of the direct-method class in the desire to speak the language was greater than that of the other French classes.

1138. **Ross, Maurice B.** Spanish tests for the H9 grade. San Diego, Calif., City schools, 1931. 4 p. ms.

A study of articulation in the teaching of Spanish in San Diego city junior and senior high schools.

*1139. **Sarpmartino, Peter.** Improvement curves in the comprehension of printed French and in the acquisition of French vocabulary. Doctor's, 1931. New York. 231 p. ms.

The purpose of the study was to establish learning curves in significant phases of language learning. Findings: A plateau was found during the first five weeks or so of each semester; progress was usually steady thereafter; with an upward spurt during last two weeks.

1140. **Sawder, Leta.** Gradation of six Spanish texts. Master's, 1931. Peabody. 63 p. ms.

The following texts were used: Chispitas, Amalia, El Capitan Veneno, Un Verano en España, José, and Marianela. Findings: The texts ranked as listed above according to the number of new words in the vocabulary beyond first 3,000.

1141. **Scott, Rebecca Davis.** Laboratory exercises for Cours pratique de français pour commercants (De Sauze). Master's, 1931. Peabody.

It was found that laboratory exercises consisting of oral-visual dialogue drills to accompany first lessons will result in a high percentage of effective students.

1142. **Smith, Lula.** Laboratory exercises for Camerlynck's France: Première année de Français. Master's, 1931. Peabody. 48 p. ms.

The exercises are based on the vocabulary and grammar contained in the text. They are to aid the study of beginning French and to improve pronunciation, conversation, and grammar.

1143. **Stinebaugh, Virgil, and Hussey, John S.** Tentative courses of study in modern languages for the secondary schools in Indiana. Indianapolis, Ind., State department of public instruction, 1930. 113 p. (Bulletin no. 100C2.)

1144. **Weber, Nelle M.** A critical study of the sectioning in upper and lower group classes in first semester Spanish at Wisconsin, 1930-1931. University of Wisconsin, Madison.

See also 240, 583, 2948.

MATHEMATICS

1145. **Baker, Marion Long.** Testing programs in the mathematics department of the high schools of Los Angeles, Calif. Master's, 1931. Southern California. 161 p.

1146. **Barry, Mary Josephine.** Mathematics and its contribution to culture. Master's, 1931. Boston Coll. 44 p. ms.

1147. Bridges, W. A. Mathematics ability of pupils entering junior high school. Master's [1931]. Peabody. 82 p. ms.

Tests of achievement in fundamental operations with integers, decimals, and fractions were given. The degree of mastery of the fundamental operations with integers, decimals, and fractions, for pupils who are finishing the sixth grade, is extremely low, as shown by data of this investigation.

1148. Butler, Charles H. Mastery of certain mathematical concepts by pupils at the junior high school level. Doctor's, 1931, Missouri. 117 p.

The study covers 63 mathematical concepts and includes test results from 2,039 pupils in grades 7 to 12 inclusive. Of these 1,658 were in grades 7 to 9 inclusive. Findings: On the whole, pupils enter the seventh grade with nearly one-third of these mathematical concepts mastered and leave the ninth grade with over one-third of them still unmastered. Junior high school organization seems to have no effect upon mastery of these mathematical concepts. There is a great difference in the degree of mastery of the concepts by pupils within any given grade. Boys show a slight general superiority over girls both in degree of mastery at a given grade level and in grade-to-grade improvement. Out-of-school experience is probably a very potent factor in affecting mastery of these concepts. Mastery of these concepts is positively related to mental age but is negatively related to chronological age.

1149. Cairns, George J. An analytical study of mathematical abilities. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic education press, 1931. 104 p. (Catholic university of America, Educational research monographs, vol. 6, no. 3, April 15, 1931.)

In this investigation of mathematical abilities, 18 tests were given to 191 boys in the second year of 5 high schools in Detroit, Mich.

1150. Coates, James Dorland. A list of objectives in teaching senior high school mathematics. Master's [1931]. Peabody. 53 p. ms.

A list of objectives in the teaching of demonstrative geometry, intermediate algebra, and trigonometry.

*1151. Congdon, Allan Ray. Training in high-school mathematics essential for success in certain college subjects. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 102 p. (Contributions to education no. 403.)

Training in high-school mathematics is interpreted to include the various outcomes from the study of algebra, geometry, and trigonometry, such as facts, concepts, skills, general processes, and methods of procedure. This investigation makes use of Oscar M. Stewart's Physics, a textbook for colleges, as the chief source of data. The mathematical vocabulary used has been determined by a careful word count for the entire text; the symbolism employed in the text has been examined, tabulated, and compared with that of other texts in physics and chemistry; the facts, concepts, skills, general processes, and methods of procedure which are used have been analyzed and tabulated. Findings: College students dealing with quantitative data make use of an extensive symbolic language quite different from that used in high-school mathematics. The author lists a number of subjects to which increased emphasis should be given if a student trained in high-school mathematics is to be successful in the college subjects dealing with quantitative data.

1152. Denver, Colo. Public schools. Mathematics—junior high school, grades 7A and 8A. 1931. 44 p. ms.

This is a tentative course of study. The material is presented as a working basis for further revision in the light of actual classroom experimentation.

1153. Duane, John Alexander. Mathematics in secondary schools. Master's, 1931. Boston Coll. 27 p. ms.

1154. Flood, Edward John. The relation of mathematics to the sciences. Master's, 1931. Boston Coll. 36 p. ms.

1155. Hale, William R. A study of the mathematical processes used in 16 gainful occupations in Nashville, Tenn. Doctor's, 1931. Texas. 149 p. ms.

The purpose of this study was to discover and set forth, in an analytical form, the practical use made of all types of mathematics in the typical occupations of city life. The data, gathered by personal interviews from the representatives of each of 16

occupations, are tabulated and presented both analytically and statistically. Findings: All branches of mathematics now required in our schools are actually used in the 16 occupations studied: arithmetic in all, algebra in 5, geometry and trigonometry in 6, calculus in 3.

1156. **Hamilton, Paul North.** A study of the relationship between the mathematics placement tests and students' subsequent success in mathematical subjects. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study was undertaken in an effort to compare and evaluate the predictive aspects of the placement-test results, high-school records, and first-semester grades of the group of students entering the University of Pittsburgh in September 1928. The mathematics records of 92 students who had had three or more semesters' work in mathematics in the University of Pittsburgh were investigated and a correlation worked out between their first semester grades and the average of grades after the first.

1157. **Healy, Aileen Marie.** A test of achievement in junior high school mathematics. Master's, 1931. Stanford.

1158. **Kansas.** State department of education. Course of study for high schools. Part 3—Mathematics. Topeka, 1930. 42 p.

1159. **Keenan, Henry Robert.** The aims in teaching mathematics in secondary schools. Master's, 1931. Boston Coll. 30 p. ms.

1160. **Kestor, William Walden.** General solution of the n th degree equation having numerical coefficients. Master's, 1931. Peabody. 43 p. ms.

Suggests a method by which any of the n roots can be obtained. The method is no more difficult or cumbersome than that of Newton or Homer; it will solve any equation when the coefficients are known no matter whether they are real or complex, which is not the case with the methods of Newton or Homer. The mastery of the method enables one to solve an algebraic equation of any degree.

1161. **King, Dorothy Prescott.** Suggested list of parallel readings for senior high school mathematics. Master's, 1931. Peabody. 75 p. ms.

Based on materials available in Peabody library. Gives annotations of 41 volumes and 175 articles from 30 magazines.

1162. **Knoxville, Tenn.** Public schools. Course of study in mathematics. Junior high school of Knoxville, Tenn. 1931. 4 p. ms.

1163. **Long Beach, Calif.** City schools. Long Beach mathematics inventory test, grades 7-14. [1931.] 4 p.

Devised by David Segel and Dora D. Stoker.

1164. **McPheron, Margaret May.** Principles, methods, and materials for motivation of high school mathematics. Master's, 1931. Peabody. 154 p. ms.

Includes a study of psychological and educational principles, an outline of methods (including classroom work, supplementary material, and extracurricular activities), and an organization of materials, which may be used in motivating the presentation of high-school algebra and geometry, together with an annotated bibliography.

1165. **Moore, Wilbert Swan.** A study of the development of mathematical concepts of arithmetic, algebra, and plane geometry. Master's, 1930. Ohio. (For abstract see no. 712.)

A study was made of the development of mathematical concepts in arithmetic, algebra, and plane geometry using three objective tests on the technical vocabulary of these subjects.

1166. **Napier, Alice.** Alexandrian mathematics of interest to high-school and college students. 1931. Peabody. 36 p. ms.

Includes biographies and works of the great mathematicians who either taught or were educated in Alexandria from 300 B. C. to 641 A. D. Conclusion: To know this period of mathematical history is of vital importance to students of mathematics.

1167. **Nichols, Fred C.** Objective supervision of nine-year mathematics. Master's, 1931. Iowa. 122 p. ms.

1168. **North Carolina education association.** Research and study committee of the Mathematics teacher's association. Mathematics in the high schools of North Carolina. Raleigh, N. C. [1930].

Questionnaires were mailed to white mathematics teachers throughout North Carolina. One hundred and eighteen were returned. The study gives the different types of courses of study, interesting projects carried on, supplementary material used, and a list of library books.

1169. O'Rourke, J. M. The unit on angles in junior high school mathematics. Master's, 1930. Chicago.

Reviews all available evidence in determining the content of the unit on angles in junior high school mathematics; finds typical pupil difficulties in the learning of such a unit; and develops suggested methods of teaching.

1170. Plummer, T. H. A critical study of the mathematical abilities desired by business executives. Master's, 1931. Ohio. 51 p. ms.

Compares demands of business men with the ideas of textbook writers as expressed by their books. Findings: The junior high school mathematics should offer arithmetic, algebra, geometry, and trigonometry. Arithmetic should be given more attention in the junior high school. Too many writers are dropping the fundamental operations of arithmetic with the elementary school. Business men say too many of our people come to them poorly prepared in fundamentals of arithmetic.

1171. Repath, Ruth Marie. An analysis of the problem-solving difficulties of eighth grade students in general mathematics. Master's, 1931. Southern California. 56 p.

A statistical treatment of test results for the purpose of analyzing and remedying the most common difficulties.

1172. Richeson, Mary Annie. Construction and partial standardization of a ninth grade mathematics test. Master's, 1931. Peabody. 79 p. ms.

Analysis of ten universally used textbooks. Tests were given to 470 white children and 54 Negro children. Findings: Of the 470 white children tested there was a range in scores on Form A from 2 to 92, on Form B from 2 to 82. The coefficient of correlation obtained by correlating the scores made on Form A and Form B was .81. The mean score made on Form A was 36.92 on Form B, 37.56, while the median scores were 37.36 and 38.23, respectively. The percentile distribution of scores given shows that while 10 per cent of the pupils on whom the norms are based did not exceed a score of 15.50 on Form A or a score of 16.67 on Form B, 90 per cent of the pupils did not exceed a score of 60 on Form A or a score of 58.33 on Form B.

1173. Robinson, R. T. The achievement of junior and nonjunior school pupils in senior high school mathematics. Master's, 1931. Colo. St. T. C.

The purpose of this study was to determine the effects of the training received in junior and nonjunior schools upon achievement in the mathematics prerequisite to college entrance.

1174. Rosecrans, Helen Mary. An analytical comparison of recent textbooks in junior-high school mathematics. Master's, 1931. Oklahoma. 72 p. ms.

1175. St. Louis, Mo. Public schools. Mathematics. Revised tentative course of study and service bulletin. Mathematics for kindergarten and grades one through six. 1930. 46 p. Public school messenger, 28: no. 10, November 21, 1930. (Curriculum series.)

1176. Schultz, Louis J. Mathematics of home mechanics. Master's, 1931. Iowa. 68 p. ms.

*1177. Seidlin, Joseph. A critical study of the teaching of elementary college mathematics. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 107 p. (Contributions to education, no. 482.)

An analysis of classroom procedures in the teaching of elementary college mathematics, in order to determine: (1) The methods of procedure; (2) to what extent certain modern principles of education are employed or violated; (3) likely criteria for good teaching; (4) to what extent examinations constitute "the interest and incentive"; (5) the use of the textbook; and (6) the use of the question as a medium of instruction.

1178. Strong, Orvel E. Some recent investigations in the teaching of mathematics. Master's, 1931. Ind. St. T. C. 126 p. ms.

Analyses investigations of mathematics teaching for trends. Findings: Mathematics is now objective media to teach children to become better social beings; it may be that mathematics teaching is too objectified.

1179. Taylor, Sarah Helen. The effects of classifying college students in mathematics. Doctor's, 1931. Illinois.

1180. Woods, Robert William. A study of textbooks in general mathematics. Master's, 1931. Cincinnati.

1181. Wright, Otis L. Individual tests in mathematics. Louisville, Ky., Board of education, 1931. 9 p. ms.

The tests consist of groups of short tests on three levels for the various units of work in mathematics.

*See also 533, 599, 1336, 1401, 1410, 1425, 1446, 2032, 2108, 2963.

ARITHMETIC

1182. Beadles, Elmer. A study of time allotments in arithmetic in the elementary schools of Indiana. Master's, 1930. Indiana. 88 p. ms.

In an effort to determine the actual practice regarding time allotments in arithmetic in grades 1 to 8, inclusive, in school units of all sizes in Indiana, the average length of the school day and the average length of the recitation period in arithmetic, and to what extent practice pads, or work books, are used in schools of all sizes, data from more than 1,000 questionnaires were grouped according to the size of the school unit from which they came, and averages found and comparisons made between schools in different groups. Findings: The length of the school day was found to vary considerably from group to group; the average length of the recitation period in arithmetic varied from 16 minutes in grade 1 to 28 minutes in grade 8; the larger the unit the greater the per cent of the day's time allotted to the recitation of arithmetic; it is generally agreed that the use of practice pads is very helpful in teaching arithmetic.

1183. Blumberg, John Otto. Properties of a certain type of continued fraction. Master's, 1931. Pittsburgh.

1184. Bogue, Mattie Edna. Analysis of instructional and drill units in advanced arithmetic texts. Master's, 1931. Iowa. 156 p. ms.

1185. Brooks, James Irving. A comparative study of the completion and multiple choice test in arithmetic. Master's, 1930. Virginia.

1186. Buswell, G. T. and John, Lenore. The vocabulary of arithmetic. Chicago, Ill., University of Chicago, 1931. 146 p. (Supplementary educational monographs, no. 38.)

The purpose of this investigation was to study the nature and the development of concepts of technical and semitechnical terms in the arithmetic of the first six grades.

1187. Butterfield, Charles. The amount of arithmetic a child needs to know in order to read intelligently an elementary geography book two. Master's, 1931. Michigan.

1188. Calhoun, E. B. A comparative study of time allotment in teaching arithmetic. Master's [1931], Peabody. 34 p. ms.

A study of one grade (seventh) in Norwood elementary school, with 109 pupils, showed no significant difference whether arithmetic was taught three 60-minute periods per week or five 60-minute periods per week.

1189. Carson, Milton E. An analytical and comparative study of the vocabulary commonly used in modern arithmetic textbooks for the fifth grade. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The study endeavors to construct in a scientific way a vocabulary that will represent the exact makeup or status of the vocabulary being used in the latest and best fifth grade arithmetic texts on the market today; and to evaluate analytically the resultant vocabulary through comparison with the Thorndike word list and with other reliable word lists. The study also includes 10 special vocabularies, which constitute component parts of the complete vocabulary and any one or all of which may be conveniently separated from the composite vocabulary: a list of 1,006 most frequent words, arranged in the descending order of their frequencies; the Thorndike plan of symbols so extended and arranged as to show the position occupied in the Thorndike word list by each word of the arithmetic vocabulary and to show the position occupied both in the Thorndike word list and in the Horn writing vocabulary by each of the 1,006 most frequent words; and a series of 10 tables so worked out as to give a basis for searching analyses.

1190. Caywood, James Alexander. A critical analysis of a series of arithmetics for grades three to eight. Master's, 1931. Cincinnati.

1191. Chidester, L. B. Some experiments in linear bisection. Master's, 1931. Ohio. 38 p. ms.

1192. Cocke, Olive. The value of arithmetic workbooks in the elementary grades. Master's, 1931. Occidental.

1193. Couch, Mary Irene. Achievement in arithmetic of children in Seventh Day Adventist parochial schools. Master's, 1931. Nebraska. 38 p. ms.

The Illinois examination was used in this study. There was little difference in the achievement in arithmetic between public school children and the Seventh Day Adventist parochial school children. There was some variation with respect to different sections of the country.

1194. Drennan, L. T. The administration of problem solving in arithmetic. Master's, 1931. Ohio. 56 p. ms.

A study to determine whether or not students, if taught a few problems well, can transfer the knowledge gained to other problems not taught. Findings: In all experiments made, the group taught a few problems well were as able to solve the untaught problems as the group taught in the traditional manner. In all experiments excepting one, the group taught in the experimental way proved more efficient than the one trained in the old way. Hence, the conclusion that arithmetic need not be a study of many similar problems, but a thorough study of a few typical problems.

1195. Ernst, William M. An objective appraisal of illustrations in fourth grade arithmetic texts. Master's, 1931. Iowa. 92 p. ms.

1196. Fairbanks, Earl. Concrete supervisory program in arithmetic. Master's, 1931. Iowa. 75 p. ms.

1197. Fialkow, Aaron. An evaluation and analysis of the results of some investigations pertaining to the habits involved in the addition of integers of elementary school children. Master's, 1931. Coll. of the City of N. Y. 128 p. ms.

Survey and evaluation of investigations dealing with habits in addition in the third and fourth grade. The techniques in these studies are critically evaluated and there is a careful analysis of uneconomical habits of work. Findings: There is need for reform in the teaching of arithmetic. There are many typical errors which children make when adding. A need for adequate remedial measures based on diagnostic studies was found.

1198. Fields, Carl Lee. Relation of arithmetic to achievement in algebra and geometry. Master's, 1931. Peabody. 59 p. ms.

A study of present curricular tendencies, involving an extended testing program for groups taking first-year algebra in London, Ky. Findings: There was a tendency for those pupils who had relatively high ability in arithmetic to achieve a comparatively high degree of success in algebra. The arithmetic ability was found to bear slight relation to their achievements in geometry. A combination of the factor of arithmetic ability with that of intelligence proved to be a better measure by which to predict success in both algebra and geometry than either of those factors considered separately. The multiple correlation of achievement in algebra with the combined factors in intelligence and ability in arithmetic was 0.74 ± 0.08 . The multiple correlation of achievement in geometry with the combined factors of intelligence and ability in arithmetic was 0.44 ± 0.10 .

1199. Forbes, Raymond Eugene. The improvement of the teaching of reasoning problems in arithmetic. Master's, 1931. Oklahoma.

1200. Fuentes, Fernando S. A critical analysis of the types of errors which were committed by fourth and seventh grade pupils and second-year students of the high and normal schools in the Philippine educational achievement tests, series A, arithmetic. Manila, P. I., Bureau of education, 1931.

Twelve hundred ninety-five test booklets and an equal number of scratch papers were examined and analyzed to find out the various types of faulty procedures which the pupils employ in solving their problems. Findings: Some types of wrong habits of arithmetical computations were discovered, and the per cent of students in each grade found to be having the same kind of weakness was determined.

1201. Goodhue, Minnie W. Relation of achievement in arithmetic and in high-school mathematics. Master's [1931]. Chicago.

Comparison of achievement of 233 high-school pupils in arithmetic and in algebra and geometry as measured by standardized tests.

1202. Gorman, Frank H. Some facts concerning changes in content and methods of arithmetic. Doctor's, 1931. Missouri. 145 p. ms.

A critical, detailed investigation of the content of textbooks in arithmetic for elementary schools, copyrighted in the quadrenniums 1907-1910, 1917-1920, and 1927-1930. Findings: Textbooks copyrighted since 1926, in general, have eliminated such topics as finding prime factors; finding the greatest common divisor and least common multiple; the use of cancellation in solving many types of problems; certain exercises with complex fractions; the tables of troy and apothecaries weights; dividing compound numbers; and painting and plastering units.

1203. Greene, Myrtle. The possible extent for development of concepts in other subjects through incidental problems of arithmetic. Master's, 1931. Michigan.

1204. Haden, Marie. A history of our numerals and decimal system of numeration. Master's, 1931. Peabody. 41 p. ms.

Findings: (1) Man in his earliest stages of development possessed number sense and made use of his fingers and toes for counting, and of tally marks or strokes for recording numbers; (2) the ancient civilized nations, the Babylonians, Egyptians, Greeks and Romans employed the decimal system of notation, but only the Babylonians made use of the principles of local value; (3) there is no evidence that the early civilized nations possessed a symbol for zero, its invention being attributed to the Hindus about the second century B. C.; (4) our nine numerals with the zero were introduced into Europe by the twelfth century, but our present system of numeration developed from the fifteenth to the seventeenth centuries; the words million, billion, and trillion having been generally accepted by the eighteenth; (5) the use of the decimal fraction was explained by Simon Stevin in 1585. Since that date many changes in the notation have been made, and even at the present time there is no universal system.

1205. Hambrick, Fitzhugh. A study of transfer in the case of simple addition facts in terms of varying degrees of intelligence. Master's, 1931. Colo. St. T. C.

This investigation was made to determine the amount of transfer among pupils at various levels of intelligence, learning simple addition combinations under a standard method of instruction.

1206. Hill, Florence. Study of arithmetic achievements in grade B5 of a large city system. Master's, 1931. Oregon. 55 p. ms.

1207. Hoffman, William Edward. Fraction drills as a measure of progress. Master's, 1931. Wisconsin.

1208. Hook, Charles E. Number psychology. Master's, 1931. North Dakota.

1209. Horrall, A. H. Revision of arithmetic course of study, grades 1 to 4. San Jose, Calif., Public schools, 1931. 36 p.

*1210. Howard, Herman B. Correlation between reading and arithmetic. Master's, 1931. New York. 68 p. ms.

The purpose of this investigation was to determine the relation between the ability to solve problems in arithmetic and the ability to comprehend in reading as found in the sixth grade of the public schools of Highland Park, Texas, in 1929-30.

1211. Jeffries, Urban B. Relative difficulty of subject matter of ten recent third grade arithmetics. Master's, 1931. Wisconsin.

1212. Johnson, Everet. The relative difficulty in learning the multiplication and division facts together or separately. Master's, 1931. Colo. St. T. C. 85 p.

1213. Kent, Regina; Peterson, Mrs. Esther, and Grover, C. C. Oakland arithmetic tests for grades 3 and 4. Oakland, Calif., Public schools, 1931.

The test was constructed for measuring achievement in arithmetic in grades 3 and 4. It consists of three parts: A test of fundamentals, a test of vocabulary, and a test of reasoning.

*1214. Kramer, Sister Mary Immaculata. Permanence of improvement and the distribution of learning in addition and subtraction. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university of America, 1931. 83 p. (Educational research bulletins, vol. 5, nos. 9 and 10.)

Bibliography: p. 79-81.

This study is concerned primarily with the retention of gains made by children as a result of drill in the processes of addition and subtraction while they are participating in regular classroom work. Findings: The most economical procedure in the fixation of number associations is spirited competitive written drill; short drill periods as limited as three minutes daily are more conducive to economical learning than are periods of double or triple this length; distributed learning periods give greater permanence of results for total amount of time spent in drill than do concentrated time periods for learning; older children have a greater retentive power for such skills than have younger children.

1215. Lamb, Theldon. Amount of arithmetic necessary for a child to know in order to read intelligently a fifth grade hygiene book. Master's, 1931. Michigan.

1216. Louth, Mary de Sales. Units of measurement in industry. Master's, 1931. Boston Univ.

A study of the units of measurement used in: (1) Purchase, (2) manufacture, and (3) sale, by five large manufacturing companies in or near Providence, R. I., and also the per cent of employees using each of three degrees of accuracy in measurement.

1217. Lowary, Oakman Hess. Errors in long division. Master's, 1930. Ohio. (For abstract see no. 712.)

This thesis was based upon the errors made on weekly test papers by children in the 4A grade at Parmelee school, Youngstown, Ohio. The study was carried on during three semesters with three different groups of children taught by two different teachers. The total enrollment for the three classes was 95.

1218. McBride, Clara Agatha. Counting and counters in arithmetic in grades 5 and 6. Master's 1931. Peabody. 101 p. ms.

A study of characteristics of addition examples which lead to counting and of children which predispose them to count when they add. Findings: (1) Certain characteristics of examples seem to lead to an unusual amount of counting; (2) practice of counting is found to be a complicated form of behavior into which many factors enter as causes.

1219. McCall, Beth A. The contribution to skill in arithmetic made by a study of the use of a calculating machine. Master's, 1931. Southern California. 69 p.

This is a single group experiment with 25 junior-college students enrolled in an office practice class, over a period of one school year, with appropriate pre-tests and end-tests before and after the course in office machines.

1220. Missouri. State department of education. Courses of study for elementary schools. Teaching arithmetic. Jefferson City, Mo., 1930. 142 p.

The material in this bulletin was prepared after a careful study of published research on various phases of arithmetic procedure, the best state and city courses of study, etc.

1221. Moore, Louberta Lillian. The effectiveness of isolated drill in addition as conditioned by certain incentives. Master's, 1931. Cincinnati.

1222. Morrison, Ervin A. The measurement of textbook illustration in fifth grade arithmetic. Master's, 1931. Iowa. 88 p. ms.

1223. Nash, Harry B. Arithmetic. West Allis, Wis., Department of instruction, 1931. 21 p.

A study of instruction in arithmetic with definite suggestions for improvement. Tests and supervisory visits revealed a cross section of instruction.

*1224. Neulen, Leon Nelson. Problem solving in arithmetic: a study of certain factors in the allocation of arithmetic problems involving one or more reasoning steps. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 87 p. (Contributions to education, no. 483.)

The problem was to analyze courses of study in order to discover current practice in the grade placement of one or more reasoning steps in problem solving; to determine the ability of the beginning, third, fourth, fifth, and sixth grade pupils to solve problems involving 1, 2, 3, and 4 steps; to discover what correlation exists between reading ability and arithmetic errors in problem solving not explained by computational difficulties; to discover an index of mastery in problem solving based upon errors due entirely to erratic performance; to determine the correlation that exists between intelligence levels and problem-solving ability; to discover if there is a closer relationship between problem-solving ability and general intelligence than between problem-solving ability and skill in computation, etc. Data were secured from courses of study; test materials similar to those found in currently used instructional material were used, and test results from two widely separated school systems, involving approximately 3,000 pupils were obtained. Data appear to substantiate the conclusion that one of the universal weaknesses or difficulties in our problem-solving work is the fact that we have attempted to measure problem-solving ability in terms of getting the right answer in place of correct reasoning abilities.

1225. Newland, T. Ernest. A chart for the diagnosis of illegibilities in arabic numerals. Bloomington, Ill., Public school publishing company, 1931.

1226. Oregon State teachers association. Objectives in arithmetic. Portland, Oreg., 1930.

This is a diagnostic study of the arithmetic teaching in Oregon schools with the object of finding the weak spots and determining upon remedies. Data were secured from the courses of study in the United States, and questionnaires sent to Oregon citizens regarding the practicability of arithmetic that is being taught in Oregon.

1227. Osburn, W. J. and Drennan, L. T. A new technique for problem solving in arithmetic. Columbus, Ohio, State department of education, 1931.

1228. ——— and Foltz, P. J. Improvement and permanence of improvement in fundamentals of arithmetic. Columbus, Ohio, State department of education, 1931.

1229. Overman, James Robert. An experimental study of certain factors affecting transfer of training in arithmetic. Baltimore, Md., Warwick and York, 1931. 235 p. (Educational psychology monographs no. 29.)

An investigation of the effect of instruction in three types of examples in 2-place addition upon the pupil's ability to handle closely related types in 3-place addition and in 2 and 3 place subtraction, and to determine whether the amount of transfer is a function of the method of teaching. After an experimental testing of the general plan, it was used with 16 second grades in Toledo, one in Bowling Green, and 14 in Findlay, Ohio. The grades were divided into four groups, each group being taught by a different method. One hundred and twelve matched "quartets" were formed, 58 composed of girls and 59 of boys. Data indicate that the four methods were about equally effective in producing transfer to those types of examples which did not involve the difficulty of placing numbers having different numbers of digits.

1230. Pulver, Isadore L. The place of business arithmetic in the bookkeeping curriculum of a senior high school. Master's, 1930. New York. 54 p. ms. (Abstract in Research bulletin in commercial education, New York university, 2: 8-13, December 1930.)

A determination of the arithmetic processes involved in bookkeeping. Tests of high-school students' ability showed that students who have not had business arithmetic do about as well as students who have had business arithmetic in a test on the arithmetic of bookkeeping.

1231. Rock, Robert E., Jr. and Foran, T. G. A comparison of studies on the relative difficulty of the number combinations. Washington, D. C., Catholic education press, 1930. 23 p. (Catholic university of America, Educational research bulletin, vol. 5, no. 8.)

"The purpose of this bulletin is to review briefly the objective studies which have been made of the relative difficulty of the fundamental number combinations in arithmetic, to show the extent to which these studies are in agreement, and to present composite difficulty rankings based upon these investigations."

1232. Bolker, Hans. The spread of ability in arithmetic and its relation to standards of promotion and revision of the course of study in grades 4, 5, and 6.

Department of education, Baltimore, Md. Baltimore bulletin of education, 9: 5-7, September 1930.

This study is an attempt to determine certain facts basic to minimum standards of promotion and revision of the course of study.

1233. ——— Tentative course of study in arithmetic for prevocational classes—supplement to course of study in arithmetic. Baltimore, Md., Department of education, 1931.

Gives objective and teaching procedures in arithmetic for prevocational pupils.

1234. Bunyon, Frank. Pupil performance in mensuration. Master's, 1931. Iowa. 149 p. ms.

1235. Rutledge, B. E., Grover, C. C., and Vandergaw, Ida. Construction of inventory test in H-2d grade arithmetic. Oakland, Calif., Public schools, 1930. 7 p.

1236. Sala, Vincent. Denominate numbers used in the factories of New Britain, Conn. Master's, 1931. Boston Univ.

A study of four large companies employing 2,776 men. Eighteen units were used for specific purposes, and used alone, not in tables.

1237. Sangren, Paul V., and Reidy, Ann. Sangren-Reidy instructional tests in arithmetic. Grades 2-8. Bloomington, Ill., Public school publishing company, 1931.

Grade 2 test, 8 p.; grade 3 test, 8 p.; grade 4 test, 12 p.; grade 5 test, 20 p.; grade 6 test, 16 p.; grade 7 test, 8 p.; grade 8 test, 8 p. Teachers handbook and manual of instructions for Sangren-Reidy instructional tests in arithmetic grades 2-8 inclusive, 44 p.

1238. Saunders, M. Olga. Tendencies in the arithmetic for grades 7, 8, and 9. Master's, 1931. Chicago. 113 p. ms.

Sixty mathematics textbooks, published between 1920 and 1931, inclusive, were quantitatively analyzed. Thirteen significant tendencies were found.

1239. Seaton, Emma. Arithmetic needed for reading 10 readers, grade 5. Master's, 1931. Michigan.

1240. Shull, Joseph H. An empirical check on the Spearman-Brown prophecy formula. Master's, 1931. Chicago. 41 p. ms.

The object of the study was to test the Spearman-Brown formula for arithmetic problems. It was found that the formula gives a fairly reliable estimate. The tendency is for overprediction.

1241. South Dakota. Department of public instruction. Arithmetic course of study for elementary grades. Pierre, 1931.

1242. Stacy, John Earle. A critical study of pupil accomplishment in denominate numbers. Master's, 1931. Iowa. 167 p. ms.

1243. Stam, I. W. Technique of study in elementary school arithmetic. Master's, 1931. Wisconsin.

1244. Straitiff, Edgar V. A survey of work-books in arithmetic for the intermediate grades. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An attempt was made to show the amount, the nature, and the distribution of the content material provided in arithmetic workbooks for the intermediate grades. A total of 25 workbooks used in this study, included 8 for the fourth grade, 9 for the fifth grade, and 8 for the sixth grade. All of the authors of the workbooks surveyed for the fourth grade are in agreement in placing emphasis on addition, subtraction, multiplication, and division of whole numbers. There is no unanimous agreement by the authors of the workbooks for the fifth grade in placing emphasis on any particular type of content. Authors of the workbooks for the sixth grade are in agreement in placing emphasis on mixed decimals.

*1245. Stretch, Lorena B. The relation of problem solving ability in arithmetic to comprehension in reading. Doctor's, 1931. Peabody. Nashville, Tenn., George Peabody college for teachers, 1931. 47 p. (Contributions to education, no. 87.)

The purpose of this study was to increase, by special training, the problem-solving ability of a group of elementary-school pupils and to determine the extent to which this increase in problem-solving ability is related to the comprehension in reading of these students. An experiment was conducted in the fifth grade of the Sul Ross school in Waco, Texas, from February 24, 1930, to May 23, 1930. There were 32 pupils each in the control and experimental groups.

1246. Suchanek, Minnie Moore. The interrelation of abilities in the addition and subtraction of fractions and mixed numbers. Master's, 1931. Iowa. 145 p. ms.

1247. Thompson, J. L. Value of home work in arithmetic. Newburgh, N. Y., Public schools, 1931. 4 p. ms.

1248. Tichenor, George Emmons. A study of the relationships between arithmetic ability and mechanical aptitude. Master's, 1931. Southern California. 76 p.

A study based on correlations between scores on standardized arithmetic tests, intelligence scores, and the Detroit and Stenquist mechanical-aptitude tests, employing the partial and multiple correlation technique.

1249. Warner, Ellen Todd. Number situations and concepts in a third grade activity setting. Master's, 1931. Ohio. 99 p. ms. (For abstract see no. 712.)

The study showed the possibilities for developing arithmetic from the angle of units of study; the relation of the number problems to social activities of life; occurrence of types of processes used in solving number situations; and practice given in these types of processes. It showed that some children display more maturity than others for solving number problems.

1250. Webb, Horton E. Study of results of use of workbook upon progress in arithmetic in Portland schools. Master's, 1931. Oregon. 65 p. ms.

1251. Young, George D. The factor of illustrations in *N* fourth grade arithmetic texts. Master's, 1931. Iowa. 95 p. ms.

1252. Young, Ira H. Difficulty in sixth grade percentage during learning. Master's, 1931. Iowa. 370 p. ms.

See also 445, 544, 546, 609-610, 615, 619, 627, 630, 636, 769, 982, 1165, 1798, 2037, 2076, 2097, 3905, 3835, 3863, 3875.

ALGEBRA AND GEOMETRY

1253. Baader, Sister Mary Frances. An evaluation of the relative efficiency of the directed-study method and the traditional oral-demonstration method of teaching geometry in the tenth grade as indicated by pupil achievement. Master's, 1931. Notre Dame.

1254. Bailey, Lawrence G. The evaluation of a technique of study for first year algebra. Doctor's, 1931. Wisconsin.

Material of a specific character to be used in connection with a basic text was prepared and used under control conditions by six teachers. Investigation was continued during one semester. The two groups of pupils were taught by the same teacher. Findings: The study material proved to be of value in connection with thought processes of the subject, but there was no difference between the two groups in their mastery of mechanical processes.

*1255. Bixler, R. Theodora. A study of resident and non-resident pupils taking ninth year junior high school mathematics. Master's, 1931. New York, 44 p. ms.

Fifty resident pupils were compared with 50 nonresident pupils by means of IQ scores, chronological ages, and standardized algebra tests. No significant difference was found between the resident and nonresident pupils.

1256. Brown, Dale. To determine non-technical words which are found in certain textbooks in first-year algebra and plane geometry and which are not within the comprehension of 77 pupils about to study these two subjects. Master's, 1931. Michigan.

1257. Cain, Homer Green. Some procedures in teaching first-year algebra. Master's, 1931. Southern California. 154 p.

A compilation of practical suggestions collected by interviews with algebra teachers and by reading professional literature on the subject.

1258. Clark, Grace Myrtle. Student difficulties in the study of plane geometry. Master's, 1931. 139 p. ms.

A study of the work of 50 students in answering 1,225 exercises in plane geometry. Findings: The greatest number of errors were made in the group of work pertaining to the relations between the regular polygon and the circle. The types of exercises that 80 to 80 per cent of the students made errors in are as follows: Geometric concept of types of lines, of laying off line segments, of estimating size of angles, of kinds of triangles, of relations in triangles and properties of a quadrilateral; choosing reasons; circle relations; proportion formula; and relation in regular polygons and the circle.

1259. Cook, Mrs. Thelma Cline. A study of the vocabulary of the Clark-Otis modern plane geometry. Master's, 1931. Indiana. 179 p. ms.

1260. Cooke, James Vinton. The interrelation and use of items in plane geometry. Master's, 1931. Peabody. 78 p. ms.

A manual to Smith's Essentials of plane geometry, prepared so as to show the use made of the theorems and corollaries (and prerequisites to each of the five books) in order to aid the teacher in determining where to place teaching emphasis.

1261. Covil, Dorothy Eleanor. The results of the self appraisal test in ninth grade algebra. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was to determine the effect of adding a self-appraisal technique to the regular subject tests in ninth-grade algebra. The technique requires the child to state the degree of confidence he has in the correctness of his own answer. The experiment was conducted in the Wilkinsburg junior high school, Wilkinsburg, Pa. during the first semester of the school year 1930-31. Two equivalent groups were used. A summary of the test results showed that the experimental group was superior to the control group in both achievement scores, and self-appraisal quotients.

1262. Davis, Adelle M. A suggested plan for the reorganization of plane geometry. Master's, 1931. Wichita. 83 p. ms.

1263. Dawson, Roy Edward. A study in prognosis in algebra. Master's, [1931]. Peabody. 75 p. ms.

An investigation to determine the value of each part of the Orleans algebra prognosis test, and to determine the effect of omitting some of its parts. Findings: Test parts are not satisfactory bases for prognosis. The test may be shortened without affecting its prognostic value.

1264. Day, Claudina. The differential geometry of the catenoid. Master's, [1931]. Peabody. 37 p. ms.

A study of the surface of revolution known as the catenoid through its differential equations, to find the various properties and characteristics of the catenoid stated in the form of theorems.

1265. Denver, Colo. Public schools. Mathematics—junior high school algebra—grade 9A. 1931. 35 p. ms.

Bibliography: p. 29-35.

This is a tentative course of study presented as a working basis for further revision in the light of actual classroom experimentation.

1266. Duer, Lillian. An experiment comparing results under geometry workbooks and the traditional textbook method. Master's, 1931. Denver.

An experiment was carried on for two semesters in which groups were paired on the basis of intelligence and geometry tests. The experimental groups used Welte Knight workbooks to supplement course of study and textbook. The control groups used the textbook alone.

1267. Ebbecke, George. A comparative study of syllabus type and standard type textbooks in plane geometry. Master's, 1931. Harvard. 34 p.

*1268. Ellberg, Arthur. Recitation plan versus Dalton plan in the teaching of plane geometry and a study in responses in the solving of original exercises. Doctor's, 1931. Temple.

1269. Fullerton, Helen P. A comparison of inductive and deductive methods in geometry. Master's, 1931. Chicago. 80 p. ms.

A comparison of the results of teaching by the two methods in one semester's work. The inductive method was found to be slightly superior over the deductive method in teaching plane geometry.

1270. Gregory, M. C. A study of an algebra test for Louisville secondary schools. Louisville, Ky., Public schools [1931].

1271. Grover, C. C. Results of experiment in predicting success in first year algebra in San Leandro and Westlake junior high schools. Oakland, Calif., Public schools, 1930. 7 p. ms.

1272. Hanson, Frederick Willard. The technique of teaching plane geometry. Master's, 1931. Southern California. 145 p.

A systematic compilation of materials for a manual for teachers of geometry, based on interviews and readings of professional literature.

1273. Henning, Keith M. To determine the relative effectiveness of certain techniques of measurement in plane geometry. Master's, 1931. Iowa. 59 p. ms.

1274. Henry, Lyle K. An interpretation of geometrical errors of 27 pupils on 22 tests. Master's, 1930. Iowa.

1275. Hepler, Elizabeth Spears. A comparative study of the individual and group methods of teaching ninth grade algebra. Master's, 1931. Kana. St. Coll. 72 p. ms.

A study of two ninth-grade algebra-classes in the West junior high school in Parsons, Kana., showed that there is no significant difference between the knowledge of algebra gained by an average-size ninth-grade algebra class taught by the individual method and one taught by the group method.

1276. Holley, Lyle W. Teaching the verbal problem in ninth year algebra. Master's, 1931. Chicago. 83 p. ms.

Tendencies in the teaching of the verbal problem as indicated by content of problems and teaching devices of texts of 1910-1930. Conclusions: Texts of 1920-1930 show an increase in use of "genuine" problem material and devices for teaching as compared to the texts of 1910-1920.

1277. Houston, Jessie F. An experiment in teaching plane geometry by individual method. Master's, 1931. T. C., Col. Univ. 65 p. ms.

An experiment tried in two geometry classes for one semester. It was found that the individual method of teaching geometry was not satisfactory for New York City public high schools.

1278. Johnson, Marguerite E. Downer. An experimental study of the mathematical abilities of superior pupils with suggestions for an enriched curriculum in plane geometry. Master's, 1931. Southern California. 85 p.

A statistical comparison of the abilities and characteristics of bright compared with average or dull students, followed by a schedule of suggestive recommendations for improving the work of the bright pupils.

1279. Keathly, Robert Peel. A method of teaching plane geometry for reducing failures to a minimum. Master's, 1930. Tennessee. ms.

1280. Kleckner, Ines M. The importance of algebra in studying plane geometry. Master's, 1931. Colo. St. T. C.

The purpose of the investigation was to determine the algebraic processes the pupil should have command of before studying plane geometry.

1281. Klopp, W. J., and Nason, Lealia. Algebra review technic. Long Beach, Calif., City schools [1930].

A study covering a period of three semesters, showing the effect of organizing algebra content into teaching units upon the saving of time in conducting reviews, improvement of the power of application, improvement of skills in algebraic manipulations, retention of mathematical concepts and skills, and size of class. A population of over 200 pupils in third-semester algebra review showed a saving of time of 25 per cent, an improvement of skills in manipulation of 49 per cent, and an appreciable gain in power of application.

1282. Lee, Dorris May, and Lee, J. Murray. The standardization of the Lee test of geometric ability. Burbank, Calif., City schools, 1931. (For abstract see no. 717b.)

This study was made during 1929-30 in grade 10 of six high schools. Eight tests were given 600 pupils at the beginning of the semester. The test has sufficient validity to prove a valuable instrument in the guidance of high-school pupils.

1283. Lepowsky, Edward. The improvement of superior pupils in first term algebra within the classroom. Master's, 1931. Coll. of the City of N. Y. 25 p. ms.

The study deals with the effects of special class work on superior children in first-term algebra. It is an experimental study with equated groups. Conclusions: Bright pupils gained very much from special work. Average and slow pupils gained because the teacher was free to spend more time with them. Control groups were about 90 per cent as efficient as the experimental groups.

1284. Longmire, B. E. A vocabulary study of plane geometry. Master's 1931. Chicago. 125 p. ms.

Analysis was made of eight plane-geometry texts. Positive correlation was found between vocabulary knowledge and success in school subjects.

1285. Lynch, James M. The relation between reading ability and ability in geometry as measured by standardized tests. Master's, 1930. New York 36 p. ms.

The problem was to determine whether or not there is a relationship between reading ability and geometry ability in a group of 96 first-term geometry pupils. Standardized reading and geometry tests were used. Findings: Coefficients of correlation, geometry and vocabulary, 0.47 ± 0.05 ; geometry and sentence building, 0.45 ± 0.05 ; geometry and paragraph reading, 0.50 ; geometry and reading, 0.54 .

1286. McClintock, Cecil Leo. Some results derived from an individualized study with teacher supervision for repeaters in second-term algebra, as measured by ability to solve problems of specific types. Master's, 1930. Indiana. 118 p. ms.

The purpose of the study was to determine to what degree the pupil repeating second-term algebra needs and benefits by an individualized study in addition to the regular class period; and to determine what relationship there is between different types of pupils and the organization of such study. Two groups were equated by means of intelligence and achievement tests; they were treated alike for a period of six weeks except that one group was given individualized study with teacher supervision, during the next six weeks both groups were treated alike except that the other group was given the individualized study. Tests given at the beginning and end of each six weeks' period showed the progress made. The group as a whole did almost twice as well with the individualized study with teacher supervision as it did without it.

1287. Marston, Elizabeth Trowbridge. Comparison of achievement in algebra and shop mathematics. Master's, 1931. Chicago. 91 p. ms.

One year's teaching and testing of 150 two-year vocational pupils in Tilden technical high school, Chicago. Findings: There was statistical evidence of greater improvement in arithmetic by shop-mathematics pupils; subjective evidence of greater emotional satisfaction of such pupils.

1288. Milholland, Harry C. An experiment to study the effect on pupil achievement of varied requirements in preparing extra-class work in second semester algebra. Master's, 1931. Indiana. 60 p. ms.

1289. Mobre, Ruth E. An experiment in teaching geometry by units. Master's, 1931. Colo. St. T. C.

The purpose of this study is to add some information to that knowledge which, eventually, will determine what results in geometry are desirable and what methods or method must be employed to obtain them.

1290. Nason, Leslie James. The effect of diagnostic and remedial reviews on improvement in third semester algebra. Master's, 1931. Southern California. 257 p. ms.

1291. Nisbett, Dessie. An analysis of some elementary algebra texts. Master's, 1931. Peabody. 52 p. ms.

An analysis of 19 elementary algebra texts. Not much agreement as to organization and arrangement of subject matter was found. A suggested organization is made.

1292. Nordstrom, C. Arthur. Graphic work for high school students in algebra. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to show the value of the graph as a contribution to the science of mathematics.

1293. Nosofsky, William. A technique for the critical analysis of failure and its application to selected studies in elementary algebra. Master's, 1931. Coll. of the City of N. Y. 132 p. ms.

A technique is developed for the analysis of failure. The technique is then applied to selected studies of failure in elementary algebra. A section is devoted to the place of intelligence, psychology, etc., in the scheme of failure.

1294. Orleans, Joseph B. A study of prognosis of probable success in algebra and geometry. Doctor's, 1931. T. C., Col. Univ.

An investigation of the use of a test of specific ability in algebra and in geometry for the purpose of predicting the pupil's probable success in algebra or in geometry, in order, if possible, to prevent him from spending unnecessary time on the subject. Prognosis tests were given to pupils in several of the high schools in New York City, in one in Buffalo, N. Y., and in one in Jersey City, N. J., at the beginning of each of several terms between 1926 and 1930 before the pupils had received any instruction in the subject. The criteria at the end of the term were the achievement tests and the teacher's marks. Findings: The correlations between scores on the algebra prognosis test and marks of achievement are much higher than those between elementary-school arithmetic marks and marks of achievement in algebra. The combination of the prognosis test and the intelligence test serves as a slightly better basis for prediction in geometry than the former alone.

1295. Overfield, Frank Paul. An experiment with a modified form of the socialized recitation in teaching plane geometry. Master's, 1931. Southern California. 73 p.

A rotation experiment in the use of two methods, with measurement of results in terms of test scores and students' preferences.

1296. Parker, Pauline E. A study of algebra prognosis. Master's, 1931. Southern California. 70 p.

This study is based on a series of correlations between first-semester success in elementary algebra and a variety of measures such as eighth-grade mathematics' tests, IQ, chronological age, and scores on a number of standardized arithmetic and reading tests, received by 143 pupils in the two junior high schools.

1297. Parrish, Hazel Amy. A study of certain factors of predictability of success in plane geometry. Master's, 1931. Northwestern.

1298. Paxton, Margaret. Predicting success in junior high school algebra. Master's 1931. Stanford. (For abstract see no. 717b.)

Correlations were found between the grades made in algebra by 500 pupils and their IQ's, between the grades made in algebra and those made in the various seventh and eighth grade subjects. Data indicate that no pupil should be barred from algebra because of a low grade in any subject.

1299. Pryor, Robert D. Permanence of learning in algebra. Master's, 1931. Iowa. 51 p. ms.

1300. Qualley, Albert Olaf. A study of certain factors related to success in teaching plane geometry. Master's, 1931. Iowa. 143 p. ms.

1301. Reese, Esther Elizabeth. How to study algebra. Master's 1931. Southern California. 153 p.

Gives the basic content for a student's manual assembled from interviews, reading, and observation of students in the process of preparing algebra lessons.

1302. Rodewald, Charles H. A third semester of advanced plane geometry for high schools. Master's, 1931. North Dakota.

1303. Rusk, Edith F. An experimental study of three methods in teaching ninth grade algebra. Master's, 1931. Southern California. 65 p. ms.

1304. Russell, Helen Grady. Prognosis of success in algebra. Master's, 1931. Rutgers. 48 p. ms.

1305. Scarcliff, William B. A study of frequent errors in first year algebra. Master's, 1931. Iowa. 97 p. ms.

1306. Semortier, Antoinette Josephine. Modern teaching aspects in demonstrative plane geometry. Master's, 1931. Notre Dame.

1307. Spriggs, Louise M. An analysis of seven workbooks in geometry. Master's, 1931. North Dakota.

1308. Stout, John Blaine. The effects of an incentive upon work in algebra. Master's, 1931. Chicago. 65 p. ms.

The incentive used in this study was release from class work upon attainment of a standard of achievement. Forty-two high-school freshmen were used in the experiment. Conclusions: Incentives may vitally affect learning. Among the most consistent and general in influence exerted is the one studied. Findings do not accord with the general belief that pupils of the upper levels of ability, as determined by intelligence tests, work farther below their capacity than do those of the lower levels.

*1309. Swartz, Bertha A. Is detention after school a more effective remedial measure for failure in geometry and algebra than independent work. Master's, 1931. Penn. State. 75 p. ms.

A study was made of a group of vocational boys completing the first semester of the second year of algebra during the first semester of the term 1930-31; of a group of junior and senior pupils completing the second semester of plane geometry during the school term 1930-31; and of a group of junior vocational boys taking the first term of plane geometry during the second semester of the term 1930-31, in the Altoona senior high school. Data indicate that detention after school is not a more effective method for correcting and preventing failures.

1310. Swanson, John A. A course in the calculus for secondary schools with new and original treatments of many topics together with the records of seven high-school classes in this course. Doctor's, 1931. T. C., Col. Univ.

The purpose of this study was to make a course of study in high-school calculus, and to give the results of teaching this course to seven classes (259 pupils) in the Wadleigh high school during the years 1925-1928. The records of the students show that the course as taught is well within the ability of the high-school girls who elected the course. Part 2 of the dissertation gives the course of study.

1311. Thompson, K. L., McMackin, Frank J. and Henshaw, Jay L. Achievement of Jersey City high schools in algebra, as tested by the Breslich algebra test. Jersey City, Public schools, 1931. 10 p.

1312. Tierney, Edward L. An achievement test in plane geometry. Master's, 1931. Indiana. 68 p. ms.

1313. Trahey, Sister Mary Raymond. A comparative study of the methods of teaching plane geometry. Master's, 1931. Notre Dame.

1314. Walker, Leland Seymour. The comparative value of an exploratory course in algebra in the formal course in first-year algebra. Master's, 1931. Notre Dame.

1315. Ward, Volney. A comparison of the achievement of students taking algebra for the first time in the ninth and tenth grades. Master's, 1930. Indiana. 91 p. ms.

Findings: Beginning algebra may be offered in the ninth or tenth grade without serious effect upon achievement; age, within the limits studied, is not a substantial factor of success in first-year algebra.

1316. Welchons, Alvie McGregor. A comparative study of two methods of teaching first semester algebra: (1) An individualized unit method, (2) the general classroom method. Master's, 1931. Indiana. 99 p. ms.

1317. Whigmore, Ruth M. A study of the 1931 Indiana State high school test in first year algebra as related to certain variables. Master's, 1931. Iowa. 74 p. ms.

1318. Wilkins, Glenn M. A study of achievement in elementary algebra in relation to mental level. Master's, 1931. Colorado.

1319. Williams, Mrs. Florence Ford. The teaching of certain topics in secondary algebra. Master's [1931]. Peabody. 75 p. ms.

Investigation of the effectiveness of method of solution upon the following topics in secondary algebra: Integral equations, removal of parentheses, complex fractions, and fractional equations. Findings: Method of solution does influence the results in the four topics studied. This influence is greater when the topic is first introduced than later, as the differences in the results decrease as study progresses. No general conclusions are drawn, since the study was made with a limited number of pupils.

1320. Wilson, C. C. The relative effectiveness of four methods of teaching plane geometry. Master's, 1931. Colo. St. T. C.

This study seeks to add some information to the knowledge which will determine what results are desirable in plane geometry, and to make recommendations to the teacher of plane geometry, as to the best method of presenting the subject, if there is a best method.

1321. Wolin, Samuel. A test of the function concept in elementary algebra. Master's, 1931. Coll. of the City of N. Y. 79 p. ms.

The author constructed a diagnostic test of the knowledge of the function concept acquired in a course in elementary algebra. The final test was administered to 250 high school students. The test can be used to diagnose pupil and class difficulties in the mastery of the function concept.

See also 584, 627, 1165, 1198, 2107, 2161, 2948, 4356.

SCIENCE

1322. Bayles, E. E. Supervisory problems in science instruction in small high schools. University of Kansas bulletin of education, 3: 3-2, December 1930.

The study concludes that the teacher's training should be extensive rather than intensive, that a fine tool consciousness is needed, that lecture demonstration is effective and economical, and that there is a best sequence of science subjects.

1323. Beauchamp, Wilbur L. An analytical study of attainment of specific learning products in elementary science. Doctor's, 1931. Chicago. 344 p. ms.

A detailed analysis of the progress of 21 pupils during one school year in elementary science class. The study including group and individual analyses, reveals the importance of methods of study and methods of teaching upon individual attainment and suggests a method of diagnosis and corrective treatment.

1324. Chicago, Ill. Board of education. A course of study in science and nature study for first, second, and third grades. 1931. 95 p. (Bulletin no. 8-123.)

1325. Calkshank, James. A study of the scientific vocabulary of nine junior high-school texts. Master's, 1931. Michigan.

1326. Curtis, Francis D. A determination of the most important research investigations in the teaching of science for the years 1925 through 1930. Ann Arbor, University of Michigan, 1931.

1327. ———. An investigation of the teaching of science in the secondary schools of the North central association. 1931. North central association of colleges and secondary schools.

A comprehensive study of about 30 aspects of the teaching of science in about 1,000 schools.

1328. Hobson, Laveta A. Investigation of the teaching condition in science in Wisconsin. Master's, 1931. Wisconsin.

1329. Johnson, Wesley A. A study of pupil interest in science materials. Master's, 1931. Wisconsin.

1330. Livingston, John Raymond. A study of pupil interest in science in certain Los Angeles city schools. Master's, 1931. Southern California. 147 p.

This study is based on questionnaire replies from pupils in the sixth grade to the junior college inclusive, with results shown by sex, age, grade, and IQ.

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1331. McKinney, Elizabeth. Science curricula for the fourth grade. Master's, 1931. Iowa. 109 p. ms.

1332. Milleff, Tzveta. Illustrative material for teaching science in the high school. Master's, 1930. T. C., Col. Univ. 21 p. ms.

The study deals with the teaching of natural sciences in the American secondary schools. Findings: No other field of instruction in the American schools of to-day offers such possibilities for supplementary and enrichment materials as does the field of science.

1333. Mosier, Lotta Estelle Harris. An experiment in the teaching of elementary science according to children's interests. Master's, 1930. Oklahoma. (For abstract see no. 713.)

A 3-year experiment was carried on in the Lee school at Oklahoma City. A special science room was fitted up in 1927 for grades 1 to 6, in which the pupils could work with the type of material and kind of problem that most suited them. The freedom of choice of interest encouraged independent work.

1334. Nettels, Charles H. Science interests. Los Angeles, Calif., Public schools, 1931.

See: Science interests of junior high school pupils, *Science education*, 15:219-24, May 1931; also Science topics that are of interest and use to adults, *Science education*, 15:139-44, March 1931; Pupils' reactions to general science courses, *Los Angeles educational research bulletin*, 11: no. 1:1-5, 11, September 1931.

In one study of the science interests of junior high school boys and girls, the dominant interests of boys were found to be chemistry, electricity, animal life, aviation, radio, the earth, minerals, mechanics, and the human body. The dominant interests of girls were animal life, plant life, stars, human body, insects, the earth, flowers, chemistry, astronomy, and electricity. A study of the interests of 1,000 parents of the children showed their 10 chief interests to be aviation, electricity, human body, radio, mechanics, agriculture, food, hygiene, chemistry, disease, and astronomy. In a study of 100 pupils in 8 twelfth grade chemistry classes on their reactions to the junior high school science courses, it was found that girls were more critical of general science offerings than were boys; girls were interested in more different science topics than boys.

1335. Nugent, Grace S. The science curriculum in the elementary school, sixth grade unit. Master's, 1931. Iowa. 117 p. ms.

1336. O'Neil, Thomas. Mathematics ability as an index of success in science. Doctor's, 1931. Fordham.

1337. Parker, Bertha M. An introductory course in science in the intermediate grades. Chicago, Ill., University of Chicago, 1931. 129 p. (Publications of the laboratory schools of the University of Chicago, no. 3, June 1931.)

The science course which is presented in detail in this bulletin is one which is being taught to the fourth-grade classes of the University elementary school of the University of Chicago. It is the result of 10 years of experimentation with the fourth-grade classes in the University elementary school. The course might well be used in any of the intermediate grades.

1338. Phillips, Adams and Hines, Zella M. A science program for elementary schools. Knoxville, Tenn., University of Tennessee, 1931. 157 p. (Extension service record, vol. 8, no. 2, May 1931.)

A syllabus for the teaching of general science by grades from 1 to 8, inclusive.

1339. Ricker, George Granville. Objectives in the teaching of science in the high school. Master's, 1931. Wisconsin.

1340. Robertson, Martin L. Synthesis and evaluation of subject matter elementary science. Master's, 1931. Michigan.

1341. St. Louis, Mo. Public schools. Science. Report of the committee appointed to revise curriculum bulletin no. 7—science for the kindergarten and grades 1 through 6. *Public-school messenger*, 28: no. 2, September 2, 1930. 66 p. (Curriculum series.)

1342. Selberg, Edith. A plan for developing a better technique in giving science demonstrations. Greeley, Colorado State teachers college, 1931.

A preliminary study of teacher and pupil errors in science demonstrations and publications on the psychology of science teaching served as a basis for determining the steps which should be included in the plan. Thirty-six student teachers were observed in the study. The analysis covered a period of three years.

1343. Straka, John H. Problems related to the teaching of high school sciences. Master's, 1931. Nebraska. 55 p. ms.

An analysis of 724 problems submitted by 104 science teachers in 31 cities of three States.

See also 583, 1154, 2020, 2041, 2059, 3171, 3190, 3794.

GENERAL SCIENCE

1344. Berg, Theodore R. A quantitative analysis of general science texts. Master's, 1931. Colorado.

*1345. Borets, Netta. Individual experiment versus pupil-demonstration method in high-school general science. Master's, 1931. New York. 97 p. ms.

The purpose of this study was to test the relative effectiveness of the individual-laboratory method and pupil-demonstration method in imparting factual knowledge to general science pupils in the first year of senior high school. Data indicate that the pupil-demonstration yields better results for immediate and deferred tests than the individual laboratory method.

1346. Branstetter, H. Warren. A course of study in general science for the junior high school. Master's, 1931. Ind. St.-T. C. 96 p. ms.

1347. Broadlick, J. N. A quantitative analysis of five general science texts. Master's, 1931. Kansas.

This is a study of the percentage of pages in five textbooks devoted to each of 26 types or divisions of subject matter and teaching helps. Analysis is proposed as basis for selecting a text for ninth-grade classes.

1348. Carreon, Manuel L. General science survey, 1930. Manila, P. I., Bureau of education, 1930.

Grade 7 and second and fourth years of 49 divisions and insular schools were tested with the Philippine educational achievement tests, series H, form 2. The comparative division median scores were secured.

1349. Chapman, Gerald Howard. The psychological approach in general science instruction. Master's, 1930. Ohio. (For abstract see no. 712.)

The object of this study was to determine whether or not changes had been made toward modern teaching practices in the writing of textbooks. It was found that none of the textbooks examined had followed the psychological method of developing subject matter as set forth by the criteria.

1350. Davis, Ira C. The relative importance of objectives and principles of general science. Master's, 1931. Wisconsin.

1351. Dysart, Russell D. A comparison of the results of different time limits in objective tests. Master's, 1931. Southern California. 50 p.

An experiment in ninth-grade general science, and in junior-college geology, designed to compare the relative effectiveness of: (1) Three types of objective tests, (2) various methods of scoring each test, and (3) different time-limits for each test, the results being statistically analyzed and compared.

1352. English, Donald John. The value of work sheets in the attainment and retention of general science material. Master's, 1931. Wisconsin.

1353. Fitzhugh, Oscar Garth. Syllabus for teaching general science by the unit method. Master's, 1930. Virginia.

1354. Heath, A. W. The relation of the immediate objectives in general science to the learning process. Master's, 1930. Illinois. 95 p. ms. (For abstract see no. 699.)

The experimental work reported in this thesis was carried on for one semester in a class of 15 students in general science at the Maple Park, Ill., community high school. The course in general science for the semester was divided into six units. Immediate objectives were determined for each unit, and learning exercises compatible with the

immediate objectives were selected and devised. An achievement test was given when the student had completed all of the learning exercises for a particular unit. Individual scores of tests made by each pupil on each unit are compared with the possible score, and the relation of mental and reading ability, to the scores made in achievement tests by the individual student. The author concludes "the recognition of the relationship between immediate objectives and learning exercises is beneficial and worth while."

1355. Heiss, Elwood D. An investigation of content and mastery of high school general science courses. Doctor's, 1931. T. C., Col. Univ. 163 p. ms.

Data reported are confined to the status of general science as a ninth-grade subject. The study is divided into three main problems: (1) To discover the basic instructional material used; (2) to determine the extent of achievement in the basic instructional material; and (3) to study the relation of intelligence to achievement in general science.

1356. Hester, Kathleen Beatrice. The construction and use of a study guide in general science. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to determine whether or not pupils can be taught self-dependence in studying general science. One hundred and twenty-eight pupils were selected from six ninth-grade general-science classes on the basis of results from equating tests. At the close of the experiment, a standardized test in general science was given. The experiment began September 1930 and continued until April 28, 1931. Results of the achievement tests on the six blocks of general science show differences consistently in favor of the experimental group. The majority of the pupils using the experimental program of instruction feel that it gives them a definite method of study by means of which they can proceed independently.

1357. Houghton, Glenn Hovis. The effect of the use of film titles on pupil's study of general science material. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An experiment was conducted with four classes of pupils to find out the result of furnishing film titles to the pupils who were to study the film content. Three classes were of the 8A grade and the fourth class was from the 9B grade. The pupils were divided into two groups of 638 pupils each. Findings: Both the pupils and the teacher were unanimously in favor of using film titles as an aid in study.

1358. Lynch, Thomas Joseph. Vocational aspects of general science. Master's, 1931. Boston Coll. 53 p. ms.

1359. Miller, Earl A. Science concepts acquired by junior high school pupils previous to entering a course in general science. Master's, 1931, Iowa. 104 p. ms.

1360. Nettels, Charles H. Evaluation of general science textbooks. Los Angeles, Calif., City schools, 1931.

The evaluation of six of the leading general science textbooks for ninth-grade use.

1361. Overn, A. V. State course of study in general science for North Dakota. Grand Forks, University of North Dakota [1931].

1362. Powers, Stuart C. A study of the "self-made" pupil laboratory manual versus the traditional laboratory manual. Master's, 1931. Ohio. 40 p. ms.

A study of 28 ninth-grade pupils in general science extending over practically the complete school year. Findings: There is no very great advantage for either a "self-made" manual or the "traditional" manual; the "self-made" being slightly superior.

1363. Remaley, J. W. C. A comparison of the aims of general science with the content of recent texts. Master's, 1931. Penn. State. (For abstract see no. 714.)

One part of the thesis consists of the listing of the aims and values of general science as alleged in 96 journal articles. The count of these alleged aims and values is shown separately for different chronological periods. More than 60 aims are listed with the frequency count of each. One hundred and twenty-five pages of the thesis are given to listing topics in general science with a showing of the percentage of space given to each in nine texts in general science. On the basis of these two quantitative analyses the author points out which of the alleged aims general science texts are adequately meeting and which they are neglecting.

1364. Rodean, William A. The overlapping of the content of textbooks in general science and biology. Master's, 1931. Minnesota. 116 p. ms.

This is an analysis of five general-science texts and four biology texts. Findings: Nearly 40 per cent of the average general-science text overlaps material in biology texts. Over one-third of this content is treated more completely in general science than in biology; over one-half is given identical treatment in overlapping texts and about one-seventh is treated most completely in biology. Analysis of biology texts shows that 56 per cent of the text overlaps general science. Over three-fourths of the overlapping material is given major treatment in biology. Only 8 per cent is given more complete treatment in general science.

1365. Selberg, Edith. Activity analysis as a basis for supervision in general science. Greeley, Colorado State teachers college, 1931.

A study of the errors and difficulties of 21 student teachers of general science, covering a period of three years. It was found that the common errors are the more difficult activities of science teaching. Student teachers find it difficult to apply the pedagogical theories and principles.

1366. Tate, Pearl June. The diagnosis of the varying success of pupils studying general science: a case study. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to learn in what way the pupils studied varied in their success in studying general science, to analyze the work that was being done, and to offer suggestions for its improvement. Mental tests, reading tests, a general type of general-science tests and a specific type of general science-tests were given the 22 cases studied. Data indicate that: Low intelligence quotients do not necessitate failure in general science; neither does low reading ability indicate an inevitable failure in science; greater gains were shown on the specific-content general-science tests than on the broader-scope general-science tests.

1367. Whittier, Grace A. References to aviation in general science courses. Master's, 1931. Southern California. 78 p.

A study based on analysis of eight general-science textbooks and on controlled interviews with 12 general-science teachers with reference to the amount of material taught relating to aviation.

1368. Wilber, Oliver. A study of the principles of science contained in general-science textbooks published since the beginning of the year 1924. Master's, 1931. Michigan.

1369. Wilhowson, C. G. The extent of alignment of materials in general science textbooks with the avowed aims of the budget. Master's, 1931. Penn. State.

This is a questionnaire study, of testimony from 300 teachers of science as to the extent to which they find designated textbooks adapted to working designated educational objectives.

See also 599, 2078, 2948, 3164.

NATURE STUDY, BOTANY, AND BIOLOGY

1370. Bastian, Fred F. A controlled experiment on the relative effectiveness of the contract versus the recitation method of teaching biology. Master's, 1931. Penn. State. 42 p. ms.

Experimental contrast between four sections taught by the contract method and four by the recitation method. Three teachers participated, each having a contract and a recitation group. The contract method proved superior in 10 of the 16 comparisons, and where the recitation method was superior it was superior by a narrower margin. On the four sections combined the contract method exceeded the recitation, on the basis of all four types of measures used, by differences sufficient to make the chances against reversal range from 1.68 to 1 to 28 to 1.

1371. Byerley, J. E. A comparison of the nature and organization of the content of textbooks on secondary school biology. Master's, 1930. Illinois. 136 p. ms. (For abstract see no. 699.)

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Nine textbooks in high-school biology, none of which were copyrighted before 1924, were analyzed to determine the nature, amount, and organization of their content. A careful analysis of each of the prefaces to the texts was first made, after which an analysis of the content proper is presented. The author found that there are 36 different major divisions of subject-matter in the various texts. The number of major divisions in the different texts varies from 3 to 11. Authors of the texts differed widely in their opinions concerning what major divisions of biology should be included in high-school biology and at what point in the sequence a certain division should be introduced. It is concluded that there is no best text on high-school biology. The author states 14 desirable features of textbooks in biology.

1372. Cederstrom, J. A. The influence of a secondary course in zoology upon gains in college zoology. *Journal of educational research*, 24: 57-61, June 1931. A study in measuring achievement at college level.

1373. ——— Retention of information gained in courses in college zoology. *Pedagogical seminary and Journal of genetic psychology*, 38: 516-20, December 1930.

A study in measuring retention of information at the college level, based on scores in scaled tests (scale A and B) given at the beginning of the course, at the end of the course, and one year after the course was completed.

1374. Compton, Lella. Enriching the teaching of nature study in elementary schools through the use of available free or low-priced literature. Master's, 1931. Cornell.

1375. Davis, Emma. Some early and later viewpoints on the teaching of nature study in the United States. Ithaca, N. Y., Cornell university, 1931. 22 p. ms.

1376. Dentel, L. H. Oral versus written instruction in the teaching of outdoor botany. Master's, 1931. Kansas.

The study describes an experiment with two rotated groups (40 each) of senior high school pupils equated on Terman mental tests scores. There is a slight but consistent superiority of written over the oral method.

1377. Downey, E. B. Biology manual for students. Cleveland Heights, Ohio, Board of education, 1930. 95 p.

The biology manual for students covers the detailed instructions for students in the 1-year course in biology offered in the high school.

1378. Farr, Winifred Mas. History of biology teaching in the State of Alabama. Master's, 1931. Peabody. 97 p. ms.

State department of archives and history, the State department of education, the City library in Birmingham, and correspondence with city superintendents of schools as to courses of study in biology, were the sources of information. Findings: That the greatest need now is for a unified program of science in the school, including the work of the lower grades and continuing through the junior and senior high school. Laboratory equipment varies with the local community and with the individual teacher. As to the textbook problem, it was found that more concern at present is given to that course which will best serve the average future citizen, which will awaken his interest in the living world in which he lives, and equip him with the scientific method for interpreting that world.

1379. Gamble, Joseph N. The place of natural science in programs of high school graduates. *School review*, 39: 177-85, March, 1931.

This study was undertaken in an attempt to determine existing curricular practices with regard to the requirement and the election of natural science as revealed in programs of high-school graduates and to find out to what extent there is sequential coherence in the courses in natural science.

1380 Gillett, Lloyd H. Comparison of the unit method and the recitation method of teaching high school biology. Master's, 1931. Colorado.

1381. Gray, Howard Burk. An achievement test in high school botany. Seattle, University of Washington, 1931. 85 p. ms.

1382. Grophear, Herman. A determination of some words used in a certain biology text which are not comprehended by ninth-grade pupils of Dearborn high school. Master's, 1931. Michigan.

1383. Hackett, R. J. An experiment with motion pictures in teaching zoology. Master's, 1931. Pittsburgh. (For abstract see no 715.)

This study aims to determine the relative effectiveness of showing 19 motion-picture films in zoology in contra-distinction to teaching the same material without motion pictures as measured in terms of pupil achievement. Three sections, numbering 116 pupils, were used in this experiment which was conducted for four months in the Taylor Alderdice high school, Pittsburgh, Pa., during the first semester of the school year 1930-31. The control and experimental groups were compared on the basis of achievement in zoology as measured by the 14 tests and the end test. None of the differences is sufficiently large to indicate with certainty that the experimental group is superior.

1384. Horton, Lewis E. A teacher's guide in nature study to beautify the home. Master's, 1931. Rutgers.

*1385. Kearney, Mary Joan and Leonard, Agnes Hestor. Manual of biology. Master's, 1931. Marywood. Scranton, Pa., Red dragon co., 1931. 71 p.

1386. Kidder, Harold Russell. The teaching of biology in the secondary schools of Massachusetts. Master's, 1931. Boston Univ.

1387. Long Beach, Calif. City schools. Nature study and elementary science. Course of study for grades 1, 2, 3, 4, 5, and 6. 1931. 229 p. (Reprinted.)

This reprint represents a careful rearrangement of the material of the 1927 issue, to which a great deal of supplementary material has been added.

1388. McDowell, Hazel Altha. Methods of teaching biology. Master's, 1931. Southern California. 83 p.

A compilation of ways and means for conducting biology courses with practical suggestions for the solution of the more common teaching difficulties in this subject.

1389. Morgain, U. Grant. The allotment of space in textbooks in biology. Master's, 1931. Penn. State. 93 p. ms.

Gives detailed tables of space allotment of six high school texts in biology, and correlations between average space in textbooks and average space given to same topics in six standard tests in biology. The correlation was found to be +0.31. The chief value of the thesis is in the detailed tables showing allotment of space to each of 28 topics.

1390. Mulick, Stanley. The science and professional preparation of nature counselors in summer camps as they affect the success of nature programs in these institutions. Master's, 1931. Cornell.

1391. Nealley, Miriam Andrews. Biological instruction of youth in the Natural science museum. Master's, 1931. Cornell.

*1392. Nelson, George E. The introductory biological sciences in the traditional liberal arts college. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 135 p. (Contributions to education, no. 501.)

An attempt has been made to examine the present objectives of biology teaching to determine whether they are directed toward educational goals that may be defined as valid, and whether the objectives are actually realized in current educational practice. The aims and objectives of instruction were listed and examined in course announcements of 100 colleges, and the prefaces of 21 widely used textbooks in the introductory biological sciences. Tests were given to 757 students. Findings: Data indicate that the objectives of biology teaching, stated in course announcements and prefaces of textbooks in the biological sciences, are not fully in line with the major aims of college instruction. Many students failed to obtain a clear conception of many of the most fundamental principles or generalizations of the biological sciences.

1393. Reese, Charles David. Objectives of high school biology. Master's, 1931. Peabody. 115 p. ms.

The study involved class demonstration method, test exercises, and analysis of tests. Findings: In measuring the adaptive controls an average score of 56.6 per cent was obtained. Low average score was attributed to two factors, lack of complete mastery at the beginning and loss of retention after 90 days. General patterns of conduct and specific habits are concomitant outcomes of adaptive controls, and for this reason adaptive controls should be the basis of such public activity.

1394. Schaller, Ralph A. A study of tests and examinations with special reference to biology. Master's, 1931. Ohio. 105 p. ms.

This study included the history of oral, essay examinations, and intelligence, standard, and new-type or objective tests; a presentation of a democratic and social theory of education and an evaluation of all tests and examinations in the light of this philosophy of education. Conclusions: Things measured become the course objectives. Therefore, course objectives should be formulated and testing program based upon these.

1395. Secor, Carl T. A comparative study of the effectiveness of the motion picture followed by oral discussion and a combination of the lecture, laboratory, and recitation methods of teaching certain units in high school biology. Master's, 1931. New York. 57 p. ms.

A study of the effectiveness of the motion picture in teaching the units of biology, treating insects, digestion, circulation, cell structure and health. Findings: (1) For general knowledge, the motion picture seems to be a better means of instruction than mixed instruction for limited units of subject matter taught in biology; (2) for factual knowledge, the motion picture seems to be a better means of instruction than mixed instruction for limited units of subject matter taught in biology; (3) pupils of low intelligence quotient make higher test scores when instructed by means of the motion pictures; (4) there is a higher coefficient of correlation between the intelligence quotient and film instruction than there is between the intelligence quotient and mixed instruction; (5) pupils do not seem to think or remember in terms of the film titles or pictures that follow a regular sequence; (6) mixed instruction seems to be as effective as film instruction for pupils of high intelligence quotient levels.

1396. Simmons, Benjamin Leroy. The present status of biology in South Dakota high schools with recommendations for changes in the curriculum. Master's, 1930. Iowa.

1397. Smith, Charles Grandison. An experimental study to determine the relative merits of the project method vs. traditional methods of teaching high school biology. Master's, 1931. Southern California. 68 p.

An equivalent group experiment with comparisons in terms of test scores and pupil preferences as expressed in questionnaire responses.

See also 799, 1324, 1364, 1454, 2070, 2486, 3237, 3316.

CHEMISTRY AND PHYSICS

1398. Aber, Lee. A study of the relative functioning value of certain items of chemistry education. Master's, 1931. Penn. State. 58 p. ms.

This study included quantitative index values of the relative importance of 106 items from high-school chemistry in affording pleasures from interpretation of phenomena that come within the experience of the person possessing a knowledge of them; also index values derived from responses from various type groups who indicated on a check list the frequency with which they had occasion to use each and the amount of pleasure afforded. The reliabilities for index values averaged 0.84. Intergroup correlations ran from 0.82 to 0.98 when corrected for attenuation.

1399. Artz, Marion Ruth. An analysis of the literature relating to the teaching of chemistry in secondary schools. Master's, 1931. Southern California. 203 p. ms.

1400. Ball, Phillip Milo. A critical analysis of pupil responses to the concepts of mechanics in high-school physics. Doctor's, 1931. Iowa.

1401. Baskerville, Charles W. Determination of the prerequisite mathematical skills required to master college physics as presented in "College physics" by Sheldon, Kent, Paton Miller. Master's, 1931. Iowa. 92 p. ms.

*1402. Black, Oswald F. The development of certain concepts of physics in high-school students. An experimental study. Doctor's, 1930. T. C. Col. Univ. Potchefstroom, South Africa, "Die Weste" [1930]. 211 p.

"In this study an attempt is made to contribute something to the problem of subject-matter and method in high-school physics and general science from the point of view of conceptual development."

1403. **Black, Paul H.** A teachable presentation of fundamental principles of velocity, acceleration, and inertia forces of machines. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The analysis is made with the average undergraduate engineering student's point of view constantly in mind and presupposes on the part of the reader only an acquaintance with and not a good working knowledge of the fundamentals of mechanics.

1404. **Bogen, Alfred J.** A comparison of two techniques for measuring the ability to solve problems in physics. Master's, 1931. Iowa. 49 p. ms.

1405. **Boyce, H. H.** Physics content of periodicals in homes of public-school pupils. Master's, 1931. Nebraska. 106 p. ms.

All periodicals coming to 1,715 homes in Nebraska, Iowa, and South Dakota were studied. Periodicals were scanned for periods from 4 to 16 weeks, depending upon the number of homes in which they were found. Clippings were saved and classified on basis of content to determine comparative quantities of clippings on various topics.

*1406. **Bray, Willis Joseph.** Achievement in general chemistry as it is related to certain learning abilities. Doctor's, 1931. Missouri. Kirksville, Northeast Missouri State teachers college, 1931. 87 p. (Bulletin, vol. 31, no. 6, July 1931.)

This study attempts to answer the following questions: To what extent do college students entering upon a study of general chemistry know how to read chemical literature; do college students of general chemistry lack general-reading ability; to what extent is ability to read chemical literature related to achievement in general chemistry; are the students handicapped by a lack of mastery of general vocabulary; to what extent is knowledge of chemistry vocabulary related to achievement in general chemistry; what relationship exists between ability to read for directions and achievement in general chemistry; what relationship exists between ability to solve a chemical laboratory problem and achievement in general chemistry; what relationship exists between intelligence and ability to achieve in general chemistry; to what extent do individual students tend to differ in reading ability, in intelligence, and in achievement in general chemistry?

1407. **Broad, Lambert E.** Preparation and evaluation of unit tests in physics. Master's, 1931. Pittsburgh. 75 p. (For abstract see no. 715.)

The purposes of this study were to construct tests in physics on the blocks of "heat," "sound," and "light," divided into valid learning units; to evaluate these tests as to validity, reliability, and objectivity; and to obtain the reaction of the students to the testing program. Findings: The tests are objective, valid, reliable, and diagnostic; students prefer the tests organized in the same way in which the subject was studied, rather than by the common method; mixing the types of questions causes the pupils little or no confusion; marking attainment on a unit by using letters signifying degrees of achievement is preferable to marking with grades based on a normal distribution.

*1408. **Bruce, G. V.** An experiment to determine the relative effectiveness of the daily-assignment method and the unit-assignment method in the mastery and retention of subject matter in elementary chemistry. Master's, 1931. New York. 73 p. ms.

The study compared achievement of chemistry classes of two consecutive years; first year using daily assignment, second year the unit method. Findings: Pupils learn slightly better by daily assignment, but they retain better by unit method.

1409. **Bursch, James F.** Predicting success in the study of chemistry. Sacramento, Calif., City schools, 1931. (For abstract see no. 717b.)

A composite index for predicting success in eleventh-grade chemistry was made by reducing Terman group test IQ's, and average marks earned in ninth and tenth grades in algebra, geometry, and English, each to percentile rank equivalents and then averaging them for 162 students electing chemistry. The Powers chemistry test (form B) was given at the close of the semester and the scores reduced to percentile rank.

1410. **Carter, William Ray.** A study of certain mathematical abilities in high-school physics. Doctor's, 1931. Missouri. 128 p.

The study deals with the extent to which high-school students of physics are able to recognize mathematical concepts, and the relative importance of this ability to computational ability in the study of physics. The place of mathematics in high-school physics was defined with a high degree of definiteness and accuracy. Different mathematical abilities were located and properly related.

1411. Condon, John L. Prognosis in physics. Master's, 1931. Syracuse.

1412. Corbridge, James Noel. Objective tests in chemistry and physics. Master's, 1931. Brown. 85 p. ms.

A survey of available tests with evaluative comments.

1413. Cordrey, William A. Placement of physics topics in the grades of secondary schools. Nashville, Tenn., George Peabody college for teachers, 1931. 69 p. ms.

A study of about 300 students. Findings: Ninth-grade students learn Archimedes' principle as well as do students in any other grade of the secondary schools and retain nearly as much. Tenth-grade students learn more reflection of light and retain as much as do the students in any other grade of the secondary schools. Eleventh-grade students of average intelligence learn physics more readily than do students of the same intelligence rating in the twelfth grade. Negro students are about 75 per cent as efficient in learning physics as are white students of the same grade classification.

1414. Dean, Ella Rose. Chemical matters referred to in periodicals of the home. Master's, 1931. Chicago. 137 p. ms.

A study of the content of Good Housekeeping, Hygeia, House Beautiful, etc., showed that chemical matters are referred to in 5.25 per cent of the pages and 8.24 per cent of the articles in the magazines. Therefore, a considerable knowledge of chemistry is necessary for the reading of magazines. It showed that a larger vocabulary of organic chemistry is needed by the reader than high-school training gives; the scope of chemical terms occurring in the magazines is greater than that of the textbook; the use of pictures in magazines is much less than in the textbook. Conclusion: The textbook, if well mastered, provides sufficient training in chemistry to enable one to read the home magazines intelligently.

1415. Debus, Earl S. A determination of scientific principles as found in 14 widely used high-school chemistry textbooks. Master's, 1931. Michigan.

1416. Devine, Paul Francis. Organization of a course in chemistry for firemen. Master's, 1931. Southern California. 94 p.

1417. Durringer, Glenn W. A determination of the material from the field of modern physics which should be included in the high-school physics course. Master's, 1931. Colo. St. T. C.

The purpose of this investigation was to furnish scientific evidence which will aid in the determination of what topics from the field of modern physics should be included in a high-school course in physics.

1418. Eck, Howard W. Adjustments of the course in chemistry to progress in the science and in educational theory. Master's, 1931. Ohio. 104 p. ms.

The purpose of the study was the perfection of a laboratory course in chemistry based on sound educational theories. Findings: Much of the traditional material can be eliminated. Shows the disciplinary, cultural, and vocational values derived from chemistry.

1419. Farr, Osborne Allen. A comparative study of visual aids in teaching chemistry. Master's, 1931. Peabody. 59 p. ms.

Visual aids which were closely related to subject matter included in course of study and which were constructed to meet the needs of the classroom instruction were studied. Pupils involved were equated according to IQ and placed in experimental and controlled groups for 12 school weeks. Findings: That pupils achieve more chemistry when taught with visual aids closely correlated with subject matter included in the course of study, than when textbook stereotyped plan of construction is followed.

1420. Fowler, Arthur Lee. A unified course in high-school and junior-college chemistry. Master's, 1931. Stanford.

1421. German, B. Fred. Individual-laboratory versus lecture-demonstration method of teaching high school chemistry. Master's, 1931. Tennessee. 62 p. ms.

1422. Goore, Horace C. Relation of chemistry in industry. Greensboro, N. C., Agricultural and technical college, 1930.

Analyses present industry and the extent to which chemistry is used; shows the need for an appreciation of the importance of chemistry in our every-day life and the necessity of greater stress on chemistry in the high school.

1423. Gorgas, Charles A. A comparative study of methods, traditional, block-unit, and subject plan, in the teaching of elementary high school chemistry. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

In this study, control groups using the traditional recitation system were compared with groups using the block-unit method and the subject plan by means of a series of tests involving a total of 400 objective-type questions covering one semester's work of elementary chemistry. The study was made with 352 students, divided into four groups of paired pupils of 47, 45, 45, and 89, respectively. Findings: The experimental groups, using a directed study plan, showed a consistent gain in answering the questions from a series of tests used to determine differences in ability to state and apply chemical knowledge after a period of study in the classroom.

1424. Haley, Walter L. Series of performance tests in high school chemistry. Master's, 1931. Rutgers.

1425. Haviland, Arthur L. The mathematics found in high school chemistry textbooks. Master's, 1930. Colo. St. T. C.

This study purposes to determine the kind and amount of mathematical terms, concepts, and processes found in high-school chemistry textbooks.

1426. Hunt, Leslie Leigh. Relation of early teaching of chemistry principles to retention. Chicago, Ill., University of Chicago, 1931. 168 p. ins.

Covers a year's work in high-school chemistry in which the placement of the periodic law was studied and evaluated on the basis of retention as shown by standardized tests. A small, increasingly significant difference in favor of the equalized group who studied the periodic law early in year was found.

1427. Hurd, Archer W. Curriculum development based on unit experimentation in physics. North central association quarterly, 5: 474-89, March 1931.

This report gives data on the responses to preliminary and final test items on a unit in physical science, and shows how certain criteria are used in eliminating sub-topics for improving the unit for future school use. The purpose was to get more satisfactory achievement scores on carefully selected course content in a projected minimal essential-project program for pupils in high-school physics.

1428. ——— Effects of school instruction on student achievement. Science education, 15: 239-44, May 1931.

Gives forms of distribution for scores in preliminary tests, final tests, and gains for 11 different teaching units in high school physics. Most of the distributions show a concentration at the low end of the scale for the pre-test, and for the gains, and a more normal distribution of the final test. Two units showing a more desirable distribution for a test on minimal essentials gives a concentration at the high end of the scale for the final test, and a more normal distribution of gains. Pupils range in number from 79 to 400 per distribution. The aim is for higher achievement scores on carefully selected content in a minimal essential-project pupil program.

1429. ——— The experimental use of teaching units in physical science. North central association quarterly, 5: 471-74, March 1931.

A report of achievement ratings on pre-tests, final tests, and gains due to a period of instruction in certain outlined units of instruction. One hundred and seven classes of more than 2,500 pupils taught by 36 teachers in 30 schools received unit outlines and tests. Twenty-five schools in 23 cities in 14 different states finally furnished test data for one or more units. The data have been collected to find out how well pupils accomplish certain clearly stated objectives when carefully selected materials are used.

1430. ——— Final tests in high-school physics. New York City, Teachers college, Columbia university, 1930. Printed with manual. 17 p.

These tests are three forms (equivalent) of a test in high-school physics, with a manual giving uses, directions for the test, directions for scoring, and converting scores and norms on the bases of: (1) Percentile scores; (2) "M" scores (T score technique); and (3) means and standard deviations. Data on objectivity, validity, and reliability, and keys for scoring each form are given.

1431. ——— General report on class achievements, unit 8. Electric-lighting systems, experimental series school year, 1930-1931. New York City, Teachers college, Columbia university, 1931.

The 94 experiments were used to determine the effects on achievement of a more careful selection of unit objectives and more careful instruction and measurement of instructional

results. One unit was used with 1,955 pupils in all experiments. Achievement records were much more satisfactory as measured by tests which have proved highly reliable and valid.

1432. ——— Preliminary tests as prognostic of final achievement in physics. School science and mathematics, 31: 745-48, June 1931.

This report gives 26 correlations between preliminary and final tests in high-school physics. The tests have reliability of about 0.91 ± 0.01 . Data presented show the pretest as the best single criterion of final achievement though there are reasons given explaining why it can not always be depended upon.

1433. ——— Realized achievement in relation to expected achievement in secondary school courses. 1931. New York City, Teachers college, Columbia university, 1931. 41 p. ms.

A report of the number and per cent of corrected responses to items in pretests and final tests for 11 teaching units in high-school physics. Each item is given in the tables, so that a person can tell what pupils know at the beginning and end of a period of school instruction on definitely stated items. The tests include information, problem-solving techniques, and appreciation items. Tables are also given showing the number of test items in pretests and final tests receiving various percentages of correct response. A discussion of factors conditioning achievement closes the report.

1434. ——— Teacher opinion on problems of science teaching. Educational method, 10: 281-84, February 1931.

Gives a summary of responses to a questionnaire sent to teachers who had tried one or more teaching units in physics. Some significant summary statements are: "The present course in high-school physics is too long"; "Pupils have no time for project work"; "More intensive concentration on a few units is desirable"; "Units should explain common things in the environment."

1435. ——— Tests in high-school physics. New York City, Teachers college, Columbia university, 1930. 19 p.

The study deals with final tests forms A, B, and C; with studies of validity and reliability, and with norms. The last are in percentiles and "M" scores. Mean scores and standard deviations are given for from 500 to 900 pupils on each form. Findings: Schools vary greatly in achievement. The private preparatory schools are very much superior to the public schools which cooperated in the study. The tests are valid and reliable according to accepted standards.

1436. ——— The workbook as an instructional aid. New York City, Teachers college, Columbia university, 1930. 54 p. ms.

This is a report of 15 controlled experiments to contrast the use of work sheets in instruction with methods using no work sheets. The results from the 15 experiments are not uniform, some favoring the use of work sheets significantly; some showing no difference; and some showing a contrasted method superior. Matched and unmatched pupil groups are compared statistically. In all, it is shown that work sheets may be used advantageously by some teachers, in order to secure significantly higher achievement ratings from pupils in high-school physics.

1437. ——— Work-test book in physics. New York City, The Macmillan company, 1930. 148 p.

Nineteen units and tests for each unit were selected in accordance with results from unit experimentation. Original units used have been much shortened with corresponding abbreviation of the tests.

1438. Jones, Leonard C. A comparison of new type tests in physics composed of the same or similar questions. Master's, 1931. Colorado.

1439. Kemp, Gerard Lawrence. (*Brother Lawrence*) Chemical education in secondary schools in the United States. Master's, 1931. Boston Coll. 61 p. ms.

1440. Kirkpatrick, James Earl. Textbook validation of a series of objective exercises in the field of high-school physics. Master's, 1931. Iowa. 682 p. ms.

1441. Kochakian, Charles Daniel. New experiments for a laboratory course in organic chemistry. Master's, 1931. Boston Univ.

1442. Lindblad, Bertha. The chemistry found in elementary high school biology textbooks. Master's, 1930. Colo. St. T. C.

This is an investigation to determine the kind and amount of chemical terms, concepts, and processes found in high school general biology.

*1443. Malin, Joseph Earl. The construction of a diagnostic test in the mechanics and related fundamentals of high school chemistry. Doctor's, 1931. Pennsylvania. Philadelphia, Pa., Williams brothers, 1931. 275 p.

The selection of items for the test is based upon three criteria: First, upon the analysis of the six leading textbooks and manuals used in the United States; second, upon pupil errors as found in the writer's previous studies and upon errors made by the 1,960 pupils in the present investigation; third, upon an analysis of the College entrance board examinations from 1917 to 1927, inclusive. All items in the test with the exception of two are taught in over 90 per cent of the schools as shown by the returns of 96 questionnaires received from city school systems representing every State in the Union with the exception of Nevada.

1444. Mills, J. E. Educational progress in chemistry. Journal of chemical education, 7: 2227-46, October 1930.

Contains comparative statistics of provisions and equipment for chemical education in the Southern States.

1445. Moore, Fred. Study of chemical principles in chemistry textbooks. Master's, 1931. Michigan.

1446. Newsom, Ralph P. Mathematics needed in the study of high school physics. Master's, 1930. Colo. St. T. C.

The purpose of the study is to reach some definite conclusions relative to the amount and kind of mathematics needed to successfully study high school physics.

1447. Payne, Virgil Francis. A comparison of the lecture-demonstration and individual laboratory methods of introducing college students to first year chemistry. Doctor's, 1931. Kentucky. 196 p. ms.

A comparison of the effectiveness of the lecture-demonstration and the individual laboratory methods of introducing freshmen to general chemistry, based on the paired-student method. The writer concludes that all students will succeed as well, and poor students probably better, in their first year's work in general chemistry if they are taught the first half-year by the lecture-demonstration method without individual laboratory work.

1448. Rizer, Richard T. A teaching procedure that proposes to take care of individual needs in a high school physics or chemistry class and a comparison of results obtained from this method and the traditional textbook method. Master's, 1931. Maryland. 112 p. ms.

Comparison of a project and special report treatment of high-school physics and chemistry with lecture-recitation-laboratory method. Findings: Superiority of first-named method in learning; inferiority in laboratory manipulation; and high value of pupil demonstration and reports.

1449. Schmidt, Carl H. Analysis of the high school physics course as found in six high school textbooks. Master's, 1931. Iowa. 83 p. ms.

1450. Schneider, Allen Joseph. The implications of the democratic ideal in education for the teaching of high school physics. Master's, 1930. Ohio. (For abstract see no. 712.)

A study of the history of the development of the teaching of physics, suggesting means of humanizing the study of high-school physics.

1451. Smith, Foss. A program for teaching high-school chemistry. Master's, 1931. Tennessee. 280 p.

1452. Sponcler, Edna Helen. Self-appraisal of the certainty of possession of knowledge of high school chemistry. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study undertakes to determine to what extent learners can appraise their knowledge of high-school chemistry; what difference in degree exists among pupils of different abilities in appraising their knowledge; and what effect practice has upon the estimation of possession. Data were secured from a chemistry class of 22 pupils in Aliquippa

high school, and three chemistry classes of 83 pupils in Beaver Falls high school. Findings: In this particular study, pupils were capable of appraising their knowledge; pupils belonging to the high group of either intelligence or achievement were best able to appraise their knowledge; pupils belonging to the middle group of either intelligence or achievement were better able to appraise their knowledge than those belonging to the low group; pupils in no category of intelligence show consistent improvement in their ability to appraise.

*1453. Stover, C. Franklin. An investigation of the chemistry terminology demanded for an intelligent reading of current literature. Master's, 1931. Penn. State. 75 p. ms.

A study was made of 48 issues of the Literary Digest taken in a random sampling of all seasons during a period of eight years. Findings: Surveys of the broad classifications of topics found in an analysis of current literature have underestimated the frequency with which chemistry actually appears in the press and in periodicals. The usefulness of a knowledge of chemical terminology in reading periodical literature has been shown to be considerable. Much of the conventional terminology of chemistry is being taught in the prerequisite sciences of biology and general science. Data indicate that advertising does not draw heavily on science in the description of products to the general reader.

1454. Thomas, Helen Stanley. Physical and biological science experiments for third-grade children. Master's, 1931. Stanford.

1455. Wagner, Elmer E. Objective analysis of high school chemistry textbooks. Master's, 1931. Colorado.

1456. Ward, William Eugene. A test of achievement on results of laboratory work in high-school chemistry. Master's, 1931. Washington. 78 p. ms.

1457. Waldon, Glen Thomas. A knowledge of the meaning of technical terms as an index to achievement in high-school physics. Master's 1930. Iowa.

1458. Weymouth, Ethel Marion. Enriched teaching of physics. An attempt to enrich the high-school physics course by topically arranged readings. Ithaca, N. Y., Cornell university, 1930. 349 p. ms.

1459. Williams, Jessie. Study outlines in physics construction and experiment evaluation. Doctor's, 1931. T. C., Col. Univ.

The problem is divided into two parts: (1) the construction of assignment sheets for high-school physics which would comply with and aid in the realization of the aims of secondary education; be based on the specific subject-matter objectives of physics as conceived in the course of study and textbooks used in Los Angeles, Calif.; make use of the principles of the psychology of learning; and be in such form as to be of practical value for large classes of average pupils with average teachers; and (2) the evaluation of the study outlines resulting from the first part of the study. Physics classes taught by 17 teachers in 9 high schools of Los Angeles were used to evaluate the study outlines.

1460. Wooley, Glenn Meng. The reorganization of subject matter in high school physics and chemistry. Master's, 1931. Southern California. 56 p.

A study based on questionnaire returns from 104 teachers of high-school physics and chemistry in California. Presents conclusions relating to the changing aims and content of these courses and suggests further steps in their reorganization.

1461. Woolson, Richard. Chemistry and chemistry teaching in the New Jersey high schools. Master's, 1931. Rutgers. 118 p. ms.

1462. Yates, James A. and Morgan, L. D. Chemistry achievement-test for high schools and colleges. Pittsburg, Kansas State teachers college, 1930.

1463. Ziegler, Tobias F. A curriculum study of physics. Master's, 1930. Colo. St. T. C.

This study seeks to determine what knowledge of electricity is useful to the average high-school graduate, what contacts in home and industrial life the individual is going to make which involve a knowledge of electricity, and which of these problems occur most frequently in the experiences of individuals.

See also 218, 2058, 2948, 3145, 3781, 3902.

SOCIAL STUDIES

1464. Akron, Ohio. Public schools. Social studies outline. 1930. 22 p. (Publication no. 1.)

This experimental course of study is intended to assist teachers in planning their social-studies work until such time as the curriculum revision committee shall have completed a course in social studies.

1465. Ballard, Charles Roy. Measuring achievement in high school sociology. Master's, 1931. Colorado. 55 p. ms.

The study deals with 10 high schools located in 6 different States, covering 440 cases. Findings: The test is both valid and reliable. Norms may be standardized after elimination of a few of the questions.

1466. Bandy, Mrs. Johnnye. Informal instruction in the social studies in the fourth grade. Master's [1931]. Peabody. 164 p. ms.

The study covered the experiments of two school years with two groups of fourth-grade children. Findings: The requirements of the Memphis, Tenn., course of study could be met through informal teaching procedure.

1467. Benzing, F. B. An analysis of visual aids in secondary school sociology textbooks. Master's, 1931. Iowa. 53 p. ms.

1468. Briggs, David H. The influence of certain methods of making the assignment on the study and learning process in the social sciences. Doctor's, 1931. North Carolina. (For abstract see no. 710.)

This study gives the results of an objective determination of the influence on the learning process of five methods of making the assignment: (1) A suggested study procedure; (2) the assignment of pertinent study questions; (3) teaching the meaning of the difficult words found in the selection to be learned; (4) making the pupils aware of the personal value of the materials to be learned; and (5) making the pupils aware of the general meaning of the materials to be learned. Each type of assignment was tested with 2 fifth, 2 seventh, and 2 ninth grade groups, by using 2 reading tests of approximately equal difficulty. Findings: Method 3 was the most influential of the five types in causing improvement on the combined scores of the three grades tested. Method 4 was the most effective with fifth-grade pupils; method 5 with the seventh-grade pupils; and method 2 with ninth-grade pupils.

1469. Chicago, Ill. Board of education. A course of study in the social sciences. Junior high school. 1931. 213 p. (Bulletin SS-789.)

This course is the result of a study of the educational needs of the children of Chicago by committees chosen for experience, skill, and scholarship.

1470. Christerson, Anne von. Motivation through praise and criticism in the teaching of social science in the junior high school. Master's, 1931. Stanford.

1471. Christy, Mary Edith. The relation of reading ability to progress in social sciences. Master's, 1931. Denver. 76 p. ms.

One hundred and thirty-one pupils in four classes in American history 1 of the eleventh grade in North high school, Denver, were tested in 1929, and 109 of these pupils were conferred with one year later. The pupils were tested in reading comprehension and rate in order to determine the range and character of abilities in the classes. The study attempts to answer various questions on the relation of reading ability to achievement in social science and other school subjects.

1472. Cleveland, Kathleen D. Development of land transportation in the United States. Master's [1931]. Peabody. 294 p.

This study involved: (1) An investigation to determine issues and problems that should be understood by the American youth; (2) an analysis of social studies texts in reference to land transportation in the United States; (3) an analysis of representative courses of study in regard to the subject; and (4) the setting up of a criteria for the selection and organization of material relating to land transportation in the United States into a social-studies unit for the junior high school. Findings: A complete organization of a junior high school social-studies unit on the development of land transportation in the United States.

1473. Davis, Beatrice. Transportation. New York City, Teachers college, Columbia university, 1931. 20 p. (Teachers' lesson unit series, no. 1.)
1474. Denver, Colo. Public schools. Social science. Elementary school, grades 3, 4, 5, and 6. 2d rev. ed. 1931. 184 p. (Course of study monograph, no. 20.)
1475. ——— Social science. Junior high school, grades 7, 8, and 9. 3d rev. ed. 1931. 196 p. (Course of study monograph, no. 3.)
1476. ——— Social science. Senior high school, grades 10, 11, and 12. 2d rev. ed. 1931. 195 p. (Course of study monograph, no. 19.)
1477. Devereaux, Olive. Social science objectives in the junior high school. Master's, 1930. Oklahoma. (For abstract see no. 713.)
A study was made of recent courses of study in social science for junior high schools in representative states and cities. Most of the lists of objectives include citizenship, pupil participation, and the command of the fundamental processes. Findings: Health, respect for law, and worthy home membership were inadequately cared for.
1478. Emig, Arthur Samuel. The meaning of objectivity in sociology. Doctor's, 1930. Northwestern.
1479. Fancier, Della Goode. An analysis of the professional literature relating to the teaching of the social studies in secondary schools. Master's, 1931. Southern California. 656 p.
A detailed and comprehensive study of a number of aspects of the subject, such as history, aims, curriculum organization, course content, methods of teaching, equipment, social-studies laboratory, teacher status, and correlation with other activities.
1480. Fawcett, Beecher W. A curriculum study in problems of transportation. Master's, 1931. Colo. St. T. C.
The purpose of this study was to discover the important problems, concepts, generalizations, and dates which concern the field of transportation, in order to determine the subject matter for a vitalized social-science curriculum.
1481. Fox, Florence C. Notes on the Oregon trail, arranged as new materials of instruction in geography, civics, and history for elementary schools. Washington, United States Government printing office, 1930. 48 p. (U. S. Office of education. Bulletin 1930, no. 27.)
1482. Gerberich, J. B. Prediction of scholastic success in principles of economics, 1930-1931. Fayetteville, University of Arkansas, 1931. 2 p. ms.
Development of aptitude measure for economics. Findings: A correlation coefficient of 0.622 with first-semester grades in the subject.
1483. Grant, M. F. The vocabulary difficulty of a certain ninth-grade textbook in social science. Master's, 1931. Michigan.
1484. Green, Belvia. A comparative study of the standings of students and time spent in social science in high school and university. Master's, 1930. Illinois. 51 p. (For abstract see no. 699.)
"Data consisting largely of high-school and university grades in social science of 300 University of Illinois freshmen were secured from the files in the office of the registrar of the university and examined. It is shown that individuals do not necessarily maintain the same relative ranks in social science in the university which they maintained in the same group of subjects in the high school; very little correlation seemed to exist between high-school and university grades in social science of individuals used in this study; a larger per cent of individuals found in the higher ranks in social science in high school completed the work at the university than did those found in the lower ranks."
1485. Grimes, Archie B. The sociology of newspapers. Master's, 1931. Iowa. 115 p. ms.
1486. Hass, C. B. A study of north central high schools of Michigan pertaining to the extent social science subjects are being offered in respective school curricula and subject combinations of their social-science teachers. Master's, 1930. Michigan.

1487. Hall, Walton S. Political intelligence then and now. Master's, 1931. Boston Univ.

This study shows the effect of social-science instruction in the past 40 years and indicates present needs.

1488. Haman, John William. The curriculum organization of the social studies in secondary schools. Master's, 1931. Southern California. 159 p.

A general treatment based on an analysis of the literature and on a subjective evaluation of the curricula in a total of about 80 institutions located in various parts of the United States.

1489. Harper, W. W. The vocabulary content of economics for Kansas high schools. Master's, 1931. Kansas.

A study of an economics vocabulary analysis of 10 representative Kansas newspapers over a period of six weeks. Lists were submitted to representative business men and compared with vocabularies of texts in economics on the approved list for Kansas high schools.

1490. Helmers, Louise Cornelia. Evaluation of visual and printed first grade social science materials. Master's [1931]. Peabody. 195 p. ms.

A study to determine visual and printed materials available for teaching first-grade social science. Findings: Of 15 units of work in courses of study recommended by Bureau of curriculum research, Teachers college, Columbia university, only 8 could meet the test of criteria set up by California curriculum commission. Material for three units of work, The homes we live in, Workers that help us, and Our clothes, was meager. Much material was found for units: Our special days, Our home life, and Our food. First-grade readers and primers furnished most printed materials; lantern slides most visual materials. Best types of material according to criteria of the fourth yearbook, Department of superintendence, National education association, were stories to be read to the children; stories and poems for the children to read; subject matter references; and excursions. According to the same criteria, very few materials suggested to the pupils other problems of value and enlisted their interest in them. Most of the printed materials in this study were written or copyrighted after 1922, showing that only recently has interest been shown in writing social-science material for young children's use.

1491. Helphinstine, Ida B. A study in the adaptation of the Chicago unit plan to certain phases of social-science work in the primary grades. Master's, 1930. Indiana. 82 p. ms.

The problem was to ascertain whether children in the first three grades have reached a level of understanding that justifies any teaching in regard to our national holidays; and whether such teaching could be made to contribute any appreciable social-science values. Findings: The degree of interest manifested and the results obtained on the tests given indicated that children in the first three grades have reached a level of understanding that justifies teaching connected with the national holidays. Objective tests in the second and third grades show that appreciable understandings leading toward more formal geography and history study were acquired.

1492. Horgan, Francis James. Curriculum making in the social studies. Doctor's, 1931. Boston Coll. 107 p. ms.

1493. Lamb, Janet M. The history and present status of thrift in the public school. Master's, 1930. New York. 117 p. ms.

The study deals with the history of the thrift movement from its European beginnings, together with that of school savings from 1798 to its present state in the United States; data show this country's wastefulness, lessons of the Great war, the need of thrift teaching in the public school, and the present status as gleaned from a study of a large number of schools. It has been found that the progress of thrift education during the 15 years of its practice in this country has exceeded the anticipations of its leading promoters.

1494. Leibman, M. The background for a course in contemporary Jewish life. Master's, 1931. Chicago. 78 p. ms.

A study to determine the content of a course in contemporary Jewish life and the relative emphasis to be placed on its constituent elements. Outlines items to be included, gives time allotment for the various parts of the course, and evaluates current texts on the subject.

1495. Los Angeles, Calif. City schools. Study plans, ninth grade social studies "The story of civilization." 1931. 192 p.

These study plans were prepared to be used with the course in the Story of civilization.

1496. ——— Thrift in education. A source book of materials with suggested plans for study in connection with the school savings-bank activity for use in the Los Angeles city school district. 1931. 188 p. (School publication, no. 218.)

1497. McChesney, Mildred F. The history and status of the teaching of economics in the secondary schools of New York State. Master's, 1931. N. Y. St. Coll. for Teach. 120 p. and appendix.

A complete history of the teaching of economics in the secondary schools of New York State. Individual schools teaching the subject in the period from 1838 to 1867 are listed. Material from textbooks, syllabuses, and Regents' examinations is used to show changes in content in the several periods. Changes in the nature of the examinations are traced, and it is shown that the questions tend to "parallel the economic questions of the day." It is the belief of the author that more children should study the subject, and facts are presented to show that it is not too difficult for children in the secondary schools.

1498. McLain, Grace. A social-problems course for high school girls. Master's, 1931. Nebraska. 211 p. ms.

1499. Major, Nannie Aurelia. The social science curriculum in the junior college. Master's [1931]. Peabody. 108 p. ms.

The study included 177 junior colleges. Findings: 1,112 courses are offered in social science, history, economics, sociology, political science, and geography. Shows the variations in semester hours in the same course, the similarity of titles of courses, and other significant facts.

1500. Minnesota. Department of education. The secondary school curriculum and syllabi of subjects. Social studies, ninth and tenth years. Ancient history, modern world history. St. Paul, Minn., 1931. 67 p. (Bulletin No. C-2.)

1501. Oregon. State Department of education. Course of study, elementary schools, history, civics. Salem, State printing department, 1931. 183 p.

This course of study includes a list of elementary-school textbooks.

1502. ——— Course of study, high schools, social studies. Salem, State printing department, 1931. 88 p.

1503. Parker, Clyde. The educational trend in social science with a course of study in sociology for the senior high school. Master's, 1931. Ind. St. T. C. 150 p. ms.

Shows educational trend in social science and constructs a course of study in sociology for senior high school.

1504. Parker, Vera E. Determination of social-studies units for first-year high school. Master's, 1931. George Washington.

Tests were given to find out what pupils do not know. Analyses social situations of high-school pupils.

1505. Roberts, Helen Mary. Sex differences in the intermediate grades relative to achievement in social science. Master's, 1930. Denver. 78 p. ms.

Social-science tests administered to pupils of the fifth and sixth grades in six Denver schools, showed that sex differences in the intermediate grades relative to achievement in social science are apparent; that they are more apparent in grades 6A and 6B than in grades 5A and 5B; and that there were greater differences within the groups than between the groups. The differences, although less significant in 5A and 5B, are great enough to warrant the conclusion that the achievement of the boys is somewhat superior to that of girls in these grades. Causes for these differences would seem to be that the material to be presented in these grades has a greater native appeal to boys than it has for girls, and the former therefore enter the studies with a wider pre-knowledge of material outlined than do the latter. It seems that some provision should be made for material designed to meet the interests of girls to a greater degree.

1506. Shane, Jessie. An analysis of the concepts, allusions, problems, and generalizations of 60 critical magazine articles. Master's, 1931. Colo. St. T. C.

This study is an attempt to find out some of the problems and issues of modern life, what generalizations are made concerning them, and what general concepts of the social-science field and allusions to specific persons, places, and events, are made concerning them.

1507. **Shull, Claude Archer.** Supplementary reading in lower division social sciences. Master's, 1931. Stanford.

1508. **South Dakota.** Department of public instruction. Social studies for the primary grades. Sioux Falls, S. D., Brown and Loenger pub. co., 1931. 355 p.

1509. **Tyler, Henry T.** A survey of the attainment of the general objectives in junior college social sciences. Sacramento, Calif., City schools, 1931. (For abstract see no. 717b.)

Tests were given to a cross section of social-science classes, including history, philosophy, economics, social institutions, psychology, political science, and geography, at the beginning of the second semester of 1930-31, and at the end of the semester with some batteries of tests that might bear on the objectives of social studies. It was concluded that there was growth in the attainment of the general objectives in the social sciences during the course of a single semester.

1510. **Watson, Mrs. Emma.** A classroom procedure for the teaching of social studies. Master's, 1931. Peabody. 139 p. ms.

An experiment conducted over a period of nine months to determine if pupil-centered assignments executed informally were successful in content achievements. The findings based on Columbian tests showed the experimental procedure as satisfactory in achievements.

1511. **Whaley, Myrtle W.** Intelligence score and achievement in social sciences. Master's, 1931. Chicago. 55 p. ms.

From a statistical treatment of school marks in social sciences and scores made on intelligence tests, it was found that the coefficient of correlation was approximately +0.40; highest correlation was found between scores and civics; lowest, for sociology.

1512. **Wilson, Howard E.** The fusion of social studies in the junior high school. A critical analysis. Doctor's; 1931. Harvard. 276 p.

See also 270, 583-584, 599, 2047, 2197.

GEOGRAPHY

1513. **Armentrout, W. D. and Whitney, F. L.** Types of geography courses in teachers colleges. *Journal of geography*, 29: 401-13, December 1930

1514. **Baltimore, Md.** Department of education. Geography. Course of study for grades 4, 5, and 6. 1931. 332 p.

The major objectives in the study of geography are: A knowledge of the relationships between varied human activities and the natural factors amid which they take place; knowledge of geographic facts and principles which will enable the individual to interpret present conditions and current problems; sympathetic interest in the lives of other people; appreciation of the economic and social interdependence of peoples of different countries; recognition of the value of human effort through the knowledge that only through cooperative labor can the resources of the earth be made available to all peoples; and respect for the natural resources with which man has been provided. This course of study is based upon the conception of geography as a study of the relationships existing between man and natural environment. Instructional material has been experimentally determined by actual classroom try-outs before organization into its present form.

1515. **Brown, Velma.** Analysis of exercises in elementary geography textbooks. Master's, 1931. Chicago. 67 p. ms.

A study of trends in the teaching of geography as revealed by analysis of exercises in elementary geography textbooks published since 1890. Findings: Decreased emphasis on facts as ends in themselves; increased emphasis on relationships as a whole and on specific relationships of man to natural environment.

1516. **Coburn, H. Llewellyn.** The construction of a junior high school course in occupational geography. Master's, 1931. Southern California. 123 p.

An organization of material from the United States census abstracts for a proposed course showing the effects of geographical factors on occupations.

1517. Cunningham, Flora May. A study of the word-content of five elementary geographies. Master's [1931]. Peabody. 167 p. ms.

A comparison was made of the vocabularies used in the study of the United States as found in five elementary geographies. Findings: (1) The smallest number of running words was found in essentials of geography, the largest in the United States and Canada; (2) the smallest per cent of zero credit words was found in elementary geography, the largest in United States and Canada (Thorndike's Teachers' word book was basis of comparison); (3) the smallest per cent of words from 9 to 3 credit number was found in elementary geography, the largest in United States and Canada; (4) the smallest per cent of words whose credit number is greater than 9 was found in United States and Canada, the largest in elementary geography; (5) the lowest median index number was found in the United States, the highest in elementary geography.

1518. Flaacke, Marjorie. The construction of an objective test in geography for normal school students. Master's, 1931. New York. 54 p. ms.

1519. Harner, Mrs. Blanche. The geographical relationship of the products of Greeley and vicinity. Master's, 1930. Colo. St. T. C.

The purpose of this study was to make available to the school child or student in the city of Greeley, Colo., material on a survey of the geographical, agricultural, and industrial relationship of the products of Greeley, Colo., and vicinity.

1520. Hohman, Sister Mary Dolores. An analysis and evaluation of courses of study in geography. Master's, 1931. Illinois.

1521. Keefer, Edith L. Case studies of 25 maladjusted pupils in sixth-grade geography. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A series of tests in 1929-30 revealed that there were a large number of maladjusted pupils enrolled in the fifth and sixth grades in the Redstone township school, Fayette county, Pa. Investigation indicated a large number of them were over age for their school grade, and far below normal in their reading ability. This study deals with all failing pupils in grade 6 who were 13 years of age and over, or who were social misfits. Results of standardized and nonstandardized tests, physical examinations, personal interviews with parents, as well as school reports and results of intelligence tests were used in the study. Diagnostic tests in geography and reading formed the basis for remedial teaching. Results of the remedial teaching in reading improved the reading status of each case used in the study.

*1522. Kiernan, Frances M. Field work in high-school geography in the New York area. Master's, 1931. New York. 30 p. ms.

Status of field work and suggestions for its increase and improvement. Findings: It is very feasible in the New York region because of the abundance of rich material found.

1523. Kopf, Helen M. One-cycle or two-cycle geography? Piqua, Ohio, Public schools, 1931. 6 p. ms.

A comparison was made of work done by pupils in upper elementary grades; the old and the new geography were contrasted. This study revealed that all pupils except those in the lower quartile accomplished as much with the 1-cycle as with the 2-cycle geography.

1524. Kueneman, Huberteen. The effect of vocabulary in reading geography textbooks. Master's, 1931. Iowa. 77 p. ms.

1525. Lee, Mary L. The influence of geography on the growth of Chattanooga industries. Master's, 1931. Peabody. 106 p. ms.

Material was obtained chiefly from personal interviews with presidents of plants within the city, showing that Chattanooga is evidently to become a much greater industrial city in the future.

1526. Lewerenz, Alfred S. Map rating scale. Los Angeles, Calif., City schools, 1931.

1527. Li, Tien-Kuei. A survey and an interpretation of the best practices in the teaching of geography. Master's, 1931. Syracuse.

1528. Nash, Harry B. Geography. West Allis, Wis., Department of Instruction, 1931. 19 p. ms.

A study of instruction in geography with definite suggestions for improvement. Tests and supervisory visits revealed a cross section of instruction.

1529. **New York (City) Board of education.** The ability of children in map reading. An analysis of the skills involved and suggestions for their development. New York, N. Y., 1930. 16 p. (Educational measurements for the class teacher, no. 16.)

1530. **New York (State) Education department.** Syllabus for elementary schools. Geography, grade 7. Albany, University of the State of New York press, 1931. 92 p.

This pamphlet completes the series of three which constitute the new geography syllabus for elementary schools, grades 5-7.

1531. **Nichols, W. B.** Teaching the geography of Asia. Master's [1931]. Peabody. 117 p. ms.

In seventh-grade geography, by the use of separate units of Asia for emphasis and by comparison, socialized recitation, problem method, and journey method, these units were made more real and vital in the life of the group.

1532. **Oregon. State department of education.** Course of study, elementary schools, geography. Salem, State printing department, 1931. 142 p.

This course of study includes a list of elementary-school textbooks.

1533. **Price, Maud.** Measuring growth of teachers in teaching geography. Master's, 1931. Michigan.

1534. **Rankin, Pearle.** The status of geography in secondary schools. Master's, 1931. Southern California. 157 p.

A summary of the history and present trends of geography in secondary schools, based on reading of professional books and magazine articles.

1535. **Swartz, David J.** A study of variation in certain map symbols. New York society for the experimental study of education. Bulletin, 12:11-14, November, 1930.

A study was made of the types and coloring of maps in seven widely used textbooks and in one school atlas. There was no uniformity in use of color for various elevations of land and depths of water in the textbooks compared, or in the various maps in the individual textbooks.

1536. **Trapp, Frank G.** A plan of pupil activity in fifth grade geography designed to develop sound habits of study and ability in logical thinking. Master's, 1931. Syracuse.

1537. **Tuttle, Elsie Florence.** Teaching the geography of the North Central States. Master's, 1931. Peabody. 155 p. ms.

This study includes the consideration of objectives, methods, materials, and content to be used in teaching pupils the geography of the North Central States.

1538. **United States. Office of education.** Government publications of use to teachers of geography and elementary science. Washington, D. C., U. S. Office of education, 1930. 14 p. ms. (Circular no. 23.)

This is a list compiled to show what publications suited to school use are available, and how they may be obtained.

1539. **Wallace, Alberta.** Generalizations and problems basic to a geography curriculum. Master's, 1931. Colo. St. T. C.

A study made to determine important problems and generalizations which are basic to a geography curriculum, through an analysis of the writings of "frontier thinkers" in the geographic field.

See also 627, 1187, 1481, 2053, 2863, 2896.

HISTORY

1540. **Albrecht, Christine M.** Some vocabulary difficulties of senior high school history. Master's, 1931. Colo. St. T. C.

This is an attempt to reduce the vocabulary difficulties found by senior high-school pupils in Mussey's textbook History of the American people.

1541. **Anderson, Karl.** The vocabulary of certain ninth-grade history context not within the comprehension of certain ninth-grade pupils. Master's, 1931. Michigan.

1542. **Andrews, Elizabeth M.** The basis of children's interests in 20 history textbooks on the intermediate grade level. Master's, 1930. George Washington.

1543. **Backlund, Elliott A.** An analysis of classroom activities in the teaching of American history in Chicago high schools. Master's, 1931. Northwestern.

1544. **Baker, Albert Franklin.** The effect of simplifying history test materials on comprehension. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Tests were given to 300 eighth-grade pupils in four different communities in western Pennsylvania. The rotation method was used. Findings: The attempt to simplify the paragraphs succeeded only in the third part, simplifying by using equivalent phrases; the technique of simplifying materials by using equivalent phrases was effective; the technique of simplifying materials by using synonyms was not effective; the test materials were too difficult for the pupils for whom they were written; the study of history materials involved a mastery of difficult vocabulary.

1545. **Baltimore, Md. Department of education.** History, course of study for grades 4, 5, and 6. 1931. 268 p.

This course of study is organized upon a single-cycle basis. The pupil studies the history of the United States in its natural setting in relation to world history.

1546. **Bashor, Esta M.** Results in junior high school history measured in terms of retention. Master's, 1931. Colo.St. T. C.

Attempts to determine, by the experimental process, the most valuable method of teaching history in the junior high school.

1547. **Buster, G. B.** Comparison of recitation method and unit method in teaching American history. Master's, 1931. Kansas.

The achievement of two groups of senior high-school pupils (45 in each group) in Kansas City, Kans., were compared, 1929-30. The mental-ability scores were equal, they had the same teacher, the same subject matter, but two different methods of instruction were used.

1548. **Camp, W. L.** Tests as motivation in American history. Master's, 1931. Iowa. 116 p. ms.

1549. **Carmela, Sister M.** A critical study of elementary school tests in United States history. Washington, D. C., Catholic education press, 1931. 46 p. (Catholic university of America. Educational research monographs, vol. 6, no. 5, July 1, 1931.)

Bibliography: p. 42-46.

1550. **Chapman, Vera Morris.** Teaching children to think through the use of historical source material. Master's, 1930. Ohio. (For abstract see no. 712.)

1551. **Childs, John B.** A study to determine some of the words in textbooks in world history which are not within the reading comprehension range of certain ninth and tenth grade pupils of the Dearborn and Vermontville public schools. Master's, 1931. Michigan.

1552. **Clark, Washington Augustus.** The development of an achievement test in South Carolina history. Master's, 1931. South Carolina. 33 p. ms. (For abstract see no. 717.)

Tests for a sixth-grade course in state history.

1553. **Dewey, Joseph Clarence.** A case study of reading comprehension difficulties in American history. Doctor's, 1931. Iowa. 1747 p. ms.

1554. **Duck, Edward Walker.** A course of study for United States history. Master's [1931]. Peabody. 203 p. ms.

United States history in senior high schools.

1555. **Dyer, Margaret.** Study procedures in the field of history. Master's, 1931. Southern California. 157 p.

A compilation of methods and devices derived from the literature, from interviews with teachers, and questionnaire responses from students.

1556. **Dynes, John J.** An investigation of the relative effectiveness of two study techniques in history. Doctor's, 1931. Wisconsin.

1557. **Ekblad, C. E.** A study of certain factors related to achievement in the teaching of United States history. Master's, 1931. Iowa. 101 p. ms.

1558. **Elliott, Miriam Belle.** The treatment of reconstruction in American history textbooks. Master's, 1931. Peabody. 225 p. ms.

Analyses of four textbooks on American history for junior and senior high schools.

1559. **Fields, Norah Boone.** Treatment of the World War in junior high school histories. Master's, 1931. Peabody. 92 p. ms.

1560. **Foster, Charlotte.** Reading comprehension as affected by the translation of elementary historical material into the spoken and written vocabulary of children. Master's, 1931. Iowa. 75 p. ms.

*1561. **Fredriksen, Beatrice.** A plan for the teaching of certain skills in the study of history in the New York City senior high schools. Master's, 1931. New York. 42 p. ms.

A questionnaire was sent out to all the department heads of all the senior high schools in New York City. Findings: No definite course for the training of the study skills is given in any of the New York City senior high schools and such a course is necessary.

1562. **Gant, Homer Francis.** The place element in high school texts on world history (a study of maps). Master's, 1930. Ohio. (For abstract see no. 712.)

A study of the number and character of the maps in four widely used high-school textbooks in world history, and of the use made by the authors of these maps.

1563. **Gillespie, Agnes Baynard.** The problem of current events in the teaching of history. Master's, 1931. Peabody. 53 p. ms.

A study of the Reader's guide and bibliographies, and method books on the teaching of history found in libraries of George Peabody college for teachers and Arkansas State teachers college, shows that current events is definitely and most appropriately placed within the jurisdiction of the social-science department—especially the history field; that some means of a check should and could be used in order to insure a more thorough comprehension of the important news studied.

1564. **Griffith, Kean.** Overlapping and repetition in junior and senior high school courses in American history. Master's, 1931. Colo. St. T. C.

This is an investigation of commonly used textbooks in American history to determine the degree of overlapping and repetition in texts used in the junior high school and senior high school courses. It is a survey in the field of the curriculum.

1565. **Haberly, Katherine.** A comprehensive analysis of high school textbooks in United States history. Norman, University of Oklahoma, 1931. 54 p. ms.

1566. **Hall, Calvin S.** An analysis of visual aids in senior high school American history textbooks. Master's, 1931. Iowa. 122 p. ms.

1567. **Hall, Mary.** Poetry in secondary school textbooks in American history. Nashville, Tenn., George Peabody college for teachers, 1931. 63 p. ms.

A study of 38 textbooks in American history for high schools, showed an increase in the use of poetry in history textbooks since 1920. The poetry varies from "The Illiad" to "Flanders fields" and from the Bible to political campaign rhymes.

1568. **Harrison, Archibald Parker.** A topical analysis of 10 junior high school textbooks in American history. Master's, 1931. Southern California. 15 p.

*1569. **Hawaweeny, Olga F. A.** A critical study and evaluation of new type testing methods in high school history. Master's, 1931. New York. 42 p. ms.

A survey was made of the literature pertaining to the subject. A study and evaluation of different forms of the new-type tests in history, was followed by a study and evaluation of the existing new-type tests in history. Findings: The new-type test in history possesses the seven essential qualities of a good test. Although some of the existing tests in history have much in their favor, a large number of them are not satisfactory because they are obsolete in material used and do not test the attainment of the basic aims of history teaching.

1570. Hupp, James Lloyd. Administrative problems in the field of history. Doctor's, 1931. Ohio. 264 p. ms.

In order to determine the major issues in the administration of the curriculum in history a list of 199 problems suggested by the literature in the field of history teaching were classified in nine categories in the form of a check list. Fifty administrators were interviewed and asked to submit problems related to the subject of history that had come up in connection with their work in administering their schools. After each administrator had submitted his list he was presented with the check list and asked to evaluate each problem as to whether he had found a knowledge of it "essential," "useful," or "of no value" to him in his work as an administrator.

1571. Jack, Coral Emma. The evolution of history in the secondary school curriculum of New York State. Master's, 1931. Cornell.

1572. Jensen, Myrtle E. An analysis of the objectives of teaching history. Master's, 1931. Wisconsin.

1573. Johnson, Macie E. Historical poems as supplementary material for teaching American history. Master's, 1930. Kans. St. T. C., Pittsburg.

1574. Kartozián, Annie Armine. Methods of teaching history through biography. Master's, 1931. Southern California. 115 p.

A compilation of materials, derived from reading and from interviews, organized into a practical manual or guide for the history teacher.

1575. Krell, Florence S. A study of some of the words occurring in Elson's ninth-grade history text which are not within the comprehension range of certain ninth-grade pupils. Master's, 1931. Michigan.

1576. Lester, Sam Jones. Overlapping in history textbook factual material on political parties. Master's, 1931. Peabody. 89 p. ms.

A study of four textbooks, with subject matter adapted to the elementary school, junior high school, senior high school, and to college. Findings are illustrated by graphs and charts. Table I and Graph I reveal the fact that there is overlapping in statements dealing with political parties as found in representative texts used in the elementary school, the junior high school, the senior high school, and the college; and that there is a striking uniformity in the number of repetitions made in each of these texts from the elementary school to the college. Table II and Graph IV disclose a remarkable uniformity in accumulation of fact material, as these texts advance in complexity.

1577. Livingstone, Courtenay Robbins. The status of the workbook in American history in the high schools of Indiana in 1929 and 1930. Master's, 1931. Indiana. 81 p. ms.

1578. Long Beach, Calif. City schools. World history. Course of study for senior high schools. 1931. 186 p.

The emphasis in this course of study is placed on modern history, and deals with the earlier period only from the standpoint of its relation to the present.

1579. Longbon, Edith Anna. Outside pressure on the teaching of history in the State of Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

Covers the teaching experience of the members of the teaching profession who cooperated by helping to furnish information.

1580. McBrien, Depew. The status of historical instruction in teacher training institutions. Conway, Arkansas State teachers college, 1931. 12 p. (Arkansas State teachers college. Bulletin, vol. 18, no. 4, January 1931.)

Data were secured from 76 teachers college catalogues and from 91 answers to questionnaires from heads of history departments. Data indicate that there is little uniformity of organization in the history departments of the institutions studied; that the

subject matter offerings in history differ so greatly that it is not possible to make a tabulation which would be comprehensive.

1581. **McKinnon, Nettie J.** An evaluation of certain study procedures in history. Master's, 1931. Chicago. 180 p. ms.

An analysis of the effects of definite detailed instruction in the technique of comparison, the identification and expression of cause and effect relationships, outlining, and the selection and organization of material in history.

1582. **Maloney, June Elizabeth.** A study of junior-senior high school textbooks in American history. Master's, 1931. Peabody. 72 p. ms.

An examination and classification of 40 textbooks in American history, which are used in junior and senior high school. Opinions were obtained from four groups of people who are closely connected with textbooks, the teacher, author, publisher, and critic. Reports were secured through questionnaires. Findings: (1) The writing of history textbooks has changed in the past few years; (2) before the World War texts that were written were centered around wars and political events. In the texts written in the last 10 or 15 years much of the political and military history is omitted and much of the social and economic history is included. Texts written by the old method are rapidly passing out of use in the schools. Texts written by the new plan meet a critical reception and the authors who have tried to fulfill the new requirements have met with varying degrees of success.

1583. **Martin, Katherine E.** A comparative study of American history as taught in junior and senior high schools. Master's, 1931. Southern California. 186 p.

1584. **Mason, Winifred.** Relationship of a knowledge of the connection of men and events to general information in history. Master's, 1931. Colo. St. T. C.

An effort is made in this thesis to determine the relation between a knowledge of the connection of persons and events and general information in history.

1585. **Mixsell, Frank Hill.** Measurable results of the use of visual aids in teaching A-7 history. Master's, 1931. Southern California. 72 p.

A rotating group experiment was conducted with two classes of some 30 pupils each over 2 periods of 5 weeks each with appropriate pre-tests and end-tests at the beginning and end of each period.

1586. **Morris, Tom T.** Analysis of senior high school American history textbooks to determine significant historical terminology. Master's, 1931. Iowa. 154 p. ms.

1587. **New York (State) Education department.** Syllabus in history. A three-year course in world history. Albany, University of the State of New York press, 1931. 229 p. (1931 reprint with supplementary material.)

This syllabus represents two general types of syllabuses: For the first year of the course it is of the "précis" type, a brief summary of the essential facts; for the second and third years of the course it is a manual somewhat complete for the fields it covers.

1588. **Nichols, Dean Gerstung.** Pupil's study guide in American history for high school. Master's, 1931. Wyoming. 91 p. ms.

1589. **Ohlson, Clare S.** A study of pupil-responses in history. Master's, 1931. Colorado. 80 p. ms.

The study was based on over 3,000 pupil observations of 12 classes taught by 6 teachers. Findings: Pupil responses varied with day of week, type of pupil activity, type of subject matter, and teacher personality.

1590. **Olds, H. W.** The use of illustrative materials in textbooks in the teaching of American history. Master's, 1931. Ohio. 58 p. ms.

A study of the standards set by which to judge pictures, the use the authors make of pictures and their suggestions for further use. Findings: There is only a slight tendency to increase numbers. Authors do not give suggestions for the use of the pictures. In making suggestions for further use the authors attempted three things: (1) To stimulate thinking, (2) to bring large numbers of people into the picture, and (3) to link the present with the past.

1591. **Palowaky, Isidore.** A comparative study of the treatment of the American Revolution and its causes in the history textbooks of the elementary

schools of England and of the United States. Master's, 1931. Coll. of the City of N. Y. 80 p. ms.

Twenty-eight texts in common use were analyzed in the light of their treatment of the War of Independence. Conclusions: American books devote five times as much space, in proportion, to the topic as do the British books; in proportion, American books devote more space to battles and personages of the war than do British books; no American text is anti- or pro-British; no British text is anti-American and several are pro-American.

1592. Pearce, Kathryn. An experiment to determine the effect of reading exercises on the exact fixation of historical facts. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this experiment was to determine the effect of reading exercises in word meaning, rate, fact material, central thought, following directions, total meaning, and organization on the exact fixation of historical facts as measured by three standardized history scales. The study involved 70 pupils of the seventh grade taking United States history in the junior high school, Donora, Pa., who were equated into two groups of 35 each. The conclusion reached is that the effect of the reading exercises on the exact fixation of historical facts was to improve the efficiency of pupils in the experimental group in answering history questions, as shown by the difference between the means of the differences in the scores of the two groups.

1593. Pearson, Emerson E. The construction of a United States history test. Master's, 1930. Indiana. 48 p. ms.

The purpose of the study was to construct a test in United States history which would parallel such books as Beard's History of the United States, Muzey's History of the American people, and similar books that emphasize the economic basis of history. The test proved reliable for high-school use.

1594. Penn, Jennie. The construction and evaluation of a study technique for American history. Master's, 1931. Kans. St. T. C., Pittsburg.

1595. Peppiatt, Esther. Study of words which cause difficulty to ninth and tenth grade pupils in comprehension of world history. Master's, 1931. Michigan.

1596. Prandoni, Sister Mary Carmela. A critical study of elementary school tests in United States history. Washington, D. C., Catholic education press, 1931. 46 p.

1597. Pritzkau, Philo Theophila. The determination of the interests of junior high-school pupils in the field of American history. Master's, 1931. Chicago. 128 p. ms.

Results from a questionnaire and interviews with 280 pupils in junior high school, showed that junior high-school pupils are interested in topics on adventure, mechanical improvement, life and customs, communication and travel, war, and other topics in motivation.

1598. Quinlivan, Sister Rose. The adaptation of the unit method of instruction to the correlated teaching of history and religion in the high school. Master's, 1931. Boston Coll. 103 p. ms.

*1599. Range, Edward E. The treatment of the subject of war as found in current Connecticut junior-high-school history texts. Master's, 1931. New York. 42 p. ms.

An analysis of the emphasis on war and peace in junior-high-school history texts was made. There has been a decrease in the amount of space (words and illustrations) devoted to military history, and an increase in economic, social, and political history.

1600. Robinson, Lucy Mai. Learning exercises for American history in senior high schools. Master's 1931. Peabody. 80 p. ms.

1601. Ryan, Leo R. -An analysis of four high school textbooks in American history for the purpose of evaluating them for use in the high schools. Master's, 1931. Coll. of the City of N. Y. 124 p. ms.

An analysis was made of four texts in the light of the number of pages devoted to various topics of American history, teaching aids, indexes, and appendices. Findings: (1) Texts published 1924-1927 place much less emphasis on the colonial period than did

earlier published textbooks; (2) recent books devote much more space to events since the Civil War than did the earlier texts; (3) newer books give much more attention to social and economic topics; (4) more space is devoted to maps than to any other type of illustrative material; and (5) among the teaching aids, the greatest amount of space is devoted to topics and studies for special reports.

1602. **St. Louis, Mo. Public schools.** History of St. Louis, the city surrounded by the United States. Vol. 1, Old St. Louis, 1930. 100 p. Public-school messenger, 28: no. 9, November 20, 1930.

In this history special attention has been given to the vocabulary and language so as to meet the reading ability of the fourth-grade child.

1603. **Serenius, Carl Arnold.** Objective drill materials versus informal discussion in college history teaching. Master's, 1930. Iowa.

*1604. **Silver, B. Robert.** An evaluation of various procedures used in meeting the needs of slow students in history. Doctor's, 1931. New York. 143 p. ms.

The purpose of this study was to select, apply, and evaluate educational procedures designed to aid students who are backward or definitely deficient in their work in the history course in a typical municipal high school. The Evander Childs high school in New York City was chosen for study.

1605. **Smith, Cecil E.** Investigation of the content "load" of American history texts for secondary schools. Master's, 1931. Ohio. 85 p. ms.

Investigation of dates, individuals, events, and terms used in American history.

1606. **Smith, Pearl G.** The value of retesting in history. Master's, 1931. Colo. St. T. C.

The purpose of this study was to find whether or not students of the junior and senior high schools retain more of the historical facts presented to them two or three times in the form of examination questions than they retain when examined in the customary way.

1607. **Smither, Collin Edward.** Relative efficiency of the unit method and daily recitation method of teaching American history. Master's, 1931. Virginia.

1608. **Spearman, S. G.** Development of criteria in subject matter and method for eighth-grade history. Master's, 1931. Ohio. 78 p. ms.

1609. **Stephenson, Orlando W. and Copass, Lucille.** The special vocabulary of American history. Ann Arbor, University of Michigan [1931]. 3 p. ms.

Findings: There are less than 50 words which are peculiar to American history.

1610. **Thurau, J. H.** Dates, men, and facts which teachers should emphasize in a course of history of European backgrounds, as revealed by an analytical study of history textbooks. Master's, 1931. Iowa. 121 p. ms. ^p

1611. **Tyler, Henry T.** A study of the tutorial plan of instruction in English history. Sacramento, Calif., City schools, 1931. (For abstract see no. 717b.)

An experimental section of 21 students was organized in English history on the English tutorial system of instruction. No text was used. Students worked directly from primary and secondary sources. A control group of 31 was taught by the usual lecture and outside preparation method. The same instructor directed both sections. A slight difference was found in favor of the experimental groups on each of the factors measured.

1612. **Wahlquist, Keith C.** Chronological sequence in history teaching. Master's, 1931. Utah. 117 p. ms.

1613. **Wallace, Elsie Jane.** An analysis of photographs in junior high school American history textbooks. Master's, 1931. Iowa. 63 p. ms.

1614. **Walsh, S. S.** Relation of methods of presentation to retention of facts in history. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to determine which of five methods of presenting history is best for the retention of facts.

1615. **Weeks, Julia Keeling.** Effectiveness of two methods of teaching history. Master's [1931]. Peabody.

A study with two groups of students in history for one semester. Findings: In this study the Morrison plan seemed more effective than the formal recitation plan.

1616. Willits, Clara Mildred. An experiment to compare methods of instruction for gifted children in unselected groups in modern European history. Master's, 1931. Southern California. 113 p.

A rotating group experiment for the purpose of comparing the effectiveness of three methods of teaching (individualized, socialized, and teacher directed) with objective measurements of results in each case.

*1617. Wyckoff, Marion M. The worthy use of leisure time as an objective of teaching history in the junior high school. Master's, 1931. New York. 56 p. ms.

A study of the actual use of history in leisure time, involving an investigation of existing studies, data of 150 questionnaires, and a study of provisions for leisure time, from courses of study and 10 textbooks. Findings: History has a place in leisure-time activity but indications are that slight emphasis is put upon this aim in teaching.

See also 579, 627, 630, 1481, 1500-1501, 2889, 2948, 3531, 4343-4344.

CIVICS

1618. Boarman, Ruth. Comparison of textbooks in problems of American democracy. Master's, 1931. Oklahoma. 34 p. ms.

1619. Graves, P. B. An experimental investigation concerning high school civics vocabulary. Master's, 1931. Kansas.

Study made in Chanute, Kans., high school, involving 147 students. A study of instruction with special emphasis upon vocabulary in civics, compared with instruction without such emphasis, comparing students with high and low mental scores, and boys and girls.

1620. Greenwalt, William Carl. A technique of study for ninth grade civics. Master's, 1931. Wisconsin.

1621. Justice, W. Arthur. The development of civic information among school children. Doctor's, 1930. Cincinnati. 171 p. ms.

1622. Kurr, Ralph J. Relation between a knowledge of current events and civic knowledge. Master's, 1931. Penn. State. 38 p. ms.

Based on tests of 133 high-school students and 119 college students, involving measures of general intelligence, measure of knowledge of current events, and objective test of civic knowledge. Partial correlation technique was used, finding correlation between current events and civic knowledge with factor of intelligence held constant. Partial r was 0.44 for high-school students, 0.38 for all college students, and 0.53 for college students without previous courses in political science.

1623. Lefferts, E. B. Outlines for study of California vehicle act. Los Angeles, Calif., City schools, 1931. 85 p.

This is for use in the junior and senior high schools.

1624. McLaughlin, Cecil Lewis. Construction of an achievement examination in American government for Iowa high schools. Master's, 1930. Iowa. 175 p. ms.

1625. Metcalf, Arthur Ansel. Some state activities in the development of citizenship teaching in the United States. Doctor's, 1931. Michigan. 346 p. ms.

A study of laws and state courses of study, 48 states, showing changing aims, content, and methods of citizenship teaching. Findings: Constant development with new attack shown about 1925; remarkable changes in last five years.

1626. Monroe, Margaret Elizabeth. Civic education in grades four to six. Master's, 1930. Ohio. (For abstract see no. 712.)

This thesis was written for the purpose of evaluating programs of civic education in the light of progressive theory.

1627. Morris, W. T. An analysis of visual aids in "Problems in American democracy" textbooks. Master's, 1931. Iowa. 20 p. ms.

1628. North Dakota. Department of public instruction. The young citizens league of North Dakota. Bismarck, 1931. 16 p.

Describes the activities of the leagues whose purpose is the giving to the grade children of North Dakota the best possible instruction and training in good citizenship by directing them in the study of vital problems of American life and government, and by helping them to take part in and assume responsibility for the proper solution of those problems.

1629. **Parks, Francis Lovern.** An analysis of pupil abilities and traits in civics. Master's, 1931. Colorado.

1630. **Pierce, Bessie Louise.** Civic attitudes in American school textbooks. Chicago, Ill., University of Chicago press, 1930. 297 p.

Bibliography: p. 257-82.

"This study deals with the content of textbooks in history, civics or citizenship, sociology, and economics sometimes called 'problems of democracy'; geography; reading; music; and foreign language commonly found in the elementary grades and in the junior and senior high schools, selected from lists of state adoptions of prescribed, recommended, and approved books, as well as those chosen by administrators of city systems."

1631. **Quisenberry, James Franklin.** An experiment with project teaching in ninth grade civics. Master's 1930. Oklahoma. (For abstract see no. 713.)

Two sections of ninth-grade civics in the high school at Woodward, Okla., were taught by the conventional method, closely following the state adopted text and the course of study; the other two sections were taught by the project method. All four sections were taught by the same teacher. At the close of the school year, the experimental group showed the higher correlation between mental ability and civics achievement and between reading ability and civics achievement.

1632. **Rhea, William J.** A study of certain factors related to success in teaching American government. Master's, 1931. Iowa. 102 p. ms.

1633. **Roach, David John.** The high school civics curriculum. Master's 1931. Stanford.

1634. **Runyan, Grace.** The secondary school commercial club as a factor in citizenship education. Master's, 1931. Hawaii. 89 p. ms.

1635. **Saylor, Charles Franklin.** Some aspects of achievement in civics in the ninth year. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Three sets of data were used in this study: (1) The results of the public-school achievement test in American history, by Jacob S. Orleans; and civic information and attitudes test, by Howard C. Hill, given October 1, 1929, and May 5, 1930; (2) the analysis of textbooks used in ninth-grade civics; and (3) the results of an inquiry sent to the civics teachers of Somerset county. The results of the tests given October 1, 1929, indicated that serious deficiencies existed in the social studies background of entering ninth-grade pupils. After studying civics during the ninth year, it was found that achievement had been made during the year, but that in a number of cases deficiencies still existed.

1636. **Speicher, Harry Blaine.** A diagnostic study of failing pupils in ninth year civics. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An attempt to measure certain aspects of 112 pupils who failed in ninth-year civics. They were tested to determine their reading ability, level in intelligence, extent of information in civics, types of civic attitudes possessed, and understanding of the vocabulary of civics. The performance of the group in silent reading was below the level of the ninth grade. The extent of the pupils' information in civics was found to be below the norm for the junior high-school pupils.

1637. **Steele, Ernest C.** The treatment of the school system as a social institution in civics textbooks used by the secondary schools in California. Master's, 1931. California. 109 p. ms.

A study to determine the status of education as a topic for instruction in the social-studies classroom. Findings: The results of a survey of secondary textbooks on geography, sociology, economics, history, and civics show that content material on education is confined almost entirely to civics textbooks for junior and senior high schools.

1638. **Stroud, Warren LaRue.** An experiment to evaluate specific and general assignments in the learning of economic civics. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Ninety-six freshmen were studied for 15 weeks during the first semester of 1930-31. One experimental and two control groups were used which were equated on the basis of the intelligence quotient, the New Stanford achievement test, the Brown-Woody civics test, and the Sangren-Woody reading test. The stronger control group, in every unit of this study, as well as on the Brown-Woody civics test, which was repeated at the end of the experiment, made a greater net gain than the experimental group. The poorer control group made the least net gain.

1639. Swingley, Clarence E. Teaching of the National Constitution and the State constitutions in the elementary and high schools of the United States. Master's, 1931. Chicago. 112 p. ms.

This study involved the examination of all the statutes passed to require the teaching of the Federal Constitution and the State constitutions in the elementary and high schools of the United States; also a consideration of the history of the movement and an analysis of the data for such instruction as found in textbooks, workbooks, courses of study, etc. The study revealed that 43 States have statutes which require the teaching of the Federal Constitution, 24 States require by law that the State constitutions be taught; the laws are not uniform as to their requirements; the instruction is most frequently required in the eighth grade and in high school; some of the laws are very specific as to the requirements; most of the statutes requiring the teaching of the constitutions have been passed since 1920; and the two leading organizations to encourage such legislation were the American bar association and the National security league.

1640. Texas. State department of education. Texas high schools. The teaching of citizenship, Federal and State constitutions. Austin, 1931. 65 p. (Bulletin no. 279, vol. 7, no. 2, February 1931.)

1641. Tubbs, Eston V. Teaching citizenship in the Chicago schools. 1931. Nations schools, 7: 23-24, February 1931. (Reprint.)

The objective of citizenship training in the Chicago schools is citizenship through creative experience.

See also 272, 283, 1481, 1501, 2889, 3525; and under Moral and character education.

MUSIC AND ART EDUCATION

1642. Aldridge, Leona Crisp. The teaching of art in the elementary grades. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Data for this study were secured from letters of inquiry sent to 147 of the largest cities in the United States to determine the status of elementary art teaching. Part 1 gives the aims and objectives of elementary art education as stated by the various schools included in the investigation. The principles of education given by various educators are given in part 2 as justification for a classroom procedure in art activity for the elementary grades.

1643. Anderson, M. T. Materials and methods for pre-school music. Master's, 1931. Wisconsin.

1644. Baltimore, Md. Department of education. Art course of study for the senior high school. 1930. 85 p.

*1645. Baron, Anna. A comparative study of color vision and color matching as related to chronological age, mental age, and intelligence quotient of children. Master's, 1931. New York. 67 p. ms.

One thousand and thirty-one children were given a color-discrimination test. An additional color-matching test was given to 446 children. Chronological ages ranged between 6 and 16 and mental ages between 5 and 15 years. No relationship was found between the ability to discriminate between colors and the mental age of the individual, but a marked relationship was found between the ability to match shades of the four fundamental colors and the mental age.

1646. Baxter, Ernest Walter. Determination of objective test content for mechanical drawing. Master's, 1931. Iowa St. Col. 62 p. ms.

A study was made of mechanical drawing as taught in junior and senior high schools. Published tests were analyzed, and an experiment performed with information and performance tests. Findings: 57 published tests are purported to test 14 abilities; 64.1 per cent were given to testing informational, pencil drawing, and pictorial drawing abilities; performance and information, $r=0.54$; interreliability of performance test, $r=0.99$.

1647. **Bethel, Mae E.** The hymnology practice of certain churches with special reference to young people's hymn preferences. Master's, 1931. Iowa.

A study of the hymnology practice of five Protestant churches and the hymn preferences of young people in these groups. Findings: Results indicate that hymns for congregational singing are not chosen on basis of preference among young people.

1648. **Biddle, Frank C.** The feasibility of grouping pupils according to musical ability for instruction in music. Master's, 1931. Cincinnati.

1649. **Bond, Gladys, and Lewerenz, Alfred S.** Art ability of Japanese children. Los Angeles, Calif., Public schools, 1931. (For abstract see no. 717b.)

Data indicate that Japanese children are able to compete on equal terms with typical pupils on a standardized test of art ability. Older Japanese pupils gave evidence of possessing a considerable fund of originality.

1650. **Bowman, Horace Bushnell.** The standardization of Kwalwasser-Dykema tests. Master's, 1931. Syracuse.

1651. **Braun, Louis H.** The existing aims of mechanical drawing in the junior and senior high schools. Master's, 1931. Colo. St. T. C.

This study attempts to determine the aims which exist in mechanical-drawing courses in the junior and senior high schools.

1652. **Burke, Alfred Francis.** Theory and application of the principles of design. Master's, 1931. Boston Coll. 48 p. ms.

*1653. **Carroll, Herbert A.** The relationship of intelligence and other variables to ability in art. Minneapolis, University of Minnesota, 1931.

Findings: (1) Abstract intelligence at the extremes vitally affects art ability; (2) marked sex differences exist; (3) training in art appears to have but little effect on the test score.

1654. **Chadwick, John E.** The prediction of success in music. Master's, 1931. Colo. St. T. C.

The study attempts to determine the prognostic value of the Kwalwasser-Dykema musical-aptitude tests in the prediction of success in applied music.

*1655. **Coleman, Mrs. Satis N.** A children's symphony. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 218 p.

All of the themes of the children's symphony were composed by children of the elementary school, and played by them on instruments of their own making and other simple instruments, as developed in the creative music classes of the Lincoln school. The symphony was learned by the children of the fourth, fifth, and sixth grades in about two and one-half months and given three times in March, 1930. The symphony was an enriching, worth-while experience, stimulating a greater interest in music and greater understanding of it.

1656. **Cook, Willie Mae.** Ability of children in color discrimination. Doctor's, 1931. Johns Hopkins.

1657. **Crossman, A. W.** Changing conceptions in art education. Columbus, Ohio State university, 1931. 60 p. ms.

A study of art education in the public schools of the United States shows that there have been three major concepts of art education: (1) Art for industry, (2) art for art's sake, and (3) art for the individual.

1658. **Crowley, Edna Eva Esther.** An experiment in methods of teaching design. Master's, 1931. Chicago. 87 p. ms.

A comparison of the effectiveness of 5 methods of teaching design to 680 high-school freshmen in 5 controlled groups. Findings: The directed observational method proved to be the most effective method due to the fact that the student's attention was directed to the salient characteristics of formal growth. They, therefore, draw more intelligent designs. The "free interpretation" method where pupil did not receive instruction proved itself very inferior, proving that children can not do as effective work if they are left entirely free as they can if they are given freedom but guided on the way.

1659. **Deanes, John.** Correlation of music with all other subjects in the junior high school. In Baltimore, Md., Board of school commissioners. Annual report, 1930-1931, p. 116-19.

A plan by which, through correlation with other subjects, the music allotment might be extended so as to permit a more effective consummation of the aims of music instruction.

1660. Doherty, Leo Terence. The teaching and appreciation of color. Master's, 1931. Boston Coll. 40 p. ms.

1661. Elliott, Marguerite Olga. Vocational guidance in the art curriculum. Master's, 1931. Claremont.

1662. Eurich, Alvin C. and Carroll, H. A. Group differences in art judgment. *School and society*, 34: 204-06, August 8, 1931.

The purpose of the study was to determine sex differences and differences between major groups in art judgment. Marked sex differences in art judgment were observed.

*1663. Fairchild, Calphurnia L. Ethics and art—a study of three artists and their philosophies. Master's, 1931. New York. 97 p. ms.

The purpose of this study was to show that artists have philosophies, and to show how great works of art have not only an aesthetic but a spiritual value. The works of Jean François Millet, George Frederick Watts, and Violet Oakley were chosen because of the ethical value of their art.

1664. Fox, Lyndall D. A statement of the functions of the art supervisor. Master's [1931]. Peabody. 53 p. ms.

The purpose of this study is to know the functions of the art supervisor as stated in current educational literature (books and magazines). The material includes general supervision, art supervision, and art education from books and periodicals which have been published within the last five years and are found in the library of George Peabody college for teachers. Findings: Art should not be taught as a special subject but should be part of the regular curriculum and closely correlated with all the work. More supervision and less teaching is needed. The supervisor should have actual classroom experience before becoming a supervisor. The supervisor is a cultivator of taste—he should aid his community to build beautifully.

1665. [Fresno, Calif. Public schools.] Percentage of elementary school teachers who teach their own music and apparent cause where not doing so. [1931.] 9 p. ms.

1666. Gamble, Gertrude. A report on the summer music camp as a factor in music education. Master's, 1931. T. C., Col. Univ. 49 p. ms.

The study is based on a field study of National high-school orchestra and band camp, Interlochen, Mich., during the summers of 1929 and 1930. Findings: Work of this and other camps is becoming a greater factor in music education every year.

1667. Goodwin, Gladys. Analysis of the scores of the Kwalwasser-Dykema tests of musical capacity given to Roxboro junior high boys and girls of all grades. Cleveland Heights, Ohio, Public schools, 1931.

1668. Griffith, Charles Leonard. Symphonic suite in G. A technical analysis. Doctor's, 1931. Iowa.

1669. Haight, Esther Ann. School instrumental ensemble material from sixteenth and seventeenth century sources. Master's, 1931. Wisconsin.

1670. Hamm, Hal W. A frequency analysis of musical terms in high-school band and orchestra compositions. Master's, 1930. Colo. St. T. C.

The purpose of this investigation was: (1) To contribute objective information which will aid in discovering the terms of musical expression which are most important in interpreting high-school band and orchestra compositions; (2) to determine what terms of musical expression are being taught in Colorado State teachers college; and (3) to determine whether or not the most important terms are being taught, and, if necessary, to make a recommendation for the revision of this phase of subject matter.

1671. Haney, Irene W. Junior high school students' judgments of taste in interior decoration. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An experiment was conducted to compare the unit plan with the subject plan of instruction. Two groups, each composed of 30 eighth-B subjects, were selected and paired on the initial test scores, the first block of work, and sex. Both classes were taught by one teacher, and used the same materials. A survey of the opinions of the pupils in the experimental group revealed that the study guide aided in judgment. Analysis of results of the experiment showed consistent improvement in every block.

1672. **Haverson, Sophia.** Musical ability of sixth grade pupils in Minneapolis. Master's, 1930. Minnesota. 74 p. ms.

The native ability, factual knowledge, and performance ability of 500 6A pupils measured objectively and the interrelation of the results. Findings: (1) Superior ability was found in these Minneapolis pupils as compared with standard norms; (2) the correlation between native ability and accomplishment (factual knowledge and performance) was higher than is found between intelligence ratings and school marks.

1673. **Hendrix, Magdalen L.** An objective study of current practices in the teaching of time and rhythm to selected fourth, fifth, and sixth grade pupils. Master's, 1931. Northwestern.

1674. **Holman, Susanne.** Music in the auditorium period of platoon schools. Master's, 1931. Colorado.

1675. **Hood, Edward Earl.** Individual instruction sheets for mechanical drawing. Master's, 1931. Indiana. 95 p. ms.

1676. **Hostinsky, Bert Lewis.** A survey of orchestras and bands in the high schools of Kansas. Master's, 1931. Kans. St. Coll. 50 p. ms.

1677. **House, Ray W.** A study of high school bands in North Carolina. Master's, 1930. Duke. 73 p. ms.

This study aims to discover the organization and methods of supporting and conducting high-school bands with information as to the methods and procedures in the organization and management of bands. A rather complete analysis of the value of such bands is given.

1678. **Hulse, Lizanell.** A study of elementary school music. Master's, 1931. Peabody. 78 p. ms.

A study of the objectives of public-school music as found in educational literature, showing how courses of study attain the objectives. Findings: Public-school music should make a definite contribution toward the development of the child into a useful citizen. The courses of study show that only four southern states offer a definite course of study. In the 10 states located in other than the southern section, all offer singing, listening and one, instrumental music. In the ten southern states, all except one provide courses in singing, listening, and two provide courses in instrumental music. In 10 cities where music receives a prominent place, all teach singing, listening, and three teach instrumental music.

1679. **Hutchinson, Dorothy D.** Natural dancing themes selected from appropriate poetry for children in the first two grades. Master's, 1931. Colo. St. T. C.

The purpose of this study was to find poems which, combined with music, will be a source of themes for natural dancing in the first two grades of the elementary school, and to prepare a serviceable handbook that will be a guide for the natural dancing instructor.

1680. **Jeffers, F. F. and others.** Course of study in elementary music. San Jose, Calif., School department, 1930. (Tentative form for first and second grades only.)

1681. **Jersild, A. T. and Bienstock, S. F.** A study of the singing ability of the three-year-old child and of the influence of training on the child's vocal capacities. New York City, Teachers college, Columbia university, 1931. 38 p. ms. (Child development institute.)

Fifty 3-year-old children were tested to find their ability to reproduce pitch and intervals. Eighteen children were given intensive training over a period of seven months. Records were made of the content and quantity of the children's spontaneous singing. The results deal with the influence of training on vocal capacity, individual difference, relationship between spontaneous singing and performance on tests of pitch and interval reproduction, relationship between parents' and children's vocal range, between vocal ability and such factors as intelligence, rhythmic ability, and ability to memorize the words and melodies of the songs used for instructional purposes.

1682. Jones, William E. A study of the vocabulary load and minimum vocabulary in texts for mechanical drawing for high schools. Master's, 1931. Ohio. 45 p. ms.

An analysis of 16 books in mechanical drawing for geometrical terms showed a very small number used. Twenty-three out of 75 constituted 91 per cent of the total usages (13,958).

1683. Kazze, Louis. The teaching of history and appreciation of music in secondary schools. Master's, 1931. New York. 88 p. ms.

A study of educational theory, aesthetic theory, and theory of music appreciation. Questionnaires revealing modern tendencies of secondary schools were studied, and suggestions made for a course of study based on the findings. Shows the value and need of a course of study based on modern educational and aesthetic theory, and gives a number of guiding principles as a basis for the construction of such a course of study.

1684. Kean, Peter Francis. The Kean drawing corrector. Master's, 1931. Boston Coll. 34 p. ms.

1685. Keller, Edith M. A survey and evaluation of music contests and competition festivals. Master's, 1931. Ohio. 211 p. ms.

The history is stressed from prehistoric times to the present day, with emphasis upon current practices and educational implications in the high schools of the United States. Findings: Contests and festivals are increasing in interest and scope. Forty-five States conduct State or sectional contests. National events are sponsored in band and orchestra. The programs on the whole are of great educational value.

1686. Larson, Minnie Ercka. Courses of study in art education for the elementary school. Master's, 1931. Chicago. 180 p. ms.

Twenty city courses of study in art which have been published since 1925 were analyzed. Grades 1 to 6 were investigated. Findings: The courses analyzed comply with the requirements set up by the National education association for evaluating courses of study. The courses have efficiently developed the five main features which are formulated as main points in the criteria for rating courses of study by the National education association. They are definitely in line with the more detailed criteria established by Stratemeyer and Bruner for rating elementary art courses.

1687. Leavitt, Frank M., and others. High school course of study in mechanical drawing, junior division, grades 7 and 8. For experimentation, 1931-1932. Pittsburgh, Pa., Public schools, 1931. 56 p. ms.

1688. ——— High school course of study in mechanical drawing, senior division, grades 9 to 12. For experimentation, 1931-1932, Pittsburgh, Pa., Public schools, 1931. 31 p. ms.

1689. Lewis, Volta Sharral. A study of the teaching of mechanical drafting in junior and senior high schools in Tennessee. Master's, 1931. Tennessee. 212 p. ms.

1690. Long Beach, Calif., City schools. Art, course of study for grades 4, 5, and 6. 1931. 100 p.

This course of study is designed to bring the art objectives into harmony with modern educational objectives based on the theory of individual differences in pupils and teachers. It is the aim to develop in all pupils some degree of appreciation for beauty, some knowledge of art principles, and the skill possible to the grade level.

1691. ——— Art, course of study for junior high schools, grades 7, 8, and 9. 1931. 100 p.

This course of study is designed to bring the art objectives into harmony with modern educational objectives based on the theory of individual differences in pupils and teachers. It is the aim to give all pupils an understanding of, and appreciation for, the art elements—line, draft and light, and color—and to present these elements and art principles in proper progression in order that the child may develop an appreciation of the beautiful.

1692. Luce, L. W. Common errors in drafting form. Master's [1931]. Iowa St. Coll. 32 p. ms.

A study of the errors in form as revealed by examination of 240 drawing plates sent from a large variety of schools. Findings: The most common errors are shown in a frequency table, and it is probable that additional instruction should be given that these may be avoided.

1693. **Marty, Fritz Alfred.** A survey of music in 25 of the larger high schools of Minnesota. Master's, 1931. Iowa. 124 p. ms.

1694. **Mebane, Eleanor Virginia.** Art education in the junior and senior high schools. Master's, 1931. Peabody. 236 p. ms.

An investigation of present-day practices in art education in the junior and senior high schools, through examination of recent publications connected with the subject. Periodicals consulted were limited to those issued since 1919. Findings are given under the following heads: Values, objectives, principles, subject matter, methods, tests, and measures.

1695. **Mellinger, Bonnie E.** Children's interests in pictures. Doctor's, 1931. T. C., Col. Univ.

In an attempt to show the need for a body of scientific information concerning elementary school children's interest in pictures, and to set up an experiment by which certain of the interests could be scientifically determined, 18 plates were shown to 795 children on the first, third, and fifth grade levels. An analysis was made of the choices of the children. Findings: The children preferred pictures in color to those in black and white. Three color pictures were preferred to two color. All grades prefer the realistic to the conventionalized style.

1696. **Miller, George T.** Reactions of junior high school students to the architectonics of pictures. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The underlying problem of this study was to determine to what extent children in the junior high school according to age, grade, and sex, recognize, reply to, and respond to the effects that isolated form made upon them. An experiment with four pictures was carried out in the Baxter junior high school of Pittsburgh with 1,014 students responding. It was found that age had little to do with the aesthetic judgment of these students. The boys improved more than did the girls, from grade to grade, in their ability to recognize isolated form; but the girls responded aesthetically in a psychological manner at a higher percentage than did the boys.

1697. **Millet, Marion E.** Interrelation of high school and community singing. Master's, 1931. Rutgers.

1698. **Misumi, Issel.** Certain factors in art judgments. Master's, 1931. Stanford.

1699. **More, Grace Van Dyke.** A study in prognostic testing of college freshmen whose major subject is music. Master's, 1931. Illinois.

1700. **National bureau for the advancement of music.** National survey of harmonica bands and classes. Digest and summary of the experience of those who have conducted them. New York, N. Y., National bureau for the advancement of music [1930]. 104 p.

A questionnaire study was made of the effect on the study of more serious musical instruments, of class study of the harmonica. Data were secured from persons having actual experience with the classes. A large number of those answering the questionnaire feel that the harmonica is a positive stimulus to the study of other musical instruments.

*1701. **Nesbitt, Mary.** Arousing children's interest in Russian music. Master's, 1931. New York. 42 p. ms.

Material is grouped to aid the music supervisor so to work with the teacher that she can help the pupils get a finer appreciation of music and a knowledge of how closely music links up the various parts of the world.

1702. **Nielson, J. T.** A study in the Seashore motor rhythms test. Iowa City, University of Iowa, 1930. (University of Iowa studies in psychology, no. 13, p. 74-84, 1930.)

*1703. **Noé, J. Thurston.** Vocational music in the public schools. Master's, 1931. New York. 146 p. ms.

The problem of this study of vocational music in the public schools is one of surveying the accumulated literature in the field of music education in an attempt to discover the salient facts concerning its development, social and philosophic basis, and its place and practice in the public schools as revealed through educational literature. Data were secured by the use of two schedules of information on which returns were received from 100 cities in 34 states.

1704. Oaks, Orville A. The development and partial standardization of objective reading tests in elementary general mechanical drawing. Master's, 1931. Northwestern.

1705. Philadelphia, Pa. Board of public education. Philadelphia tests in mechanical drawing, Grades 7A, 7B, and 8A—June 1931. 1931. 14 p. ms. (Bulletin no. 215, September 21, 1931.)

The tests in mechanical drawing which were given to boys in grades 7A, 7B, and 8A in all junior high schools in the city during the week of June 8, 1931, are designed to furnish: (1) An objective interpretation of the requirements of the respective courses of study, and (2) objective measures of attainment in various phases of mechanical drawing. The repetition of a testing program in mechanical drawing has shown substantial improvement in pupil achievement.

1706. Pittsburgh, Pa. Public schools. Course of study in art education, elementary, junior, senior divisions, kindergarten to twelfth year. 1931. 150 p. (Bulletin no. 20.)

*1707. Porter, Raymond Willis. A study of the musical talent of Chinese attending public schools in Chicago. Doctor's, 1931. Chicago. 167 p. ms.

Bibliography: p. 164-67.

This investigation of the musical talent of Chinese students was carried on through the cooperation of 120 Chinese individuals attending 13 public schools in Chicago. Findings: These Chinese subjects possess musical talent of the same kind as the non-Chinese subjects with whom they are compared; they seem to possess musical talent in an appreciably lower degree than do the non-Chinese subjects; there is no significant difference among the subgroups in musical talent when these Chinese subjects are grouped according to sex, to chronological age, or to school status; the range of individual differences among the members of the group in the degree of musical talent possessed by each extends from very low ability to very high ability.

1708. Richman, Luther Anton. The cost to the student of a four-year course in public-school music on the college level. Master's, 1931. Cincinnati.

1709. Rogers, Katharine U. Curriculum in music for junior high school. Master's, 1930. Ind. St. T. C. 136 p. ms.

Curriculum of music for junior high school.

1710. San Francisco, Calif. Public schools. Mental ability of pupils electing art in junior high schools. 1931. 7 p. ms.

The purpose of the study was to discover the mental ability levels of pupils electing art courses in the junior high school. The distribution of the mental abilities of these pupils was found to be similar to that of the general level in each school concerned.

*1711. Sanford Blanche R. The place of creative art expression in the elementary school curriculum. Master's, 1931. New York. 69 p. ms.

The study has developed from the psychological bases of art expression to the present creative expression through art in the public schools.

1712. Santa Monica, Calif. City schools. Seashore musical talent test. 1930. 44 p. ms.

The purpose of this survey was to classify, for the music department, all junior high-school pupils taking, studying, or playing instruments. 265 pupils were tested. All grades from 7B to 9A, inclusive, were represented. The age range was from 10 to 18 years. The IQ range was from 60 to 150. All scores were converted to percentile rank.

*1713. Schnyder, Dorothy M. A study of the correlation of museums with public schools in art education. Master's, 1931. New York. 66 p. ms.

A study of museum-school correlation in New York City, the historical background of the problem; its present status and relation to visual education. The data tend to show that the efficiency of the museums in organizing programs which meet the art-instruction needs of the schools exceeds the efficiency with which the schools make use of the opportunities offered. Teacher opinions maintain that growth in interest, appreciation, and knowledge of art principles are apparent as a result of museum-school correlation.

1714. Schwartz, Felix Conrad. History of art instruction in the public schools of the United States. Master's, 1930. George Washington. 65 p. ms.

Through a survey of the early textbooks and of the literature on American art education, together with a critical condensation of the documentary data, this thesis brings forward the significant essential facts concerning the history of art instruction in the public schools of the United States. Findings: Public art instruction in America has been submitted to utilitarian criteria and ends.

*1715. **Shouse, Mary.** The status of required music in the California high schools. Master's, 1931. New York. 82 p. ms.

This is a study of the music required for graduation in the high schools of California. One hundred and sixty-five senior high schools of California sent in replies to a questionnaire having to do with enrollments of music departments, questions concerning the number of music courses offered, the number of teachers on the music faculty, assembly music, and with music which is extracurricular. Data indicate that no music is required above the eighth grade, except in a very small percentage of schools, and that more than 70 per cent of the students do not elect music and are largely dependent on incidental sources for the music which they happen to hear.

1716. **Sisson, Ralph C.** Work sheets and textual helps paralleling the course of study in architectural drawing 1. Oakland, Calif., Public schools, 1931.

The work sheets and textual helps were largely drawn from personal architectural experience, modified by a careful review of available literature.

1717. **Skele, Elmer A.** Organization and administration of bands and orchestras in North Dakota. Master's, 1931. North Dakota.

1718. **Smith, Hazel.** Articles concerning art education in educational periodicals. Master's, 1931. Peabody.

A study of 19 of group one of the classified list of educational periodicals prepared by the committee on standards of the Educational press association of America for the Department of superintendence of the National education association. The study is further limited to those periodicals which have been published within the last 10 years, and are to be found in the library of George Peabody college for teachers. Two hundred and forty-four articles concerning art education were found.

1719. **Smith, John Bertie.** Trends of thought of art education. Master's, 1931. Chicago. 117 p. ms.

Qualitative analysis of the trends of thought in art education as revealed by the bulletins of three major art associations. Findings: There has been little change in art educational theory during the past 30 years, whereas radical changes have been made to attain generally recognized objectives.

1720. **Stantou, Hazel M. and Koerth, Wilhelmine.** Musical capacity measures of adults repeated after music education. Iowa City, University of Iowa, 1930. 18 p. (University of Iowa studies, no. 189, October 15, 1930. Series on aims and progress of research, no. 31.)

This study gives data relative to music capacity measures for 157 students in the degree and certificate courses at the Eastman school of music, who were given the measures at the beginning of their course and again after three years of intensive music education. The writers predict that there is a certain range of expected positive or negative variation which is neither a gain nor a loss but a normal fluctuation span beyond which only a real gain or loss occurs. When reliable results are obtained in the Beashore tests, these results are the measurement of certain capacities for achievement regardless of the amount and kind of musical training and education. They have real prognostic value.

1721. **Stephens, Mary E.** A survey of color education as outlined in courses of study for art in 30 States. Master's, 1931. North Dakota.

1722. **Taylor, Walker D.** Survey of instrumental music in three-year junior high schools of Pennsylvania. Master's, 1931. New York. 82 p. ms.

A study of the 3-year junior high schools of Pennsylvania since their classification as such to the present date, to ascertain the general situation in the field of instrumental music in these schools and the need for increased activity along instrumental lines.

1723. **Test, Flora C.** A study of the predictive value of tests in a music school. Master's, 1931. Syracuse.

1724. Todd, Jessie M. Drawing in the elementary school. Chicago, Ill., University of Chicago, 1931. 60 p. (Publications of the laboratory schools of the University of Chicago, no. 2, February 1931.)

The art course includes drawing, construction, modeling, painting, study of color, picture study, and design. This pamphlet explains in considerable detail the materials and methods employed in the teaching of drawing.

1725. Trvdik, Harriett Adams. A study of progress in music as correlated with chronological age of beginning music study. Master's, 1931. Nebraska. 198 p. ms.

Age at which nationally known organists (Fellows of American Guild) began study was discovered, also age at which pupils in senior high-school orchestras, etc., were found. Findings: Those making high success began study under 10, a few under 15, most of them about 7.

1726. Twombly, Margaret. The historical development and value of the new art education. Master's, 1930. Colo. St. T. C.

The purpose of this study is to consider the changes in the development of art education in the United States in the last 40 years, and to attempt an appraisal of the new art education.

1727. Wagner, Carlotta Comer. An experimental study in pianoforte learning with reference to the theory of formal discipline and transfer of training. Doctor's, 1931. Southern California.

1728. Waugh, Harvey Richard. Methods of presenting early chamber music to high school groups. Master's, 1930. Iowa.

1729. Waymack, Eunice Hammer. Child reactions as a basis for teaching picture appreciation. Master's, 1931. Cincinnati.

1730. Weaver, Homer Ellsworth. An experimental study of music reading. Doctor's, 1931. Stanford. (For abstract see no, 717a.)

A study was made of two aspects of music reading: The extent of the reading span for musical material; and the characteristics of the reading process as revealed by the number, duration, and pattern of the fixation pauses of the eye, and the distance that a musician reads ahead of the actual playing of the notes. A group of 18 persons, all of whom had had musical training but who varied widely in amount of training and skill in performance, was used in preliminary studies of reading span. A group of 20 persons with no special training in music, a group of 20 amateur musicians, and a group of 15 expert musicians were used. Individual differences were great, the distributions of all groups were so even that no types of music readers could be distinguished.

*1731. White, Bernice. Music dictation. An overview of the subject, including its history, something of its status in music curricula, a comparison of scholastic standards, conclusions, and suggestions. Master's, 1931. New York. 34 p. ms.

From statistical studies in comparative standards, the standards were found to be variable.

1732. Wilson, Maurice Clement. The teaching of mechanical drafting in high schools of North Carolina and Tennessee with recommendations. Master's, 1930. Tennessee. ms.

1733. Winter, Max. Common errors in mechanical drawing technique. Master's, 1931. Iowa St. Coll. 40 p. ms.

The errors were obtained from approximately 550 junior and senior high-school students.

1734. Wolfe, Irving W. Ability of one-room rural school pupils of Iowa to sing selected tunes. Master's, 1931. Northwestern.

1735. Young, Clarence B. The status of music in Indiana high schools. Master's, 1931. Indiana. 78 p. ms.

See also 127 (8-9), 458, 496 (13), 508, 615, 627, 790, 1071, 2048, 2090, 2111, 2131-2132, 3193, 3789, 3793, 4056, 4089.

DRAMATICS AND ELOCUTION

1736. **Bagenstos, Pearl E.** An evaluation of contests in speaking in the secondary schools. Master's, 1930. Iowa.

1737. **Becton, Emma B.** The Little theatre movement in four universities. Nashville, Tenn., George Peabody college for teachers [1931].

A study of the Little theater movement in the University of North Dakota, the University of North Carolina, Harvard university, and Yale university. Findings: Frederick H. Koch and George P. Baker started the movement; North Dakota has two movements; Yale gives an M. F. A. degree; North Carolina developed the folk drama; Harvard no longer has theater in college.

1738. **Bignell, Polly Ann.** A syllabus for a high school course in dramatic art. Master's, 1930. Iowa.

1739. **Blomquist, Roberta Bleakney.** A study of the objectives of high school dramatic productions. Seattle, University of Washington, 1931.

A survey of objectives since early Greek times. Presents objectives of high-school dramatic production as indicated by two questionnaire studies. Suggests a plan for realizing character-training objectives in high-school dramatic productions.

1740. **Calhoun, S. Wallace.** A method of testing ability in fine tonal discrimination without verbal instruction and without the use of verbal report. Master's, 1931. Ohio. 64 p. ms. (For abstract see no. 712.)

The initial considerations on a subject which will take some years to complete, and the beginning of the evolution of a method adaptable to a wide variety of experimental psychological situations. The method is entirely possible, but the technical problems of tone generation, conditioned-reflex technique, and testing-booth construction are such as will take some time to complete.

1741. **Carroll, Joseph John.** The pedagogical value of the one-act play. Master's, 1931. Boston Coll. 26 p. ms.

1742. **Cornmesser, Mary Jane.** The rise and development of spring festivals. Master's [1931]. Peabody. 68 p. ms.

1743. **Deem, Miriam E.** The place of dramatics and the dramatic club in junior high school. Master's, 1930. T. C., Col. Univ. 64 p. ms.

The study covering six years of experimentation in educational dramatics, shows the value of permanent dramatic organization in the school; the use of dramatics in character building and correcting; and the gratification of the universal desire for creative self-expression. Finds that pageantry is a good form for giving expression to the masses; vocational pageants may be used as a form of vocational guidance; shows the value of dramatisation in giving literary experiences.

1744. **Downs, Genevieve Rosemary.** Dramatic instruction in correctional schools for boys. Master's, 1931. Southern California. 42 p.

A study of the effect of dramatics on behavior based on four years' experience in play production with delinquent boys, followed by a survey of dramatic instruction in State correctional institutions.

1745. **Fatherson, Elizabeth.** An analysis of methods and practices in dramatic activity for children. Master's, 1930. Iowa.

1746. **Ferguson, Annie Kate.** A critical study of textbooks in dramatic production. Master's, 1930. Iowa.

1747. **Frank, Maxine Gordon.** The organization, administration and activities of the dramatic clubs in the senior high schools of Los Angeles and vicinity. Master's, 1931. Southern California. 78 p.

A study of numerous aspects of the work of dramatic clubs, based on questionnaire replies and on interviews with sponsors.

1748. **Hannick, Marie Lucilla.** The place of dramatics in the high school. Master's, 1931. Marywood. 41 p. ms.

1749. **Keeney, Opal Ada.** The relation of training in speech in secondary school to success in the university courses in the subject. Master's, 1930. Iowa.

1750. McGrew, Helen G. A prompt book and production of Lula Vollmer's "Sun-Up." Master's, 1930. Colo. St. T. C.
It is the purpose of this study so to record the process of production of "Sun-Up" that the work may be of value to teacher producers of plays in high schools.
1751. Marks, Janet Elizabeth. Methods of teaching stagecraft. Master's, 1931. Southern California. 142 p.
A compilation of materials for the guidance of art teachers who are primarily interested in its applications to dramatics; based on reading, interviews, and observations.
1752. Matchett, Katharine. Survey of the dramatic courses and the plays produced in the high schools of the State of Nebraska during 1928-1929. Master's, 1930. Northwestern.
1753. Moller, Helen Badgley. Some possible educative outcomes of school drama. Master's, 1931. Washington. 244 p. ms.
1754. Peavey, George J. A year's course of study in speech for a senior high school. Master's, 1931. Hawaii. 109 p. ms.
1755. Quimby, Frank B. A decade of international debating. Master's, 1931. Harvard. 116 p.
1756. Reinhard, Thelma Dorothea. A plan for the supervision of dramatic clubs in secondary schools. Master's, 1930. Iowa.
1757. Rogers, William C. The status of public speaking in the high schools of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)
A check list was sent to the schools offering public speaking in 1928-29, a total of 315 schools. Replies to the questionnaires and literature on the subject reveal that the subject is generally not well taught due to inadequately prepared teachers and to meager, indefinite, poorly arranged courses of study.
1758. Sanders, Laura Irene. The present status of dramatics in the high school curriculum as discovered through a study of 210 high schools. Master's, 1930. Northwestern.
1759. Sheets, Roberta Dinwiddie. A plan for a course in the principles of characterization in acting. Master's, 1930. Iowa.
1760. Silverthorne, Carolyn. A syllabus for a first college course in dramatic art. Master's, 1930. Iowa.
1761. Skelton, Elizabeth Verna. The teaching of speech in the junior high school. Master's, 1931. Stanford.
1762. Stump, Edwin Turner. A state program of educational dramatic activities for West Virginia. Master's, 1930. Iowa.
1763. Swain, Genevieve Margaret. Speech correction work in California public schools. Master's, 1931. Stanford.
1764. Thompson, M. Weldon. Status of dramatics in the high schools of Virginia. Washington, D. C., George Washington university, 1931.
Questionnaire of objectives, equipment, etc., for dramatics in Virginia high schools.
1765. Tomlin, Ramona Doloris. An experimental study of pitch control in speech. Master's, 1930. Iowa.

JOURNALISM

1766. Baetty, Winifred. An analytical and descriptive account of news publications in the high schools of the Chicago area. Master's, 1930. Northwestern.
1767. Browne, Kenneth Alton. Desirable qualifications of a high school publications adviser and teacher of journalistic writing. Master's, 1931. Stanford.
1768. Cooper, Alvin Carl. A study of student publications in the white accredited secondary public schools in Virginia. Master's, 1931. Virginia.

1769. **Haserot, Dorothy Sibyl.** The status of journalism in the junior high schools of California. Master's, 1931. Southern California. 171 p.

A questionnaire study of the aims, curriculum organization, content, and methods of teaching formal courses in journalism and of methods of management of school papers in junior high schools.

1770. **Passons, Thomas L.** Student newspaper and magazine management in Tennessee colleges and universities. Master's, 1931. Peabody. 73 p. ms.

A study of student management, selection of staffs, subscriptions, advertising, circulation, printing, costs, etc. Findings: No prevailing method of selecting staffs; one-half of institutions do not provide offices; papers vary considerably in respect to frequency of publication, subscription rates, number of column inches an issue, advertising rates, circulation, and printing costs; advertising limited primarily to local firms; no well-defined rates of advertising; alumni do not usually subscribe; control of all papers is closely united to their respective institutions.

1771. **Probert, Eleanor.** Status of journalism in the senior high schools of California. Master's, 1931. Southern California. 98 p.

A questionnaire study of practices in teaching journalism classes and in sponsoring the newspaper and the annual, including a survey of the special training of journalism teachers.

1772. **Redford, Edward Horrall.** A study of journalism in American secondary schools. Master's, 1931. Stanford.

1773. **Reichard, Mildred Katherine.** Organizing the school paper as an English composition project. Master's, 1930. T. C., Col. Univ. 187 p. ms.

This study quotes and summarizes opinions of authorities to justify organizing an all-school paper as an English composition project; proposes a method for starting a school newspaper with staff members chosen from two eighth-grade experimental classes; reports on 29 different classrooms procedures; suggests plans to use in conducting the project as it was conducted at the Parkville high school, Parkville, Md., in 1928-29; and compares the all-school paper with a classroom newspaper or individual-pupil paper based on literature.

1774. **Roop, Joseph A.** High school journalism: a study in the larger public high schools of Missouri, Kansas, and Oklahoma. Master's, 1931. Missouri. 189 p.

1775. **Schuler, Maybelle Pillar.** The status of the high school newspaper as a curricular activity in the published works on high school journalism. Master's, 1931. Denver. 112 p. ms.

Defines and evaluates the status of the high-school newspaper, discussing "status" under six important phases: (1) historical background; (2) contribution to the fundamental aims of education; (3) place as a subject in the curriculum; (4) value compared with that of other school publications; (5) financial importance; and (6) evidence of future development.

See also 4030.

SAFETY

1776. **Douglass, Carleton E.** Course of study in safety education for elementary grades. Baltimore, Md., Department of education, 1931. 133 p.

This course of study shows the opportunities for safety education in the instructional offerings and administrative set-ups in the Baltimore elementary schools.

1777. **Forbes, Theodore W.** Visual estimation of velocity in connection with highway safety. Doctor's, 1931. Ohio. 100 p. ms. (Contributions to psychology, no. 11.) (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 127-35.)

The study aims to build an apparatus for studying judgments of velocity; applying it to commercial drivers, and comparing it with road-test results on students. Findings: Inability to estimate velocity is one factor, and therefore to some extent responsible for accidents.

1778. **Gallup, Luke L. and Lowerman, Alfred E.** A partial summary of accidents to pupils in Los Angeles public schools during the school year 1929-1930. Los Angeles, Calif., City schools, 1930. Los Angeles educational research bulletin, 10: 3-7, November 1930.

1779. Howard, E. E. A study of safety and accident prevention in school shop and in industry. Master's, 1931. Penn. State. 81 p. ms.

A study based on 80 replies to questionnaires from school shops and industrial establishments in Pennsylvania. Displays details of provisions for safety.

*1780. Lockhart, Raymond John. Units of safety education by correlation in a secondary school curriculum. Master's, 1931. New York. 104 p. ms.

1781. Miner, Frances Hudson. How to teach safety in the high school. Master's, 1931. Southern California. 230 p.

A compilation and description of numerous practical devices and methods for teaching safety in all the regular school subjects and in many extracurriculum activities; based on an analysis of the literature, on interviews with safety experts and teachers of the subject, and on a study of practices in other cities.

1782. Panock, L. H. Study to determine the safety education needs in St. Louis. Master's, 1930. Chicago. 120 p. ms.

Concerned with the fatal accidents to persons of all ages in the United States from 1920 to 1927, and children under 16 in St. Louis, from 1921 to 1929. Findings: Greatest need by parents of children of preschool age, next by 5, 6, and 7 year old children. Negro children are especially in need. Wide variation between the various school districts.

See also 3284, 3309, 3414.

PRESCHOOL EDUCATION

*1783. Andrews, Elizabeth Gordon. The development of imagination in the preschool child. Doctor's, 1930. Iowa. Iowa City, Iowa, The University, 1930. 64 p. (University of Iowa studies, First ser., no. 191. Studies in character, vol. 3, no. 4, November 15, 1930.)

Traces the development of imagination in the preschool child in order to ascertain its relation to intelligence, chronological age, sex, and individual differences.

1784. Babbitt, Adeline E. A vocabulary study of preschool children. Master's, 1931. Hawaii. 150 p. ms.

Findings: Vocabulary is most influenced by home language, mental age, and length of kindergarten attendance.

1785. Bate, Elsa Brown. A study of the posture of a group of nursery-school children during the rest period. Master's, 1931. Kans. St. Coll.

1786. Batjer, Margaret. Relation of activity of the preschool child to his physical and mental makeup. Master's, 1931. Tennessee. 35 p. ms.

1787. Beaver, Alma P. A technique for studying the initiation of social contacts by preschool children. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 70 p. (Child-development monographs.)

Thirty-two children, ranging in age from 26 to 45 months, were studied in an investigation of the initiation of social contacts by preschool children. The method was found to be a highly reliable instrument for differentiating individuals with regard to frequency and type of initiated social contacts.

1788. Breckenridge, Marian. A study of the effect of the rest period before lunch upon the behavior of nursery school children during the lunch period. Detroit, Mich., Merrill-Palmer school [1931].

1789. Ding, G. F., and Jersild, A. T. The laughter and smiling of preschool children. New York City, Teachers college, Columbia university, 1931. 33 p. ms.

Observational records of the laughter and smiling of 59 Chinese children, aged 2 to 5, were taken during a period of several months in a nursery school and kindergarten in Chinatown, New York. Each child was observed four hours or more. The occasions which gave rise to laughter and smiling, individual differences in responses, correlated factors, evidences for and against current theories, and age and sex differences are treated in the presentation of the results.

1790. **Edwards, Winifred.** A study to determine how students in the nursery school may be helped to become more efficient in their dealings with children. Master's, 1930. Kans. St. Coll.

1791. **Greene, Katharine B.** The relation between kindergartens and nursery schools. *Childhood education*, 7: 352-55, March 1931.

1792. **Hatt, Elise.** A comparative study of measurements and qualitative ratings of nursery school children. Merrill-Palmer school, Detroit, Mich. *Child development*, 2: 1-29, March 1931.

A report of the efficiency of a profile based upon percentiles, the Biogram, in indicating the relative superiority or inferiority of individual nursery-school children. . . . A comparative study was made of the Biograms of two groups of nursery-school children, one group considered by adults observing them in the nursery school to be "most desirable" and the other group "least desirable" from an all-round point of view, in order to determine (1) what traits best differentiate the two groups of children and (2) the relative importance of the different traits in determining what is regarded as "desirability" and "undesirability."

1793. **Hill, Paul L.** A picture completion test series for preschool children. Master's, 1931. Ohio. 43 p. ms.

A study of 106 children, 76 normal, 30 feeble-minded, ages 2 to 6 (approximately). A test technique was devised which seems to be worth further investigation and standardization.

1794. **Langdon, Grace.** A study of the similarities and differences in teaching in nursery school, kindergarten, and first grade. Doctor's, 1931. T. C., Col. Univ.

A total of 1,624 returns to a questionnaire were received from 442 schools in 357 cities in 48 States. Data indicate that techniques of guidance are used which are questionable in the light of principles of mental hygiene; there is too great conformity to behavior patterns; there is too much emphasis on the learning of skills rather than on spontaneity and freedom of expression; material is put in the nursery-school curriculum which is better suited to the developmental level of older children; contacts are seldom made between kindergarten and first-grade teachers and the children's parents.

1795. **Neff, Olive.** A study of the posture assumed by nursery-school children during floor play. Master's, 1931. Kans. St. Coll.

1796. **Raymond, E. Mae.** Score card standards for evaluating nursery school education. Master's, 1931. T. C., Col. Univ. 40 p. ms.

An educational program formulated on a basis of child-development needs. Standards were organized by which to judge nursery schools.

1797. **Roberts, Katharine Elliott.** The ability of preschool children to solve problems in which a simple principle of relationship is kept constant. Master's, 1930. Iowa.

1798. **Simpkins, Nella.** Numerical experiences of nursery school and kindergarten children. Master's, 1931. Nebraska. 27 p. ms.

Children were observed during many sessions and their actual use of number recorded. Many individual differences were found. Division was used more than subtraction or multiplication.

1799. **Sinden, Mrs. Cecile C.** A study of social groups among nursery school children. Master's, 1930. Cornell.

1800. **Spangler, Flora Ross.** Some factors influencing negativism in 29 nursery school children. Master's, 1931. Kans. St. Coll.

1801. **Stutsman, Rachel.** Mental measurement of preschool children: with a guide for the administration of the Merrill-Palmer scale of mental tests. Yonkers-on-Hudson, N. Y., World book company, 1931. 368 p.

This book includes a full description of the Merrill-Palmer scale of mental tests for preschool children. There are sections on problems and history of the mental testing of preschool children, the Merrill-Palmer research, a guide for the administration of the Merrill-Palmer scale, and illustrative case studies.

1802. Taylor, Katharine Whiteside. *The children's community*. Washington, D. C., American association of university women, 1931. 22 p.

An experiment in nursery-school organization and administration by a group of lay college women. Findings: Nursery-school education is within the possibilities of any community from the viewpoints of budget, excellently prepared teachers, cooperation in record keeping, and parental participation.

1803. Taylor, Nell Boyd. *The preschool child*. A bibliography. Washington, D. C., American association of university women, 1930. 80 p.

A pamphlet for the guidance of study groups in preschool education, containing a new study syllabus dealing with the various phases of child development during the preschool years.

1804. Utah. Department of public instruction. *Bulletin on the pre-school child*. Salt Lake City, 1930. 53 p.

This study deals with the preschool child; child's development; importance of habits of food, sleep, and elimination during the first year; suggestions for the formation of good eating, sleeping, and elimination habits; equipment which aids normal development and habit formation; habits of eating, sleeping, third, fourth, and fifth years; helping a child to develop desirable habits; truth and falsehood; fear; temper tantrums; thumb sucking and nail biting; punishment; the problem of discipline; helping the child to learn consideration for others and to lend cooperation; music; and play.

1805. Waddell, Charles W., and others. *A six-year experiment with a nursery school*. Los Angeles, Calif., University of California, 1931. 178 p. (Bulletin of the Teachers college, University of California at Los Angeles, no. 1, April 1931.)

This study describes the work of the nursery school of the University of California at Los Angeles, which was started with a group of 2-year-olds and a group of 3-year-olds in September, 1925. This nursery school has a fivefold purpose: Care and development of children, parental education, training of a limited number of teachers, demonstration center for certain groups, and limited research.

1806. Wechsler, D., Crabbs, L. M., and Freeman, R. G. Galvanic responses of preschool children. *Pedagogical seminary and Journal of genetic psychology*, 38: 203-22, December 1930.

The purpose of this study was to investigate the availability of the psychogalvanic reflex as a means of studying the emotional reactions of young children. Galvanic responses to each of a standardized series of stimuli were obtained. Thirty children, aged 2 to 4 years, were used. The measurements were correlated with ratings by teachers. The relative effectiveness of different types of stimulation was studied.

1807. Weiss, La Berta A. *An experimental investigation of certain factors involved in the preschool child's compliance with commands*. Master's, 1931. Iowa.

The study was undertaken for the purpose of analyzing some of the factors involved in the preschool child's compliance with commands. Findings: The results indicated a consistent decrease in time taken for response with increase in chronological age. Time also tended to decrease with increase in mental age. There was no significant relation between time of response and IQ or sex.

1808. Work, Janice M. *The Merrill-Palmer picture puzzle series; a study of the picture element at the preschool level*. Master's, 1931. Ohio. 51 p. ms.

Experiment tried on 70 nursery and preschool children to discover influence of picture in solving Merrill-Palmer picture puzzles. Findings: (1) Older children solve the picture puzzles with or without the picture more quickly than younger children; (2) picture puzzle No. 2 is probably too difficult for many children under 3 years of age, and picture puzzle No. 3 is probably too difficult for many children under 3 years and 7 months of age; (3) at the upper limits of the age group tested, children solve the puzzles with the picture down in the same or less time than with the picture up; (4) the picture element is less influential at the upper age levels than at the lower.

See also 509, 1643, 3162, 3377, 3407; and under Educational psychology and child study.

ELEMENTARY EDUCATION,

INCLUDING KINDERGARTEN AND FIRST GRADE

1809. Belmont, Mass. Public schools. Report on first grade entrance requirements. 1931. 6 p. ms.; Bibliography, 2 p. ms.

Data indicate that from a fourth to a third of the pupils of the schools of Belmont, Mass., are mentally under age for the work expected of them. The author suggests that the schools establish a mental-age requirement of $6\frac{1}{2}$ years for entry into the first grade and a chronological-age requirement of 5 years for entry into the kindergarten.

1810. Busby, Clyde. A study of the abilities and achievements of 259 1L pupils. Richmond, Va., Public schools, 1931. 15 p. ms.

1811. Chamberlain, Clarence White. A survey of the San Jacinto elementary school. Master's, 1931. Southern California. 136 p. ms.

1812. Davis, Mary Dabney. Kindergarten-primary education, a statistical and graphic study. Washington, United States Government printing office, 1930. 41 p. (U. S. Office of education. Bulletin 1930, no. 30.)

1813. Fry, Rhey. The school vocabulary of first grade children. Master's, 1931. Oklahoma. 55 p. ms.

The vocabularies of approximately 300 first-grade children in the Oklahoma City public schools were studied during the school years 1929-30 and 1930-31. A complete record was kept of all the words used in oral conversation by the children during their informal school periods. The words were tabulated in alphabetical order and given a credit number showing their frequency placement by 100s and 500s. The words were compared with the frequency placement of the adult vocabulary studies of Thorndike, Horn, the child vocabulary studies of the International kindergarten union, and Trent home vocabulary of first-grade children. From this comparison it was found that there was a wide disagreement between the words in the study and the adult words, and a fairly high correlation between the words in this study and the words found in other children's lists.

1814. Fulton, Lawrence Wilson. An evaluation of a differentiated progress plan in the elementary grades. Master's, 1931. Wisconsin.

1815. Gibson, Robert Earl. An elementary school survey of Contra Costa county, Calif., with recommendations for a reorganization. Master's, 1931. Stanford.

1816. Green, Samuel David. Problems of the grammar grade teacher. Master's, 1931. Virginia.

1817. Hsieh, James F. and Hopkins, L. Thomas. The cooperative group plan for the organization of elementary schools. New York City, Teachers college, Columbia university, 1931. 70 p.

1818. Hoss, Lula B. The new education applied to the intermediate grades of the public schools. Master's, 1931. Indiana. 192 p. ms.

1819. Houston, Texas. Independent school district. The use of the Park-Franzen test for readiness to do first-grade work as an aid to better classification in the low-first grade. 1931. 3 p. ms. (Research bulletin, no. 8212.)

1820. Kerrigan, Agnes Jane. The philosophy of modern elementary education. Master's, 1931. Ohio. 90 p. ms.

Points the direction for reinterpretation of elementary education in the light of modern psychology and a changing civilization. Findings: Elementary education should provide a program of education that gives social insight to the individual and that is based on a program of activity that avoids the dangers of unwarranted freedom. This study shows the possibility and advisability of providing for dynamic learning within the boundaries of the present traditional situation. The suggested program is based upon the writings of John Dewey and it postulates the necessity of a common understanding, by administrators and teachers, of an underlying philosophy of education.

1821. **Lauderbach, J. Calvin.** A survey of the public elementary schools in Chula Vista, Calif. Master's, 1931. Southern California. 150 p.

A study of existing conditions in the Chula Vista elementary school relative to population, buildings, classification of pupils, efficiency of classroom teaching, school staff, educational organization, and financial status, followed by recommendations in each case.

1822. **MacLeod, Kenneth M.** Comparison between three types of organization in first and second grades. Master's, 1931. Michigan.

1823. **Massachusetts.** Department of education Age requirements for admission to grade 1 in the towns and cities of Massachusetts as of September 1, 1930. [Boston, 1930.] 5 p. ms.

1824. **Noble, M. C. S., jr.** Proceedings of the sixth annual North Carolina conference on elementary education. Raleigh, N. C., State department of public instruction, 1930. 70 p.

Contains information showing, specifically, ways by which North Carolina educators are achieving the six cardinal principles of elementary education; also presents a number of studies dealing with ways for solving administrative problems peculiar to the public elementary schools in North Carolina.

1825. **Platt, Omer Glen.** A survey of the Connersville elementary schools. Master's, 1930. Indiana.

Intelligence and educational surveys were made in the four grade schools of Connersville; teachers' and superintendents' reports were compiled and compared with other cities of similar status with Connersville. Findings: Connersville is free from the class problem; it compares favorably in finance with other cities of the same size; the salary schedule should be adjusted; the wholesale practice of retardation of pupils should be eliminated; teacher tenure was good; instruction for various buildings showed a low degree of variation; report for attendance and health was above the average for the state.

1826. **Quigley, Mary A.** A survey of a city grammar school. Master's, 1931. N. Y. St. Coll. for Teach.

This is a "service study" making use of intelligence tests, standardized achievement tests and an age-grade classification for the purpose of testing the general efficiency of the school. The results obtained, carefully tabulated and interpreted, are made the basis of 11 definite recommendations.

1827. **Raybold, Emma.** A study of first-grade pupils, 1927-1930. Los Angeles, Calif., City schools, 1930. Los Angeles educational research bulletin, 10: 2-5, January 1931.

An investigation into the relation between mental age and reading readiness.

1828. **Reid, Robert Morrison.** A study of industry and perseverance among elementary school pupils. Master's, 1931. Stanford.

1829. **Santa Monica, Calif.** City schools. Detroit kindergarten survey. 1931. 5 p. ms. (Report, no. 17.)

The tests were given to 233 kindergarten pupils. The range of CA for the group was from 4 years 9 months to 6 years with a median age of 5 years 6 months. The range in intelligence was from 70 to 140 IQ with a median IQ of 104.3.

1830. **Scrivener, Gertrude E.** Relationship of certain behavior traits of intelligence and school achievement in first and second grades. Master's, 1931. Wisconsin.

1831. **Smith, Weir Galley.** Proposed reorganization of the elementary schools of Kings county. Master's, 1931. Stanford.

1832. **Thompson, Clara B.** The relative value of factual material as such and the value of factual material told in story form in its effect upon extent and permanency of learning in the primary grades. Master's, 1931. Colo. St. T. C.

1833. **Trent, Bess.** The vocabulary of first-grade children outside of school. Master's, 1931. Oklahoma. 53 p. ms.

Parts of conversations from 62 children were recorded verbatim by parents; this yielded 90,770 running words and 3,491 different words. The first 1,500 words, with

frequency occurrence of four or more, were listed alphabetically, and the frequency placement of each word given. The list was compared with two adult lists, Thorndike's and Horn's, and with two children's lists, The International kindergarten union's, and Fry's list. The study indicates that lists of adults' words are not valid criteria for choosing children's words and that a first-grade list should include words used both in school and outside of school.

1834. **Watters, James Paskel Boyd.** A study of selected elementary schools of Cleveland county, Okla. Master's, 1930. Oklahoma. (For abstract see no 713.)

A selection was made of eight of the best and eight of the poorest 1-room schools of Cleveland county, Okla. The groups were designated X and Y respectively. Data were collected showing the enumeration, enrollment, attendance, and achievement of the children of these schools for the years 1924-1929; the expenditure on teachers' salaries, supplies, repair of buildings, purchase of equipment and books for the years 1927-1929; and the valuation, indebtedness, and mill levies for the school year 1928-29. Tests in reading, arithmetic, spelling, and handwriting were given to students of the sixth, seventh, and eighth grades of these schools. Conclusions: In order to eliminate the difference in holding power and achievement between such groups as X and Y, it is proposed that larger units of taxation and a better plan of organization be adopted.

1835. **Wheeling, W. Va. Independent district. First-grade study. 1931.**
11 p. ms.

A study undertaken to measure the gain brought about by a change in readers.

See also 11, 29, 40, 116, 127 (2), 199, 209, 214, 226, 233, 250, 300, 1981, 3129, 3188, 3193, 3275, 3942-3943, 4140, 4178, 4351; and under Educational tests; Professional status of teachers; School administration; School management; Special methods of instruction and organization; Special subjects of curriculum; Teacher training.

SECONDARY EDUCATION

1836. **Abraham, Richard I.** Study of student expense in junior and senior high schools. San Francisco, Calif., Public schools, 1931. 20 p. ms.

1837. **Adamson, Bertha Luella.** Activities of honor students. Master's, 1931. Nebraska. 37 p. ms.

A study of the activities of honor students in Lincoln, Nebr., high schools and in the University of Nebraska over a period of three years. Findings: Honor students engage in activities to as great if not greater degree than do nonhonor students.

1838. **Almack, J. C. and Benjamin, E. H.** Survey of Monterey union high school district. Stanford University, Calif., Stanford university, 1931.

1839. **Aten, Harold D.** Lesson assignments of teachers in the Oakland senior high schools. Oakland, Calif., Public schools, 1930. 74 p. ms. University high school journal, 10: 235-50, December 1930.

This contains a digest of 13 authors' statements of the essential qualities of assignments.

1840. **Atlanta, Ga. Public schools. Population studies, 1931, white junior and senior high schools. 1931. 25 p. ms.**

A statistical study of the white junior and senior high-school population by wards.

1841. **Bauman, Frank A.** Business management in a California high school. Master's, 1931. Stanford.

1842. **Binns, William H.** A study of a junior-senior high school class. Master's, 1931. Temple.

1843. **Bishop, J. M.** Accredited versus nonaccredited schools. 1931. Peabody. 85 p.

A comparison of accredited and nonaccredited high schools in Virginia. Findings: Accredited schools are superior to nonaccredited schools.

1844. **Bixler, H. H.** Report of achievement of Atlanta high school students in college, 1927-1928. Atlanta, Ga., Board of education [1930]. 4 p. ms.

Includes a summary of marks and honors gained by Atlanta high-school students in Georgia colleges.

1845. Bos, Bert Peter. Report of the partial survey of the Eastern academy, Borb of Prospect Park, N. J. Master's, 1930. New York. 65 p. ms.

1846. Bowman, Raymond Palmer Garber. A method of estimating instructional efficiency in the high school—based on correct teaching procedures involved in the acquisition of specified learning products. Master's, 1930. Virginia.

1847. Bozarth, Virgil. A comparison of small Michigan high schools on the basis of the number of graduates going to college. Master's, 1931. Michigan.

1848. Carnegie foundation for the advancement of teaching in co-operation with the Joint commission of the Association of Pennsylvania college presidents and the State department of education. Study of the relations of secondary and higher education in Pennsylvania. Progress report 3, memorandum of proposals for the treatment of the secondary enquiry group in the senior high school, 1931-1934. New York City, Carnegie foundation for the advancement of teaching, 1931. 20 p.

The report takes up the following proposals that apply to the entire enquiry group as distinguished from sections of the group selected for special treatment: Home room organization, school, recognition of self-directed work, and differentiated treatment of special groups.

1849. Carr, Margaret J. S. Accredited secondary schools in the United States. Washington, United States Government printing office, 1930. 152 p.

(U. S. Office of education. Bulletin, 1930, no. 24.) Supplement, 26 p.

1850. Carrothers, George E. Annual report of the division of university inspection of high schools and the list of accredited schools for the year ending June 30, 1931. Ann Arbor, University of Michigan press, 1931. 94 p. (University of Michigan official publication, vol. 33, no. 2, July 4, 1931.)

1851. Cassler, George W. Case studies of maladjusted high-school pupils. Master's, 1931. Penn. State. 82 p. ms.

Analytical study of 20 cases. The significance is in the detailed descriptions of the cases. Statistical analysis showed that the most frequent causes of maladjustment were the following: Lack of interest, lack of study, ineffective study habits, influence of associates, employment, and lack of self-determination.

1852. Clem, Orrie M. Some scientific studies in secondary education. Baltimore, Md., Warwick and York, 1931.

A summary of 12 studies in secondary education. Specific conclusions are given for each study. The studies were conducted in various schools in Syracuse and New York State.

1853. Coulter, Hugh Alexander. A general and comparative study of West Virginia high schools. Master's, 1930. Tennessee. ms.

1854. Coxe, Warren W. and Cornell, Ethel L. Subjects interesting and uninteresting to present high school pupils. Albany, New York State education department, 1931. New York State education, 18: 690-91, March 1931.

Analysis of 10,000 questionnaires.

1855. ——— and Cowen, Philip A. Educational needs of pupils in small high schools. Albany, N. Y., University of the State of New York press, 1931. 63 p. (New York State Education department. Bulletin, no. 969.)

1856. ——— and Soper, Wayne W. Evaluation of high-school subjects. Albany, New York State education department, 1931. New York State education, 18: 776-77, April 1931.

Analysis of 10,000 questionnaires.

1857. ——— ——— The high school's part in increasing the enjoyment and appreciation of living. Albany, New York State education department, 1931. New York State education, 18: 588-90, February 1931.

Analysis of 10,000 questionnaires.

1858. ———. Why do pupils attend high school? Albany, New York State education department, 1930. New York State education, 18:371-72, December 1930.

Analysis of 10,000 questionnaires.

1859. Cragun, Orville Robinson. The size of high school as a factor in college success. Master's, 1931. Kans. St. Coll. 38 p. ms.

The results of this study indicate that the size of high school is not a significant factor in college success.

1860. Diefendorf, J. W. The high-school situation in New Mexico. Albuquerque, N. M., University of New Mexico press, 1931. 58 p. (Bulletin, vol. 5, no. 1. Education series, Whole no. 194, June 15, 1931.)

Data for the study of the high-school situation in New Mexico were taken from the annual reports for the year 1929-30.

1861. Douthat, Lyell Vernon. The extent to which pupils in the large high schools of West Virginia are being taught by teachers who are prepared to teach the subject. Master's, 1930. Ohio. (For abstract see no. 712.)

The study field was limited to the high schools of West Virginia having a staff of 11 or more, including the principal; 36 schools and 500 teachers and principals were included; a total of 48,288 pupils were involved in the study.

1862. Dungan, John Urban. The planning of secondary school schedules with special reference to the exempted villages of Ohio. Master's, 1931. Cincinnati.

1863. Eisenberg, Harry O. Comparative study of the resident and the non-resident pupils in a six-year high school. Master's, 1931. Temple.

1864. Elder, Harold Chester. The relation of high-school scholarship to combined intelligence and attitude scores. Master's, 1930. Kans. St. Coll.

1865. Essig, J. Fred. Comparative study of county versus local unit of high-school organization in Colorado. Master's, 1931. Iowa. 111 p. ms.

1866. Fauquhar, Myrtle Elva. Student adjustment in the Francis Joseph Reitz high school of Evansville, Ind. Master's, 1931. Indiana. 126 p. ms.

1867. Frank, Samuel Christian. High school credit for outside study. Master's, 1931. Ohio. 109 p. ms.

The scope of the study includes all of the States of the Union. An increased interest is shown to widen the educational prerogatives of the States.

1868. Frew, James Edward. The articulation of junior and senior high schools in Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

It has been the purpose of this study, to learn of the methods now used by city, exempted village, and county high schools in Ohio to effect articulation among and between the junior and senior high schools.

1869. George, John Robert. A study of the grade distribution of a California high school. Master's, 1931. Stanford.

1870. Givens, George Howard. A study of secondary education in Russell county. Master's, 1930. Virginia.

1871. Goette, William Louis. A study of the instructional records of the accredited six-year junior senior high schools of Florida. Master's, 1931. Florida.

1872. Gridley, Kate Louise. The effects of carrying an extra solid on a group of high-school girls. Master's, 1931. Southern California. 89 p.

The records of 72 high-school girls were studied under both a 5-solid and 4-solid load and various conclusions drawn as to effects on scholarship, health, and social life.

1873. Hamrin, Shirley A. Organization and administrative control of large high schools. Doctor's, 1931. Northwestern.

1874. Harris, Leo Alvil. Comparison of fraternity and non-fraternity graduates of a California high school. Master's, 1931. Stanford.

*1875. Harshman, Floyd E. Adjustments in secondary education during the decade 1920-1930. A survey and evaluation of adjustments reported by a group of secondary school principals. Doctor's, 1931. New York. 288 p. ms.

The study gives adjustments in secondary education during the past decade as reported by 227 high-school principals, and tries to evaluate typical practices in terms of a democratic philosophy of education.

1876. Heard, Beverly H. Problem of pupil transfer in the high school of the Teacher-training division, Wilberforce university. Master's, 1931. Ohio. 99 p. ms.

A study of transfers over a 6-year period (1925-26 to 1930-31), 600 cases, involving preliminary training, continuation in school, comparative school success, educational losses, and contributing causes. Findings: Transferred pupils are much older according to grade classification than pupils not transferred; they are 18 per cent less successful in completing their high-school education. The mortality for transfers is approximately the same as for nontransferred pupils. There is a big loss in educational opportunity on the part of transfers who eventually withdraw. Transference adds to the general (money) cost of education. The gain or loss in credit for transfers is of little general consequence. Transfer mortality is due largely to lack of proper guidance.

1877. Hentschke, Armin Carl. An investigation of the use of student help in Los Angeles high schools. Master's, 1931. Southern California. 116 p.

A study of present practices with evaluation of the benefits of such work to students; based on questionnaires and on interviews with administrators, directing teachers, and graduating students.

1878. Hess, Benjamin Musser. A comparison of State and North central association standards for high schools in the North central territory. Master's, 1931. Cincinnati.

1879. Holdridge, Gerald Raymond. The major objectives of secondary education as revealed in recent educational literature. Master's, 1931. Wisconsin.

1880. Hughes, Otto. A study of the students in Columbus high school with IQ's below 95 as an index to future administrative plans to meet their needs. Master's, 1930. Indiana. 55 p. ms.

A study to determine whether or not the low IQ students present an administrative problem; to determine the nature of the problem; and to find out what the local administration can do toward a solution of the problem. Findings: A large percentage of the low IQ group were retarded, received low or failing teachers' marks; they plan to enter vocations in which they are incapable of succeeding, and to enter institutions of higher learning.

1881. Ilse, Richard. Union secondary schools. Master's, 1931. Colo. St. T. C.

This study concerns itself with provisions for high-school education in districts which do not maintain high schools for their own pupils. The affiliation of elementary districts into high-school unions which will provide secondary education without consolidation of the elementary districts is the scope of the study.

1882. Jones, B. V. A comparison of offerings in large and small high schools. Nashville, Tenn., George Peabody college for teachers, 1931. 143 p. ms.

A study of 17 states—72 schools. Findings: Both large and small schools were found to have given evidences of growth since 1919-20, with the large schools increasing their offerings in vocational work to a great extent. The change in the smaller schools was primarily of the cultural type. The larger unit is more desirable for the offering of a more extended program of studies.

1883. Kimberlin, Dorothy Emilee. Differences in adjustment of rural and city school children upon entering the low-ninth grade in a city school. Master's, 1931. Stanford.

1884. Kocs, Leonard V. Private and public secondary education, a comparative study. Chicago, Ill., University of Chicago press, 1931. 228 p.

Data for this study were gathered during the four school years 1925-26 to 1928-29. From the standpoint of the Committee on relations to other institutions of learning of

the University of Minnesota, the investigation was made to provide a more substantial basis for establishing policies in accrediting private secondary schools than is afforded by the usual type of inspection. The investigation includes the students, their ability and achievement as shown by tests, their success in the university, the curriculum offerings of the schools, and the training of teachers. Comparisons are made of private and public secondary schools and of the different types of private schools.

1885. **Kumlián, W. F.** The high-school education of farm boys and girls in South Dakota. Brookings, South Dakota State college of agriculture and mechanic arts, 1930. 62 p. (Bulletin no. 250.)

Data indicate that slightly more than half the farm children of high-school age in South Dakota are now enrolled in high school; the high-school tuition charge to rural nonresident pupils averages \$12.29 per month; it is estimated that less than one-third of the general run of farm children attending high school return to the farm after finishing their high-school course; evidence seems to favor the consolidated or union type of high school for rural communities, especially when the elementary grades can be included in the system; educational authorities differ as to the minimum-sized rural high school that can advantageously offer courses in vocational agriculture and home economics.

1886. **Kunkel, George A.** An analysis of the activities of secondary school pupils. Master's, 1931. Pennsylvania. 75 p. ms.

1887. **Louisville, Ky.** Public schools. High school progress. 1930. 20 p. ms.

All available records of the pupils who entered four white high schools September 1925, as beginners in the ninth grade, were studied. Grades in each course completed were also studied and withdrawals were recorded. Credits or failures earned at the Y. M. C. A. night school, summer school, and by special examination were noted.

1888. **McCollow, John William.** A survey of the adolescent problems found in the high schools of Grant county, Okla. Master's, 1931. Oklahoma. 142 p. ms.

1889. **Maher, Richard.** Choosing of leaders in senior school. Master's, 1931. New York. 52 p. ms.

A study to find underlying element of leadership. Findings: Interest in particular activity is basis of leadership.

1890. **Maller, Julius B.** Predicting success in high school. New York City, Teachers college, Columbia-university, 1930. 26 p. ms.

The records of 5,968 high-school seniors were examined and the correlations between scholarship, intelligence, and age-at-entrance were computed. The study revealed that there was a higher correlation between scholarship and acceleration as measured by age-at-entrance to high school than between scholarship and intelligence, measured by a standard intelligence test.

1891. **Mercer, Sister Mary Leocadia.** Origin and growth of secondary education in Oklahoma. Master's, 1931. Denver. 95 p. ms.

The purpose of the study was "to find the underlying basic principles upon which an Oklahoma system of secondary education was founded, and to show how upon these principles a great structure has been built. An attempt has been made to trace the development of secondary education from its beginning in 1891 down to the present." The Oklahoma statutes, State records and reports, and newspaper files were studied to secure data for the study.

1892. **Mikesell, Ray Everett.** A proposed distribution of high school centers for Licking county, Ohio. Master's, 1930. Ohio.

1893. **Monroe, Albert Loomis.** Survey of masters' theses in secondary education at Peabody college. Master's, 1931. Peabody. 199 p. ms.

Findings: One hundred and twenty masters' theses have been written in the Department of secondary education at George Peabody college for teachers during the years 1915 to 1930, inclusive; classified as to methods, 23 were experimental; 13, historical; 23, descriptive; 55, tabular; and 2, statistical.

1894. **Myers, C. E., Gifford, W. J. and Peters, W. D.** Survey of secondary education in Fauquier county, Va. Richmond, Virginia State board of education, 1931.

1895. ——— **Smithey, W. B. and Buck, J. L. B.** Survey of secondary education in Franklin county, Va. Richmond, Virginia State board of education, 1931. 5 p. ms.

1896. **Newland, T. C.** Some differential factors in the high school senior's prospective college attendance. Doctor's, 1931. Ohio. ms.

1897. **Newton, Isaac A.** The selective character of secondary education. Master's, 1931. Peabody. 85 p. ms.

1898. **Paredes, L. B.** A study of administrative problems and practices in the Philippine public high schools. Master's, 1930. Illinois. 89 p. ms. (For abstract see no. 699.)

"This descriptive study is the result of the author's attempt to present a critical appraisal of the public high school as a social institution; to make certain suggestions with regard to the general organization of secondary education in the Philippine Islands; and to present a detailed and technical discussion of the curriculum, instruction, and administration of the secondary school. Original sources published in the Philippines and in America were consulted for data used in this investigation."

1899. **Pauline, Rose M.** Pupil study in the rural high school. Master's, 1931. Michigan.

1900. **Payne, Clara.** A study of the needs and problems of girls in the public secondary schools. Master's, 1931. Claremont.

1901. **Payne, Virgil French.** The selective character of secondary education in Nashville. Master's, 1931. Peabody. 97 p. ms.

1902. **Peters, Timothy Edwards.** Changing tendencies in methods of high school teaching. Master's, 1931. Colorado.

1903. **Pierce, Susannah Cornelia.** Difficult situations of high school girls. Master's, 1930. Northwestern.

1904. **Pool, Samuel Oma.** The transferred high school pupil of Oklahoma. Master's, 1931. Oklahoma. 41 p. ms.

1905. **Robinson, James C.** The overlap in high school "government" and college "government." Master's, 1931. Iowa. 328 p. ms.

1906. **Ross, Maurice Burak.** Graduating class activities in high schools. Master's, 1930. Stanford.

1907. **Ruby, Addison E.** The relation of teaching experience to class achievement in high school subjects. Master's, 1931. Iowa. 124 p. ms.

1908. **Bunkle, Robert L.** High school seniors' evaluation of subjects. Master's, 1931. Iowa. 51 p. ms.

1909. **Rutledge, R. E.** Follow-up report of high school graduates. Oakland, Calif., Public Schools, 1930-1931. June, 1930, 15 p. ms.; December 1930, 14 p. ms.; June 1931, 24 p. ms.

1910. ——— Senior high school term progress report. Oakland, Calif., Public schools, 1930-1931. June 1930, 9 p. ms.; June 1931, 10 p. ms.

These reports present analyses of the scholarship record of the senior high schools of Oakland, Calif.

1911. **Ryan, James Cecil.** The efficiency of the small high school. Master's, 1931. Oklahoma. 151 p. ms.

An intensive study of five small high schools of Oklahoma. According to standard score cards, the physical plants and educational equipment were found to be inadequate. The administration, supervision, teaching staff, and curriculum, when measured in the light of best practice as set forth by school authorities, were found to be deficient. The preparation and training of teachers is the only exception. The per-pupil costs were lower than those in the larger city schools, but they were maintained by sacrificing standards. Standardized tests indicated that the pupils were far below the norms in achievement.

1912. San Diego, Calif., City schools. Coordination between San Diego city junior and senior high schools. 1931. 4 p. ms.

A report containing data on articulation obtained from questionnaires to teachers and principals concerned.

1913. Scott, Charles. Problems and trends in secondary education in the United States from 1901 to 1928. Master's, 1931. Oregon. 129 p. ms.

1914. Scott, Walter Everett. Everyday problems of the high school teacher. Master's, 1931. Nebraska. 168 p. ms.

A comparative study of 1,868 problems collected directly from 310 high school teachers of Nebraska. Problems were compared on the basis of: (1) Total experience, (2) high school experience, (3) tenure in present position, (4) college training, (5) age, and (6) sex of reporting teachers.

1915. Shaw, Ernest Glenn. A study of certain phases of the efficiency of the Ross county high school system of Ross county, Ohio. Master's, 1931. Cincinnati.

1916. Shell, Ivan C. Social, economic, and educational status of male graduates and non-graduates of Lockland high school in the last decade. Master's, 1931. Cincinnati.

1917. Shepherd, Homer Paul. A study of the relation of variability in intelligence to variability in other characteristics in high school pupils. Master's, 1931. Tennessee. 122 p. ms.

1918. Shoemaker, Stirling. A study of the status of the Grosse Pointe high school as a preparatory institution for further education. Master's, 1931. Michigan.

1919. Smolar, Murray M. Prognostic value in high school success of the Otis intelligence and the Stanford achievement tests. Master's, 1931. Coll. of the City of N. Y. 88 p. ms.

A study to discover the value of the score on Otis self-administering test of mental ability, Stanford achievement and chronological age in prognosticating success in high school. Findings: (1) Otis score was of little value; (2) Stanford achievement score showed some correlation with marks in high school; (3) chronological age gave negative coefficients but they were so close to zero as to be of very doubtful value; and (4) first-term marks in Latin and English had a fair correlation with 3-year Regents' marks, but here, too, results were too low for prognostication.

1920. Stephan, Merrill B. The four-year unit-district high school in Illinois. Master's, 1931. Chicago. 210 p. ms.

A study of the 158 unit-district 4-year high schools in Illinois. Findings: In general, the high schools cost more in aggregate than the eight grades. Financial relief is urgently needed by many districts. Unit-district type of organization has a number of distinct advantages over dual organizations.

1921. Stetson, F. L. The organization and administration of standard high schools. Eugene, University of Oregon, 1931. (University of Oregon publication. Education series, vol. 2, no. 7, p. 201-96, July 1931. Studies in secondary education in Oregon, 1.)

The purpose of this study was to call attention to the strong and weak points in the organization of the secondary schools in order to serve as a basis for constructive suggestions; permit individual administrators to compare local procedures with those in schools of similar size; provide a source of information for such interested persons, as students of educational administration, prospective teachers, and teacher training institutions; and to establish a record of the status of the schools with regard to the various features studied, thus making possible a determination of progress through a later survey.

1922. Stevenson, Hollice Erwin. A statistical analysis of California secondary school districts. Master's, 1931. Stanford.

1923. Stewart, Virginia. A study of trends in high school enrollments in Ohio, 1912-1930. Master's, 1931. Ohio. 65 p. ms.

1924. Stewart, W. W. High school enrollments in Nebraska. Master's, 1931. Nebraska. 54 p. ms.

A study of the trends in high-school enrollments of 88 accredited schools for a period of 20 years.

1925. Stuenkel, David W. A study of high school commencements. Master's, 1931. Bucknell.

1926. Sydenstricker, Cora Amelia. A program of secondary education for Wallingford, Conn. Master's, 1931. Yale.

1927. Symonds, Percival M. On what basis should a high school boy choose his curriculum. Teachers college record, 32:437-44, February 1931.

1928. Timmons, Pryor B. The geographical and vocational distribution of the graduates of representative small Ohio high schools. Master's, 1931. Ohio. 115 p. ms.

A study of 15 high schools in county districts, all except 1 in villages, only 1 of which has a population of more than 1,000. Approximately one-half of the graduates leave their home communities, more than one-half live in towns and cities; only 303 are farmers, whereas, 1,972 were reared on farms. Only 288 of the 303 farmers are following the vocations of their fathers, and only 370 in all are following their fathers' occupations. They live in 36 states besides Ohio, in 3 territories, and 2 foreign countries. The children are engaged in 176 vocations, while the parents were engaged in 118. Conclusions: If future graduates enter professions in the same proportion, the professions will be greatly overcrowded. A thorough-going program of vocational guidance is greatly needed in rural and village districts.

1929. Tisdale, Edward Norman. Great Falls high school handbook (the first book issued). Great Falls, Mont., Call printing company, 1931. 58 p.

Educational guidance for every pupil, giving the historical background of the school, the organization, special educational guidance features, student organizations, customs and traditions, school songs, cheers, etc.

1930. Touton, Frank C. Abstracts of unpublished masters' theses in the field of secondary school administration. Theses completed and presented at the University of Southern California. Cicero, Ill., Department of secondary school principals, National education association, 1931. 116 p. (Bulletin, no. 34.)

1931. Trimble, Terrill Marshall. The efficiency of various types of high schools in Colorado, as measured by the scholarship of their students in the University of Colorado. Master's, 1931. Colorado.

1932. Waldo, Inman-Gideon. Some factors affecting the choice of and success in high-school subjects. Master's, 1930. Colorado.

The study deals with 1,104 cases, 526 boys and 578 girls, distributed by grades as follows: I, 195; II, 405; III, 366; IV, 138. Findings: Pupils do better work in elective subjects. Those who select subjects because they will "aid in making a living" make the highest median marks.

1933. Waterman, Ivan E. Distribution of high school pupils' residences. San Francisco, Calif., Public schools [1930].

A spot map was made showing the location of each high-school pupil in San Francisco (except continuation school).

1934. Weeks, Alice L. Follow-up studies. Providence, R. I. Public schools, 1930.

A follow-up study of Providence high-school graduates showed that 32 per cent continue their education, 58 per cent are employed, 6 per cent are unemployed, and 4 per cent are removed.

1935. Williams, L. A. The person-consciousness of a selected group of high school pupils. Berkeley, Calif., University of California press, 1931. p. 85-138. (University of California publications in education, vol. 6, no. 2.)

A study was made of an unprejudiced list of the names of persons uppermost in the minds of boys and girls in attendance in a junior and senior high school in the Los Angeles school system, and in two junior high schools and two senior high schools from the school system in the San Francisco Bay region during the school year 1924-25. A total of 2,216

papers were studied. Data indicate that the high-school students named a relatively small number of different persons as leaders. There was a marked tendency to emphasize political and military leadership, and a tendency to neglect leadership in the fine arts. The lists were provincial in character with undue emphasis upon local celebrities. The students made a distinction between real and imaginary characters.

See also 7, 13, 17, 29-30, 37, 42, 44, 53, 55, 127 (3), 193, 196, 201, 203, 212, 214, 218-219, 225, 243, 250, 258, 277, 311, 315, 317, 339, 343, 345, 355-356, 358-359, 378, 384, 388, 447, 507, 520, 530, 545, 547, 550, 559, 561, 564, 584, 588, 593, 601, 606, 622, 625, 627, 633, 646, 683, 2405, 2485, 2501, 2516, 2543, 2547, 2551, 2602, 2626, 2639, 2646, 2651, 2658, 2683, 2702, 2743-2744, 2746, 2748, 2751, 2756-2760, 2770, 2772, 2829, 2831-2832, 2837, 2845, 2847, 3134, 3148, 3153, 3157, 3171, 3175, 3177, 3179, 3182, 3189, 3416, 3431, 3442, 3444, 3479, 3486, 3494, 3499, 3516-3517, 3524, 3531, 3541, 3556, 3564-3565, 3573, 3577, 3591, 3595, 3602, 3607, 3617, 3641, 3643, 3653, 3659, 3667-3668, 3681, 3689-3691, 3698, 3709, 3713, 3715-3716, 3724-3725, 3735, 3737, 3743, 3749, 3758, 3760, 3770, 3774, 3778, 3784, 3795, 3817, 3819-3820, 3825-3826, 3828, 3837, 4078, 4087, 4093, 4102, 4131, 4161, 4177; and under Education extension; Educational and vocational guidance; Health and physical education; Libraries and reading; Professional status of teachers; School management; Special subjects of curriculum; Teacher training.

JUNIOR HIGH SCHOOLS

1936. Bays, Marianne Elizabeth. A comparative study of the expressed interests of the University junior high school. Master's, 1931. Oklahoma. 35 p. ms.

1937. Beu, F. A. The junior high school: an annotated bibliography. Charleston, Ill., Eastern Illinois State teachers college, 1931. 76 p. (Bulletin 113, July 1, 1931.)

1938. Brooks, Fowler D. Prediction of scholarship in junior high school. Greencastle, Ind., DePauw university, 1931. 19 p. ms.

Educational and intelligence tests, teachers estimates of ability, and previous school achievement were studied to find their value in predicting scholarship of 300 pupils during three years in junior high school. Findings: Previous school achievement gave the highest single factor correlations with scholarship, but previous school achievement plus the results of an intelligence test gave still higher multiple correlations. Previous school achievement (average mark) was usually a better predictive factor of scholarship in a particular subject. Simple correlations and multiple correlations of 0.80 to 0.94 were common. In commercial subjects correlations were much lower, few of them being more than 0.50.

1939. Buchwald, Leona C. On trial pupils in junior high schools. Baltimore, Md., Department of education, 1931. 1 p. ms.

1940. Chase, Vernon E. The distribution and housing of junior high school pupils. Dearborn, Mich., Fordson school district, 1931. 20 p., 4 p. ms.

Includes study of the distribution of seventh-grade pupils, annual growth of membership, the adequacy of present junior-high-school centers, and the location of an additional center.

1941. ——— and Lowrey, H. H. Distribution and travel distance of beginning junior high schools. Dearborn, Mich., Public schools, 1931. 4 p.

1942. Cline, Erwin Curtis. An investigation of exploratory units in junior high schools. Doctor's, 1931. Cincinnati. (For abstract see no. 696.)

The problem is the analysis of so-called exploratory units in the junior high school, in order to discover their present status and trends, and to contrast status and trends with the theory underlying such units as such theory is revealed by the writings and opinions of experts in the field. The schools studied were limited to 3-year junior high schools in school systems definitely organized on the 6-3-3 basis in communities where the senior high schools belong to the North central association of colleges and secondary schools. A total of 321 schools were studied.

1943. Coker, Lyman Hubert. An investigation of concomitant learning in the junior high school of Oklahoma university. Master's, 1931. Oklahoma. 58 p. ms.

1944-1945. Coxe, Warren W. When is a school a junior high school? Albany, New York State education department, 1930. Junior-senior high school clearing house, 5: 72-79, October 1930.

Analysis of the subject matter taught by means of questionnaires from teachers and page analysis of textbooks. The junior high school does not seem to have modified its instructions in accordance with the generally accepted objectives.

1946. ——— *and others*. Courses of study and curriculum offerings in junior high schools in New York State. Albany, University of the State of New York, 1931. 330 p.

Part I presents an analysis of junior-high-school courses of study in New York State, setting forth instructional materials found in junior-high-school courses of study which may be used as a basis for consideration and discussion of desirable changes. Part II presents certain outstanding features of more progressive developments in junior-high-school units throughout the State.

1947. Gabler, E. R. Records that the junior high schools send to the central office. Doctor's, 1931. New York.

A study was made of 67 cities of over 100,000 population. Analysis was made of record forms, annual reports, articles, and textbooks on the junior high school. Findings: Items of information significant for the central office to require, are determined by experts' rating of items obtained by various analyses.

1948. Glatfelter, Edward A. A survey of the Hannah Penn junior high school, York, Pa. Doctor's, 1931. Penn. State. 150 p. ms.

A survey of the Hannah Penn junior high school applying the different survey techniques in an effort toward improvement of the various practices and procedures. The curriculum and social program were revised.

1949. Gray, Robert F. Organization of a tenth year at Francisco junior high school. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

A study made to determine the advisability of establishing a tenth year at Francisco junior high school.

1950. Gurley, James G. The status of the seventh, eighth, and ninth grades in Illinois 6-3-8 and 8-4 systems. Master's, 1931. Iowa. 128 p. ms.

1951. Guy, Arthur L. The administration of junior high schools in Kansas. Master's, 1930. Chicago. 190 p. ms.

A study of the number, enrollment, and organization of junior high schools in Kansas; their legal basis, teaching staff, and administrative officers. Findings: The distribution of junior high schools in Kansas does not follow closely the school population. All children of junior high school age in Kansas are not being given an equal opportunity to enjoy the benefits of the junior high school. The salaries of the teachers and principals in the junior high schools seem to be influenced, first, by the size of the school; second, by the level of training reached; third, by sex; and fourth, by the subject taught or by the type of duty performed. The 2-year minimum training requirement of the State Board of education is not considered sufficient training for junior high school teachers. The administration of junior high schools in Kansas compares favorably with the administration of junior high schools in other States.

1952. Hurley, William R. An investigation of the effect of certain activities on scholarship in junior high school. Master's, 1931. Southern California. 103 p.

An analysis of the total time spent by 180 pupils in all school and out-of-school activities for a 7-day week, based on interviews and individual time records, followed by a study of the relationships between participation in activities and scholastic success.

1953. Mahan, T. J. The exploratory objective in the junior high school. Greeley, Colorado State teachers college, 1930.

A total of 1,817 junior high school pupils from nine junior high schools in Greeley and Denver, Colo., answered the questionnaire.

1954. Martin, Paul E. Geographical distribution of the junior high school population. Compton union district, Calif., Public schools [1930].

A spot map was made showing the residence of each child living within the district. New boundaries were drawn on the basis of this study for the purpose of equalizing the enrollment in the various schools.

1955. **Might, George Willard.** A study of pupil progress in the junior high schools of Atlanta, Ga., 1923-1928. Master's, 1931. Cincinnati.

1956. **Mills, Henry C.** The comparative efficiency of the 8-4 and 6-3-3 systems of schools as measured by the scholastic achievement of their pupils during the junior high school period. Doctor's, 1931. Harvard. 266 p.

1957. **Parker, Andrew M.** A comparative study of the achievement of the University junior high school. Master's, 1931. Oklahoma. 38 p. ms.

1958. **Proctor, William Martin, and Ricciardi, Nicholas.** The junior high school, its organization and administration. Stanford University, Calif., Stanford university press, 1930. 324 p.

1959. **Butledge, R. E.** Junior high school term progress report for the terms ending June, 1930, June, 1931. Oakland, Calif., Public schools, 1930-1931. 12 p. ms., 13 p. ms.

These reports give briefly an analysis of the marks given by the teachers of the Oakland junior high schools.

1960. ——— Low-tenth scholarship report. Oakland, Calif., Public schools, 1930-1931. June 1930, 18 p. ms.; December 1930, 13 p. ms.; June 1931, 15 p. ms.

1961. **San Diego, Calif. City schools.** Coordination between San Diego city elementary and junior high schools. 1931. 3 p. ms.

A report containing data on articulation obtained from questionnaires to teachers and principals concerned.

1962. ——— Student organization in San Diego city junior high schools. 1931. 8 p. ms.

Annotated charts, showing student organization in all San Diego city junior high schools.

1963. **San Francisco, Calif. Public schools.** A study of the age and ability of pupils entering and leaving junior high school. 1931. 10 p. ms. (Bulletin no. 24.)

A comparative study of pupils entering and leaving the 10 San Francisco junior high schools. Wide differences exist in the abilities of the pupils in the various junior high schools. The mental abilities are based on the results of the Otis classification and the Terman group test of mental ability.

1964. **Schlein, Walter Charles.** The organization and administration of the Alexander Hamilton junior high school of Fresno, Calif. Master's, 1931. Stanford.

1965. **Spurgin, Alice.** A study of the reading tastes, vocational choices and hobby interests of junior-high school pupils. Master's, 1931. Oregon. 67 p. ms.

Findings: (1) Pupils of higher ability groups read nearly four times as much as those of lower groups; (2) book reading had the most homogeneous choice among ability groups; (3) a better type of magazines was reported by pupils in high ability groups; and (4) of the best liked books, less than 2 per cent were not found on school reading lists.

1966. **Trillingham, Clinton Conroy.** Administrative devices for stimulating scholarship in the junior high schools of Los Angeles county. Master's, 1931. Southern California. 185 p.

An analysis of the methods and effectiveness of improving scholarship by such means as supervised study, personal conferences with pupils, homogeneous grouping, testing programs, and numerous other devices, based on interviews with principals of 25 schools.

1967. **Warner, Harold E.** Factors controlling the scheduling of the junior high school day. Doctor's, 1931. George Washington.

A questionnaire study of practices, problems, and solutions of problems in scheduling.

1968. **West, Joseph Henry.** The junior high school in the Southern association. Master's, 1931. Peabody. 164 p. ms.

A study of junior high schools in the Southern association of colleges and secondary schools. Findings: (1) That the junior high schools of the Southern association have

been slow in providing the necessary means for the physical development of the individual pupils; (2) that these schools show advancement in the matter of meeting the intellectual needs of their pupils by the provisions for supervised study, homogeneous grouping, promotion by subject, and in methods of instruction; (3) that provisions for meeting the social needs of individual pupils are inconsistent and limited among the schools of this association; and (4) that in the matter of moral instruction the indirect method, found through the teaching of literature and science, appears to be followed more often than the direct method.

1969. Wind, Kate. A comparative personnel study of retained and eliminated pupils in junior high schools. Master's, 1931. Minnesota. 140 p. ms.

A comparative study of data relative to intelligence, age, scholarship, and socio-economic status of 1,355 eliminated pupils and 1,213 retained pupils in junior high school, for the purpose of prediction of length of stay in school, and with a view toward providing suitable educational and vocational guidance in accordance with the indicated length of stay in school. Findings: For purposes of prediction, overageous is, perhaps, the outstanding characteristic of the prospective early leaver. Age-grade status is the factor among those noted, most closely associated with retention or elimination (biserial $r=0.876 \pm 0.001$). The Sims score, the composite score representing various factors in socio-economic status of home background, ranks second highest among the correlations calculated (0.624 ± 0.009). Magazines in the home (biserial $r=0.55 \pm 0.012$), school marks (biserial $r=0.397 \pm 0.009$), and books in the home (biserial $r=0.368 \pm 0.010$) all present significant differences between the two groups and show considerable correlation between the individual factors and amounts of schooling the children receive.

See also 307, 310, 315, 317, 342, 535, 544, 546, 584, 590, 599, 625, 627, 1836, 1840, 1842, 1868, 1871, 1912, 2034, 2179, 2255, 2284, 2288, 2297, 2300, 2305, 2500, 2602, 2756-2757, 2817, 2835, 2867, 2882, 2887, 2895, 2908-2909, 2970, 2980, 3010, 3019, 3033, 3037, 3049, 3056, 3074, 3084, 3111, 3136, 3176, 3187, 3196, 3266, 3276, 3338, 3351, 3356, 3374-3375, 3602, 3625, 3641, 3649, 3655, 3683, 3705, 3718, 3749, 3755, 3763-3764, 3771, 3860, 3925, 3938, 3946, 3950, 3952, 3987, 4016, 4019, 4030-4033, 4051, 4078, 4165, 4300, 4302, 4325, 4331, 4340; and under Special subjects of curriculum.

JUNIOR COLLEGES

1970. Anderson, John A. An examination of the records of the graduates of the Pasadena junior college in standard colleges and universities. Pasadena, Calif., Junior college, 1930.

The reports of 259 graduates of the Pasadena junior college in attendance at 24 standard colleges and universities were studied.

1971. Austin, David. The probable effect of the development of the public junior college on the enrollment of the small liberal-arts college. Master's, 1931. Claremont.

1972. California. State department of education. Statistics of California junior colleges for the school year ending June 30, 1930. Sacramento, California State printing office, 1931. 35 p. (Bulletin no. J-4, August 1931.)

The statistics in this bulletin comprise all of the essential data reported to the State department of education relative to the public junior colleges of California.

1973. Christensen, Alfred. The organization and administrative control of the public junior college. Master's, 1931. Northwestern.

1974. Crawford, Stanton C. Junior college as extension of university. Junior college journal, 1: 289-98, February 1931. (Reprint.)

This article describes the organization and work of the Johnstown junior college of the University of Pittsburgh.

1975. Davidson, John Wesley. A study of the feasibility of establishing junior colleges in Washington. Master's, 1930. Washington.

1976. Davis, Horace Leonard. Some aspects of the financing of 11 private junior colleges of Kentucky. Master's, 1931. Kentucky.

1977. Denson, J. L. The public junior colleges of Mississippi. Master's, 1930. Colorado.

1978. **Dodson, Pat Sparks.** The development and present status of the junior college in Texas. Master's, 1930. Texas Christian.

1979. **Eby, Frederick, and Pittinger, Benjamin Floyd.** A study of the financing of public junior colleges in Texas. Austin, University of Texas, 1931. 80 p. (University of Texas bulletin no. 3126. Bureau of research in the social sciences. Study no. 1, July 8, 1931.)

The study of the financing of the 16 junior colleges in Texas for the years 1927-28 and 1928-29 shows wide variations in allotment of funds, and in the interpretation of costs chargeable to the junior college, and not to the school system as a whole.

1980. **Eells, Walter Crosby.** California junior college laws: drastic changes. School executives magazine, 50: 235, January 1931.

1981. ——— Junior college. Boston, Mass., Houghton Mifflin company, 1931. 833 p.

This book, which is intended primarily as a textbook for courses on the junior college, is arranged in three main divisions. Part 1 is devoted to the development of the junior college, part 2 deals with the organization and administration of the junior college, and part 3 discusses the place of the junior college in American education.

1982. ——— Public junior college as an agency of democracy, the financial aspect. In National education association, Department of secondary-school principals. Bulletin, 35: 135-50, March 1931.

1983. ——— Success of the public junior college in California. American association of university women journal, 24: 117-21, April 1931.

1984. **Fischer, Ernest William.** A study of the departmental teaching costs in Chaffey junior college for the fiscal year ending June 30, 1930. Master's, 1931. Claremont.

1985. **Fox, Clement Silas.** A study of sex differences in achievement of junior college freshmen. Master's, 1931. Stanford.

1986. **Hale, Wyatt W.** Comparative holding power of junior colleges and regular four-year colleges. Phi delta kappan, 13: 69-74, October 1930.

From a study of the holding power of 38 junior colleges and 21 standard colleges, it was found that standard colleges have a significantly greater holding power than do junior colleges.

1987. **Harbeson, John W.** A critical study of the practice of classifying junior college students into separate certificate and diploma groupings. Doctor's, 1931. Southern California. 383 p.

A comparison of certificate and diploma students with respect to social and economic backgrounds, high-school and junior-college scholastic records, 13 standardized intelligence and personality tests, and trait ratings by students, parents, and teachers; followed by a study of the educational implications involved.

*1988. **Joyal, Arnold Edward.** Factors relating to the establishment and maintenance of junior colleges, with special reference to California. Doctor's, 1931. California. Berkeley, University of California press, 1932. (University of California publications in education, 6: 350-453, 1932.)

The study takes up the development of legal standards for the establishment of junior-college districts in California; junior-college laws in States other than California; class size and teaching load in relation to educational objectives and to cost of instruction; other factors which affect the cost of instruction in California junior colleges; cost of instruction in California junior colleges; the area of junior-college districts, and enrollments in relation to area; and the development of criteria for the establishment and maintenance of junior colleges.

1989. **Kentucky. University.** Report of a survey of 15 private junior colleges of Kentucky. Lexington, University of Kentucky, 1931. 204 p. ms.

This survey covers number, growth, and distribution of the student body, entrance and graduation requirements, student load, faculties, libraries, laboratories, buildings and equipment, and finance.

1990. McCarthy, Joseph Lowell. Entrance requirements and curricula of 15 private junior colleges in Kentucky. Master's, 1931. Kentucky. 80 p. ms.

Reports an investigation of the practices of 15 private junior colleges of Kentucky in the admission and graduation of students, and a study of the curricula of these institutions.

1991. McKenzie, John H. A follow-up study of students in junior colleges of Michigan. Master's, 1931. Chicago. 110 p. ms.

A questionnaire study of 459 former students from six junior colleges in Michigan. Considers social and economic condition prior to and during attendance, with study of later educational training and occupation. Findings: The isthmian functions of the junior college are being well provided for. There is need of greater emphasis being placed upon terminal courses.

1992. Martin, Paul E. Prognosis of success in junior college. Compton union district, Calif., Public schools [1930].

Correlation coefficients were obtained between actual achievements in junior college and five prediction indices.

1993. ——— Scholarship standing of junior college groups. Compton union district, Calif., Public schools [1930].

Average grade-point ratios were figured for nongroup students, Greek-letter society, Greek letter society probationers, and special students. The average grade-point ratio for all students was 1.1; for all men, 1.1; and for all women 1.3. Greek-letter students had a higher average than nongroup students, and fraternity probationers had a higher scholastic average than the corresponding group of women students.

1994. Merrill, Ray Stoddard. A proposed plan of junior colleges for Utah. Master's, 1931. Stanford.

1995. Metzler, David Russell. Adult education in the junior college. Master's, 1931. Stanford.

1996. Millikin, Bruce Emanuel. The junior college in Utah—a survey. Master's, 1931. Stanford.

1997. Murray, Evan B. The need of public junior colleges in Utah. Master's, 1930. Utah St. Agr. Coll.

1998. O'Mara, James P. The organization and administration of curricula in California public junior colleges. Pasadena, Calif., Junior college, 1930.

A study of the curricula and practices in the junior colleges, as well as the organization of the colleges.

1999. Prall, Charles E. Report of the junior college survey committee, Arkansas educational association. Journal of Arkansas education, 9: 18-23, November 1930.

2000. Proctor, William Martin. Student interest in junior college. Junior college journal, 1: 84-88, November 1930.

2001. Reedy, Joel Martin. The junior college as now administered. Master's, 1931. Tennessee.

2002. Robins, John Prescott. Should junior colleges be established in Oregon? Master's, 1931. Stanford.

2003. Rosenstengel, William F. Criteria for selecting curricula for public junior colleges. Doctor's, 1931. Missouri.

It was the purpose of this study to develop criteria which might be used in determining the curricular offerings of a particular junior college.

2004. San Mateo, Calif. District junior college. Follow-up study of former students of San Mateo junior college and a study of status 1 and status 2 students. 1931. 9 p. ms. (Vol. 3, no. 7.)

2005. Segel, David. A plan for classifying entering junior college students. Long Beach, Calif., City schools, 1930. 3 p. ms. (Junior college research study, no. 2.)

2006. ——— and Brintle, S. L. A report on the Stephens college experimentation in orientation courses in Long Beach in 1929-30. (A supplement to the Stephens college reports.) Long Beach, Calif., City schools, 1931. (For abstract see no. 717b.)

This report compares the results on tests given to classes taking orientation courses in social studies and humanities and to regular classes in high school and junior college. The comparison shows that the experiment as set up is inadequate to show differences between the achievements of pupils taking orientation work and those taking regular work.

2007. ——— Brintle, S. L., and Woodruff, C. H. Investigation of certificate and diploma classification as used in the Long Beach junior college, with the development of guidance techniques. Long Beach, Calif., City schools, 1931.

Teachers' marks and psychological and educational test data on 1,000 Long Beach junior college students furnished the basis for this study. The data showed that the classification on the basis of recommended grades is unjust both to certificate and to diploma students. High-school marks alone are not a sound basis for predicting college success.

2008. Taylor, Philip H. A comparison of certain aspects of public junior colleges and four-year liberal arts institutions in Southern California. Master's, 1931. Southern California. 123 p.

A study of student populations, administrative problems, curricula, and aims of the two types of institutions operating in this area.

2009. Thomson, Mary Martha. A personality study of students in certain public junior colleges in California. Master's, 1931. California. 33 p. ms.

The purpose of the study was to determine further characteristics of students in five typical California junior colleges, supplementing the work of Eells. Findings: The group studied was homogeneous with regard to chronological age and nativity. A close relationship exists between parental occupations and educational opportunity. The locus of the institution seems to be one of the factors which determines opportunities for student employment. There is no uniformity of procedure in determining entrance status of students. From the programs chosen, it would seem that nonrecommended students come to junior colleges more for social purposes than through a desire for more learning activities.

2010. Tweedy, Ira. Can Idaho establish more junior colleges? Master's, 1931. Stanford.

2011. Whitney, F. L. Legal background of the junior college movement. High-school teacher, 6: 322-23, October 1930.

This is a survey of state legal provision for the fiscal support of the public junior college.

2012. Young, William Lesquereux. The junior college movement in relation to higher education in Ohio. Doctor's, 1931. Ohio. 450 p. ms.

A study of data from 8,183 high-school seniors in 32 selected Ohio cities, and data from the 45 Ohio colleges. Findings: Ohio needs the public junior college; public junior colleges would not harm, but would benefit present worthy Ohio colleges.

See also 993, 1003, 1093, 1133-1134, 1420, 1499, 1509, 2015, 2651, 3030, 3045, 3141, 3145, 3216, 3239, 3393, 3773, 3939, 3990, 4017, 4310-4311, 4344.

TEACHER TRAINING

2013. Adams, Alice. Weaknesses in the training of beginning primary teachers as revealed by ratings of principals and interviews with teachers. Master's, 1931. Southern California. 63 p. ms.

2014. Ambros, Milos-Vejchoda. A study of 108 colleges and universities preparing teachers in physical education in the United States, 1930. Master's, 1930. Int. Y. M. C. A. Coll. ms.

2015. Atkinson, W. K. The academic and professional preparation of junior-college instructors. Master's, 1930. Illinois. 61 p. ms. (For abstract see no. 699.)

"Data were obtained from published statements concerning standards of preparation of junior-college instructors, from published catalogues or bulletins of 75 institutions studied, and from answers to a letter addressed to 80 superintendents and deans throughout the country. A review of previous investigations of the sort represented by this thesis is included. The statement that 'the academic training, as marked by degrees held, places the preparation of junior college instructors of the country as a whole on a high level' is among the concise statements drawn from the findings."

2016. Bachman, Frank P. Training and certification of high school teachers. Nashville, Tenn., George Peabody college for teachers, 1930. 175 p. (Field studies, no. 2.)

A study of the present status of high-school teaching as a profession and suggestions as to steps which should be taken to elevate high-school teaching to a semiprofessional level so that teachers may prepare themselves with confidence that a reasonably secure and definite teaching position awaits them.

2017. Barney, Lew K. Problems and generalizations in elementary courses in education. Master's, 1931. Colo. St. T. C.

The purpose of the study was to select a suitable number of the most frequently used problems and generalizations to be combined into a syllabus for elementary courses in education.

*2018. Bateman, Marjory. A program of physical education for training the nonspecialized elementary teacher based upon present procedure and present needs in the State of Wisconsin. Master's, 1931. New York. 165 p. ms.

The study deals with the physical education programs in teachers colleges in the United States; the content of courses, and administration of them in 11 teachers colleges having the most satisfactory physical education programs.

2019. Beane, George Tolivar. The relationship between training of teachers and achievement of students. Master's, 1931. Peabody. 75 p. ms.

*2020. Billig, Florence Grace. A technique for developing content for a professional course in science for teachers in elementary schools. Doctor's, 1930. T. C., Col. Univ., New York City, Teachers college, Columbia university, 1930. 101 p. (Contributions to education, no. 397.)

Bibliography: p. 99-101.

A study was made of the courses in science for teachers in elementary schools offered by 146 teachers colleges and normal schools, as given in their catalogues for the years 1927-28, 1928-29. The background of training in science of 954 students enrolled in courses in science was analyzed. A technique was developed for a professional course on the collegiate level for the training of teachers in science.

2021. Blough, Leslie E. The development and present status of teacher training in the Church of the Brethren. Master's, 1930. Northwestern.

2022. Bolton, Ferrell. Specific training of Georgia primary teachers holding a bachelor's degree. Master's, 1931. Peabody. 70 p. ms.

A study of transcripts of primary teachers in the towns and cities of Georgia through superintendents of same, also academic courses for these transcripts. Findings: (1) Composition, history and literature were the subjects that averaged highest in the academic group; (2) general psychology and history of education averaged highest in the professional group; (3) there was little variation in the academic subjects taken by the primary teachers, but great variation in the professional subjects taken by them; (4) the cultural courses received the highest percentage in the city group and the vocational courses the highest percentage in the small-town group; (5) the average credit hours in the academic subjects ranged from 3 to 19, while the range in the professional group was from 2 to 7 hours; (6) high-school methods was taken practically as often as primary methods; (7) practice teaching was done more often in the high school than in the elementary grades; and (8) practice teaching in the elementary grades was taken less frequently than any other academic or professional subject.

2023. Brown, Dorph Harrison. The relationship between academic preparation and success of high-school teachers. Master's, 1930. Colorado.

2024. **Burgoon, B. D.** Orientation courses in the teacher training institutions of Ohio. Master's, 1931. Ohio. 93 p. ms.

2025. **Burson, Susie.** Evaluation of teacher training program by factors for such evaluation, "Vocational education," Wright and Allen. Master's, 1930. T. C., Col. Univ. 17 p. ms.

The study is an evaluation of a teacher-training program (not including technical subjects). Recommendations are made for changes in program which will improve its rating.

2026. **Butler, Hilda B.** A study of the allocation of responsibilities in the training of secondary school teachers. Master's, 1931. Penn. State. 63 p. ms.

A questionnaire study based on returns from teachers, principals, and superintendents in Pennsylvania. Opinions were solicited on what functions should be performed by training schools and what ones by supervisors in the post-training career. There was considerable overlapping in the recommended functions. The 15 functions most often allotted to each are listed in the thesis.

2027. **Comer, B. H.** The training and experience of Georgia high school teachers. Master's, 1931. Mercer.

2028. **Crutsinger, George M.** Teacher training in Texas with a proposed program. Doctor's, 1931. T. C., Col. Univ.

A study was made of the physiography of Texas and the distribution of its population, the size of the task in providing a system of public schools, the character and location, and various features of the teacher-training institutions. As a result of this study, a program of teacher training is proposed suggesting a radical revision of the State's procedures relative to administration and financial support of public schools, and proposals for a new plan of certification.

2029. **Dinkins, William H.** Implications of economics and religion in the development of teacher training at Selma university. Master's, 1931. T. C., Col. Univ. 56 p. ms.

An evaluation of fundamentals in economics and religion as related to the ends of education, and as related to content of instruction. Findings: Economics, more ethical in its nature than is commonly considered, and religion, are the keys to desirable changes in our instructional work at Selma university.

2030. **Dotson, Edna.** The status of shorthand in teacher-training institutions. Master's, 1930. Colo. St. T. C.

A study of 54 schools belonging to the American association of teachers colleges to determine how many teachers colleges give credit for shorthand, how much credit such schools allow, and the attitude of teachers colleges toward shorthand as a college subject. An examination of 142 teacher-training institution catalogues was made to find out the policy in regard to giving credit for shorthand.

2031. **Eavey, C. B.** A study of the relation of the doctor's degree in the field of education to preparation for the teaching of undergraduate education. Doctor's, 1931. New York. 143 p. ms.

Investigation of courses in education offered by 26 universities, programs of 265 doctors who took the degree in education, and study of the offerings in education of 250 undergraduate schools of education. Findings: The doctor's degree in the field of education should be given with much more consideration of the teaching needs of those who take it. More adequate guidance should be given candidates, less emphasis should be placed upon research which should be more specific and thorough when required. The great need is preparation for teaching for which entirely too little attention is given at present. Schools of education, on the graduate level, are devoting too much attention to courses in administration and educational psychology and too little to work in theory and principles and those fields which 70 per cent of doctors enter as teachers after receiving their degrees.

2032. **Evans, Catherine.** Status and preparation of mathematics teachers. Master's, 1931. Kansas.

Correlation between teacher-preparation represented by majors and minors, and the success of their pupils in algebra and geometry in state scholarship contest. High schools in A and B classes, involving 600 teachers, are represented.

2033. Field, Frank. The evolution of teacher training and certification as functions of state education in Tennessee. Doctor's, 1931. New York. 239 p. ms.

Covers all State activities in indicated functions from earliest times to the present. Recommends single State boards, State director of teacher training, certification by credentials only, based ultimately on two years of training for elementary teachers and college graduation immediately for high school teachers. Historical treatment of subject gives details of development of functions in State especially along lines of curricula organized for training of teachers.

2034. Foster, I. Owen. The training of junior high school teachers. In High school principals' conference (Indiana university). Proceedings, 1930. Bloomington, Ind., Indiana university, 1930. p. 62-68. (Bulletin of the School of education, Indiana university, vol. 7, no. 2, November 1930.)

This study was made to determine what superintendents, principals, and teachers of junior high schools believe that the training of a junior high school teacher should be. The study analyzes the replies to a questionnaire received from 90 persons.

2035. Frazier, Ben W. Present status of teacher training in the United States. Journal of chemical education, 8: 63-83, January 1931. (Reprinted.)

For this paper data concerning the qualifications of college teachers of chemistry were secured from question lists sent during the course of a recent nation-wide survey to approximately 800 teachers of chemistry.

2036. Grass, Mary Donaldine. The organization of curricula for the training of women teachers in physical education. Master's, 1931. California. 104 p. ms.

The purpose of this thesis was to contribute to a better understanding of teacher training in physical education by means of an analysis and study of the development of professional preparation courses, by a study of the different types of courses now offering professional training, by discussion of some of the principal problems in professional training, and finally by making certain suggestions for the organization of professional preparation curricula so as to train more adequately for future leadership.

2037. Gratz, Eleanor Victoria. A course in primary arithmetic for teachers based on the psychology of the learning situation. Master's, 1931. Stanford.

2038. Hall, Gladys Elwood. Training classroom teachers to deal with personality problems. Master's, 1931. New York. 124 p. ms.

History of mental hygiene in the public schools, and visiting teacher movement with a discussion of problems of teacher training in personality problems and detailed outline of courses given teachers in service by the author working as a visiting teacher. Conclusions: The classroom teacher is in a strategic position in developing the personality of pupils and should be given an understanding of mental hygiene principles in teacher-training institutions. Teachers in service can be given supplementary courses.

*2039. Hamlin, Herbert McNee. A case study of teacher-training in a separate land-grant college. Doctor's, 1931. Chicago. 322 p. ms.

The study aims to give an account of the development and present status of teacher training in Iowa State college, Ames; to illustrate the advantages in the study of teacher training of a genetic approach which includes the study of the careers of graduates trained for teaching; and to bring together, check upon, and improve methods in use for gathering and preserving historical data relative to teacher training, particularly data regarding graduates' careers in teaching. It was found that many of the most valuable data are to be found off the campus of the institution in records of State departments of education, State teachers associations, State historical associations, in educational periodicals, unpublished studies in the libraries of other educational institutions, and in the files of the departments of the Federal Government concerned with education. Data regarding the careers of graduates gathered in this study were found to be regular in their distribution, indicating the possibility of predicting many of the phases of the careers of future graduates and of basing teacher-training policies to some extent upon such predictions.

2040. Hamrick, Martin Elliott. The determination of the objectives and activities of a teacher training curriculum in tests and measurements in secondary education. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

This investigation was confined to the field of secondary education, covering grades 7 to 12, inclusive. The curriculum was designed primarily for the training of classroom

teachers. The activities included only the subjects of English, including reading, writing, spelling, grammar and language, and composition; mathematics; science; social science; and foreign language. The objectives were mailed to 47 directors of research or directors of tests and measurements of city school systems throughout the United States. Results were received from 34 of these. Activities lists were mailed to 1,036 schools. Returns were received from 87 schools located in 80 different cities in 25 States and the District of Columbia. Findings: The ratings of the objectives by directors of research and directors of tests and measurements have a higher reliability than the ratings of the activities by high-school teachers.

2041. **Hazeltine, Karl.** Study of the teaching of science to elementary teachers. The development of a measuring device to test observation, reflective thinking, and problem solving. Doctor's, 1930. Cornell. 199 p. ms.

Study of the available elementary science tests together with the use and development of certain problem-solving tests involving nature content in schools of rural New York, Cleveland, and certain teacher-training institutions. The study included a visitation of 21 teacher-training institutions with a view to observing actual teaching methods to supplement returns received from these institutions by correspondence and the questionnaire method. Findings: The average teacher is not able to judge the difficulty of science questions proposed to her pupils. There seems to be no positive correlation between tests in science and commonly used measurements of achievement. There does not seem to be a difference between boys and girls in their ability to do nature work.

2042. **Henck, George Daniel.** Present status of the training of industrial arts teachers in the United States. Master's, 1931. Southern California. 68 p.

A study of several aspects of training shop teachers in 70 representative teacher-training institutions of the United States, based on questionnaire replies and on an analysis of curricula in published bulletins.

2043. **Hertzler, Silas.** Preparation and experience of the critic teachers of the secondary schools of Indiana, 1929. Educational administration and supervision, 16: 693-704, December 1930. (Reprint.)

Replies to a questionnaire were received from eight junior high school critic teachers, and from 62 senior high school critic teachers. A total of nearly 89 per cent of the critic teachers have a bachelor's degree or its equivalent; about 51 per cent of them have done at least a little university work beyond the regular bachelor's degree. The correlation between college majors and subjects taught is high. Many of the critic teachers are teaching in more than two major fields. Nine per cent of the critic teachers had had a course which was intended to prepare them to be successful critic teachers.

2044. **Hoakins, Albert Burleigh.** The content and aims of general psychology for teachers. Master's [1930]. Peabody. 92 p. ms.

A determination of what constitutes the active content of the course and the specific aims of the classroom teacher of representative schools of the type indicated. Findings: There is a tendency to narrow content as compared with legitimate content and to reserve certain content for more specialized courses which usually follow. The dominant aims are to increase understanding of human reactions and educational import.

*2045. **Huey, Bess A.** Preparation of the teacher and supervisor of public-school music. Master's, 1931. New York. 591 p. ms.

A study of the program of music education provided by all State teacher-training institutions for the preparation of teachers and supervisors of public-school music. This study was a survey of current practices to determine the status of curricular offerings in the preparation of teachers and supervisors of music.

*2046. **Jameson, Emily D.** Physical education for the preparation of general elementary-school teachers. A study of content and requirements of courses of physical education offered in 22 state teachers colleges and normal schools in 1926-1927. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 119 p. (Contributions to education, no. 402.)

"The problem of this study is concerned with a statistical and descriptive analysis of the organization and content of courses in physical education offered during 1926-27 to women preparing to be general elementary and junior high school classroom teachers, exclusive of those preparing to be special teachers of physical education. The purpose was to discover common practices which may be the basis of recommendations in regard to content and organization of courses for the guidance of institutions and instructors."

2047. Johnson, Ella M. Required courses in social studies in curricula of elementary teachers. Master's, 1931. Chicago. 103 p. ms.

Number, types, extent of professionalization, and analysis of courses in social studies and health in 140 curricula. Findings: Emphasis on subject-matter courses, especially American history, principles of geography, government, and activity courses in physical education.

2048. Kauffman, George F. A study of student loans, scholarships, and subsidies in the teacher-training colleges and normal schools in the New England and Middle Atlantic States. Master's, 1930. T. C., Col. Univ. 65 p. ms.

Study based on a questionnaire which was sent to 71 State teachers colleges and normal schools.

*2049. Kellerman, Adella F. Special qualifications for teachers in grades seven to nine. Master's, 1931. Syracuse. 215 p. ms.

By personal correspondence with accepted authorities in the field of junior high school and grammar grades, data were secured on functions of education for adolescents; the strength and weaknesses of the present program; and the pressing problems and methods of procedure in collecting data for the study. A semi-intensive analysis was made of the subjective and objective opinion of teachers and administrators on the felt needs, deficiencies and types of preparation desirable, and on objective data on the status of the training of these teachers in service. The study was confined to the northern tier of States, Eastern, Central, and Midwestern.

2050. Klinefelter, C. F. Training of teachers for trade and industrial education; suggestions for the organization and operation of efficient teacher-training programs. Washington, D. C., United States Federal board for vocational education, 1930. 178 p. (Bulletin no. 150. Trade and industrial series, no. 42.)

2051. Kolstoe, S. Olaf. Selective factors in teacher training. Doctor's, 1931. North Dakota. 187 p. ms.

A study of 1,403 students enrolled in the freshman and sophomore years at the State teachers' colleges at Minot, Valley City, Mayville, and Ellendale, in the school year of 1930-31. Conclusions: All prospective teacher trainees should furnish evidence of scholastic ability as measured by intelligence tests, which would assure reasonable success in teachers college work. IQ's below 90 are questionable. Standards should be high enough to eliminate approximately 10 per cent of those who according to present standards are aspiring to become teachers. Continued research in teacher training and selection problems should be carried on with the State university and the teachers colleges participating and cooperating.

2052. Kretke, Mrs. Rose. Professional preparation of department heads in senior high schools. Master's, 1931. Nebraska. 60 p. ms.

This study involved 954 department heads, from cities of 30,000 population and over, in 31 States.

2053. McCain, L. P. The preparation of teachers of grade school geography. Master's, 1930. Colo. St. T. C.

An attempt to determine what the capabilities of the grade teacher of geography should be to meet the requirements of the job, and to try to discover to what extent teacher-training institutions are preparing the prospective teacher to meet the requirements of the job.

2054. McLees, Mary Hunter. A study of the elementary teaching personnel of Hunterdon, Morris, Sussex, and Warren counties, N. J., with particular reference to the State program of teacher training. Doctor's, 1931. T. C., Col. Univ.

This study tries to show how the present program of teacher training in New Jersey is meeting the needs of the elementary schools of the State with particular reference to the counties of Hunterdon, Morris, Sussex, and Warren. Findings: The movement of teachers is the chief source of demand for new teachers in the section studied. The number of recent normal-school graduates not placed in New Jersey is high. New Jersey uses home girls to a great extent in its schools. The State program of teacher training seems to suffer from a lack of balance between supply and demand. Teachers of the section studied are not up to the New Jersey standard in college or normal-school training, the

greatest lack being found in the more rural areas. Indications are that the teacher-training program of New Jersey needs to place more emphasis on the sociological conditions of the State than is now being done. Three possible adjustments are suggested.

*2055. Martin, Theodore Day. Instruction in professional ethics in professional schools for teachers. Doctor's, 1931. T. C., Col. Univ. Washington, D. C., National education association, 1931. 89 p.

Selected bibliography, p. 74-79.

The purpose of this study was to discover current administrative practices regarding instruction in professional ethics; to suggest administrative arrangements which professional schools for teachers may use to acquaint their students with the accepted standards of professional conduct; to prepare a selected and annotated list of standards of professional conduct which may be used as a basis for discussion in teacher training classes and among teachers in service. Data were secured from questionnaires sent to the heads of schools of education, law, medicine, architecture, commerce and business, dentistry, journalism, and nursing; catalogues from a representative number of schools for teachers, lawyers, and physicians; and correspondence and personal conferences with leaders in the eight fields. Codes of ethics adopted by the National education association and by State teachers' associations were analyzed.

2056. Miles, Carl V. A study of the academic and professional training of the high-school principals and superintendents of Missouri. Master's, 1931. Chicago. 74 p. ms.

The study includes reports from over 600 school administrators. Findings: The school administrators of Missouri have had less academic and professional training than the average for the United States.

2057. Miller, Harold H. The relationship between the subject preparation of teachers and the fields in which they are now working. Benjamin Franklin high school, Rochester, N. Y. [1931].

2058. Mills, J. E. Educational requirements for teachers of chemistry in secondary schools. Journal of chemical education, 7: 2259-66, October 1930.

*2059. Murray, Lillian B. A proposed four-year professional course leading to a baccalaureate degree with specializations in science and physical education. Master's, 1931. New York. 76 p. ms.

A study of the small or rural high schools in the United States with enrollments of 100 and less. A curriculum is suggested suited for the teacher who goes into the small high school to teach physical education and is asked to teach science as a second subject. The curriculum set-up is not conclusive but rather tentative to fit into any college or university program. Through research in the field of physical education the most frequent combination found with physical education was science and thus the combination used in the curriculum set-up.

2060. O'Briant, Bernice A. A study of teacher training for secondary schools. Master's, 1931. Cincinnati.

2061. Park, Maxwell Gerald. Training in objective educational measurements for elementary-school teachers. Doctor's, 1931. T. C., Col. Univ.

A study was made of the topical content of 10 of the most frequently used textbooks in educational measurements, and a check list of topics prepared and sent to 188 instructors in an equal number of State normal schools in 48 States. Seventy-three instructors ranked the 219 educational-measurement items of the check list. Data were also secured on the administration of the educational-measurements course in the various State normal schools and on subject-matter methods in the fields of arithmetic, music, and reading in these normal schools. Findings: There was a considerable lack of uniformity of content in the 10 books analyzed. The various instructors reported 37 functions in the educational-measurement course. Seventy-four per cent of the 104 subject-matter methods teachers reporting think that their course should involve instructions in the nature and use of standard tests.

2062. Peabody, May Ella. Experimental course with rural teachers in the psycho-sociological phases of child development. Master's, 1930. T. C., Col. Univ. 44 p. ms.

A study with 52 rural teachers for one school year to ascertain the method and technique of presenting subject matter of child development; conducted mainly through case studies and monthly reports from teachers with assigned readings. Findings: Desirability and importance of such a course for rural teachers; necessity of discovering more effective ways of securing closer contact with the group; and the importance of the rôle of the superintendent in the check-up and follow-up work of such a course.

2063. Reese, W. P. An evaluation of the program for training secondary teachers in the State of Kansas. Doctor's, 1931. California.

2064. Riley, Winston, Jr. Professional training and equipment of private school teachers of the North central association. Master's, 1931. Ohio, 35 p. ms.

A study of ages, marital and parental status, academic and professional training, teaching preference, salaries, etc. An increasing evidence of professionalization of private-school teachers of North central association and higher salaries were found.

2065. Roberts, Elmer C. The status of typewriting in teacher training institutions. Master's, 1931. Colo. St. T. C.

*2066. Robinson, Clara L. Psychology and the preparation of the teacher for the elementary school. A survey and an analysis of practices in the teaching of psychology in certain professional schools for the preparation of teachers. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 121 p. (Contributions to education, no. 418.)

Data for this study were collected from 80 per cent of the States, from new and old schools for teacher training, and from two sources in many of the schools. Data were secured from which to determine the trends in the teaching of psychology in professional schools for the preparation of elementary-school teachers; a survey was made of present practices. Information was obtained directly from in-service teachers as to their difficulties.

2067. Ross, Glen. The academic preparation and duties of directors of physical education in Arkansas high schools. Master's, 1931. Arkansas. 66 p. ms.

A study of the academic training and duties of 250 men engaged as directors of physical education in the larger Arkansas high schools, and an analysis of 180 requests for directors of physical education received by the appointment bureau during the past five years. Findings: Directors of physical education now employed have college training ranging from four to 200 semester hours. The median is 126 semester hours. Sixty-three per cent of all new physical directors have baccalaureate degrees. Science is the subject most frequently taught by Arkansas directors, and school officials seeking directors of physical education most frequently ask for men also trained in science. Other academic subjects, ranked in order of frequency taught as a major subject and also in order of preference shown by school officials, are mathematics and social science.

2068. Rous, Carmolita. Procedures in teaching girls' athletics in high school. Master's, 1931. Southern California. 280 p.

A collection of procedures and practical suggestions, designed as a guide in training of teachers of girls' sports; derived from interviews, observations, and from a study of the literature.

2069. Rutledge, R. E. Report on professional study of teachers and principals of the Oakland public schools for the year ending December 31, 1930. Oakland, Calif., Public schools, 1931. 7 p. ms. (For abstract see no. 717b.)

Data indicate that 70.2 per cent of all the classroom teachers had carried on university or college work during the year; more than 50 per cent reported participation in club activities and more than 40 per cent participation in organized professional activities.

2070. Sawyer, Helen E. Biology—a part of teachers' training. Master's, 1931. Temple.

*2071. Schleier, Louis M. Problems in the training of certain special-class teachers. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia University, 1931. 133 p. (Contributions to education, no. 475.)

The purpose of this study was to present a digest and an analysis of the State laws pertaining to the education and training of mentally and physically handicapped children in the public schools; to give rulings of State boards of education on the preparation of

teachers for these classes; to make a survey of courses and curricula now offered in institutions for the preparation of teachers and supervisors of special classes; and to propose a teacher-training program for teachers of the two types of handicapped children in the public schools. Data were secured from State school laws; from rulings of State boards of education; from current catalogues of all city and State teacher-training institutions, liberal-arts colleges, universities, and some private institutions; from literature in the field of special education; and from interviews with authorities, supervisors, and selected teachers in several fields of special education. Findings: State laws vary in their provisions for the education of handicapped children. Eleven States have ruled that special-class teachers shall be regularly trained elementary-school teachers; that they shall have had a definite number of years' teaching experience in the elementary school, and shall have certain technical training preparing them for the work. A number of teacher-training institutions, colleges, and universities offer courses for the preparation of teachers and supervisors of mentally handicapped children.

2072. **Scranton, Laurell Lacey.** An analysis of the content of courses required in the professional training of teachers of vocational agriculture. Doctor's, 1931. Cornell.

The purpose of this study was to: (1) Make comparisons of the training programs of several States on the basis of the range in number and in instruction time of the units of instruction considered as constants in the professional preparation of agricultural teachers; (2) discover the degree to which the industrial courses are contributing to the training needs of agriculture teachers; (3) note possible overlapping; (4) check offerings with special reference to activities and responsibilities; (5) call attention to need for greater definition of values, etc.

2073. **Sprowles, Mary E.** Trends of organization of curricula in physical and health education for purposes of teacher training. Master's, 1931. Temple.

2074. **Tuttle, Mildred T.** The present status of teacher training for classroom health education. Nashville, Tenn., George Peabody college for teachers, 1931. 85 p. ms.

A study of teacher-training schools throughout the United States. Findings: There is too little integration of health programs in both training school and practice schools. The study showed a lack of methods courses dealing specifically with health education. Courses in health education for the most part are elective and enrollment in elective health courses very small. The health service and facilities for health examinations from the point of health education are very limited. There is practically no work being done to correlate *physical* health with *mental* health of teachers while in training.

2075. **Vannatta, Harry E.** Teacher training in the liberal arts colleges of Pennsylvania. Doctor's, 1931. Penn. State. (For abstract see no. 714.)

A study was made of the education faculties of 46 colleges. Findings: The full-time teachers and those with experience in public schools have a greater tendency to make their courses professional ones than do part-time teachers, or teachers without public-school experience.

2076. **Van Walker, Willard R.** Professional preparation for teaching the 100 addition and subtraction combinations. Master's, 1931. Iowa. 134 p. ms.

2077. **Wheeler, John T.** Determining the agricultural constants in a preparatory curriculum for teachers of agriculture in Georgia. Doctor's, 1931. Cornell. 250 p. ms.

Survey of types of agriculture in Georgia to find the practice in cotton farming, the most widely distributed type. Problems faced by all teachers were studied. Findings: There is a need for certain technical knowledges and skills in cotton farming for all who teach agriculture in high schools of Georgia.

2078. **Wienbergen, Lester A.** Evaluation of the training curriculum of general science teachers. Master's, 1931. Wisconsin.

2079. **Wiggins, Dossie M.** A program for improving the training of high school teachers in Texas. Doctor's, 1930. Yale. 223 p.

2080. **Williams, Mary Sheppard.** A study of teacher-training departments in Florida high schools. Master's [1931]. Peabody. 63 p. ms.

A study of establishment, administration, and output of teacher-training departments in Florida; a rating of graduates of 1929-30; output of all college teacher-training

agencies in Florida; status of training of all teachers in Florida, 1929-30. Findings: Median training of white teachers was less than one year college; 85 per cent had less than two years college; median training for Negro teachers was little more than tenth grade (2 years high school); 65 per cent had less than two years college; college output was inadequate; high-school teacher-training departments are needed until other facilities are developed.

2081. Young, Dale S. State support for teacher-training institutions. Montgomery, Ala., State department of education [1931?].

Includes a history of state support for normal schools in Alabama, present needs, and a future program for state aid.

See also 127 (14), 176, 196, 227, 240-241, 265, 389, 1134, 1590, 2164, 2168, 2250, 2544, 2991, 3616, 3628, 3676, 4022, 4072, 4085, 4095, 4107, 4284.

NORMAL SCHOOLS AND TEACHERS COLLEGES

2082. Allen, C. H. Correlation between average yearly grades and intelligence ratings for 90 normal students. Cullowhee, N. C., Western Carolina teacher's college, 1930.

The purpose of this study was to determine the correlation of the average yearly grades made by students and their intelligence ratings. The study seeks to determine to what extent a student rating may be predicted by entrance intelligence tests. It also seeks to determine suitable basis for the classification of students upon entrance to Western Carolina teacher's college.

2083. Bennett, Luther J. The clerical and secretarial help in state teachers colleges. Doctor's, 1931. T. C., Col. Univ.

Study made by questionnaire to determine current practices and to determine policies of better administration of clerical and secretarial work in teachers colleges.

2084. Buck, Arthur L. The teachers college and the press. Master's, 1931. Colo. St. T. C.

This study attempts to evaluate the newspaper-publicity program of the Colorado State teachers college in terms of the recognized objectives and aims of the college.

2085. Burford, Mrs. Charlotte Schweitzer. The duties of matrons and the management of teachers college dormitories. Master's, 1931. Indiana. 175 p. ms.

2086. Conkling, L. D. Report of committee on freshman success and failure. Freshmen student success or failure at Montana State normal college. Dillon, Montana State normal college [1931]. 14 p. ms.

Tests were given to 164 freshmen. Data indicate that practically all of the failing students rank low in intelligence as measured by the tests; that earning a part or all of one's expenses in college is not a general cause of failure; that extracurricular activities are not a general cause of failure; that there seems to be a tendency to favor better prepared students from the bigger high schools.

2087. Cordrey, Everett E. Attempts to improve college instruction in teachers colleges. Arkansas State teachers college, Conway. Peabody journal of education, 8: 282-90, March 1931.

2088. ——— A study of staff organization in state teachers colleges. Conway, Arkansas state teachers college, 1931. 27 p. (Arkansas State teachers college. Bulletin, vol. 19, no. 3, August 1931.)

Data were secured from the catalogues of a number of state teachers colleges with a class A rating. The study aimed to determine the general tendencies in vogue relative to departmental, committee, and administrative staff organization in state teachers colleges. Data indicate that there is little uniformity among teachers colleges with reference to the administrative organization of the faculty.

2089. Cornell, Ethel L. and Cox, Warren W. An analysis of normal school training. Albany, New York State education department, 1931. 61 p. ms.

Based upon questionnaire returns from 1929 graduates of all New York State normal schools. Findings: A striking variation in the type of teacher graduating from the different training schools was found. Teachers believe the amount of time devoted to practice teaching is adequate but criticize the type of training.

2090. **Deweese, Horace G.** The requirements in music education of two and four year general certificate courses in class A state teachers colleges. Master's, 1931. Northwestern.
2091. **Eliassen, R. H.** A follow-up study of the graduates of the College of education, Ohio State university, 1925-1929. Doctor's, 1931. Ohio. 181 p. ms. Survey of five graduating classes, 1925-1929 (1,567 graduates). Returns were received for 80 per cent. Findings: Approximately 70 per cent taught and of those only 20 per cent taught their major alone, whereas 50 to 60 per cent directed activities.
2092. **Fees, Mary Louise.** Physical education for women in the teachers colleges of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 718.) A study was made of the physical education courses offered in 73 four-year teachers colleges in the United States. A proposed plan was submitted for the six teachers colleges of Oklahoma.
2093. **Garrison, Noble Lee.** Current practice in coordination of college and training school work. Ypsilanti, Mich., Noble Lee Garrison, 1931. 26 p. The study covers reported practices in 60 state teachers colleges.
2094. **Goodman, A. K.** Entrance and classification examination in reading comprehension for teachers colleges. Master's, 1930. Colo. St. T. C. The purpose of this study was to construct a test which will measure in a valid and reliable manner the reading comprehension of those individuals entering teachers colleges who wish to become teachers in elementary and secondary schools.
2095. **Grote, Carolina.** A study of the housing and living conditions of women students in the Western Illinois state teachers college at Macomb for the school years 1926-27, 1927-28, 1928-29. Doctor's, 1931. T. C., Col. Univ. 154 p. ms. A study to determine differences between academic achievement, as measured by teachers' marks compared with intelligence quotients, among students living under the various types of housing conditions; differences between social experiences as measured by ratings on a social-participation score card in extraclassroom activities; and differences with respect to health.
2096. **Hagan, Rev. John.** The organization of a diocesan normal school. Doctor's, 1931. Catholic Univ.
2097. **Heineman, Frank S.** A study of deficiencies in arithmetic of prospective teachers. Master's, 1931. Penn State. 47 p. ms. Based on statistical analysis of test errors by students who stood low and upon interviews with them. Subjects were students in the State teachers college, Edinboro, Pa. The deficiencies were found to be varied and quite crucial. Many of the deficiencies were to be explained on the basis of lack of follow-up drill in the later public-school years, to roundabout methods, to lack of general ability, and to bad attitudes.
2098. **Hemminger, Estella.** The relationship of psycho-neurotic tendencies to intelligence, achievement, and adjustment to the college life situations of Colorado State teachers college freshmen, 1930-31. Master's, 1931. Colo. St. T. C.
2099. **Hillyer, Louise Woodruff.** Relation between student-load and quality of achievement. Master's, 1931. Peabody. 41 p. ms. Scholastic records of 100 students of George Peabody college for teachers showed that those students who transferred the most credit to Peabody show the highest relationship between the amount of work carried and the teachers' marks. Highest correlation was found in groups of students who transferred to Peabody with more than two years of previous college training. Lowest correlation was found in that group of students who had taken all of their undergraduate work in the institution. Peabody students tend to carry the maximum load at all times. The mean load of the normal schedule was found to be 17.43 with a sigma of 1.50.
2100. **Kirby, Richard T.** Teachers colleges degrees. Master's, 1931. Wyoming. 88 p. ms.
2101. **Lowry, Ellsworth.** The teachers colleges of Pennsylvania in relation to the needs of their districts. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was to determine the exact number of elementary and junior-high-school teachers needed in each of the 13 teachers-college districts of Pennsylvania, and to compare this need with the supply furnished by the state teachers colleges. The total number, grades taught, and the turnover were obtained from reports made by the secretaries of the 2,581 public-school districts of the state, and the data tabulated for the years 1922-23 to 1927-28, inclusive. The actual need was determined from the turnover and the per cent of transfers from one district to another. The supply was limited to the graduates of the state teachers colleges. Data were assembled by legislative districts, and a separate study was made of each of the 13 districts to determine the extent to which the actual needs were being met by the teachers college of that district. Data indicate that in 1927, 11 of the 13 state teachers colleges trained as many, or more primary teachers than were needed; 10 teachers colleges graduated more intermediate teachers than were needed; no grammar grade teachers were trained, but there was a need in each district varying from 28 to 109; the total demand for junior-high-school teachers in 1927-28 was 332, and the total number graduated from the teachers colleges was 377. The total demand in the state in 1927-28 was 6,545 and the total supply was 8,428. The number needed each year was decreasing at the rate of 209 per year, and the supply was increasing at the rate of 300 per year.

2102. Milholland, John. The relationship of intelligence and classification test scores to mortality and scholastic ratings. A continuation study of 453 freshmen of the class of 1933 at Colorado State teachers college. [Greeley, Colorado State teachers college, 1930.] 42 p. (Third report, study no. 115, 1929-1930.)

2103. New Jersey. State teachers college, Trenton. Faculty committee on assembly programs. The assembly in the teachers college. Trenton, N. J., State teachers college, 1931. 22 p. (Trenton studies in education, no. 1.)

Data on the type of assembly were secured from 30 teacher training institutions, and 12 liberal arts colleges. A questionnaire was sent to students of the Trenton State teachers college to determine the type of assembly program which they would enjoy. As the result of these studies, a new type of program was put into effect.

*2104. Newmark, David. A study of a class in the Philadelphia normal school. Doctor's, 1931. Pennsylvania. Philadelphia, Pa., Westbrook company, 1931. 125 p.

This investigation is a study of the relation between evidences of success in the Philadelphia normal school and student characteristics.

2105. Pelton, Frank Mathews. Relationship between standardized tests and classroom achievement in the Potsdam normal school. Master's, 1931. Cornell.

2106. Powell, R. W. Training school facilities in State teachers colleges. Masters', 1930. Chicago.

A study of 91 state teachers colleges.

2107. Ratliff, Lavada. Entrance and classification examination in geometry for teachers colleges. Master's, 1931. Colo. St. T. C.

The problem in this study is the construction of a geometry section of the mathematics unit of the high-school division of the entrance and classification examination for teachers colleges.

2108. Richtmeyer, Cleon C. Mathematics curricula in teachers colleges of the North central association. Master's, 1931. Peabody. 52 p. ms.

2109. Robbins, R. E. A six year trend in teachers college student personnel, Colorado State teachers college, 1925-1931. Master's, 1931. Colo. St. T. C.

The purpose of this investigation was to make a personnel study of a cross section of Colorado State teachers college students enrolled in the winter quarter of 1930-31; to determine the social and economic background of the student body; to determine, by means of this survey, the six academic levels of the college, and contrasts and trends from the study made in 1925.

2110. Sande, O. B. Comparison of progress in teacher training in teachers colleges and normal training high schools. Master's, 1931. Minn. St. T. C.

2111. Sandford, Hazel. A program for the study of the history and appreciation of art in the teachers colleges of Pennsylvania. Master's, 1930. New York. 48 p. ms.

The problem of art appreciation in public education, the history of the problem, and the development of a state program were taken up in this study. Findings: The three essential factors of a good program are, a teacher of character with rich cultural and artistic background, a main historic cable including the minor arts and applied problems, correlating with the progress of the history.

2112. Schrammel, H. E. Comparative study of grades given by Kansas State teachers college faculty members, 1929-1930. Emporia, Kansas State teachers college, 1930.

2113. Shipley, Gertrude Tyson. An evaluation of guided study and small group discussions in a normal school. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 48 p. (Contributions to education, no. 486.)

This study attempted to evaluate the use of interclass guided study and small group discussions as a method of procedure on the college level. Thirteen classes of senior students taking a course in "principles of education" participated in the experiment—seven one semester and six the following semester. The groups were equated on the bases of chronological age, Otis intelligence scores, personality ratings, practice-teaching grades, and freshman averages. In both experiments half of the classes were used as control groups and half as experimental groups.

2114. Slacks, John Ross. The training of rural teachers in state teachers colleges. Master's [1931]. Chicago.

A study undertaken to determine the need for the training of rural (one-room) teachers and the provisions now made for that training in State teachers colleges.

2115. Smith, L. T. Student maintenance and production work in teachers colleges. Master's [1931]. Peabody. 130 p. ms.

A study of 87 teachers colleges. Findings: It is a general practice among teachers colleges to employ students in maintenance and production work—especially in printing, cabinet work, and carpentry.

2116. Sperry, Ruth Comstock. Contributions of dormitory life in the training of a teacher. Master's, 1931. T. C., Col. Univ. 56 p. ms.

A survey and analysis of the organization and guidance of a resident student's life in the Maryland State normal school at Towson.

2117. Stinnette, Ray L. An evaluation of the present college entrance requirements at Colorado State teachers college. Master's, 1931. Colo. St. T. C.

It is the purpose of this investigation to make a contribution to the problem of entrance requirements at Colorado State teachers college.

2118. Swanson, Charles Glenn. A personnel study of graduate students in the department of education, Colorado State teachers college. Master's, 1931. Colo. St. T. C.

The purpose of this investigation was to gain some definite information regarding the type of student enrolled in the graduate school as expressed by averages found for the group on various items of personnel data; and by means of this data to evaluate the group and by comparison with similar studies in this and other institutions to indicate the comparative standing.

2119. Uphall, C. C., and Masters, Harry V. An analysis of the gains made in certain objective tests by normal school students during the two-year period of their attendance. Bellingham, Washington State normal school, 1931. 11 p. ms.

Five subject-matter tests and the Thorndike intelligence examination for high-school graduates were given to 125 students when they first entered the State normal school at Bellingham. The same tests were given again just before they were graduated from their 2-year course. The study evaluates the changes in score which resulted. A gain was made by these 125 students in each of the six tests. The gain was statistically significant on every test.

2120. Vaden, James Woodridge. Distribution of grades at George Peabody college for teachers. Master's, 1931. Peabody. 60 p. ms.

2121. Whitney, F. L., and Leuenberger, Harold. The college success and mortality of State teachers college freshmen as related to intelligence and high school achievement. Educational administration and supervision, 16: 668-74, December 1930.

Five hundred and nine Colorado State teachers college freshmen were examined in terms of intelligence, high-school achievement, college class marks, and persistency of attendance.

2122. Wilcox, Tipton Cato. Preparation compared to teaching of Murray State teachers college graduates. Master's, 1931. Peabody. 71 p. ms.

The period studied was from 1923 to 1930, inclusive. Both 2 and 4 year graduates were considered. Findings: All 2-year graduates were prepared to teach the subject or grades which they taught. Over 50 per cent of men and 29.4 per cent of women who were 4-year graduates were unprepared.

2123. Williams, Alice M. Orientation of freshmen in New York State normal schools and teachers colleges. Master's, 1931. Syracuse.

2124. Winans, Seymour. An analysis of some methods of selecting students for training at the Glassboro State normal school. Master's, 1931. Rutgers.

2125. Wright, Frank L. A comparison of the preparation of secondary school teachers in universities and teachers' colleges. St. Louis, Mo., Washington university, 1931.

2126. Yoeman, Bessie. Study of health programs of teachers' colleges in Southern States. Master's [1931]. Peabody. 63 p.

A study of programs in Southern States—Alabama, Oklahoma, Texas, South Carolina, North Carolina, Arkansas, Florida, Georgia, Louisiana, Mississippi, Tennessee. The health service being given to the student teacher while attending college and the professional courses offered in health education were studied.

See also 2, 46, 420, 439, 991, 1042, 1087, 1200, 1513, 1518, 2046, 2048, 2127, 2133, 2231, 2257, 2277, 2281-2282, 2348, 2366, 2489, 2993, 3006, 3247, 3340, 3350, 3368, 3392, 3510, 3933, 4124, 4256, 4259, 4353, 4363.

PRACTICE TEACHING

*2127. Ade, Lester Kelly. Provisions in the state teachers colleges of Pennsylvania for laboratory-school experience in teaching in the elementary grades. Master's, 1931. New York. 136 p. ms.

The aim of this study was to ascertain the laboratory-school provisions of the Pennsylvania State teachers colleges and to describe them. It also attempts to show what additional provisions are needed to insure adequate laboratory-school experience for prospective teachers actually enrolled in the State teachers colleges during the 1927-28 academic year.

2128. Armentrout, W. D. and Wrinkle, W. L. Directed observation and teaching in secondary schools. An experimental edition. Greeley, Colorado State teachers college, 1930. 313 p. ms.

2129. Booher, Charles D. Supervision of student teaching in public school systems. Master's, 1931. Ohio. 109 p. ms.

Critical and historical survey of the literature and institutions supporting the various methods of teacher training as to facilities and types of supervision given student teachers. Findings: Educational status of supervising teachers was very low. More adequate preparation should be required for supervising teachers and ways and means provided for the attainment of the same. A program of selection and guidance which will insure a high type of candidate for the profession is needed. This training should only be given in institutions of high standing in which teacher training is the major function.

2130. Brown, Mrs. Merie Spacey. An investigation of the practices connected with student teaching in elementary teacher training institutions in the United States. Master's, 1931. Indiana. 178 p. ms.

2131. Clark, Ada V. Requirements in directed observation and student teaching for music supervisor. Master's, 1931. Peabody. 45 p. ms.

A study based on reports from 25 institutions of higher learning. Findings: Students majoring in public-school music are required to observe expert teaching and to teach; two semester hours credit is granted for each; they are required to observe in junior or senior year, to teach in senior year, to hold group conferences weekly with students, to teach and observe in all phases of music in which they expect to supervise, to make a bibliography of suitable material, to catalogue music material and care for music equipment, to study individual differences of pupils observed or taught, to test achievement of pupils and work out remedial measures, and to read books pertaining to public-school music.

2132. Dale, Alice F. A study of the facilities for laboratory work provided for future supervisors of music by teacher training institutions. Master's, 1931. New York. 68 p.

Summary of replies to 200 questionnaires concerning qualifications of supervisors of training, types of schools provided, types of training, follow-up work, and supervisory activities in connection with training for music supervision. Findings: Lack of standards in number of years required for training of music supervisors; requirements in amount of laboratory experience; qualifications of supervisors of training; types of schools used for laboratory training; use of rating cards; amount of time devoted to laboratory work; and types and amount of follow-up work. Summary points to a need for standardisation, further study of problem and more concerted action on the part of those engaged in this type of work.

*2133. Eubank, Louis Allen. The organization and administration of laboratory schools in state teachers colleges. Doctor's, 1931. Missouri. Kirksville, Northeast Missouri state teachers college, 1931. 89 p. (Bulletin, vol. 31, no. 4.)

It was the purpose of this study to give a description of present practices in the organization and administration of laboratory schools in State teachers colleges. Blanks were filled out and returned by 85 teachers colleges representing 29 States. Personal visits were made to 12 State teachers colleges in 7 Central Western States. The latest available catalogue from each cooperating institution was examined to obtain information pertaining to the laboratory schools.

*2134. Fox, Ethel Katherine. A study of the effectiveness of participation for student teachers in a specific situation. Master's, 1931. New York. 31 p. ms.

This was a study of the participation school at Cortland normal school. Findings: Participation contributes directly toward independent student teaching.

2135. Gipson, Samuel Luther. The effect of practice teaching on pupils. Master's, 1931. Peabody. 64 p. ms.

A study of elementary classes in the Cookeville, Tenn., city schools. Findings: (1) Classes under first-grade and third-grade critic teachers made more progress; (2) classes under fifth-grade practice teachers made less than standard progress and less gains than their parallel control classes on all levels; (3) class under practice teachers was more accelerated than the parallel nonpractice class under observation for the same period.

2136. Hackler, John Monroe. The relative value of courses in student teaching and courses in observation. Doctor's, 1931. Stanford. 208 p. ms. (For abstract see no. 717a.)

Data indicate "that the results obtained from the professional information test, the aptitude test, the reading and literature tests, and the estimation of students and teachers who had completed courses in teacher training indicate that student teaching has greater value than observation in the teacher training courses at Tahlequah, Oklahoma."

2137. Hall, Cecil Belknap. Studies in observation of teaching. Master's, 1931. Stanford.

2138. Hughes, Sydney Evelyn. Creative supervision of student teaching. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of this study was an attempt to show the need of a new type of laboratory experience in student teaching in the teacher-training institutions and to suggest a practical program by means of which this experience may be secured.

2139. Lindacher, Loretta. The relation of success in certain subjects in high school and college to success in practice teaching in the same subjects. Master's, 1931. N. Y. St. Coll. for Teach. 16 p.

Since the subject matter taught is likely to be the same as that which was learned by the practice teacher in the high school, the question is raised as to whether practice teaching success may not be more closely related to success shown by regents' examinations than to success shown by college grades in the subjects taught. The numbers in some of the groups studied are small, but coefficients of correlation indicate that for all of the seven subjects studied except one (Latin) practice-teaching grades are more closely related to college grades in the subject taught than to regents' grades in the same subject. In the case of Latin, the number was too small for the result to be trustworthy.

2140. McKibben, Hazel. An experimental study of methods of handling the introductory period to student teaching. Master's, 1930. Iowa St. Coll. 125 p. ms.

Three methods of introducing student-teachers to student-teaching were planned by the writer. These plans were used with 116 student-teachers by nine different supervisors. Final conclusions could not be drawn but indications were that with the group studied the plan with the longer introductory period was best suited for the needs of the group.

*2141. Marshall, Edna M. Evaluation of types of student teaching. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 91 p. (Contributions to education, no. 488.)

The purpose of the study was to evaluate three types of student teaching. A study was made of the catalogues and surveys of teacher-training institutions and of books and periodicals relating to this field. The experiment was carried on at the Maryland State normal school at Salisbury from September 1926 to June 1929 and in the counties of Maryland during the years 1928-29 and 1929-30. Students who were admitted to the school in September of 1926 and 1927 were placed in three equivalent groups at the end of the first term. The equating was based on the results of tests given at the school at the end of the first term. An attempt was made to evaluate the type of student teaching the teachers had had, by studying their success in the field during their first year's teaching, with the aid of county superintendents and supervisors of 20 counties of the State. Results of the testing program tend to show that student teaching graded and distributed over a long period of time develops greater teaching efficiency than does student teaching which is concentrated in a shorter period of time.

2142. Maryland State normal school, Towson. A guide for student teaching. 1930. 75 p. (Bulletin.)

This manual is intended for the use of all concerned with the course, student-teaching.

2143. Mead, Arthur B. Laboratory school conditions in Ohio: finances. Delaware, Ohio Wesleyan university, 1931.

A study made in cooperation with the Ohio college association.

2144. ——— Lists of problems and researches for study and investigation in the field of student teaching, laboratory schools, and allied work. Delaware, Ohio Wesleyan university, 1931.

2145. ——— Progress in the study of laboratory school work for the preparation of teachers. Educational administration and supervision, 17: 370-75, May 1931.

2146. ——— Supervised student teaching: basic principles illustrated and applied, student teaching activities and organization and administration. Richmond, Va., Johnson publishing co., 1930. 891 p.

2147. ——— and others. The status and needed improvements of laboratory facilities for preparing teachers in Ohio. Delaware, Ohio Wesleyan university, 1931. 31 p. ms.

2148. Morgan, Clara Bell. The content of courses in observation, participation, and practice-teaching in teacher-training institutions. Master's, 1931. Oklahoma. 102 p. ms.

This is a study of what is taught in participation, observation, and practice-teaching courses in teacher-training institutions of the United States. More than 50 per cent of the schools report observation done in conjunction with other courses. Practice teaching occurs as a separate course in most institutions. There is little indication that students have gradual introduction into teaching.

2149. **Moriarity, Margaret** (*Sister Mary Margaret*). An investigation of the effectiveness of student teaching in an elementary training school. Master's, 1931. Washington. 59 p. ms.

Findings: Work of student teachers is at or above par when compared with the work of regular teachers.

2150. **Morrison, B. H.** An analysis of case problems in student teaching in secondary education. Greeley, Colorado State teachers college, 1931.

One hundred and thirteen case problems submitted by student teachers were analyzed. These problems grouped themselves in 30 types. The outstanding difficulties were caused by mentality differences, disciplinary cases, and the assignment.

2151. ——— The development of guiding principles and practices for the conduct of student teaching. Greeley, Colorado State teachers college, 1931.

Guiding principles for the conduct of student teaching were submitted to a jury of 40 experienced training teachers located in 20 different teacher-training institutions. Findings: There is high agreement among the jury concerning the validity of the principles; practice lags behind approval in nearly all cases.

2152. ——— An evaluation of the Montclair, N. J., plan of student teaching. Greeley, Colorado State teachers college, 1931.

Sixty-six members of the senior class were used as a jury to evaluate all phases of student teaching.

2153. **O'Neil, Ella.** Study of instructional materials presented to student teachers at regular critic meeting. Master's, 1931. Michigan.

*2154. **Pendergast, Helen Ann.** A study of student teaching in physical education in institutions offering a major course for women. Master's, 1931. New York. 106 p. ms.

A study of some of the practices in the organization, administration, and supervision of student teaching—requirements, year, credit, amount of practice, prerequisites and requisites, observation, agencies used, size of classes, types of teaching, the supervisor, her load, conferences, lesson plans, rating of teachers, and system of grading. Gives the prevalent tendency in practices concerning these items in 53 institutions.

2155. **Reed, Ethel Jane.** Methods used by student teachers in securing and maintaining interest. Master's, 1931. Iowa St. Coll. 118 p. ms.

Study of the use of interest skills by 20 student teachers. Findings: Low correlation between aptitude tests, grades in psychology and education, memorization of skills, and the ability to use interest skills in teaching.

2156. **Sisson, S. Hull.** The present status of student teaching in American universities. Master's, 1931. Washington. 62 p. ms.

Findings: Student teaching has been adopted universally as an important and essential phase of teacher preparation in American universities. A gradual raising of standards for admission and more effective provision for elimination are being pursued. The establishment of laboratory schools seems to have come to a standstill with greater recourse to the public schools. The increasing number of states demanding student teaching for certification indicates a favorable attitude of the lay public.

2157. **Smithick, Alice C.** A study in personality of student teachers. Master's, 1930. T. C., Col. Univ. 175 p. ms.

2158. **Toles, Elsie.** Problems of student teaching in rural and urban schools. Master's 1931. California. 106 p. ms.

The purpose of the study was to ascertain the type of difficulties confronting the teacher in training during the student-teaching experience and to indicate along what lines training courses may need modification to give more direct preparation for meeting them. Findings: Preparatory to training, test-experience of student teaching should be given as an aid to determine aptitude for teaching; the amount of supervision by supervisors of training institutions should be increased; training courses should include: principles underlying the selection of subject matter; the teaching of pupils to study; and organization and management, with emphasis on the study of pupil-teacher relationships, etc.

2159. Vaughn, Cora B. Administrative organization of student teaching. Master's, 1931. Southern California. 176 p.

Based on a study of the voluminous literature relating to the subject, an analysis of bulletins and catalogues of teacher-training departments, interviews with supervisors and a variety of unpublished data; treats such problems as selection of student teachers, administrative organization, laboratory high schools, and rating of student teachers.

2160. Wade, Newman A. Distribution of student teachers' time in conducting recitations. Frostburg, Md., State normal school, 1930. 24 p. ms.

Data were collected during the school year 1929-30, from student teachers' records of the number of recitations taught in each subject and grade during the forenoons of each of two 6-week periods of student teaching. Reports were furnished by 66 student teachers. One half of the students taught in graded schools for six weeks and in one-teacher rural schools for six weeks; the other half of the pupils taught in graded schools both periods. Reading received the largest share of attention. Arithmetic ranked second, but considerably below reading. Approximately 16 per cent of the total time was given to recitations in the social studies. Slightly less than 7 per cent of the time was used in conducting recitations in such subjects as industrial arts, health, nature study, and writing. A number of student teachers spent less than two hours with classes in the various subjects.

2161. Wellborn, J. W. Effect of student teaching on pupils in two classes in beginning algebra. Master's, 1931. Kansas.

Gives the results of an experiment carried on with rotated groups of 21 pupils each, with a student teacher under direct supervision of the critic teacher and with the critic teacher alone, for two 10-week periods.

2162. Wildrick, Caroline M. Dowling. An investigation of the practices connected with student teaching in elementary teacher training institutions in the United States. Master's, 1931. Indiana. 178 p. ms.

See also 871, 2106, 3751, 3766, 4105.

PROFESSIONAL STATUS OF TEACHERS

2163. Allen, J. G. A study of the status of shop teachers in the all day unit trade school in the State of Pennsylvania. Master's, 1930. Penn. State. (For abstract see No. 714.)

Data were secured from questionnaires and official records in the offices of the State department of public instruction, Harrisburg, Pa., in an attempt to study the trade and industrial school teachers employed in all-day schools and classes in order to determine their training, experience, professional training, tenure, turnover, salaries, certificates held, etc.

2164. American educational research association. Teacher personnel. Review of educational research, 1: 65-159, April 1931.

A summary of references up to November, 1930, including the following sections: Teacher supply and demand, recruitment for teacher training, the preparation of teachers, teacher selection and placement, teachers' salaries, teaching load, teacher rating, ethics of the teaching profession, health of the teacher, the legal status of the teacher, teacher tenure, teachers' organizations, pension or retired pay for teachers.

2165. Ames, Fannie Orlina. The teacher in American literature. Master's, 1931. Stanford.

2166. Anderson, C. Albert. A comparison of the teacher qualifications of the Rocky Mountain States. Master's, 1931. Wyoming. 161 p. ms.

2167. Anderson, Henning Jay. Correlation of scholarship and success in teaching. Master's, 1930. Chicago.

High school scholarship marks and college scholarship marks were correlated with teaching success (as rated by superintendents) for 490 2-year and 3-year certificate-course graduates and 110 A. B. or B. S. graduates of Northern State teachers college, Marquette, Mich.

2168. Bailey, E. Lehr. The teaching personnel of Loraine county schools. Master's, 1931. Ohio. 147 p. ms.

A comparative study of teachers of the county between 1915 and 1930. Findings: (1) There is need for more men teachers; (2) a county salary schedule; (3) longer tenure; and (4) higher training.

2169. **Clary, James Dan.** The teachers in the public accredited high schools in Arkansas, 1929-1930. Master's, 1931. Chicago. 87 p. ms.

A study of the public accredited high schools in Arkansas showed that the training and salaries are not sufficient and that the teacher load is not excessive.

2170. **Clay, Wallace L.** The economic activities of Ohio men high school teachers. Master's, 1931. Ohio. 95 p. ms.

A study of regular and auxiliary incomes, experience, training, dependents, kinds of property accumulated, extent of travel, professional plans of men high school teachers. Findings: 82 per cent of 192 men with 6 or more years of experience earned auxiliary incomes during previous 5 years, 44 per cent doing such work during time of contract for teaching. Median 5-year average salary was \$1,996, and average median of annual auxiliary earned incomes was \$156 with a range of \$000 to \$3000. Median number of dependents was 1.54, and average was 1.92. Training beyond high school ranged from less than 2 years to more than 7, with a median of 4.7. Median experience was 10 years for the group. Sixty per cent attended summer school for an average of 1.9 sessions during the preceding five years. Life insurance was owned by 98 per cent, autos by 85 per cent, and house furnishings by 82 per cent of the group. Salaries were roughly proportional to experience but not so with training; five years of training reached the point of diminishing return in regular income. Auxiliary incomes bear no apparent relationship to experience, training, or regular salaries. Eighteen per cent only claim no membership in professional societies, and 24 per cent are subscribers to less than two professional journals. Twenty-six per cent of the group have not traveled for pleasure beyond the native State, and 65 per cent have never traveled in foreign countries for pleasure.

2171. **Coxe, Warren W.** A study of the elementary school teacher in New York State. Albany, New York State education department, 1931.

Based upon questionnaires from the elementary school teachers in New York State, outside of New York City. Findings: Data relating to general and professional training, experience, certification, salaries, nationality, and birthplace are given.

2172. ——— *and* **Soper, Wayne W.** Study of the high school teacher in New York State. Albany, University of the State of New York press, 1931. 42 p. (University of the State of New York bulletin, no. 964)

This study shows that 75 per cent of the high-school teachers in the State are college graduates. It points out the limited amount and rather unsatisfactory character of the professional training which high-school teachers have received.

2173. **Croon, Charlotte.** Construction of scoring key of Strong's vocational interests blank for women teachers. Master's, 1931. Minnesota.

2174. **Dice, Clifford Orville.** The legal status of public school teachers in California. Master's, 1931. Southern California. 72 p.

A study of constitutional provisions, legislative enactments and court decisions to determine the present status of the teacher and to indicate the trend of legislation in recent years on this subject.

2175. **Georges, Frank J.** Financial policies and practices of teachers. Master's, 1931. Southern California. 170 p.

2176. **Gould, Arthur and Nettles, Charles H.** Induction of new teachers into service. Los Angeles, Calif., City schools, 1931.

A study made to assist principals with the problem of bringing new teachers into a high school.

2177. **Grimm, L. B.** A credit union for Illinois State teachers association. Springfield, Illinois State teachers association, 1931. 23 p. ms.

This is a nation-wide study of credit unions among teacher groups; it analyzes problems met by a state-wide teacher group. It recommends a credit union for local groups where credit needs justify; but discourages such unions for state-wide groups.

2178. **Hager, Walter E.** The quest for vocational adjustment in the profession of education. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 84 p. (Contributions to education, no. 491.)

A study of the success which followed attempts of graduate students of education to change the type of their educational work. The measures of success used were: The

extent to which such students were able to obtain a position in the field they tried to enter, and the salary they received. Data were secured from records at Teachers college of 454 persons who received their master's degrees in 1924 and 1925. Findings: Data indicate that long experience in one field of education may not necessarily be an appropriate preparation for success in another. It seems desirable to select the field of education in which one wishes to engage and to enter upon that work early in one's career. There are opportunities for advancement and high salaries in every field of education. It seems inadvisable for a person to resign a position in order to obtain training in a new field.

2179. Hall, Willis T. The status of the junior high school teachers of Oklahoma. Master's, 1931. Oklahoma. 69 p. ms.

2180. Hammonds, Carsie. Distribution of time of teachers of vocational agriculture in Kentucky—its relation to distribution of aid and to teacher training. Lexington, University of Kentucky, 1931. 113 p. (Bureau of school service. Bulletin, vol. 3, no. 3, March 1931.)

This study was undertaken for the purpose of determining how teachers of vocational agriculture in Kentucky spend their time at various times of the year, how certain factors affect this distribution of time, and what changes might be made in the teacher-training and supervisory programs in the light of these findings.

2181. Harris, Otto. Living conditions of faculty members. Doctor's, 1930. New York. 256 p. ms.

A study of the physical, social, and economic conditions of faculties of New York university, Columbia university, Hunter college, and the College of the City of New York. The data definitely show that members of the faculties as a whole can not live on the salaries which they receive.

2182. Hartle, R. B. The teacher in Maryland since 1865. Master's, 1931. Maryland. 57 p. ms.

A study of the certification, number, tenure, salaries, pensions, and duties of teachers of the public schools of Maryland from 1865 to 1930. Findings: Great improvement has been made in the certification, employment, tenure, and remuneration of teachers in Maryland. Since 1904 the State has developed a definite policy for improving the teaching force.

*2183. Herring, William C. The rural teacherage; with special reference to Oklahoma. Doctor's, 1931. Cornell. 202 p. ms.

The purpose of this study was to set up standards that may be used by school officials in planning new teacherages or in judging the serviceability of those already erected, with special reference to conditions in Oklahoma. Data were secured from available literature, and from questionnaires on 320 teacherages in Oklahoma.

2184. Hoerner, Mary Finch. The married woman as a teacher of home economics. Master's, 1930. T. C., Col. Univ. 69 p. ms.

A questionnaire study giving the opinions of 29 State supervisors, 31 city supervisors, and 62 married home economics teachers.

2185. Iowa. Board of educational examiners. Teachers of the public elementary and secondary schools of Iowa. A summary. Des Moines, Iowa, 1930. 36 p.

This study was sponsored by the Board of educational examiners and the Department of public instruction. Facts were assembled from over 98 per cent of the individuals employed as teachers, principals, supervisors, superintendents, or in other professional positions connected with the public elementary and secondary schools in the school year 1928-1929.

2186. Jaeger, Waldemar John. Supreme court and appellate court decisions in California relative to teachers. Master's, 1931. Stanford.

2187. Jones, William Walter. An intensive study of the teaching force of the consolidated schools of Oklahoma as to salary, experience, and qualifications. Master's, 1930. Oklahoma. (For abstract see no. 713.)

This is a statistical study which indicates that the superintendents of the Oklahoma consolidated schools are improving in salary, experience, and qualifications; high-school teachers are improving in experience and qualifications but are decreasing in salary; elementary school teachers are gaining in salary, experience, and qualifications.

2188. Keeler, Frederic D. A study of secondary school faculty meetings. Master's, 1931. Utah. 94 p. ms.

2189. Kentucky. University. A report of a survey of the teaching personnel of the Lexington schools. Lexington, University of Kentucky, 1931. 128 p. ms.

On the basis of a study of the teaching staff of the city schools of Lexington, Kentucky, recommendations are made with reference to the age of teachers, both with respect to their employment and their retirement, the employment of married teachers, health regulations, source of teachers, distribution of the members of the staff between the two sexes, the amount and nature of the training of new employees, growth in service, teaching loads, and certain miscellaneous factors.

2190. Knight, William H. Cost of living of teachers in the State of Ohio. Master's, 1930. Ohio.

2191. Lake, F. X. An analysis of the prospective teachers in the June 1931 graduating class who entered the University of Michigan in the fall of 1927. Master's, 1931. Michigan.

2192. Lee, J. Murray. A survey of the teaching staff. Burbank, Calif., City schools, 1931. (For abstract see no. 717b.)

Data were secured from questionnaires filled out by all the teachers in grades 1-12 in the school system.

2193. Lindemann, Howard. The secretaries of state teachers' associations. Master's, 1930., Ohio.

The study deals with salary, experience, training, duties, and accomplishments, of the secretaries of state teachers associations, and includes an analysis of constitutions.

2194. Masters, Harry V. and Upshall, C. C. A study of certain facts revealed by the application blanks of those applying for the life diploma during the school year of 1928-1929. Bellingham, Washington State normal school, 1930. 11 p. ms. (Bureau of research studies, no. 6)

Findings: There are more teachers in the primary and intermediate grades than in the grammar grades and rural schools; teachers applying for the life diploma have had, on the average, 29 months of teaching experience since graduation; the range of the middle 50 per cent of the teachers in intelligence quotient is 114-127; tabulations of data on certain other aspects of the first few years of a teacher's professional career are given.

2195. ———— A study of certain facts revealed by the application blanks of those receiving the life diploma in June 1930. Bellingham, Washington State normal school, 1930. 11 p. ms. (Bureau of research studies, no. 7.)

Findings: There are more teachers in the primary and intermediate grades than in the grammar grades and rural schools; teachers applying for the life diploma have had, on the average, three years teaching experience since graduation; the median initial salary ranged from \$100 to \$109 per month according to the grades taught; the average salary had increased \$20 per month at the end of three years' teaching experience.

2196. Mead, Arthur B. and others. Ethics for prospective teachers. Delaware, Ohio Wesleyan university, 1931. ms.

2197. Meyer, William T. An analysis of the social science teaching positions in Iowa high schools. Master's, 1931. Iowa. 137 p. ms.

2198. National education association. Department of classroom teachers. Sixth yearbook: The economic welfare of teachers. A discussion of the principles of economic security and their application among teachers and teachers' organizations. Washington, D. C., National education association, 1931. 244 p.

The yearbook aims to present certain basic principles underlying the economic welfare of workers in general; to apply several of these principles to the needs of the teaching profession, indicating some of the methods whereby teachers, both individually and in organized groups, can help to promote their own financial security; and to describe plans and activities actually in operation among teachers' organizations for the economic benefit of their members. A survey was made of the available literature in the field, and reports on the activities of teachers' organizations were obtained from questionnaires and letters.

2199. ——— Research division. Ethics in the teaching profession. Washington, D. C., National education association, 1931. 89 p. (Research bulletin, vol. 9, no. 1)

2200. Nebraska. State department of public instruction. Status of rural teacher in Nebraska. In its Biennial report of the State superintendent of public instruction, 1929-1930. Lincoln, Nebr., 1931. p. 112-19.

2201. ——— Status of teacher in accredited schools in Nebraska. In its Biennial report of the State superintendent of public instruction, 1929-1930. Lincoln, Nebr., 1931. p. 127-42.

2202. Olmstead, Edna. Troublesome and very difficult problems of beginning rural school teachers. Master's, 1931. Michigan.

2203. Overn, A. V. Where do teachers come from. Grand Forks, University of North Dakota, 1931. 10 p. (School of education record, vol. 16, no. 7, April 1931)

A study was made of all the teachers in Minnesota outside of Duluth, St. Paul and Minneapolis. The training and experience of the teachers is increasing. The nature and extent of this increase is shown.

2204. Parish, Truman A. Out of school activities of teachers of agriculture in New York. Master's, 1931. New York. 65 p. ms.

A study of 84 per cent of the agricultural instructors in New York State (90 individuals). Findings: On the average each man was engaged in 6.4 different activities spending 11½ hours per week in them. Thirty-one per cent of the activities were taken up because of suggestions from higher authority. The remainder were taken up because of the satisfaction derived from them. The teachers reporting spent two hours a week in non-agricultural activities involuntarily because they were asked to do so by men of influence and authority.

2205. Parkinson, B. L. The preparation, experience and salaries of white public school teachers in Alabama. Montgomery, Ala. Department of education, 1931. 9 p. (Reprinted from Alabama school journal, May 1931.)

This study is based on data given by teachers on themselves when they filled out Institute cards in the fall of 1930. Data on 3,451 teachers were studied and analyzed.

2206. Parks, Hannah. Job analysis of the work of the high school teacher of English. Master's, 1931. Ohio Wesleyan.

Work was begun in 1927. Data were obtained from teachers in service and student teachers.

2207. Pittard, Eunice. Status of home economics teachers in Tennessee approved high schools. Master's, 1931. Peabody. 59 p. ms.

Findings: Of the 366 home economics teachers studied 26.22 per cent taught only home economics and 73.77 per cent taught a combination of subjects. The combination teacher taught an average of 1.66 other subjects in addition to home economics. English was combined with home economics more than any other subject. The average salary of the teacher of home economics only was slightly higher than the average salary of the combination teacher. The tenure for home economics teachers was higher than the tenure for combination teachers. The majority of home economics teachers had held their position three years or less, while the majority of combination teachers had held their present position only one year.

2208. Ragsdale, T. B. The frequency of performance of certain teachers activities by rural teachers and the extent to which they consider their training adequate preparation for performing such duties efficiently. Master's, 1931. Illinois.

*2209. Rankin, Marjorie. Trends in educational occupations. An examination of the waxing and waning occupations in the public school systems of certain cities in the United States from 1898 to 1928. Doctor's, 1930. T. C. Col. Univ. New York City, Teachers college, Columbia university, 1930. 83 p. (Contributions to education, no. 412.)

The study deals with the types of educational positions available, their distribution, past trends, and probable implications for the future. Fourteen cities were studied in the investigation. Data indicate that the supply of undergraduate students does not agree with the demand for teachers, but that the supply of graduate students is close to the demand.

2210. Schmitz, Bernard A. Teacher participation in the small city high schools of Missouri. Master's [1931]. Peabody, 129 p. ms.

Survey of the small city high schools of Missouri in cities of 2,500 to 10,000 population as to the extent that the teachers do and should participate in nine administrative functions. Findings: Teachers should participate in administration. There is less teacher participation in making the salary schedule than in any other function.

2211. Scroggs, Schiller. Faculty training, tenure and salaries at Oklahoma agricultural and mechanical college. Stillwater, Okla., Oklahoma agricultural and mechanical college, 1931. 15 p.

Observes the trend with reference to training, tenure, and salaries at Oklahoma agricultural and mechanical college and compares data with North central and Land-grant college survey data. Findings: (1) There has been an upgrading of degrees through all the schools, without exception, and a marked decrease in number of bachelor's degrees; average tenure has increased from 5.0 years in 1929 to 5.4 years in 1931, and range from 1-20 to 1-23; salaries continue to compare favorably with those in other institutions of higher learning as a whole, but not so well with those in the institutions of outstanding prestige.

2212. Segel, David. Teachers' vacation reports for 1930. Long Beach, Calif., City schools, 1931. (For abstract see no. 717b.)

This report gives the activities engaged in by the teachers of Long Beach during the summer of 1930.

*2213. Selle, Erwin Stevenson. The organization and activities of the National education association; a case study in educational sociology. Doctor's. 1931. T. C., Col. Univ.

The purpose of the study was to subject the National education association to a sociological analysis and interpretation in the following particulars: (1) its organization; (2) its leadership; (3) its activities and objectives; (4) its relationships to other groups; and (5) its method of control. The study covers the years 1918 to 1928.

2214. Shoemaker, Martin C. A personnel study of directors of physical education for boys in high school. Master's, 1931. Northwestern.

2215. Snyder, Laura Gertrude. Securing a teaching position. Master's, 1931. Wichita.

2216. Stewart, Richard Bradshaw. A comparison of salaries, tenure, and experience of superintendents, principals and teachers of vocational agriculture, manual arts, and athletics in Iowa high schools. Master's, 1930. Iowa St. Coll. 96 p. ms.

2217. Thompson, J. I. Analysis of teacher absence, 1925-1930. Newburgh, N. Y., Public schools, 1931. 8 p. ms.

2218. ———. Analysis of teachers absence 1931 compared with past five year period. Newburgh, N. Y., Public schools, 1931. 10 p. ms.

2219. Turner, R. W. A study of industrial arts and vocational teachers as to salary, educational status and teachers load in West Virginia. Master's, 1931. Ohio. ms.

2220. Van Eman, Charles R. The absent teacher in the public schools of Columbus, Ohio. Master's, 1931. Ohio. 75 p. ms.

The study is limited to the public schools of Columbus, Ohio.

2221. Williams, Leslie P. A study of the married teacher problem. Master's, 1931. Iowa. 126 p. ms.

2222. Wisconsin teachers association. Report of the committee on reorganization. 1930.

Reported by Ethel Gardner.

This report gives the results of three years' study leading to the revision of the constitution of the Wisconsin teachers association.

See also 155, 176, 222, 1665, 2502, 4033, 4071, 4081.

APPOINTMENT AND TENURE

2223. Abraham, Richard I., and others. Plan for appointing teachers to positions in secondary schools. San Francisco, Calif., Public schools, 1931. 3 p. ms.

2224. Baker, Philip A. Teacher tenure in Utah. Master's, 1930. Utah. 101 p. ms.

2225. Burr, Genevieve Rose. Teacher turnover in the one to seven room schools of six counties of California before and since the tenure law of 1927. Master's, 1931. Southern California. 125 p.

Determines the rate of turnover for three years before the 1927 tenure law in order to compare it with the rate of turnover for the three years after the law for the purpose of discovering whether or not the tenure situation has been improved.

2226. Campbell, Ethel Wallace. A measure of teacher tenure in the public schools of Indiana. Master's, 1931. Ind. St. T. C. 123 p. ms.

A study to ascertain facts on tenure of teachers in Indiana, in a scatter of ten counties over the State. Findings: There was an increase in mean throughout the period covered by study, slight retardation before and after tenure law passed, the increase approaching normal at end of three-year period under the law.

2227. Connerley, Florence Good. A study of teacher tenure in the commissioned township high schools of Indiana for the years 1924-1930. Master's, 1931. Ind. St. T. C. 210 p. ms.

A study undertaken to find out how the tenure law worked out in actual practice in commissioned township high schools, 1924-1930. Findings: Mean tenure for principals in six years studied increased from 1.79 to 2.79; slight increase in tenure for women and men.

2228. Gray, Robert F. Examination for teachers applying for position in secondary schools. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

The San Francisco board of education, in April 1931, adopted a plan of teacher selection for secondary schools which included a written examination. The addition of the written examination will make the basis of selection of secondary teachers resemble that used for the elementary teachers which has been practiced successfully for several years.

2229. Herron, A. M. A critical evaluation of Oakland's plan of inexperienced teacher employment. Oakland, Calif., Public schools, 1931. 27 p. ms.

2230. Montana education association. Report of committee on a placement bureau in the home office of Montana education association. [1931.] 14 p. ms.

Thirty of the 34 state education associations replied to a questionnaire on placement bureaus sent out in March 1930. The study recommends that a placement bureau be set up in the office of the secretary of the association; that the activities be confined to those of a reference bureau for a couple of years; that the bureau should be self-supporting; and that the superintendents and principals use the bureau as fully and as often as possible.

2231. Mullins, Virgil E. A study of five years of placement of Indiana State teachers college teachers. Master's, 1930. Indiana, 407 p. ms.

2232. Potts, William S. A study of the administrative machinery for selecting and dismissing teachers. Master's, 1931. Southern California, 90 p.

Based on interviews with heads of departments, principals, supervisors, and superintendents in 10 school systems of varying size, in an effort to determine the share of each type of functionary in the selection and dismissal of teachers.

2233. Rowell, Robert Milton. Tenure of high school principals of Tennessee from 1921-1930. Master's, 1930. Virginia.

2234. Schultz, Jacob S. Teacher placement in Ohio. Doctor's, 1931. Cincinnati. 220 p. ms.

A study of teacher placement as carried on by all training institutions in Ohio, all State departments of education, State education associations, about a dozen institutions over the country; and such commercial agencies as would answer. Gives criticisms from school superintendents and beginning teachers.

2235. Schweickart, Elbert F. A study of teacher tenure in a limited area of the State of Indiana since 1922. Master's, 1931. Cincinnati.

2236. Struble, M. H. Legislation affecting teacher tenure. Master's, 1931. Ohio. 80 p. ms.

The study covered the entire United States. Findings: Tenure legislation should be adopted by the States but under a new, strongly centralized, state educational system that provides for state certification of teachers. It should include a clause that would compel teachers to keep abreast the improvements of the present time by doing professional study. It should be accompanied by retirement system and a state-wide salary schedule based on merit and training.

2237. Utah education association. [Information received from questionnaire No. 32 relating to teacher tenure and withdrawals.] 1931. 11 p. ms.

By D. W. Parratt.

*2238. Van Houten, Lyman Henry. Length of service of Pennsylvania high school teachers. Doctor's, 1931. T. C., Col. Univ.

This study was undertaken to ascertain the relationship between the length of teaching service and certain economic, social educational factors, with particular consideration of the future needs and the supply as the situation exists under the present educational organization. A study was made of personal professional information on 16,545 high-school teachers. Findings: In Pennsylvania the tenure of both men and women was found to be longer than in other States where studies of the problem have been made. Junior high school teachers in all districts have a higher average service than those for any other-type. The influence of professional curricula appears in the longer average services of graduates of the university colleges of education and teachers colleges. Teachers of single subjects remain in their positions for longer periods than those of subject combinations. The higher the family income the less the likelihood of many years in teaching. Teachers who live at home teach longer than those who do not live at home. Long tenure is associated with social factors that require the certainty of employment and the certainty of income which teaching affords.

2239. Walker, George J. The operation of the teachers' tenure law in a metropolitan section. Master's, 1931. New York. 56 p. ms.

A study of all the legal cases on the dismissal of teachers within the jurisdiction of the Board of education of New York city for a period of 10 years. It was found that the New York teacher-tenure provisions are well formulated. They contain all the desirable features of a tenure law that authorities on the subject recommend. They compare favorably with any of the State teacher-tenure laws which have been enacted and surpass most of them.

2240. Williams, L. W. Turnover among secondary teachers in Illinois. Doctor's, 1931. Illinois.

See also 2164, 2168, 2182, 2211, 2216, 2651.

CERTIFICATION OF TEACHERS

2241. Arant, Thomas Jesse. Certification of industrial arts teachers in the Southern States. Master's [1931]. Peabody. 98 p. ms.

Thirteen Southern States—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia—were studied; three other States—California, New Jersey, and Nevada—were set up as standards. Findings: On an average, the Southern States do not have as high requirements for the certification of industrial-arts teachers as the three States set up standard.

2242. Baldwin, Edward B. A study of the certification of teachers. Master's, 1931. Peabody. 120 p. ms.

Trend of thought for the past 30 years, as found in available literature, is compared with actual practice on certain problems of certification. A complete and extensive annotated bibliography was compiled.

2243. Bockmon, Ruth McChesney. History of the certification of teachers in Kentucky. Master's, 1931. Chicago. 120 p. ms.

A study of State legislation relative to teacher certification from initiation of the department (1838) to the present. Findings: (1) Certification authority has shifted gradually from local area to a central agency for the State; and (2) upward trend in requirements for training is noted.

2244. Burkman, Joel Andrew. Teachers' permanent certificates and professional growth. Doctor's, 1931. California. 168 p. ms.

The study answers the question: What should be the policy of the States in granting teachers' permanent certificates? Findings: The purpose of certification is that teachers be properly qualified; therefore, multiplicity of bases upon which issuance is made is unwarranted. Since there is no effective assurance that professional improvement be carried on after granting a life diploma, teachers' certificates should be granted for limited periods. The duration of teachers' certificates should be limited to three years. The States would not be imposing an unreasonable burden if they required the earning of two units of credit annually for the renewal of teachers' certificates.

2245. California. State department of education. Regulations governing the granting of State teachers' credentials and county certificates in California. Sacramento, 1930. 73 p. (Bulletin no. H2, rev. September 1930.)

2246. Cushing, Herbert L. The certification of teachers in Nebraska. Master's, 1930. Nebraska. 180 p. ms.

A study of certification procedures and criteria in various States, including opinions from deans of teachers colleges and city and county superintendents.

2247. Horne, James A. Certification of graduates of the school of education of the North Dakota agricultural college as high school teachers in the Western States. Master's, 1931. N. D. Agr. Coll. 40 p. ms.

2248. Mahood, Samuel C. A study of state certification requirements for teachers in evening industrial (Smith-Hughes) schools throughout the United States. Master's, 1930. Penn. State. (For abstract see no. 714.)

The questionnaire method was used in this study, supplemented by a study of official records, reports, and requirements as set forth by the various States.

2249. Miller, Frank Myron. A study of the certification of teachers in the State of California, 1849-1880. Master's, 1931. Stanford.

2250. New York (State) Education department. Certification and training of vocational teachers, supervisors and directors, industrial and practical arts teachers and guidance teachers. Albany, N. Y., University of the State of New York, 1930. 29 p. (University of the State of New York bulletin no. 958, October 15, 1930.)

2251. Peyton, Warren. Certification of teachers, superintendents, and supervisors in Kentucky. Frankfort, Ky., State department of education, 1930. 178 p. ms.

A study to determine past and present practices in granting certificates, giving number, kinds, validity, and basis of certificates now in effect and reporting findings and recommendations for the future.

2252. Virginia. State board of education. Regulations governing the certification of teachers in Virginia. Richmond, 1931. 14 p. (Bulletin, State board of education, vol. 13, no. 4, January 1931.)

2253. Wisconsin teachers association. Report of committee on certification, 1930.

C. A. Bowman, chairman.

An exhaustive study of certification channels in Wisconsin, a digest of developments in other States, and an outline of a plan for remedying existing conditions.

2254. Zaugg, Walter Albert. Permanent certification of teachers: its influence on improvement of instruction. Doctor's, 1931. New York. 181 p. ms.
- A study of State laws and departmental regulations governing the granting of permanent certificates with their relationship to professional growth of teachers. Findings: permanent certification, unrestricted as to in-service professional growth, is incompatible with present-day educational philosophy and practice. A form of restricted permanent certification is proposed contingent upon evidences of professional growth.
- See also 2016, 2033, 2182, 2194-2195, 2249, 2840.

IMPROVEMENT OF TEACHERS IN SERVICE

2255. Bowen, Diana. In-service training of junior high school teachers. Master's, 1931. Rutgers. 149 p. ms.
2256. Bryant, George B. The status of county teachers' institutes in Ohio. Master's, 1931. Ohio. 112 p. ms.
- From a study of 88 counties in Ohio, it was found that the county institute is functioning in Ohio to-day as a means of developing professional solidarity and inspiration.
- *2257. Conger, Napoleon. Professional adjustment service rendered by teacher training institutions. Doctor's, 1930. T. C., Col. Univ. Durant, Okla., Southeastern State teachers college, 1930. 190 p. (Southeastern State teachers college contribution to education, no. 2.)
- The purpose of the study was to investigate the nature and extent of systematic service which teacher-training institutions are rendering their graduates, and to formulate a professional adjustment service program for state normal schools and teachers colleges.
2258. Cooper, Lewis Briscoe. Sabbatical leave for college teachers. Doctor's, 1931. Cincinnati. (For abstract see no. 698.)
- The three major problems of the study relate to: (1) The several essentials and techniques of administering sabbatical leave; (2) the status of the teacher on such leave; and (3) the work of agencies seeking to extend the practice to more institutions and teachers. Institutions were classified according to their sabbatical-leave practice: (1) Those which grant leave with pay as a regular practice; (2) as an irregular practice; and (3) institutions which do not grant leave with pay.
2259. Jenkins, Albert. Sabbatical leave of absence in secondary schools. Syracuse, N. Y., Syracuse university, 1931.
2260. Massachusetts. Department of education. [Improvement of the teaching service] Boston, 1931. 3 p. ms.
- This study answers the question "Does your town or city have a regulation requiring experience as a qualification for the employment of teachers in your school system?" Data are also given concerning the employment of married women as teachers and the number of installments in which teachers salaries are paid.
2261. Shanks, James L. Encouragement given Oklahoma high school teachers for summer school attendance. Master's, 1931. Peabody. 64 p. ms.
- A study of 110 high schools in the State of Oklahoma and of the teacher-training colleges in that State. Findings: (1) The superintendent of schools, in 85 per cent of the cases, is responsible for the encouragement given teachers for summer-school attendance; (2) teachers in 50 per cent of the high schools are required to attend summer school at least once in three years; (3) officials of 90 per cent of the high schools check teacher's summer school record; (4) in 79.1 per cent of the schools increased wages are given to the teachers for increased college training; (5) immediate financial reimbursement seems to have a negative effect upon teachers' summer school attendance, and the teacher-training colleges encourage teachers to attend summer school by offering a diversified program, with special educational and recreational courses for teachers; by attempting to reduce living expenses in the community near the college to the teacher's ability to pay; and by permitting the teachers to obtain or complete requirements for certificates and degrees.
2262. Skogberg, Violet E. The in-service education of teachers. Master's, 1931. New York. 87 p. ms.
- A study of the literature and statistical material on in-service education of teachers.

2263. Spickard, *Ragnella and Coon, Beulah I.* A study of a plan of training home economics teachers in service based on a study of teachers' difficulties. Washington, D. C., U. S. Government printing office, 1931. (U. S. Federal board for vocational education.)

See also 1533, 2189, 2244, 2827.

RATING OF TEACHERS AND PROGNOSTIC TESTS

2264. Bowman, Earl C. Problem of the early prognosis of teaching success. *Educational administration and supervision*, 17: 95-102, February 1931.

2265. Campbell, Charley. High school student rating of teachers. Master's, 1931. Colorado.

2266. Carter, William Windom. Student-teacher rating vs. supervisor-teacher rating. Master's, 1930. Indiana. 169 p. ms.

In a study of teacher rating to determine how much agreement there is between the ratings given teachers by students and by supervisors, 26 superintendents and principals of Indiana and Florida schools assisted in getting student and supervisor ratings of teachers. One hundred and twenty-one teachers were rated, 5,000 students participating in the ratings. The subject taught seemed to have little effect upon divergences between student and supervisor ratings.

2267. Coombs, P. H. A contribution to the prediction of teaching success. Master's, 1931. Colo. St. T. C.

2268. Curtis, Marie Elyce. Can teaching success be predicted? Master's, 1931. Stanford.

2269. Drury, James C. Student evaluation of instruction, School of commerce, New York university. Master's, 1931. New York. 59 p. ms.

Four hundred and fifty students were asked 40 questions concerning the teacher and his methods. Each question was answered five times, once for each of the five different classes, a total of 2,250 comments. Findings: Students found the instruction to be satisfactory.

2270. Evans, James W. The prediction of college marks and probable teaching success of 100 women student teachers. Master's, 1931. Kans. St. T. C. Pittsburg.

2271. Joyner, Schuyler Colfax. Prognostication of students' success in school and teaching. Master's, 1931. Southern California. 65 p.

A study of the correlation between scores received on the graduate education aptitude test by 499 graduate students in education and various other measures such as school marks, amount of graduate study, salary, type of teaching position, age, and years of experience.

*2272. Kriner, Harry Luther. Pre-training factors predictive of teacher success. Doctor's, 1931. Penn. State. State College, Pennsylvania state college. 1931. 91 p. (Penn state studies in education, no. 1.)

Bibliography: p. 88-91.

The problem of this study was to find the relation of teacher success to a number of factors in evidence before entrance to professional training. The teachers used in the study were selected by the superintendent in each system on a general success basis. Data were secured through a personal interview with each teacher used in the study.

2273. Leonard, Edith Marion. The selection of prospective teachers. Master's, 1931. Claremont.

2274. Ludeman, W. W. What college freshmen think of their high school teachers. *School executives magazine*, 50: 527-28, July 1931.

Questionnaires were sent to 500 college freshmen, with possible weaknesses and strengths of their high-school teachers listed, and freshmen were asked to mark the weaknesses and three strengths.

2275. McLaughlin, James Orr. A case study of teachers judged successful and non-successful. Doctor's, 1931. Stanford. (For abstract see no. 717)

This study aimed to discover if traits and abilities present in youth contribute to the making of successful teachers and if they can be employed for prognostic purposes. A study was made of 98 successful and 16 unsuccessful teachers who had taught at least two years, and upon whom three independent ratings were available. Data indicate that the qualifications for teaching are largely functional and can be stated in a few requirements.

2376. Mahan, Harriet S. The validity and reliability of four teaching aptitude tests. Master's, 1931. Colo. St. T. C.

The purpose of the study was to discover which one of four teaching aptitude tests contributes most to prediction of success in student teaching, and whether any of the four contributes enough to justify its addition to the battery of tests given to students entering Colorado State teachers college.

2277. Masters, Harry V. and Upshall, C. C. An empirical evaluation of certain formulas for prediction of success in normal school. Bellingham, Washington state normal school, 1931. 13 p. ms. (Bureau of research studies, no. 5.)

Available data on students at the State normal school, Bellingham, were analyzed to determine the best formula for prediction of success in normal school. Data indicate that first-quarter grades of boys may be predicted with an accuracy 33 per cent better than chance, and first-quarter grades of girls with an accuracy 22 per cent better than chance.

2278. Moran, Mary Elinor. Construction of three tests designed to measure certain poetry aptitudes of teachers of English at the high school level holding A. B. or B. S. degrees or better. Doctor's, 1930. Indiana. 248 p. ms.

The study purposes to construct and standardize three tests: Test A, a measure of the emotional reaction to the rhythm of poetry; test C, a measure of sensuous imagery reactions to word suggestion; and test D, a measure of the ability to infer the meaning of unusual or unfamiliar words from their poetic context when the meaning is definitely implied. When the tests were given to a group of English teachers it was found that the tests had diagnostic value in revealing the varying degrees of ability of response of teachers of English to the fundamental materials of poetry such as rhythm, the music of poetry, sensuous imagery, and meaning of unusual and unfamiliar words as shown by their context.

2279. Bemmers, H. H. Departmental differences in the quality of instruction as seen by students. *School and society*, 30: 332-34, September 7, 1930.

The study is based on the average ratings at Purdue university by schools or departments on the Purdue rating scale, given by students. From the standpoint of the student, data show that: Departmental as well as individual instructor patterns of teaching personality exist; desirable traits tend to vary together within a given department, but the variations from trait to trait given within a given department are likely to be insignificant; and that interdepartmental variations are quite extreme and point to considerable differences in teaching effectiveness.

2280. Schalm, Paul. The value of mental and social intelligence ratings in the prediction of teaching success. Master's, 1931. Michigan.

2281. Upshall, C. C. and Masters, Harry V. An evaluation of certain tests and information for predicting success in normal schools. Bellingham, Washington State normal school, 1931. 12 p. ms. (Bureau of research studies, no. 4.)

The problem of this study was to evaluate certain tests and information for the purpose of predicting: Average first-quarter grades, average grades during the whole undergraduate period, practice teaching success, whether or not the student will graduate, whether or not the student will receive a position through the appointment bureau of the normal school, and success in teaching in the field during the first semester after graduation.

2282. ——— Prediction of first quarter success among normal school students. Bellingham, Washington State normal school, 1930. 11 p. ms. (Bureau of research studies, no. 1.)

The scores of seven entrance tests and age at high-school graduation were used to find a regression equation by means of which first-quarter grades might be predicted. Only two of the tests, the Thorndike intelligence examination for high-school graduates, part I, and the history-test had enough beta weight to be retained in the final regression equation.

2283. **Watson, Mrs. Gladys Hipple.** An exploration of some possible areas of difference between students for whom predictions of outstanding success or failure are made. Doctor's, 1931. T. C., Col. Univ.

The study aims to answer the questions: How can success or failure in the teaching field be predicted? Are existing personality or vocational tests of value? Are there constant differences between successful and failing teachers which can be measured by tests now in use? Are these, if they exist, differences of intelligence; of personality; of interests; of scholastic ability; of liberalism versus conservatism; or of characteristic responses in various teaching, administrative, and blocking situations? A personality study was made of 58 students at Teachers college, of whom 39 were in the success and 19 in the failure group. There seems to be no pattern which is universally characteristic of the superior group to the exclusion of the failure group and no pattern peculiar to the less able group.

2284. **Whitney, F. L. and Hertzberg, O. E.** Professional aptitude test for elementary and junior high school teachers. Greeley, Colorado State teachers college [1931].

A standard test predictive of teaching success is here in the making. High coefficients of reliability have been secured.

2285. **Zartman, Edna Louise.** The relation between academic status in college and success in teaching. Master's, 1931. Wisconsin.

See also 2164.

TEACHER LOAD

2286. **Abraham, Richard L.** Program problems and practice in senior high schools of San Francisco. San Francisco, Calif., Public schools, 1930.

During the fall term, 1929, a study of teacher-load in all the senior high schools of San Francisco was made. The primary objectives of the investigation were to determine the median instructional load of senior high school teachers, and to furnish a basis upon which comparisons could be made among the several schools and departments.

2287. **Bennett, G. Vernon and Hull, Osman E.** Elementary school teachers activities. A survey made for the Los Angeles City teachers club. Los Angeles, Calif., Los Angeles City teachers club, 1931.

This study of the teaching load covers a field of educational endeavor, which, up to the present, has not been critically analyzed.

2288. **Blair, Stephen Henry.** The teacher's load in the Hattiesburg, Miss., junior high school. Master's, 1931. Peabody. 51 p. ms.

Data were secured in the Hattiesburg, Miss., junior high school, during the school year 1930-31, by obtaining from the teachers an account of the time spent daily in: (1) Teaching and allied activities; and (2) extra-instructional activities. Findings: (1) Teachers in the Hattiesburg junior high school spent on an average 589.7 minutes, or 9.8 hours, each day in all activities, teaching or other allied activities; (2) 704.1 was the average number of pupil clock-hours per week per teacher; (3) 21.8 minutes was the total average time spent by the teachers in daily preparation for all classes; (4) 2.3 different preparations were made daily by each teacher; (5) the teacher's load was affected by many items which can not, at present, be measured, such as subjects taught, number of fields in which teaching was done, amount of teaching done in major and minor fields, and experience of the teacher; and (6) the teaching loads were not equalized.

2289. **Bouelle, Frank A. and Evans, Frank O.** Teacher load and size of classes in the senior high schools of Los Angeles as shown by the headship reports of October 1930. Los Angeles Calif., City schools, 1930. 14 p. ms.

2290. **Briggs, Charles W.** Subject combinations in high school teachers' programs. Master's, 1931. Iowa. 52 p. ms.

2291. **Brown, Harold Clinton.** Factors, formula, and devices used in computing and lightening the teaching load. Master's, 1931. Nebraska. 108 p.

Study of available literature on the subject and questionnaires from 106 schools in Nebraska. The factors, formula, and aids now used by Nebraska superintendents, were determined.

2292. **Chapman, Harold B.** Pupil-teacher ratio report. Baltimore, Md., Department of education, 1931. 11 p. ms.
A scientific study of the ratio of pupils to teachers in the several types of schools.
2293. **Chase, Vernon E.** Pupil membership and teaching load in 12 Michigan cities. Dearborn, Mich., Fordson public schools, 1930. 7 p. ms. (Bulletin, no. 53.)
Shows membership, number of teachers, per cent distribution of pupils, and teaching load in kindergarten, elementary grades, junior high school, senior high school, and special classes.
2294. **Christensen, A. M.** High school teacher's load. Schoolmasters club of Western Minnesota. Moorhead, Minn., State teachers college [1931]. 10 p. ms.
2295. **Evans, F. O.** Studies of teacher load and size of class. Los Angeles, Calif., Public schools, 1931. 35 p.
2296. **Ketring, W. H.** Combinations of subjects taught by high school teachers in Illinois. St. Louis, Mo., Washington university, 1931.
2297. **Lee, J. Murray.** A study of teacher-load in junior and senior high schools. Burbank, Calif., City schools, 1931. (For abstract see no. 717b.)
The study included the average teaching-load in the junior and senior high schools, the average load by departments, the teaching-load carried by each teacher, and an analysis of the extracurricular and community activities of each teacher.
2298. **Morley, Alonzo J.** Amount of teaching load devoted to extracurricular activities in Utah senior high schools. Master's, 1931. Brigham Young. 119 p. ms.
A questionnaire study resulting largely in a survey of present conditions.
2299. **Pearson, Eugene L.** A study of the teaching load in the Kentucky public high schools accredited by the Association of colleges and secondary schools of the Southern States for the year 1928-1929. Master's, 1930. Kentucky. 38 p. ms.
A study of the important phases of the teaching load of high school teachers in 80 public high schools of Kentucky, which were accredited by the Association of colleges and secondary schools of the Southern States in 1928-29.
2300. **Perry, Arthur L.** A study of teacher load in elementary and junior high schools in New Jersey. Rahway, N. J., Public schools, 1931. 40 graphs and supplementary material.
2301. **Phillips, K. J.** Relationship between training and teaching combination of the high school teachers of the State of Iowa. Master's, 1931. Iowa. 124 p. ms.
2302. **Reading, Pa. Public schools.** Teacher-load study, secondary schools - 1931. 21 p. ms.
2303. **Scroggs, Schiller.** Service loads of the faculty. Stillwater, Okla., Oklahoma agricultural and mechanical college, 1931. 38 p.
Observes the trend of service loads at Oklahoma agricultural and mechanical college. Service report was filed by each instructor containing detailed statement of services of all types. These data were tabulated and status and trends observed. Findings: (1) Large reduction in service loads since 1929; (2) reduction effected through elimination of extreme overloads; (3) some overloading still exists; (4) increase in total load of 1,000 student clock hours and 500 clock hours of teaching; (5) 34.8 per cent increase in time instructors are called upon to give to administrative work; (6) too many classes enroll fewer than six students.
2304. **Strong, William H.** Number and combinations of subjects in programs for teachers in accredited public non-north central high schools of Michigan for the first semester of the 1929-30 school year. Master's, 1930. Michigan.

2305. Waterman, Ivan R. Teaching load in San Francisco junior high schools, spring semester, 1929-1930. San Francisco, Calif., Public schools [1930.]

The teaching loads in the junior high schools on the bases of number of periods taught per week and number of pupil periods per week were tabulated for each junior high school teacher. Averages for subjects and for schools were computed.

2306. Whiteneck, Hosea A. Yard duty schedules. Long Beach, Calif., City schools, 1931.

2307. Whitney, Charles Sumner, jr. The teaching load of senior high school teachers in Oklahoma. Master's, 1931. Oklahoma. 56 p. ms.

The study included 2,661 teachers in 666 different schools. The schools were divided into four groups on the basis of the number of full-time high-school teachers employed. Findings: In practically all factors of the teaching load the small schools compared unfavorably with the larger schools; there was an uneven distribution for any factor of the load in any particular group of schools; it seems impossible for very small schools adequately to control some factors of the teaching load; in the large schools it is possible to regulate and in most cases to equalize the load.

See also 2164, 2189, 2219; and under Class size.

TEACHER SUPPLY

2308. Anderson, E. W. Supply and demand in teaching. 1930. Ohio State university, Columbus.

The study deals with the supply and demand in all fields of high-school teaching in Ohio for the year 1929-30. A general oversupply of trained high-school teachers was found, but definite shortage in several fields of teaching exists.

2309. Bowman, Earl C. and others. Teacher demands in Indiana. 1931. DePauw university, Greencastle, Ind.

2310. Brenholtz, Harold. Population as a potential factor in the need for teachers for secondary schools of a State, with special application to California and Texas. Doctor's, 1931. California. 80 p. ms.

The analysis of population statistics available was used to select factors or trends which may be used in determining the number of secondary-school teachers which will be needed for a State at a future time. Findings: There is a high correlation between total population and number of pupils of secondary-school age. Predictions of secondary-school population will be about as accurate as prediction of the total population, but not more so.

2311. Clement, Mrs. Evelyn. Supply and demand of teachers in California. Sacramento, Calif., State department of education, 1931. 47 p. ms.

A study of teachers certificated in California, 1920-1930, and of teachers employed in California, 1930-31. The oversupply of teachers in the State continues, but it is less serious than in the previous year.

2312. Colvert, Clyde C. Demand and supply of high-school teachers in Arkansas. Master's, 1930. Arkansas. 83 p. ms.

A study of the sources of supply and academic preparation of 538 new full-time teachers employed in the Arkansas high schools during the school year 1929-30. Findings: The supply of available high-school teachers holding a college degree for the school year 1930-31 will exceed the demand by approximately 169 teachers. The greatest surplus of teachers will be in the fields of English, science, social science, home economics, and Latin.

2313. Eliassen, R. H. Bibliography in supply and demand of teaching. 1930. Ohio State university, Columbus. Educational research bulletin, 9: 455-73, November 5, 1930.

A summary of all information found in studies of supply and demand up to November 1930. The bibliography lists 119 studies and magazine articles, each carefully annotated.

2314. Foster, I. Owen, chairman. A study in teacher supply and demand in Indiana. Bloomington, Ind., Bureau of cooperative research, Indiana university, 1930. 77 p. (Bulletin, vol. 7, no. 1, September 1930.)

This study purposed to find out how many and what kinds of teaching positions exist in Indiana; to learn to what extent the various positions are modified annually; to find out to what extent the teacher-training institutions of the State meet the demands of the State; and to discover what adjustments in enrollments, guidance, etc., may be suggested by a more thorough knowledge of demand and supply.

2315. Huffaker, C. L. Teacher supply and demand in Oregon. Eugene, University of Oregon, 1931. p. 99-156. (University of Oregon publications, vol. 2, no. 5, January 1931.)

2316. Jeep, H. A. Teacher supply and demand in Iowa. Doctor's, 1931. Iowa. 929 p. ms.

2317. Ohio education association. Demand and supply of elementary teachers in Ohio for the year 1929-1930.

2318. Oregon. State department of education. A study of teacher supply and demand and teacher training in the State of Oregon. Salem. [1931.]

This study embraces all teachers, both elementary and high school, and all the various aspects of their training and experience.

2319. Whitney, F. L. Teacher demand and supply in the public schools. Greeley, Colorado State teachers college, 1930. (Education series, no. 8.)

This survey repeats Buckingham's procedures of 1926 in his Ohio check of the demand for and the supply of public-school teachers.

*2320. Zeigel, William Henry, jr. Some factors affecting teacher supply and demand in Missouri. Doctor's, 1930. Missouri. Columbia, University of Missouri, 1930. 62 p. (Abstract.)

Published later as University of Missouri bulletin, vol. 32, no. 33. Education series, no. 32, November 20, 1931.

The purpose of this study was to bring together as many facts bearing on the general problem of teacher supply and demand in Missouri as time, finances, and available State records permit. The study is concerned primarily with the status of both experienced and inexperienced public-school teachers in Missouri who taught in 1929-30, excepting the teachers of Kansas City and St. Louis.

See also 2164.

TEACHERS' PENSIONS

2321. Carroll, Hardy Abram. North Carolina public school teachers' retirement system. Master's, 1931. North Carolina. (For abstract see no. 710.)

This study gives a brief history of pension and retirement systems; it contains a list of the outstanding needs of North Carolina and the children and the teachers of the State for a retirement system; defines certain basic principles underlying a sound retirement law; and includes a retirement plan, based on those principles, for the public-school teachers of North Carolina.

2322. MacDonald, Elihu. The constitutionality of teachers' pension legislation. Master's, 1931. Washington Univ.

2323. National education association. Research division. Current issues in teacher retirement. Washington, D. C., National education association, 1930. 65 p. (Research bulletin, vol. 8, no. 5, p. 222-87.)

2324. ——— Flat-rate and per cent-of-salary retirement systems. Washington, D. C., National education association, 1931. 10 p. (Studies in State educational administration, no. 7.)

2325. Povenmire, Mahlon A. A study of the age, salary, prior service and deposit of the teachers in the State teachers retirement system of Ohio. Master's, 1931. Ohio. 70 p. ms.

The data were a Hollerith card for each of the 47,048 members of the State teachers retirement system on August 31, 1928. Findings: The larger cities as measured by the number of teachers employed had the highest index rating in each of the criteria.

2326. Utah educational association. [Data received from questionnaire no. 33 relating to group insurance.] 1931. 1 p. ms.

By D. W. Farnitt

2327. Whittet, Gladys. A proposed retirement system for teachers in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

This study gives a detailed analysis of the arguments advanced in favor of teacher-retirement systems; a history of the teacher-retirement system movement in the United States; and a detailed study of each of the teacher-retirement systems in the United States showing which provisions have stood the test of time and are still in use in addition to those that have been considered undesirable or impractical and are no longer in use.

See also 2164, 2182, 2189.

TEACHER'S PERSONALITY AND HEALTH

2328. Conner, D. O. Mortality and morbidity of Ohio teachers. Master's, 1931. Ohio. 186 p. ms.

2329. Denver, Colo. Public schools. Sick leave with full pay as provided in the Denver public schools. 1931. ms.

Five days per year are allowed with pay for sick leave. The five days are cumulative so that what is unused remains for later years. The study included such items as number of days used on the average by employees, cost of sick leave, cost of paying substitute teachers for those taking sick leave; also leaves of absence for sickness.

2330. Goodfellow, L. L. The relation of scholarship and personality traits to interest in teaching. Master's, 1931. Penn. State. 40 p. ms.

A study based on tests administered to 146 members of the class of 1932 at Pennsylvania State college and to 26 other senior students who were about to do student teaching. One part of study applied regression equation technique to determine relative weight of certain factors in scholarship, the other part showed relation of scholarship to certain personality traits as measured by personality inventories. In personality traits, students interested in teaching excel in moral attitudes, sympathy, responsibility; but the less interested students excel in appearance, conversation, and disposition.

2331. Goss, Amy Middleton. A suggested course in reading to be used in connection with personality training of prospective vocational teachers. Master's, 1931. Iowa St. Coll. 134 p. ms.

2332. Munson, W. B. Absence of teachers on account of illness. Fresno, Calif., Public schools [1930].

This study was made to determine the amount of absence of teachers on account of illness, the proportion of teachers absent, the length of absences, and the days of the week on which absences most frequently occur. A total of 37.3 per cent of 480 teachers were not absent on account of illness. Average absence was 2.92 days per teacher.

2333. Rudisill, Mabel. Personality and teaching success. Doctor's, 1931. Wisconsin.

See also 2157, 2164, 2189, 3547.

TEACHERS' SALARIES

2334. Bowles, Rosewell P. The operation and effects of a single salary schedule. Doctor's, 1931. T. C., Col. Univ.

The problem was to determine what changes had occurred in the teaching corps of a city school system since the single-salary schedule went into effect; also, if possible, to show how the schedule had operated to produce such changes. Findings: The single-salary city was found to be consistently superior to the regular-salary city when detailed comparison was made. In this case the single-salary schedule was meeting the claims made for it.

2335. Bradshaw, C. F. Factors influencing salaries in the public high schools in Oklahoma. Master's, 1931. Chicago. 150 p. ms.

The salaries for 1927-28 were studied in relation to the source of degree of teacher, amount of college training, use of special college training, experience, tenure, teaching load, and sex. Findings: Variations in salary were marked in relation to where the teacher secured college training; also marked salary variation was found relative to gross amount of college training. Experience and tenure affect salary variation in a limited degree. Use of collegiate specialization in teaching is associated with appreciable higher salaries. Sex shows the usual marked salary discrimination. Teaching load, and departmental assignment have little traceable influence on salary variation when large groups of mixed teachers are considered.

2336. Cincinnati, Ohio. Public schools. A study of the cost of teachers salaries in the Cincinnati public schools. 1931. 26 p. ms.

2337. Denton, John Newman. Teacher-salary practice in Georgia. A statistical study. Monroe, Ga., Research council of Georgia association of superintendents of Georgia education association, 1931. 17 p.

A questionnaire was sent to 215 independent school systems of Georgia asking for detailed information concerning the training, tenure, and salary of each teacher. The study was made to determine the relation between training, tenure, and salary. Data indicate that high-school teachers are paid far better salaries than elementary teachers, in proportion.

2338. Denver, Colo. Public schools. Analysis of salary expenditures, junior high schools, March 17 to 21, 1930. 1931. ms.

The costs were computed for instruction, student activities, counseling, school administration, unassigned time and miscellaneous activities for all junior high schools in terms of teachers' and principals' salaries in the schools studied.

2339. ——— Single salary schedule as it has operated in Denver. 1931. ms.

The study gives average salaries, minimums and maximums, and amounts of salary bills from 1919 to 1931 inclusive. It shows also for these years numbers receiving increases, total amount of increases, and average increase per teacher. The report includes a comparison of number of teachers having A. M. and A. B. degrees, two years of college work, high-school graduates, etc. in 1920 and 1930.

*2340. Dix, Lester. Economic basis for the teacher's wage. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 114 p. (Lincoln school research studies.)

In an attempt to answer the question "What average wage for teachers would be justifiable from a purely economic point of view" a study was made of modern literature of economics; the history of teachers' wages; literature and statistics of intelligence testing in the army, in colleges, normal schools, high schools, and among teachers; and statistics of wage and income distribution. Findings: Data indicate that there should be a revaluation in the minds of the profession and the public of the native intelligence of actual teachers; a raising and enforcement of standards of training and requirements for teachers; planning the admission of candidates for teacher-training in relation to the needs and wide dissemination of information as to the economic situation of the profession; the widening of occupational opportunities for women; extension of publicly supported vocational training in other occupations than teaching and clerical service; and increased study of the possibilities of bringing about a more justifiable distribution of income.

2341. Elsbree, Willard S. Teachers' salaries. New York City, Teachers college, Columbia university, 1931. 286 p.

2342. Field, W. E. and Johnston, O. T. Teachers' salaries in the Los Angeles city elementary and high school districts. Report on a survey of salary schedules for the teaching, supervisory, and school administrative personnel authorized and ordered by the Los Angeles city board of education. Los Angeles, Calif., City schools, 1931. 178 p.

The survey of salaries of the teaching, supervisory, and administrative personnel in the Los Angeles public-school system was made with the object of providing pertinent facts, and the conclusions toward which they lead, for the use of the Board of education in determining just and scientific salary schedules.

2343. Hall, Ortha Olive. A survey of Lawrence county comparing the salaries of rural and city teachers, state aid and non-state aid teachers, in state aid townships with state aid scale, and teachers' salaries with the salaries paid in other occupations. Master's, 1930. Indiana. 103 p. ms.

Data indicate that rural teachers are paid less than city teachers and are without employment for a longer period of time; teachers in state-aid units receive less than teachers in nonstate-aid units; the average salary for all teachers in state-aid units is higher than the scale for receiving state aid; elementary teachers are paid higher in proportion to training than high-school teachers; many high-school teachers receive less salary than the scale; salaries received by most of the employees in other occupations are higher than those of both the rural and city teachers, and of the state-aid and nonstate-aid teachers.

2344. Hughes, W. Hardin. Making the salary survey continuous. Pasadena, Calif., City schools, 1931.

2345. ——— Relation of teachers' salaries to expenditures—special reference to Pasadena. Pasadena, Calif., City schools, 1931. Pasadena teachers magazine, June 1931.

2346. Kenney, Charles Edwin. State legislation affecting teachers' salaries in the United States. Master's, 1931. Peabody. 126 p. ms.

2347. Koehler, Albert. Status of high school teachers' salaries in Indiana. Master's, 1931. Ind. St. T. C. 39 p. ms.

Different geographical sections of Indiana were compared; sexes were contrasted and compared; and cities versus rural sections were studied. Findings: High-school teachers in eastern section are lowest paid; men are paid higher than women; range is \$900-\$3,750; cities have higher mean than respective geographical section.

*2348. Magee, Herman J. Unit costs of salary in state normal schools and teachers colleges. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 75 p. (Contributions to education, no. 489.)

In this study an attempt has been made to find a practical cost unit whereby expenditures for salaries may be related to the number of individuals served and types of service offered; to use this unit in an analysis of salary expenditures in selected teacher-training institutions and compare salary costs for general overhead, college instruction, and training school instruction; to find unit costs of instructional salaries for curricula of different types and length; to discover the relationship of unit salary costs and differences in enrollment and in the number of curricula offered; to recommend an adequate method of obtaining salary costs for state teacher-training institutions. Data were secured from eight state normal schools and eight state teachers colleges for the second semester of 1928-29. They were located in four different States, widely distributed geographically and representing different types of organization. Data were treated statistically. The correlation results obtained, when the various costs of institutions offering a varied number of curricula were compared, indicate that schools having the more differentiated programs tend to increase the percentage of the budget given to college instruction and decrease the percentage of the budget given to training-school instruction; they increase both the gross expenditures and standard credit costs for total salaries, general overhead, and college instruction.

2349. Manning, Lionel Walter. The interrelation of teacher-training salary schedules, state certification, and advancement of method for industrial arts in the secondary schools. Master's, 1931. Oreg. St. Agr. Coll. 67 p. ms.

2350. Munzenmayer, Lester H. Greater equalization of educational opportunity through a salary schedule. Doctor's, 1931. Ohio.

Pertains to conditions in Ohio rural schools and cities under 75,000 population.

2351. National education association. Research division. Salaries in city school systems, 1930-31. Washington, D. C., National education association, 1931. (Research bulletin, vol. 9, no. 3, p. 160-227, May 1931.)

2352. ——— Special salary tabulations. Tabulations I-A-V-A, Salaries paid teachers, principals and certain other school employees, 1930-1931. Washington, D. C., National education association, 1931. 5 pts.

2353. ——— Special salary tabulations. Tabulation I-B-V-B, salaries paid school administrative and supervisory officers, 1930-1931. Washington, D. C., National education association, 1931. 5 pts.

2354. ——— Staffs and salaries in state departments of education. Washington, D. C., National education association, 1931. 61 p. ms. (Studies in state educational administration, no. 9.)

2355. ——— Department of superintendence and Research division. Preliminary figures on classroom teachers' salaries, 1930-1931, in 86 large cities. Washington, D. C., National education association, 1931. 7 p. (Educational research circular, no. 3, March 1931.)

2356. Osburn, W. J. A study of teachers' salaries. Columbus, Ohio, State department of education, 1931. ms.

2357. Rutledge, R. E. Report on salaries of superintendents, assistant superintendents or associate superintendents, and business managers for the year 1930-1931. Oakland, Calif., Public schools, 1931. 4 p. ms.

2358. San Francisco, Calif. Public schools. Conditioned salary increase for teachers. 1931. 6 p. ms.

The present salary schedule is drawn up on a basis of three probationary years with no increase in salary, with an annual increase for each of the following 12 years. On all years after the third year, the annual increase is automatic except at the beginning of the fourth, seventh, eleventh, and fifteenth years. The schedule was so drawn up as to provide for some kind of conditioned salary increase on these years. The study is a brief outline of a plan for the conditioned salary increase.

2359. Soper, Wayne W. Average salaries of teachers in New York State, 1929-1930. Albany, New York State education department, 1931. 12 p. ms.

Analysis of statistics taken from superintendent's reports to the State education department for the year 1929-30.

2360. Starr, Russell W. A comparison of salaries of high school teachers in Iowa schools offering vocational agriculture with those not offering vocational agriculture. Master's, 1930. Iowa St. Coll. 97 p. ms.

2361. Stout, C. W. Salaries of city school superintendents of Georgia. Master's, 1931. Mercer.

2362. Utah education association. [Data received from questionnaire no. 35 relating to paying annual salaries of teachers in 12 installments.] 1931. 4 p. ms.

By D. W. Parratt.

2363. Wonders, William J. A salary schedule for smaller Colorado school districts. Master's, 1931. Colorado.

2364. Wygal, Fred Orr. An evaluation of the proposed salary schedule of Montgomery county, Virginia. Master's, 1930. Virginia.

2365. Young, Lloyd Percy. The administration of merit-type teachers' salary schedules. Doctor's, 1931. T. C., Col. Univ.

The purpose of this study was to set up standards governing the use and administration of merit rating for salary purposes; to analyze and evaluate the methods of combining merit rating with the salary schedule; and to analyze and evaluate the administration of the merit rating plan used for salary purposes. Data were gathered from a study of the educational literature on the subject; salary materials of the National education association; salary schedules, rating plans, and other data from 59 cities; and personal visitation and study of the administration of the merit-type salary schedule in nine cities in four States using that type schedule. Criteria governing the administration of merit-type salary schedules were drawn up from educational literature. The practice as reported in the 59 cities was evaluated in the light of the standards developed.

See also 2164, 2168, 2182, 2187, 2205, 2211, 2216, 2219, 2651, 3833.

HIGHER EDUCATION

2366. Armentrout, W. D., Whitney, F. L., and Woody, W. H. The college hour. Colorado State teachers college, Greeley, Colo. 11 p. ms. (Research bulletin, no. 14, 1930.)

From a study of the student body and faculty of Colorado State teachers college for the college year 1926-27, it was found that the average student in Colorado State teachers college spends practically 48 hours per week in class attendance and preparation for class work, 16 hours in class and 32 hours in preparation. Only 480 students out of 1,600 took part in this study. Comparisons are made with like studies at Vassar, etc.

2367. Ashton, John William, ed. Trends in graduate work, a program commemorating the thirtieth anniversary of the founding of the graduate college

of the State university of Iowa. Iowa City, University of Iowa, 1931. 176 p. (University of Iowa studies, Series on aims and progress of research, no. 8. New series no. 194.)

This volume is an incomplete record of the proceedings of the conference celebrating the thirtieth anniversary of the founding of the graduate college of the university. The purpose of the conference was to consider how the graduate college meets present needs and to look forward to problems and opportunities to be met in the next 30 years.

2368. Brammel, P. E. A study of entrance requirements in the University of Washington. Doctor's, 1930. Washington.

2369. California taxpayers' association. Report on University of California. An analysis of the growth of the University from 1918 to 1929 and of the unit cost of instruction during the fall and spring semesters 1928-1929. Los Angeles, Calif., California taxpayers association, 1931. 52 p. (Association report no. 2, part 2.)

Part 1 is not printed.

In this study a job analysis was made of the work of over 2,000 faculty members. Classroom attendance and grades earned by more than 20,000 students were obtained. Records of 2,538 classes, having a total enrollment of 174,168 students were analyzed. The purpose of the study of the University of California was to give information that would be helpful in its financing and management. The survey included a comparison of income and expenditures, 1918 to 1929; the financial share borne by the State for that period; the growth of the university compared with all other colleges in the State, 1918 to 1929; the unit costs of instruction, 1928-29; and the creation of a fund of data that will be useful in predicting the future growth and needs of the University.

2370. Chamberlain, Charles Edward. Budgetary accounting for the small college. Master's, 1930. Iowa.

2371. Chambers, Merritt Madison. The structure and legal status of the governing boards of state institutions of higher education in the United States. Doctor's, 1931. Ohio. 350 p. ms. (Abstract reprinted from Abstracts of Doctor's dissertations, No. 6, Ohio State university, p. 39-47.)

Includes governing boards of state universities, land-grant colleges and other state technical and special colleges, and all state teacher-training institutions above the high school level. Facts are given relative to the nomenclature and size of the governing boards; the term, compensation and methods of selection of members; and statutory qualifications for membership.

2372. Cowen, Philip A. College tuition trends. Albany, New York State education department. New York City, Science press, 1931. 4 p. (Reprinted from School and society, 33: 737-40, May 30, 1931.)

A study was made of tuition fees of 109 private and 47 public colleges and universities grouped according to endowment, enrollment, sex of students, geographical location, and tuition. Although the groups are not comparable, the relative tuition has followed similar trends in private and public colleges. Findings: Men's colleges have increased relative tuition consistently since 1920. Relative tuition, which was as high as 62 per cent in women's colleges, has had a rapid and significant decrease.

2373. Edwards, Marcia. The relation of college enrollment to economic depression in the United States, 1890 to 1930. Master's, 1931. Minnesota.

Fluctuations from the normal trend of college enrollment in 96 colleges and universities from 1890 to 1930 are compared with indexes of general business conditions for the same period. Findings: College enrollment and economic indexes have been related positively; a less-than-normal enrollment having followed a depressed economic index, in general with a lag of 1 to 3 years. Graduate school enrollment has shown the opposite tendency.

2374. Eikenberry, Amos B. A study in methods of college teaching. Master's, 1930. Ohio. (For abstract, see no. 712.)

One of three sections in a class of sophomores in general psychology was used as an experimental group, the other two sections were used as controls. Summaries of copy reading were handed in covering a total of nearly 18,000 pages of material done by 3 students. Objective tests were given during the 18 weeks in which the experiment was in progress. Comparisons were made between the three sections. With but one exception, the experimental group did better work on the tests than any of the control groups, though the difference was not great. Results were consistently favorable to the experimental group.

2375. Engelhardt, Fred. Survey of Minnesota colleges 1930. University of Minnesota, Minneapolis. 300 p. ms.

2376. Hanner, John Flint. A study of the facts involved in establishing a state university at Fresno, Calif. Master's, 1931. Stanford.

2377. Harmon, Darrell B. The business administration of the small endowed college. Doctor's, 1931. New York. 198 p. ms.

Examination of finances and methods of business administration of 171 small endowed colleges. Findings: Methods of administration must be improved before adequate financing can be secured.

2378. Herren, Joe M. Graduate schools: their present practices, policies and problems. Master's, 1931. Western Reserve. 306 p. ms.

2379. Hickman, G. E. The status of the registrar in the standard four year denominational college. Master's, 1930. Nebraska. 117 p. ms.

Based on questionnaire study of 130 small denominational colleges in all parts of the United States. A study of the college, enrollment, salaries, the registrar as an individual, preparation and rank, of the registrar, State and National associations, equipment and help in the office, duties of the registrar, etc.

2380. Hyde, Melvin W. Standards for publicity programs in state supported colleges and universities. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers College, Columbia University, 1931. 80 p. (Contributions to education, no. 506.)

The purposes of this study were to determine whether or not a state-supported college or university has a responsibility for reporting its activities to its constituents; to determine whether the responsibility for reporting is the same with regard to all activities; to indicate the most effective agencies for reporting the various types of news concerning the college or university; to present a case illustration showing the nature and extent of the gap, if any, in the reporting relationship between a State university and its supporting constituency; and to set up certain standards for publicity programs in state-supported colleges and universities.

2381. Iowa. State department of public instruction. Report of the Iowa state board of education for the biennial period ending June 30, 1930. State University of Iowa, Iowa State college of agriculture and mechanic arts, Iowa state teachers college, School for the blind, School for the deaf. Eleventh biennial report. Des Moines [1930]. 480 p.

2382. Johnson, Palmer O. Comparative allotment of funds to private and public institutions of higher learning by educational foundations. 1931. University of Minnesota, Minneapolis. 80 p. ms.

An analysis of the types of institutions that have been the recipients of funds from one of the chief educational foundations over a 7-year period. Findings: The funds of the five foundations studied are predominantly allotted to private institutions.

2383. ——— Trends in incomes and expenditures of the University of Minnesota; The relation to other State appropriations and the fiscal tendencies in other States. 1931. University of Minnesota, Minneapolis. 78 p. ms.

Analysis of trends in sources of support and the types of expenditures of the University of Minnesota over a 20-year period—similar analysis of State appropriations for other purposes. Findings: Although the expansion in university functions for all purposes has resulted in an unbroken series of increases in expenditures, no tendency appears for a reduction in the demand upon the university by the State and its citizenry. Public education, higher education, and State governmental administration have been recipients in about equal proportions of State appropriations during recent years. The states studied as an aggregate are spending more money for the operation and maintenance of institutions concerned with noncontributing elements of society than for the training of individuals in higher institutions of learning.

2384. ——— The university studies its human product. 1931. University of Minnesota, Minneapolis. 220 p. ms.

An evaluation of the University of Minnesota in terms of its former students. Findings: Former students are repaying, by social and economic service, the State that provided them their educational opportunities.

2385. Johnson, Palmer O., and Griswold, C. E. A comparative study of the incomes and expenditures of five State universities—California, Illinois, Minnesota, Ohio, and Wisconsin. 1931. University of Minnesota, Minneapolis. 115 p. ms.

A detailed analysis of the sources of income and the educational program as shown by distribution of expenditures of five comparable institutions over a 5-year period. Findings: There is a tendency towards a gradual reduction in the percentage of total income accruing from the State. Some variation exists among the institutions studied in the emphasis placed upon the different aspects of their educational programs.

2386. Jordan, Riley B. Educational opportunities in colleges and universities outside Ohio most largely attended by graduates of Ohio schools. Master's, 1931. Ohio. 236 p.

*2387. Katzin, Samuel. A comparative study of the problem of control in the administration of higher education in the United States and Europe. Doctor's, 1931. New York. 200 p. ms.

A comparative study of control of functions of university government in the following countries: United States, England, Germany, France, Belgium, Italy, and Poland. The purpose was to determine truthfulness of the criticism that American universities are governed entirely by outside agencies, while European universities are claimed to be autonomous. Findings: While legally, university control in America presents marked contrast with European universities, in actual practice neither are the American universities fully under outside control, nor the European universities under internal control. Both in America and in Europe the control of universities is mixed, possessing some of the features of internal and of external control.

2388. Larson, Emil L. Policies and practices in the granting of the master's degree in education. 1931. University of Arizona, Tucson.

2389. Lubbers, Irwin I. College organization and administration: current practices in independent liberal arts colleges. Doctor's, 1931. Northwestern.

2390. MacGregor, Jay B. The genesis and growth of the control and administration of the State university of Iowa. Doctor's, 1931. Iowa. 296 p. ms.

2391. Maine. University. A survey of higher education in Maine. Report presented October 4, 1930. 76 p. ms.

Survey conducted with advisory service of staff of higher education of Teachers college, Columbia university. E. S. Evenden, chairman.

2392. May, L. L. Trends of college entrance requirements in the Southern States. Master's, 1931. Ohio. 80 p. ms.

2393. Minnesota. University. Report of the survey commission, 12. An analysis of the growth in enrollment of collegiate students at the University of Minnesota 1920-1921 to 1929-1930. Minneapolis, 1931. 52 p. (Bulletin of the University of Minnesota, vol. 34, no. 46, August 27, 1931.)

The increase in enrollment of collegiate students of the regular academic year during the decade ending in 1929-30 represents a total of 55 per cent over 1920-21. This increase is distributed between graduate and undergraduate students in the proportion of approximately 7 to 40. The increase in undergraduate students seems to be due to a changing proportion between freshmen and upper classes. Student mortality rate has decreased. Although most of the graduate students are registered from the State of Minnesota, the proportion is significantly smaller than for the undergraduate group.

2394. Morrison, Mrs. Vera. State aid in higher education in Maryland. Master's, 1931. Maryland. 180 p. ms.

Traces the development of state aid to higher education in Maryland from 1784 to 1931. Findings: Maryland has granted state aid to higher education since 1874. In this development, the action of the State has been based on expediency rather than on a planned policy. At present the State is confronted with important problems in the support of higher education which have arisen as a result of the past history.

2395. National committee on standard reports for institutions of higher education. Suggested forms for financial reports of colleges and universities. Champaign, Ill., Flanagan-Pearson company, 1931. 58 p.

This bulletin is an effort to set up basic principles which should be followed in accounting and reporting in colleges and universities and forms of summary financial reports recommended for use in these institutions.

2396. National society of college teachers of education. Practices of American universities in granting higher degrees in education. A series of official statements collected and edited with the authorization of the executive committee of the society. By Frank N. Freeman. Chicago, University of Chicago press, 1931. 187 p. (Yearbook 19, Studies in education, 19.)

Contains an article by J. Orin Powers on The administration and requirements of the master's degree in education.

2397. New York (State) Education department. Report on higher education in the State of New York, for the school year ending July 31, 1929. In 26th annual report of the Commissioner of education of the State of New York. Albany, University of the State of New York, 1931. p. 71-117; 305-79.

2398. Oklahoma agricultural and mechanical college, Stillwater. Oklahoma agricultural and mechanical college and its services. An educational and financial accounting to the people of the State by the president and other officers of the college. Stillwater, Oklahoma agricultural and mechanical college, 1931. 259 p. (Bulletin, vol. 28, no. 1.)

2399. O'Rear, F. B. Annotated bibliographies on selected topics of higher education, especially in the fields of staff problems, student personnel problems, and finance. [1931.] Teachers college, Columbia university, New York, N. Y. ms.

2400. Oregon. Board of higher education. Biennial report . . . 1929-1930. [Salem, 1931.] 205 p. ms.

2401. Palmer, Archie M. Presidential mortality. Association of American colleges, New York, N. Y. Association of American colleges bulletin, vol. 16, no. 4, December 1930. 12 p.

Study of the college administrative changes during 1930 in an attempt to discover some explanation for the extensive replacement which has occurred in recent years through analyses of: (1) The causes behind the retirement from office of the former incumbents; and (2) the professional backgrounds and personal qualifications of the new (incoming) presidents and the considerations which led them to enter upon their new work.

2402. Pan American union. Division of intellectual cooperation. Colleges and universities in the United States having courses for the study of Latin America (taken from catalogues of 1930 and 1931). Washington, D. C., 1930. 14 p. ms.

2403. Penrod, E. B. Honorary degrees conferred by certain colleges and universities in the United States from 1921 to 1931. 1931. Hillsdale college, Hillsdale, Mich. 8 p. ma. (Hillsdale collegian, vol. 52, no. 23, p. 2, 4, March 19, 1931.)

The primary object of this investigation was to ascertain to what extent promoter degrees were conferred as honorary. Questionnaires were mailed to 8 colleges and universities in the United States. Sixteen of the institutions consulted granted no honorary degrees between 1921 and 1931. Of the 61 institutions replying to the questionnaire, 45 have conferred honorary degrees.

2404. Pettengill, T. E. An evaluation of the new entrance basis of the University of Minnesota. Master's, 1930. Minnesota.

2405. Purviance, Charles E. Higher institutions attended by recommended and partially recommended San Francisco high school graduates of 1928-1929. San Francisco, Calif., Public schools [1930].

Part 2 of the High school principals' annual reports, showing the higher institutions attended by high-school graduates.

2406. **Ratcliffe, Ella B.** Accredited higher institutions, 1929-1930. Washington, United States Government printing office, 1930. 156 p. (U. S. Office of education. Bulletin 1930, no. 19.)

*2407. **Reeves, Mildred Russell.** An analysis of the doctoral degrees conferred by New York university 1923-1929. Master's, 1931. New York. 207 p. ms.

It is the purpose of this study, through an analysis of 173 degrees, to determine whether or not the type of training which is required for the Ph. D. degree at New York university is at variance with the uses to which it is put; to undertake a comparative analysis of the policy, organization, and finished products of the graduate school of arts and sciences and the graduate school of education on one American university; and to attempt to make some estimate of the rôle played by each school in the field of graduate education at New York university.

*2408. **Russell, John Dale.** Efficiency in college management. Doctor's, 1931. Indiana. 201 p. ms.

2409. **Sherbon, Florence Brown, and Ferris, Emily.** Experience and opinions of 350 married women graduates of the University of Kansas with reference to the university curriculum and problems of the American home. Lawrence, University of Kansas, 1931. 30 p. (Kansas studies in education, vol. 2, no. 2, June 1931.)

Data were secured from 350 married women graduates of the University of Kansas to discover their opinion as to what the university contributed to the various aspects of their domestic life, to obtain their opinion as to the present needs of the American home, and their opinion as to what the university might or should contribute in the way of curriculum aids to the American home.

2410. **Singleton, Gordon G.** The survey of the Georgia normal and agricultural college, Albany, Ga. Atlanta, Georgia department of education, 1931. ms.

2411. **Stowe, A. Monroe.** Studies in collegiate education. A continuation of a bibliography of recent literature on collegiate education compiled for use in the study of American college problems of interest to college faculty members and students. Lynchburg, Va., Lynchburg college, 1931. 24 p. (Bulletin, vol. 5, no. 3, June 1931.)

2412. **United States. Office of education.** Survey of public higher education in Oregon. Washington, United States Government printing office, 1931. 298 p. (U. S. Office of education. Bulletin, 1931, no. 8.)

Survey commission: Arthur J. Klein, F. J. Kelly, George A. Works.

Findings: The State board of higher education was created with jurisdiction over the five publicly supported higher institutions of Oregon in order to unify their activities and to utilize the institutions to create a single system of publicly supported higher education in the State. Data indicate that Oregon falls below the United States as a whole in the percentages of students in graduate work, in liberal arts, and in law, and that the percentages enrolled in agriculture, commerce, business, engineering, and pharmacy exceed those of the United States as a whole.

2413. ——— Survey of state-supported institutions of higher learning in Arkansas. Washington, United States Government printing office, 1931. 139 p. (U. S. Office of education. Bulletin, 1931, no. 6.)

Survey commission: Arthur J. Klein, John W. Withers, William B. Bissell.

A study of higher education in Arkansas with reference to: (1) The nature and extent of public-school facilities provided as a basis and background for higher educational development; (2) the articulation of higher institutions with public-school development; (3) the function of the higher institutions in providing teachers for the public schools; and (4) relationships among the higher institutions themselves and with reference to the coordination of the functions they exercise other than those of teacher training.

2414. **Watson, Eleanor.** An evaluation of a college education by recent graduates of the University of Denver. Master's, 1930. Denver. 80 p. ms.

A survey of adult educational movements in general. Data were gathered from graduate students and interpreted in the light of their bearing on the problem of the continuous effect of a college education and of maintaining alumni educational relationships.

2415. Weber, C. Oliver. An experiment at Wells. The will to learn as exemplified by the reading period at Wells. *Journal of higher education*, 2: 298-304, June 1931.

In 1929-30, Wells college instituted a reading period of about two weeks, one at the end of each semester, during which time nearly all regular classes and laboratories were dismissed, the students studying independently. Judging from a minute survey of student opinion, the innovation was a great success. This conclusion is not contradicted by any other consequences, effects on grades, health, etc.

2416. West, Guy Ashley. The administration of subject A at the University of California. Doctor's, 1931. California. 170 p. ms.

A study of the extent of reliability of Subject A; the extent that objective tests can be substituted for the essay examination; the extent that instruction in Subject A actually improves the English of students; and how the Subject A program at the University of California may be improved. Findings: Reliability of the essay test in Subject A is slightly higher than that of essay tests in general but considerably lower than that of the objective-type test. The essay and objective tests measure different functions.

2417. Wilhite, Virgla Glenn. Endowment and funded income of institutions of higher learning in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Findings: Proceeds from the sale of the land, reserved by the Federal Government for the benefit of higher education in Oklahoma, are used for the maintenance of the several State schools.

2418. Wolff, Mary E. Curricular changes in six Ohio colleges since 1895. Master's, 1931. Ohio Wesleyan.

A study of changes in curricula on Ohio university, Ohio Wesleyan university, Otterbein college, Oberlin college, Miami university, and Denison university.

2419. Wright, I. M. and Boyer, Carl W. A survey of the graduates of Muhlenberg college. 1931. Muhlenberg college, Allentown, Pa. 45 p. ms.

A study undertaken to help determine Muhlenberg's contributions to the teaching profession.

2420. Young men's Christian association of the United States of America. Educational council. Tabulation of curricular work in Y. M. C. A. schools, 1929-1930. 42 p. (Educational council bulletin, vol. 1, no. 4, November 1930. Supplement, no. 1.)

This survey "tends to indicate that on the collegiate level the Y. M. C. A. is finding its largest field, outside of a few large cities, to be in serving the junior executive or technician, who does not need a complete college education for his occupation but does require the essence of a collegiate program, which is primarily technological, but includes a setting and some perspective on that section of life in which he lives and those people with whom he deals."

See also 18, 21-22, 33, 38, 41, 51, 53, 93, 127 (13), 214, 224, 245, 273, 284, 360, 362, 511, 555, 1844, 1847-1848, 1859, 1896, 1905, 1931, 1970, 1974, 1986, 2012, 2014, 2029, 2139, 2156, 2211, 2274, 2295, 2381, 3007, 3011, 3043-3044, 3046-3047, 3059, 3098, 3112, 3147, 3156, 3168, 3213, 3219, 3230, 3235, 3255, 3257, 3259, 3263, 3288, 3291-3292, 3355, 3403, 3551-3553, 3566, 3574, 3592, 3594, 3685, 3715, 3722, 3734-3735, 3738, 3751, 3762, 3790, 3810, 3834, 3963-3964, 4073, 4091-4092, 4102, 4274; and under Education extension; Educational research; Normal schools and teachers colleges; Professional education; Special subjects of curriculum.

STUDENT PERSONNEL PROBLEMS

2421. Adell, Harry Enoch. The value of homogeneity in predicting college success from high school grades. Master's, 1931. Kansas St. Coll. 29 p. ms.

A study of 116 freshmen from engineering division.

2422. Andersen, Holger. Record of honor scholarship students in the University of Wyoming. Master's, 1930. Wyoming.

A study of the records of graduates of Wyoming high schools who have been given honor scholarships at the University of Wyoming since 1913.

2423. Baldwin, O. B. The maturation of the college student. Master's, 1930. Kansas.

2424. Barnes, Elinor J. A comparative study of the permanently employed undergraduate women in the Ohio State university. Doctor's, 1931. Ohio. 115 p. ms. (Abstract.)

The study aimed to compare the permanently employed undergraduate women students of the sophomore, junior, and senior classes at the Ohio State university with four groups of equal size of undergraduate women paired by nine criteria in order to find differences in: Economic conditions affecting home life; economic conditions affecting the student while in attendance at the Ohio State university; summer employment activities; social participation; and academic achievement and recognition; and to interpret the differences in the light of possible causes for such differences and the significance of the differences for the student herself. Data were collected from questionnaires filed upon registration and from the college offices. Findings: The permanently employed women have poorer economic background than the other women; spend less money for general expenses and clothes; tend to do the same work during the summer that they do during the school year, and their earnings are about half those of other groups; do not participate in social functions, and do slightly better academically as measured by cumulative point-hour-ratio than other groups.

2425. Baughman, Dryden. A comparative study of the scholastic record made by the freshmen classes of 1928 and 1929 in common courses in various curricula of the Alabama polytechnic institute. Master's, 1931. Ala. Poly. Inst. 30 p. ms.

A comparison of the freshman chemistry, English, and history grades of liberal arts students with the grades of professional students of equal mental ability. The findings show that professional students of below average intelligence tend to make higher grades than their equals in a liberal arts course. With the students of above average intelligence this seems to be true in a much smaller degree among certain professional groups but not among all.

2426. Beck, Hubert Park. The relation of housing to grades received by freshmen at the University of Chicago. Master's, 1931. Chicago.

A study of freshmen classes entering the University of Chicago in the autumn of 1929 and the autumn of 1930; freshmen were divided according to whether they lived at home, in dormitories, in fraternity houses, in rooming houses, etc., and differences between students in different housing groups with respect to high-school average, prognostic test, etc., were studied.

2427. Blair, Glenn Myers. The prediction of freshmen success in the University of Washington. Master's, 1931. Washington. 70 p. ms.

Findings: Freshman success can be predicted with greater accuracy by means of regressive equations than by high-school average. Correlation between these two criteria and freshman average are .553 and .514, respectively. If high-school and college marks could be made more meaningful and reliable and the intelligence test more reliable the predictive value of the regressive equation would be considerably higher than it is. The multiple coefficient would be .679.

2428. Blair, John L. Significant factors in the prediction of college success. Doctor's [1931]. Kent St. Nor. Coll.

All available data on entering students at Kent were checked against various criteria of success during the first college year of the students.

2429. Brandenburg, G. C. Successful alumni—what they do and what they think. Lafayette, Ind., Purdue university, 1930. 36 p. (Purdue university. Studies in higher education, 16, November 1930.)

A total of 232 replies to a questionnaire were returned by alumni who had graduated between the years 1887 and 1917.

2430. Breitwieser, J. V. The graduate students. School of education record (University of North Dakota), 16: 37-44, November 1930.

This is a study of the sex, age, nationality, training, and choice of majors and minors for the graduate students of the 1930 summer session; and a comparison with the 1920 summer students.

2431. Brooks, Fowler D. Practice needed by graduate students to acquire skill in statistical methods. 1931. DePauw university, Greencastle, Ind.

2432. **Camp, Dolph.** A personnel study of the graduates of Hendrix college. Master's [1931]. Peabody. 52 p. ms.

Deals with six graduating classes of Hendrix college, 1925-1930, inclusive.

2433. **Campbell, Ruth.** A study of the relationship between types of housing and academic standing of girls entering the University of Wisconsin in September 1928, for the years 1929-30. Master's, 1931. Wisconsin.

2434. **Carlson, Harold S.** Information and certainty in political opinions: a study of university students during a campaign. Iowa City, The University, 1931. 48 p. (University of Iowa studies. Studies in character, vol. 4, no. 1, August 15, 1931. New series 209.)

A rating sheet, information test, and questionnaire were given to 357 University of Iowa students at the time of the 1928 elections, to study the subjective certainty with which certain prevalent opinions were held in relation to the test knowledge of the principal facts that were supposed to be relevant to them; and to study the influence of several factors on the relationship between certainty and information.

2435. **Cederstrom, J. A.** Gains of the highest and lowest. Journal of higher education, 2: 321-25, June 1931.

A study in measuring achievement at the college level based on scores in scaled tests (A and B) given at the beginning of the course and at intervals during the course. Findings: The students having highest initial attainments in five groups in college zoology tend to make lower gains than those having the lowest attainments. In spite of their greater gains the latter group do not reach the final attainment of those having the better start.

2436. ——— Repeaters at the college level. University of Minnesota, Minneapolis. Journal of applied psychology, 15: 411-17, August 1931.

Determines achievement on basis of the gains made as shown in scores made in scaled tests (A and B) given at beginning of course and at end of the course in an elementary college zoology course.

2437. **Chauncey, Marlin Ray.** The educational and occupational preferences of college seniors: their significance for college achievement. Doctor's, 1931. T. C., Col. Univ.

The study is founded upon three types of data collected in the study of the relations of secondary and higher education in Pennsylvania by the Carnegie foundation for the advancement of teaching in cooperation with the joint commission of the Association of Pennsylvania college presidents and the State department of public instruction: (1) A report of the student blank secured from college seniors' answers to questions relating to special subject interests and abilities; (2) a comprehensive college achievement test giving measures of achievement for certain fields of study; and (3) a record of secondary and college credits making possible the control of the amount of training which the student had secured in a given subject.

2438. **Dalley, Jesse E.** A study of freshmen failures in college of literature, science and arts, University of Michigan, 1926-27, 1927-28, 1928-29. Master's, 1930. Michigan.

2439. **Deal, Roy W.** An attempt to improve the reading-for-study ability of college freshmen. Doctor's, 1931. Nebraska. 100 p.

A systematic practice in reading for study followed by tests of retention.

2440. **Dellinger, Martin Luther.** Freshman week in the American college. Master's, 1931. Virginia.

2441. **Douglass, Harl R.** Relation of high school preparation and certain other factors to academic success at the University of Oregon. Eugene, University of Oregon press, 1931. 61 p. (Education series, vol. 3, no. 1.)

A study of the class of 1930 of the University of Oregon to find the relation of marks in college to subjects taken in high school, to size of high school from which graduated, salaries paid teachers, American council psychology tests, high school marks in various subjects, and principals' ratings. Findings: Practically zero (partial) correlation was found between pattern of high-school studies, size of schools, or teachers' salaries, and college success. Correlation of from 45 to 54 was found on high-school marks, psychology-test scores, and principals' ratings. Multiple correlation corrected for attenuation = .75.

*2442. Drake, Charles A. A study of an interest test and an affectivity test in forecasting freshman success in college. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia University, 1931. 60 p. (Contributions to education no. 504.)

The American council on education psychological examination for college freshmen had been given to each entering freshman class of Adelphi college since 1925, and the Pressey test (parts 1 and 4) had been given each year since 1926. Data obtained were analyzed by partial and multiple correlation techniques as related to each other and to average college grades. Data indicate that by reason of the gross nature of the relationships measured by such tests, not much advance can be expected from elaborate intensive statistical analysis of measures such as these.

2443. Eurich, Alvin C. Enlarging the vocabulary of college students. 1931. University of Minnesota, Minneapolis. 8 p. ms.

An experimental study to determine whether college students enlarge their vocabularies through special drills. The experimental group made significantly greater gains than the control group.

2444. ——— A preliminary study of probation students. [1931.] University of Minnesota, Minneapolis. 32 p. ms.

A study of the character of a group of probation students. Findings: The probation students have much lower ability as measured by intelligence tests than students not on probation.

2445. ——— The reading abilities of college students. Minneapolis, University of Minnesota press, 1931. 200 p.

Studies the effect that drills in vocabulary, paragraph reading, and study have upon reading efficiency, vocabulary, marks in English, and marks in all subjects taken by the students. Findings: The results indicate that the experimental group made significant gains in vocabulary tests that overlap the training exercises. No significant gains were noted on the other tests. The conclusion is drawn that the training exercises were efficacious in producing improvement in the specific vocabulary upon which drill was given but not in general vocabulary.

2446. Ferguson, George O. Some factors in predicting academic success in the college of arts and sciences, University of Virginia. University of Virginia record extension series, Secondary education in Virginia, 12: 3-13, April 1931.

This study deals with the students who entered the college for the first time in September 1930, carried 15 hours of work, and took all their examinations at the end of the first term. Data indicate that there are no criteria which will exclude poor students without at the same time excluding good ones.

2447. Fisher, Raymond Henry. A study of the scholarship of self-supporting and working students of Stanford university. Master's, 1931. Stanford.

2448. Foster, C. E., Jr., and Dwyer, Paul S. A study of the geographic distribution of students in 363 American colleges and universities. New Brunswick, N. J., Rutgers university, 1931. 32 p. (Rutgers university bulletin, Ser. 8, no. 1, July 1931. Studies in education, no. 1.)

The 363 institutions studied enrolled 601,547 students. The criteria considered were: The number of States represented, the percentage of students from the "home State," the percentage of students from the "home district."

2449. Fox, Deyo B. The problems as measured by the Purdom diagnostic test that are associated with the successful and the unsuccessful students. Master's, 1931. Michigan.

2450. Freeman, Frank S. Predicting academic survival. Journal of educational research, 23: 113-23, February 1931.

A study of the value of the mental test in predicting length of survival in a college of arts and sciences. Findings: The test is especially valuable for the highest and lowest ranges.

*2451. Friedman, Max H. Distribution of grades in Washington Square college of New York university. Master's, 1931. New York. 36 p. ms.

A comparison of the distribution of grades with the normal distribution, and a comparison of grades given by various departments and instructors with the distribution

by the college and the normal distribution. Findings: Grades for the college are higher than they would be under a normal distribution; most of the departments vary widely from the normal distribution; the distribution of the various marks given by each instructor varies widely in most cases from the distribution for his department, for the college, and from the normal distribution; instructors within the same department even though teaching the same courses differ widely from one another in their distribution of grades. Study of the literature shows that wide variations in the distribution of grades is common to most colleges and departments.

*2452. Furbay, John Harvey. Undergraduates in a group of Evangelical Christian colleges. Doctor's, 1931. Yale. 139 p. ms.

The purposes of this study were to determine: (1) The general backgrounds of the students before entering the colleges; (2) the purposes and aims of the students; (3) the opinions of the students regarding their training in these schools, and (4) the isolating of the chief unmet needs of the students. The institutions studied were: Asbury college, Eastern university, Houghton college, John Fletcher, Taylor university, and Wheaton college.

2453. Garnett, Raymond L. The 1929 University of Missouri freshman class and its success. Doctor's, 1931. Missouri. 179 p. ms.

A study of the relation of 13 psychological, social, economic and scholastic factors to university freshman success. Of the 13 factors considered, only two, the high-school scholarship rank and the American council on education psychological examination appeared to have a significant relationship to freshmen success. These two factors were combined into a university aptitude index which differentiated between successful and unsuccessful freshmen to the following extent: Of the three students who fell below point 10 on the aptitude scale, none succeeded, while of the 19 students who fell above the 89 point, all succeeded. Of the 34 students who fell below the 20 point, two, or 5.9 per cent, succeeded, while of the 108 students who fell above the 79 point on the scale, 96, or 88.9 per cent, were successful. Of the 86 students who fell below the 30 point on the scale, eight, or 9.3 per cent, were successful, while of the 152 who fell above the 69 point on the scale, 81.7 per cent succeeded. Of all the successful students, only 3.8 per cent fell below the 30 point on the scale and 53.9 per cent fell above the 69 point on the aptitude scale. A student's chances for success rise steadily from no chance in the lowest 10-point step on the 10-step scale, one chance in 15.5 in the second step, one chance in 8.7 in the third, to one chance in 1.4 in the eighth step, one chance in 1.2 in the ninth and a perfect chance in the tenth and highest step.

2454. Geffert, Bessie. Comparative scholarship ratings of fraternity and non-fraternity students. Master's, 1930. Kans. St. Coll.

2455. Gillis, Ezra L. Report on freshman grades. In Association of Kentucky colleges and universities. Proceedings, 1930. p. 30-37.

Findings: Colleges and departments, and even instructors, vary greatly in assigning marks; variation in marking is due to instructors rather than to subjects; high grades given in a subject in one college seem to offer no reliable basis for predicting that high grades would be given in that subject in another college; a grade A given by different instructors seems to represent as many different levels of achievement as would be represented by A, B, C by a given instructor.

2456. Goldsmith, V. V. Personnel study of college letter and non-letter men, University of Kansas. Master's, 1931. Kansas.

This is a study of the comparison of teachers' marks of athletes and nonathletes in paired groups for a 5-year period. Findings: Athletes made slightly better high school and college marks and failed fewer college hours.

2457. Hampshire, Hattie Woods. Effects of emotion upon academic success. Master's, 1931. Nebraska. 75 p. ms.

Includes the study of 200 college students.

2458. Held, Omar Conrad. An attempt to predict the success of university freshmen in their adjustment to scholastic work. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

The members of the freshman class entering the University of Pittsburgh in September, 1928, were chosen as the subjects for the study. The Pearson product moment correlation technique was one method used to determine the relationship between preadmission data and college achievement. Findings: Some preadmission factors, especially the composite placement test rating, predict general academic achievement in the freshman year of college practically as well as freshman grades predict sophomore grades. The

accuracy of prediction of academic college achievement in the freshman year is increased in some instances where several preadmission factors are considered jointly for prediction.

2459. Hood, Helen Vander Veer. Report on students who enrolled in college preparatory courses against advice of research department. Alhambra, Calif., City high school, 1931. (For abstract see no. 717b.)

Data on the 170 pupils studied indicate that almost none of them stood a very good chance of reaching college and that the Research department was justified in advising them to go into some course other than college preparatory.

2460. Humphreys, J. Anthony. Conference proceedings of the College personnel officers held at Oberlin college, October 27-28, 1930. Oberlin college, Oberlin, Ohio, 1931. 60 p. ms.

2461. Judin, Laurence A. Ability and scholastic success of transfer students in the College of education. Master's, 1931. Minnesota.

2462. Katz, Daniel and Allport, Floyd Henry. Students' attitudes. A report of the Syracuse university reaction study. Syracuse, N. Y., Craftsman press, 1931. 408 p.

Bibliography, p. 398-402.

The purposes of this study were threefold: First, the practical objective of college education; second, to investigate the psychology of the modern college students; third, to ascertain the character of attitudes and opinions held in different groups. The entire discussion is based upon the returns from the Reaction study at Syracuse university in 1928.

*2463. Kurani, Habib A. Selection of students for admission to American colleges. Doctor's, 1931. T. C., Col. Univ.

This study analyzed the admission procedures of 287 colleges and universities, developed a theory of selection, and gave a concrete proposal for improving admission and selection. Findings: Data indicate that in general, the number of criteria employed for admission and the accuracy with which they are adhered to vary in accordance with the demand for entrance to an institution and its ability to meet it. The function of selection is the direction of the student to the institution or line of study which most adequately meets his needs.

2464. Magnuson, Henry Walter. A study of the relation between teacher judgment, intelligence, and grades received by 80 scholastically superior university students. Master's, 1931. Stanford.

2465. Mathews, Chester O. Factors affecting the achievement of superior college students. 1930-1931. Ohio Wesleyan university, Delaware.

2466. Myer, M. B. Instructors marks received by letter and non-letter men in college. Master's, 1931. Kansas.

A study of 90 pairs of letter and nonletter men enrolled at some time from 1924 to 1928, inclusive, in Kansas State teachers college of Emporia equated on the basis of mental test scores. Letter men had lower mean mental test scores, higher marks, and were younger.

2467. Nakhosteen, Mehdi Khan. Treatment of personality difficulties among college students. Master's, 1930. T. C., Col. Univ.

The study includes social, technical, administrative, and moral education, showing personal development, better understanding of life situations, and better preparation for future vocation.

2468. Nelson, Belford Beetham. An attempt to increase the predictability of college ability tests by work-limit methods. Master's, 1931. Ohio. 20 p. ms.

Students who had taken time-limit entrance tests were given a different form work-limit, alleviating emotional factor of time. One group finished the test in one meeting and another group in four meetings. Work-limit time and score were correlated with scholastic averages. Due to extraneous factors the one-meeting group gave unreliable results. The 4-meeting group gave coefficients of correlation between work-limit score and point-hour ratio or scholastic averages higher than between time-limit scores and point-hour ratio. In most groups there was positive relationship between time and point-hour ratio. Predictability slightly increased.

2469. Nelson, Erland. Success of students who transfer from college to college at the University of Nebraska. Master's, 1930. Nebraska. 104 p. ms.

This is a study of the academic achievement of 312 students who transferred from one college to another in the University of Nebraska. The study indicates only slight improvement in scholastic standing following transfer. Considerable variation exists as to the amount of improvement or lowering of scholastic standing between the various colleges and between the classes in each college.

2470. Nelson, M. J. The predictive value of the freshman tests administered in the fall of 1929 for scholastic achievement during the school year of 1929-1930. Cedar Falls, Iowa state teachers college, 1930. 4 p. ms. (Research report, no. 5.)

It was found that one indication of the predictive value of the tests is in the correlation between test scores and the number of grade points earned. Complete data are on hand for 757 students who were present during all of the three terms. The two English tests seem to give the best prediction of general scholastic success. The high-school content test and the reading test showed some superiority in selecting students who will not succeed in college. No test has any significant superiority in selecting the students who have the highest scholastic achievement.

2471. Newlon, Clara W. A study to determine the nature and stability of certain interests of certain students at the University of Pittsburgh. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to determine: The nature of freshman vocational choices; the stability of freshman vocational choices; the relation between vocational choice and interests; the stability of interests; whether or not certain categories of interests are peculiar to certain types of students; and whether certain interests are stable among certain types of students. Data consist of responses made by 99 University of Pittsburgh students during the freshman year 1927 and during the senior year 1930 to 420 items in the Strong vocational interest blank. Data indicate that if interests are an index of vocational significance, some students will find the occupation which they have chosen unsuited to their disposition; since large numbers of interests may change without change in occupational choice, it seems that many items in the blank have no relation to some of the occupations, or it may mean that the individual already embarked on a vocational training program may be forced by circumstances to continue; by the time individuals become freshmen in college, they have acquired more than 50 per cent of interests which they possess during the senior year. The influences which are brought to bear on men students during their residence at the university seem to produce an attitude of open-mindedness toward a greater number of peculiarities of people; those brought to bear on the women students seem to produce in them an attitude of prejudice against a greater number of peculiarities of people.

2472. Pallett, Earl M. Student mortality at the University of Oregon. Doctor's, 1931. Oregon. 237 p. ms.

Purpose of the study was to analyze certain variables in order to determine, if possible, what relation they bear to the fact that certain students remain in the university until graduation and others transfer to other institutions or withdraw before they graduate.

2473. Patterson, Ruth Anita. Evaluation of a personal rating blank as used for graduate students. Master's, 1931. Stanford.

2474. Peisen, Rachel. A study of the grade average curves of the four four-year colleges in the University of Arkansas. Master's, 1931, Arkansas. 59 p. ms.

An investigation of the grade-point averages made by three groups of entering freshmen at the University of Arkansas to ascertain the trends which these averages take by colleges as the students advance from year to year. A part of the study is devoted to an analysis of the facts regarding the relationship of persistence and scholastic aptitude to grade-point averages. The records of 1,368 students are included.

2475. Pope, Ruth Vesta. Factors affecting the elimination of women students from selected coeducational colleges of liberal arts. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 111 p. (Contributions to education, no. 485.)

A study was made of the college careers of all freshmen entering in 1925 who left before graduation, in order to determine the conditions under which women students in six

colleges of liberal arts were eliminated. By means of interviews, questionnaires, letters and the perusal of all official records, data were compiled concerning the 630 students who had entered the class at that time. Findings: The reasons for withdrawal were varied; reasons of a personal or social nature predominated; reasons that contributed to the withdrawal of an individual were in order of frequency—economic, academic, physical, and social.

2476. Pullias, Earl V. The qualifications and achievements of Henry Strong scholars. Master's, 1931. Chicago. 97 p. ms.

A study of the Henry Strong educational foundation scholars who attended the University of Chicago during the years 1912-1930.

2477. Reebel, Katherine Rhys. An analysis of the first semester scholastic records and Binet test records of the 1930 college freshmen in the University of Pittsburgh who ranked in the lower 20 percentiles on the American council of education tests. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The students whose scores fell within the last 20 percentiles on the American council on education tests were selected for this study; their records on the Simon-Binet test, and their first semester academic grades were also used. The students having the higher intelligence quotients showed a higher percentage of their number passing the subtests. Most of this group of students failed to do average college work.

2478. Remmers, H. H. and Stalnaker, J. M. A study of the class entering Purdue university in 1926. Lafayette, Ind., Purdue university, 1931. 81 p. (Bulletin, vol. 81, no. 9. Studies in higher education 17.)

This study presents a statistical survey of the evaluation of tests and personal data gathered for the class entering the university in 1926, and shows the extent to which they have been effective prognostic measures. Data were gathered for each of the 1,126 entering students on age at entrance, sex, high-school deficiencies, occupation of father, university classification, health rating, environment in which he lived, vocational preference, orientation test scores, etc. Findings: At the end of four years 29 per cent of the students had graduated, 46 per cent had voluntarily withdrawn from the university, and 14 per cent are still trying to accumulate sufficient credits to graduate.

2479. Ross, Robert Trowbridge. Problems of college freshmen. Master's, 1931. Southern California. 89 p.

2480. Schumpert, Robert L. Aspects of the college personnel program. Master's, 1931. Wisconsin.

2481. Schwenk, L. Anna. A diagnostic interpretation of the scores of the Carnegie general culture test at the Pennsylvania State college. Master's, 1931. Penn. State. 49 p. ms.

A tabulation of the frequency with which each of the 930 items of the test was missed by the 180 sophomores in the School of education who took the test shows on what types of items our students were best and on what types they were lowest. Object is to determine what further instruction should be advised for them in order that they may round out their culture.

2482. Segal, David. Differential prediction of ability as represented by college subject groups. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

The purpose of the study was to set up a method of comparing the probability of success in one college-subject group with the probability of success in another college-subject group. Tests on history, English, algebra, and interest were given to graduating high-school seniors who intended to go to college. Data indicate that differential prediction of success may be added as a method to the practice of guidance at the college level and probably at lower levels.

2483. Smith, Ernest B. Comparison of academic grades, courses, and professions of 471 varsity athletes at the University of Michigan. Master's, 1931. Michigan.

2484. Smith, Merrill Jefferson. A study of the alumni of the New Mexico military institute. Master's, 1931. Stanford.

2485. Stewart, A. W. A comparison of the work done at the Pennsylvania State college by rural high school students with that done by students from urban high schools. Master's, 1930. Penn. State. (For abstract see no. 714.)

Findings; Students from the rural high schools scored somewhat lower than urban students in the placement tests given at their entrance to the college. In academic achievement as measured by grade points there was little difference between the two groups. While the rural high school students entered college with something of a handicap, they overcame the handicap and equalled, or even slightly surpassed the students from the urban high school.

2486. Stewart, Joseph S. Record of students entering Georgia colleges, 1929-30. Atlanta, Ga., University of Georgia, 1930. 79 p. (Bulletin, vol. 31, no. 2.)

The reports of students were compiled by the registrar of each institution. Shows freshman grades in Georgia colleges, first term, 1928-29, and compares high-school and college-freshman grades of 2,281 Georgia students, 1928-29.

2487. Teague, O. D. The predictive significance of pre-college data with reference to college success. Master's, 1931. Tennessee. 90 p. ms.

2488. Thompson, Lorin A., jr. Note taking in relation to college success. 1931. Ohio State university, Columbus.

2489. Will, Roland G. The university, college, and normal school students in Oregon. Doctor's, 1931. Ohio. 387 p. ms.

Analysis of the social, economic, and academic background of 8,192 students representing about 85 percent of the enrollment of the institutions of higher learning in Oregon. Findings: Normal-school students are the most poorly equipped students economically, socially, and academically. The university students rank highest. Small private arts college students rank between these two groups.

2490. Wood, Waldo Emerson. A study of performance on the graduate level based upon subject marks and intelligence test scores: ages 20 to 60. Doctor's, 1931. Indiana. 229 p. ms.

2491. Woody, Clifford. Achievements and interests of students entering 19 institutions of higher learning in Michigan in September, 1929. 1931. University of Michigan, Ann Arbor.

Findings: (1) Great variation in selective power of different institutions was found; (2) teacher-training institutions are not getting as good students as other institutions; (3) students enrolled from outside of State are of higher mental ability than those from within the State; (4) students of larger high schools made higher scores on tests than those from smaller high schools; and (5) students from larger high schools make higher marks during first semester of college work than those from smaller high schools, etc.

2492. Wrenn, Charles Gilbert. A student among the superiorities of college. School and society, 33: 462-63, April 4, 1931.

See also 433-434, 483, 652, 2009, 2082, 2095, 2098-2099, 2104, 2109, 2118, 2399, 3580, 3582, 3586, 3748.

SCHOOL ADMINISTRATION

2493. Allen, William Cox. The doctrine of church and state as applied to education. Doctor's, 1931. South Carolina. 64 p. ms. (For abstract see no 717.)

2494. American educational research association. School organization. Review of educational research, vol. 1, no. 3, June 1931.

W. W. Coxe, chairman.

Bibliography: p. 231-44.

Contents: The development of public-school organization, by W. W. Coxe, p. 163-72; Evaluation of the various units of public-school system, by W. C. Beavis, p. 173-99; Pupil classification and grouping, by Paul T. Rankin, p. 200-30.

2495. Anderson, John Ernest. Duties of business executives in cities of 100,000 or more inhabitants. Master's, 1931. Chicago. 48 p. ms.

This study included business executives in the public school systems of cities in the United States having 100,000 or more inhabitants according to the United States census of 1930. Findings: Cities are not uniform in duties required of business executives. Business executives are either responsible to the board for the performance of their duties

or to the superintendent of schools. In a majority of the cities they were responsible to the superintendent of schools. There is no uniform title given to business executives. Many duties of the business executive are strictly educational in nature. Duties may be classified under six headings: (1) secretarial or clerical duties; (2) administrative or executive duties; (3) duties that pertain to the school plant; (4) duties that pertain to supplies; (5) duties that pertain to handling of school funds, and (6) miscellaneous duties.

2496. Bachman, Frank P. The all-year school of Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1931. 60 p. (George Peabody college for teachers, Field studies no. 3.)

Data indicate that a summer quarter, as an integral part of an all-year school, can serve to advantage a highly selected group of children only, and that its doors can not justifiably be thrown open to all children who may present themselves for enrollment. The summer quarter as an integral part of the all-year school has in no way affected either the building or teacher requirements for the regular quarters.

2497. Baker, Benjamin Whittier. The work of the superintendents in the small school systems. Master's, 1931. Oklahoma. 151 p. ms.

2498. Bize, David. A definite procedure for requisitioning and purchasing supplies for small schools. Master's, 1931. Nebraska. 99 p. ms.

A definite procedure is worked out for requisitioning and purchasing supplies in a school system whose population is under 600. The study includes practices in schools, business institutions, and supply houses. It criticizes present practice of schools and recommends forms, explaining how to use them.

2499. Brown, Glen David. Planning and executing a public school insurance program. Master's, 1931. Indiana. 108 p. ms.

2500. Bursch, James F. An analysis of clerical work in Sacramento elementary and junior high school. Sacramento, Calif., Public schools, 1931. 5 p.

2501. ——— A study of pupils attending other than the elementary or junior high school nearest which they reside in Sacramento. Sacramento, Calif., Public schools, 1931. 19 p.

2502. California commission for the study of educational problems. Report. Sacramento, California State printing office, 1931. 2 vols.

Contents: Vol. 1. Student problems, p. 15-74; teacher problems, p. 75-94; school organization problems, p. 95-126; school costs and revenues, p. 127-84; miscellaneous school problems, p. 185-203. Vol. 2—Appendix, 197 p.

2503. Challender, Harry Morgan. The administration of public education in Wyoming. Master's, 1931. Stanford.

2504. Clark, Edward T. Some factors for consideration in the founding of a school. Master's, 1931. T. C., Col. Univ. 135 p. ms.

2505. Croessmann, Pauline. A job analysis of the administrative positions in public schools. Master's, 1931. Chicago. 50 p. ms.

Cases included North Central States and took up administrative duties in elementary and secondary schools. Findings: (1) Men and women advance at about the same rate in administrative work; (2) religion is a factor to be considered in an administrator; (3) women begin about two years later than men upon an administrative career; and (4) there is no well-defined system of advancement in this type of work.

2506. Cunningham, Ray Michael. The relationship of pupil saturation to type of residence district. Master's, 1931. Southern California.

2507. Davis, Lawrence H. Student migration in the schools in towns of 1,000 or less population in Iowa. Master's, 1931. Iowa. 50 p. ms.

2508. Deffenbaugh, W. S. School administration in state educational survey reports. Washington, United States Government printing office, 1931. 34 p. (U. S. Office of education. Bulletin, 1930, no. 35.)

This compilation contains some of the principal recommendations relating to State and local school administration found in some of the State survey reports. Only reports printed since 1920 have been used in this study. There is appended an article by the United States Commissioner of Education giving a review of some of the significant experiments and experiences of the States in school administration.

2509. **Elliott, Albert W.** The status of the democratic ideal in the field of school administration. Doctor's, 1931. Ohio. 177 p. ms. *

A study of the growth and history of the democratic ideal, showing the extent to which the democratic ideal governs in the activities of school administrators. Findings: Approximately 75 per cent of the school administrator's activities are democratic. The remainder are largely autocratic.

2510. **Engelhardt, Nickolaus L. and Burton, T. C.** A report on a proposed country day school for New Canaan, Conn. 1931. 42 p. (Privately printed.)

2511. **Fixley, Everett H.** The superintendent in the smaller town, a study based upon conditions in Oklahoma, with special reference to the professional training of superintendents. Doctor's, 1931. Harvard. 227 p.

2512. **Forney, Burton Edward.** Training of the school office personnel. Master's, 1931. Stanford.

2513. **Frank, Harold P.** A study of the methods of acquiring and administering land for public school purposes in the United States, in cities having 25,000 or more inhabitants. Master's, 1931. Ohio. 140 p. ms.

Includes 126 cities having a population of 25,000 or more, located in 33 States and the District of Columbia. Total of 6,319 public-school sites were included. Findings: (1) The junior high school, tendency to increase the size of school units, and the emphasis being placed on physical education are major factors affecting school-land problems; (2) scientific procedure for selecting and acquiring school land is to be desired; (3) wide use of school sites not in actual use should be encouraged; (4) practically no disadvantages result from acquisition of school sites 5 to 10 years before use; and (5) there is a marked tendency toward acquisition of larger grounds for all types of schools.

2514. **Garlin, R. E.** A study of educational publicity in Texas newspapers. Austin, University of Texas, 1930. 107 p. (Bulletin no. 3044.)

Bibliography on school publicity: p. 98-107.

The purpose of this study was to ascertain the quantity and nature of school publicity now appearing in Texas newspapers, and the part taken by Texas newspapers in getting the findings of the Texas educational survey before the public. Data indicate that newspaper school publicity places unequal emphasis on the various items it covers; it is concentrated on a few topics; it seems to be becoming more extensive by increasing the number of topics it covers. There seems to be a tendency to give an increasing amount of space to the high school. Newspaper school publicity is concentrated at or near the beginning and end of the school year.

2515. **Grover, C. C. and Davis, May E.** Report of cafeteria survey committee. Oakland, Calif., Public schools, 1931. 20 p. ms.

A study was made of the various phases of cafeteria management in the Oakland schools. A set of principles by which the efficiency of the administration of school cafeterias might be checked was agreed upon and presented to the persons concerned.

2516. **Hall, Edward D.** A study of the tuition situation in Wisconsin high schools. Master's, 1931. Wisconsin.

2517. **Hamersly, G. C.** The liability of school districts for injuries occurring to teachers and pupils. Master's, 1931. Iowa. 68 p. ms.

2518. **Hampton, Henry Sylvester.** Proprietary versus board schools. Master's, 1931. Stanford.

2519. **Harris, Therman Winfred.** The struggle for a federal department of education in the United States. Master's, 1930. Oklahoma. (For abstract see no. 713.) *

The study aims: (1) To ascertain the extent of the struggle in Congress, among educators, and in general among people interested in education; (2) to present the facts concerning the origin of the principal education bills, the action taken on them in Congress, and the disposition made of them; (3) to analyze the principal bills and compare their provisions; and (4) to present the principal arguments for and against this proposed department.

2520. Hendricks, Floyd W. Powers and duties of city superintendents of schools. Master's, 1931. Chicago. 118 p. ms.

A study of powers and duties of superintendents of city schools as shown by board rules and regulations of 150 cities. Findings: There is little variation in the nature and extent of board rules and regulations for the control of city superintendents in cities below 15,000 population; from 15,001 to 50,000 population, and above 50,000 population. The number of provisions in various sets of rules and regulations varies from 1 to 39. Five per cent of the provisions are in regard to finance; 6.9 per cent in regard to buildings, grounds, supplies, and equipment; 21.1 per cent in regard to supervisory activities; 21.3 per cent in regard to board relationship; 11.1 per cent in regard to general powers and duties; and 34.4 per cent in regard to personnel. There is need for more careful planning and organizing by boards of education of the duties and powers delegated to city superintendents of schools.

2521. Henry, Julius Gilbert. Measuring the effect of publicity on the educational sentiment of a community. Master's, 1931. Indiana. 99 p. ms.

2522. Henzlik, F. E. School administration and the training of superintendents for small city school systems. Lincoln, University of Nebraska, 1931. 35 p. (University of Nebraska publications, no. 83. Educational monographs, no. 1, May 1931.)

This study describes the rise and growth of school administration; the small city superintendency as a professional career; answers the question what is school administration; describes the need of professional training in school administration; answers the question "what should be the training of superintendents in small school systems?"; and gives in the appendix selected readings for students in school administration.

2523. Herring, John P. A point of view and practical technique for evaluating activity. Lancaster, Pa., Educational council of the Young men's Christian associations of the United States of America, 1931. 27 p. (Educational council bulletin, vol. 2, no. 1, March 1931. Supplement, no. 1.)

A technique for estimating the value of the returns from the effort and money put into education. Criteria for judging the value of activities, both of individuals and of groups are presented for the use of teachers, leaders of physical education, and others.

2524. Hill, Margaret. The Riverdale school. 1931. Reed college, Portland, Oreg. 98 p. ms.

A study of the Riverdale school, giving its history, community surroundings, financial situation, plant and equipment, personnel, organization and administration, method, curriculum, and its place in the community. Findings: Riverdale school is a progressive school—not so progressive as some but more progressive than the ordinary public school.

2525. Hosman, E. M., and others. Publicity helps for school administrator. 1931. University of Nebraska, Lincoln. 300 p. ms.

Brings together the practical media for school publicity for the school administrator.

2526. Hunkins, L. E. Office planning in small school systems. Master's, 1931. Nebraska. 111 p. ms.

Investigation of characteristics of offices in 169 schools in Nebraska and surrounding States with an enrollment from 100 to 650 students. The needs in these schools according to the ideas of the superintendents were determined and recommendations made as to proper principles to be used in planning offices and characteristics of offices. Suggestions were submitted in the form of office plans incorporating these principles and characteristics.

2527. Hunnicutt, C. William. A study of past and present relationships between the Federal Government and public education in the U. S. of America. Master's [1931]. Arizona. 76 p. ms.

Primarily concerned with grants to education and the general policy of the Federal Government with respect to the organization and control of education. Findings: The principle of aid to education by outright gifts was stressed in early times. The later policy with money grants has been to exercise control and to require equal or greater efforts from the States.

2528. **Hunt, Charles G.** Qualifications of Indiana township trustees. 1931. University of Chicago, Chicago, Ill. 80 p. ms.

A study (random sampling of 230 cases) of the age, sex, education, marital status, parental status, and political, religious, and fraternal affiliations of trustees. Findings: The estimated mean age is between 45 and 50 years; less than 0.5 per cent are women; 93.5 per cent are married; 50.4 per cent have at least one child in school; 63.5 per cent have an eighth-grade education or less, 22.1 per cent have done secondary-school work, and 14.4 per cent have done work beyond the high school; 28.2 per cent have had some teaching experience; and 97.8 per cent belong to a church or have a church preference. The mean membership in clubs and fraternal organizations is \$26; 40.6 per cent have held previous political offices; 67.7 per cent are engaged in agriculture; 12.5 per cent are proprietors; 6.2 per cent belong in the commercial groups; and 3.3 per cent are in managerial positions. No foreign-born trustees were reported and 83.9 per cent had American-born parents; 61.3 per cent belong to the Democratic party and 38.7 per cent belong to the Republican party.

2529. **Jackman, Willard C.** A plan for distribution of supplies in small schools. Master's, 1930. Nebraska. 78 p. ms.

A study of 85 schools in Nebraska, including two groups of schools. Group I included 17 schools with from four to eight teachers, and Group II included 68 schools with more than eight teachers.

2530. **Jones, Charles C.** The development of measures for predicting growth of school population. Master's, 1931. Indiana. 135 p. ms.

2531. **Keefer, Clifford O.** The state superintendents of public instruction of Indiana. Master's, 1931. Ind. St. T. C. 92 p. ms.

Biography of every State superintendent of public instruction in Indiana since the office was founded. Findings: Indiana was the thirteenth State to establish chief school official; the office is relatively new in all States.

*2532. **Kemmerer, Walter William.** School accounting by machine methods. Doctor's, 1930. Columbia. Houston, Texas, Auxiliary directory company, 1930. 178 p.

This study is intended to serve as a means of discovering and making available the advantages which may be derived from the use of mechanical equipment in school accounting and related procedures. Data were secured from a personal study of 17 public-school systems, and from information secured by correspondence and other indirect means from 17 other public-school systems, all using mechanical accounting equipment.

2533. **Ketring, John H.** Public school insurance in Illinois. Master's, 1931. Washington Univ.

2534. **Kirkham, Francis W.** Educating all the children of all the people. Washington, United States Government printing office, 1931. 57 p. (U. S. Office of education. Bulletin no. 11, 1931.)

This bulletin describes the education of all the children of all the people in Granite district, Utah. The program described was carried out without material increase in cost because of the simplicity of the plan and the ability of the staff to organize to meet certain phases of the new set-up for the program without overloading.

2535. **Lavell, Robert J.** Continuous school publicity; a proposed program. Master's, 1931. Cincinnati.

2536. **Lohman, Neal Joseph.** Public school publicity in the San Francisco Bay region. Master's, 1931. Stanford.

2537. **Massey, M. A.** A study of small school systems, administered by superintendent who serves also as high school principal. Master's, 1930. Nebraska. 65 p. ms.

A study of schools in Montana, South Dakota, Kansas, and Nebraska.

2538. **Maxwell, Homer H.** Tuition rates charged in Pennsylvania. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An attempt was made to determine the practice in the charging of tuition in the high schools of the fourth-class school districts in 14 counties in Pennsylvania. The study purposed to find how many school districts were charging a legal rate of tuition, how much the legal rates vary from the actual tuition rates charged, whether the school

districts were charging an excessive rate of tuition or were not receiving sufficient income from tuition, and how the rates of tuition in other counties corresponded to the rates of tuition in Armstrong County. The results of this study indicate that school boards do not generally compute the cost of tuition; that it would be more equitable for the State department of public instruction to compute the tuition rate for each school district.

2539. Messelheiser, Harriet. The judicial power of the state support. Master's, 1931. Chicago. 155 p. ms.

An examination of the statutes and the judicial decisions of the different States of the United States. Findings: There are only 10 States in the United States which do not incorporate judicial power into the functions of the office of the State superintendency. These States are Arizona, Connecticut, Delaware, Idaho, Maine, Massachusetts, Missouri, North Carolina, South Carolina, and Tennessee. Only 14 of the other 38 States have court decisions bearing on the subject. These are Georgia, Indiana, Iowa, Kansas, Kentucky, Nebraska, Montana, New Jersey, New York, Oklahoma, Rhode Island, Texas, Washington, and Wisconsin. In the 9 States—Iowa, Kentucky, Montana, New Jersey, New York, Rhode Island, Texas, Washington, and Wisconsin—where the statutes give the State superintendent the power of deciding all controversies and disputes arising in the administration of the public-school system, the judicial decisions have usually sustained the statute and refused the prerogative writs of the State until the remedies provided by the school law have been exhausted.

2540. Mortensen, M. R. Problems of new school superintendents. Master's, 1931. Nebraska. 120 p. ms.

Problems submitted by 31 superintendents new in their respective positions during the years 1928-1930. Four hundred forty problems were classified, analyzed, and conclusions drawn. Effectiveness of scholastic and professional training also was determined.

2541. Murphy, Asael Beanland. Basic training program for city school superintendents. Doctor's, 1931. California. 128 p. ms.

Shows the development and present status of educational administration as a field of professional study and training, and determines what the training program for a city superintendent should include. The development of educational administration as a field of study has resulted in many specialized course offerings, numerous and differentiated, in the training institutions. The program for a prospective city superintendent should include three to five years' teaching experience in either, or better in both, an elementary and secondary school after the A. B. is received. Minors should be chosen from the fields of sociology, psychology, economics, political science, English; at least 18 units in the field of education including theory of education, educational psychology, supervision, educational sociology, curriculum, educational statistics, and tests and measurements; 18 units in educational administration, including school finance, business administration, organization and administration of the curriculum and supervision, administration of the teaching personnel, public relations and publicity, organization of schools and school systems, and school housing. The optimum training program would comprise approximately 60 units of selected courses in education; 36 units, the minimum.

2542. Nannings, S. P. A plan of organization of the state department of education. Albuquerque, N. M., University of New Mexico press, 1931. 19 p. (Bulletin, vol. 5 no. 2, Education series, whole no. 197, August 1, 1931.)

From a study of United States Bureau of Education reports, State school survey reports, school codes, reports of State boards of education, State teachers' association reports, etc., the author suggests provisions that should appear in the New Mexico constitution and school code.

2543. National education association. Department of secondary school principals. A study of the influence of departmental specialization on the professional attitudes of high school teachers toward certain administrative problems. Berwyn, Ill., 1931. 70 p. (Bulletin no. 37.)

The purpose of this study was to secure the judgments of high-school teachers on certain important professional problems which are frequently encountered in administration and to analyze and evaluate the judgments, with respect to their departmental significance. Nine hundred and sixty-three replies were received to a check list sent to the teachers of 83 schools. Replies were classified into nine groups according to the subject or subjects taught. Findings: There is marked consensus of opinion in all departments with reference to the best method of organizing the curriculum; written lesson plans are preferred by a majority of the teachers; all departments, except the physical education

group, consider inefficient study habits of pupils as the major cause of pupil failure in their courses; the teachers of all departments show remarkable similarity of opinion in their views on the proper use of the class period; the teachers were hesitant in indicating their attitudes on supervision; all departments prefer that the principal budget his time and apportion it equitably among those administrative functions generally recognized as of the greatest value to the school; etc.

2544. ——— Department of superintendence. Five unifying factors in American education. Washington, D. C., National education association, 1931. 543 p. (Ninth yearbook.)

Studies in pupil promotion, community relationships, teacher preparation, finance, principles of articulation, etc.

2545. ——— Department of superintendence and Research division. Transportation of school children in 67 large city school systems. Washington, D. C., National education association, 1931. 12 p. (Educational research circular, no. 4, March 1931.)

2546. Nebraska. University. School publicity class. Publicity helps for the school administrator. Lincoln, 1931. 278 p. ms.

This bulletin is intended to be used as a publicity manual. Its approach to detail problems is in the nature of "how to do," or "how to make," or "how to plan."

2547. New Jersey. Department of public instruction. Report of a survey of office practice in the New Jersey high schools, 1929-1930. Trenton [1930]. 9 p. ms.

2548. Nichols, John Ralph. State educational policy in California during 1910-1915. Doctor's, 1931. Stanford. 460 p. ms. (For abstract see no. 717d.)

The problem was to characterize the State's educational policy from 1910, when the political and financial "revolution" occurred, to 1915, before the influence of the World War could be felt. The financial policy of the State was traced as a background for the study. Findings: Financially the system was drifting toward decentralization; professionally and, to some extent, politically, it was following a policy leading toward further centralization. The appendix contains valuable statistical data on the public-school system from 1850-1926, carefully annotated and traceable back to original sources.

2549. Nissen, S. B. The newspaper as a socializing agency for the school. Master's, 1931. Minnesota. 259 p. ms.

Survey of school-news content of South Dakota newspapers.

2550. Oregon State teachers association. Committee of thirty. Oregon education plan. Portland, Oreg., Oregon State teachers association, 1930. 8 p. A state-wide plan for the reorganization of public school system of Oregon.

2551. Osborne, Larkin Vanburen. Administrative and disciplinary problems in high schools of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The purpose of this study was to determine the most significant disciplinary problems and by what methods and by whom such problems are handled. Replies to a questionnaire were received from 600 administrators of the high schools of Oklahoma. Findings: There has been a vast change in the idea and practice of discipline; many of the problems that do occur are classed as not having significance; no one method of handling disciplinary problems can be used successfully to the exclusion of all others; almost all problems, both administrative and classroom, are handled to a large extent by the instructors.

2552. Pechota, Henry Lee. The administration and organization of the welfare functions of nine Southern California school systems. Master's, 1931. Southern California. 122 p.

A study of the financial, physical, and personal aspects of (1) attendance, (2) health, and (3) pupil guidance, based on personal interviews with the directors of these services.

2553. Pool, Archie Lee. School audit service in Oklahoma. Masters', 1931. Oklahoma. 124 p. ms.

There is no legal requirement for the auditing of school finances in Oklahoma. Questionnaires returned by 198 independent school districts of the State indicate that there

is a great variation in the frequency of school audits. Many schools have lost money which might have been saved had the school had regular financial audits. The size of the schools is not the major factor in determining the number of days required for, and the cost of, the audit service. Most of the school financial losses might be eliminated by a state auditing department centralized in either the State department of education, or the State examiner and inspector. A form for the use of all school auditors of the State is included in the study.

2554. Pryor, Ralph Huntington. Unit control versus multiple control of executive functions in school administration. Master's, 1931. Southern California. 112 p.

A study of the proper relationship of a business manager and other board-of-education employees to the superintendent of schools, whether coordinate or subordinate, based on an analysis of board rules in 100 cities with populations of 30,000 or more, and on a review of the literature of the subject.

2555. Rischeberger, Paul A. A study of invoices in the Pittsburgh public schools. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to determine a classification of school supplies and expenses for the accounting department of the board of public education, Pittsburgh, Pa. Data were obtained from approximately 65,000 invoices for the year 1929 provided by the accounting department of the board of public education. Data show that there is a general accounting classification under which the school supplies and expense items found on invoice may be listed. Certain departments of the public schools have definite periods of the year for ordering school supplies.

2556. Schwartz, Henry L. A comparative personnel study of state and consolidated school superintendents in Iowa. Master's, 1931. Iowa. 246 p. ms.

2557. Shultz, Fred. Budgetary procedure in city schools of Kentucky. Master's [1931]. Peabody. 56 p. ms.

It was found that budgetary procedure is not up to standard.

2558. Sloan, Herbert L. A study of the status of public school administrators in Kansas. Master's, 1930. Kans. St. T. C., Emporia. Emporia, Kansas State teachers college, 1930. 54 p. (Studies in education, vol. 1, no. 2, June 1930.)

The purpose of this study was to present an analysis of the status of the Kansas public-school administrator's position and to make a comparison of the findings of the study with those of similar studies. Data were secured from the high-school principal's report which is filled out by the administrators themselves and is filed at the State superintendent's office at Topeka. Data were taken from the reports for the year 1929-30. The investigation includes all public-school administrators in Kansas who are in charge of schools that offer at least one year of public secondary education. Data indicate that there is a comparatively wide range in the salaries of the Kansas administrators; there are no women administrators in the first or second class cities and only seven in the third class cities; the majority of administrators have had four years of high-school training; the median for the academic training beyond the high school is 4.4 years. Nearly all of the Kansas administrators hold the bachelor's degree. There is need for longer tenure in one position in order to better the school situation.

2559. Smith, Earl William. Characteristics and provisions for a superintendent's handbook. Master's, 1930. Nebraska. 110 p.

Check lists were sent to 80 superintendents in Nebraska and adjoining States.

2560. Sowers, F. E. Administrative implications of creative education. Master's, 1931. Ohio. 154 p. ms.

2561. Stingel, L. C. Handbook of guiding principles for boards of education. Master's, 1931. Ohio. 151 p. ms.

2562. Strayer, George D. Nonresident tuition study based on replies received in answer to a questionnaire sent to all cities over 100,000 in population. Washington, D. C., Public schools, 1931. 8 p. ms.

This study of tuition charged nonresident pupils is based on information received in response to a questionnaire which was sent in November 1930 to 93 cities over 100,000 population asking for information in regard to the amount of tuition collected, the number of nonresident pupils enrolled, the basis of computation for tuition rates, the standards of exemption, and the rule or law upon which the nonresident tuition charges were based.

2563. **Sutton, D. H.** Acquisition, management and disposal of Federal land grants for the support of public schools in Ohio, 1803 to 1931. Doctor's, 1931. Ohio. 410 p. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6. Ohio State university, p. 355-64.)

2564. **Talbot, George D.** The organization of teachers' handbooks. Master's, 1931. Ohio. 105 p. ms.

From an analysis of 25 teachers' handbooks and 302 questionnaires regarding items of content in handbooks it was found that there is no uniformity in existing handbooks; and teachers, wherever located, need pretty much the same information.

2565. **Walker, Irvin Martin.** The status of the superintendent of schools in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Information on such items as training, experience, salary, and tenure was secured from educational literature. Similar data about Oklahoma superintendents were gathered from questionnaires filled out by them. Findings: The superintendent should be required to have as a minimum a bachelor's degree with sufficient courses in the field of administration; it is important that he have a master's degree, preferably in the field of education; longer tenure for superintendents should be an objective of educators; the superintendent should be an expert adviser to the board of education; he should distribute his time properly among his varied school duties.

2566. **Weaver, Harold D.** An analysis of techniques used in interviewing. Master's, 1931. Ohio. 65 p. ms.

2567. **Weisensee, John P.** A student's dictionary of terms widely used in school administration. Master's, 1931. Nebraska. 88 p. ms.

The study pertains to a series of terms, technical in nature, which are troublesome to students in school administration. The terms are determined and defined.

2568. **Wenger, Samuel Bernis.** School administration as a profession. Master's, 1931. Nebraska. 132 p. ms.

An analysis of the professions such as law and medicine, in order to discover the distinctive marks and to apply these to the task of the city and community administrator of schools; to note extent of these marks realized and the tendencies leading in that direction.

2569. **White, Elizabeth Seymour.** Distinctions between private and public schools as shown by court cases. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The primary outstanding distinction is that the public schools are supported by public taxation, and that the whole public select their representatives to manage the schools, while the private schools are supported by contributions and tuition charges and are managed by individuals or corporations, rather than by a school district.

2570. **Whiteneck, Hosea A.** Population and school growth. Long Beach, Calif., Public schools [1930].

Basic principles in developing a method of forecasting future population are: Limited territory and static growth. Population growths were computed by means of logarithmic curves.

2571. **Wilson, G. Alvin.** An accounting system for school activities. Master's, 1931. Wisconsin.

See also 8, 62, 127 (1), 387, 1841, 1873, 1898, 1905, 1921, 1930, 1951, 1958, 1964, 1973, 1998, 2001, 2083, 2088, 2133, 2146, 2159, 2387, 3605, 3668, 3853, 4359; and under Educational surveys.

EDUCATIONAL LEGISLATION

2572. **Auville, J. G.** Legal limitations of boards of education with reference to malfeasance. Master's, 1931. Ohio. 80 p. ms.

2573. **Baker, Beulah Norvell.** The legal and constitutional basis of the St. Louis public school system. Master's, 1931. St. Louis. 111 p. ms.

2574. **Folds, Vivian P.** Georgia school law. Master's, 1931. Mercer.

*2575. **Hodgdon, Daniel R.** Legal aspects in the administration and control of public school property. Doctor's, 1931. New York. Vol. 1, 182 p. ms.; vol. 2, p. 184-399. ms.

The problem of this study was to discover and formulate the general principles which have been established through the mass of judicial decisions and legislative enactments as such enactments are involved in the judicial decisions concerning school property.

2576. **Hollenback, Warren.** The tort liability of school districts as shown by court decisions. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A study of the reported cases shows that as a general rule school districts are not liable in tort actions, for their corporate acts such as: Failure to require bonds of contractors for indemnifying others; improper construction of buildings, examples of which are the erection of balustrades and railings of insufficient height; permitting the grounds to be dangerous, due to excavation, obstructions, machinery, incinerators, tanks, wire, openings, etc.; permitting the use of unsuitable, defective, or dangerous appliances, for example, defective gymnasium and heating apparatus, unguarded saws and planers, unsuitable gauges, etc.; improperly transporting pupils, such as, negligent driving or using unsuitable conveyances; failure to repair holes, etc. The decisions show the great amount of suffering and damage that has resulted to the injured party when he was not at fault.

2577. **Houle, Harold L.** A comparative study of the legal aspects of tuition charges in the public schools of the United States. Iowa City, University of Iowa, 1931. 104 p. (Extension bulletin, no. 265. April 1, 1931. College of education series, no. 28.)

Findings: A total of 24 pupil-tuition situations were provided for in the statutes of all the States. A model tuition plan is suggested which includes every pupil-tuition situation involved in the statutes of the several States.

2578. **Illinois. Department of public instruction.** The school law of Illinois. Issued by Francis G. Blair, Superintendent of public instruction. Amended by the fifty-seventh general assembly. [Springfield, Ill., 1930.] 207 p. (Circular, no. 256.)

* 2579. **Keesecker, Ward W.** Digest of legislation providing federal subsidies for education. Washington, United States Government printing office, 1930. 52 p. (U. S. Office of education. Bulletin, 1930. no. 8.)

2580. **Kentucky. State department of education.** Kentucky common school laws, 1930, with abstracts of the decisions of the Court of appeals to and including vol. 238, page 292, Kentucky reports and opinions of the Attorney general to and including no. 2,476. Frankfort, 1930. 342 p.

The compilation includes all sections of the statutes relating to the common schools of the Commonwealth, including Acts of 1930.

2581. **Lide, Edwin S.** Constitutional basis of public school education. Washington, United States Government printing office, 1931. 11 p. (U. S. Office of education. Leaflet, no. 40.)

This study gives the provisions relative to public-school education below college or university level that have been written into the constitutions of the 48 States.

2582. **Missouri. State department of education.** Revised school laws. Revised statutes 1929, amended laws and new laws 1931, enacted by the Fifty-sixth General assembly, with court decisions, opinions of the attorney-general, forms and comments, for the use of school officers, 1931. Jefferson City, Botz printing and stationery company, 1931. 330 p.

2583. **National education association. Research division.** Bibliographies on eight problems of school legislation. Washington, D. C., National education association, 1930. 27 p. (Studies in state educational administration, no. 5.)

2584. ———— State school legislation, 1930. Washington, D. C., National education association, 1931. 11 p. (Studies in state educational administration, no. 6.)

2585. **Neff, Edwin W.** The law relating to the public school system of Michigan. Master's, 1931. Chicago. 142 p. ms.

Statutory and case law of the more common legal questions confronting school administrators in Michigan.

2586. **New York (State) Education department.** Education law as amended to July 1, 1931. Albany, University of the State of New York press, 1931. 341 p. (Bulletin no. 978, August 15, 1931.)

2587. **Peaden, Porter Lee.** Legal status of the school superintendent in employment of personnel. Master's, 1931. Peabody. 67 p. ms.

Findings: The great majority of States provide for employment of personnel by board of education.

2588. **Roberts, Waid C.** Legal status of the school board clerk in Ohio. Master's, 1931. Ohio. 76 p. ms.

A study of code law, attorney general's opinions, and court decisions, resulting in a logical reorganization of legal materials heretofore unorganized for the use of the clerk; and court decisions to corroborate the law.

2589. **Schad, Harry.** Legal rights and obligations of public school students. Doctor's, 1931. Johns Hopkins.

2590. **Sullivan, J. W.** Judicial decisions in Missouri relating to public school administration. Master's, 1931. Chicago. 174 p. ms.

Study of all supreme court and appellate court decisions in Missouri relating to public-school administration. Findings: Principles involved in legal aspects of public-school administration, such as nature of school district, formation and alteration of school districts, powers and duties of school boards, personal liability of school-board members, use of school money, rights and duties of students, employment and dismissal of teachers, etc.

2591. **Templeton, Leumas Bascom, jr.** A digest of the South Carolina supreme court decisions on schools and school districts. Master's, 1931. South Carolina. 42 p. ms. (For abstract see no. 717.)

Summarizes 92 cases from 1850 to 1930.

2592. **Vaughn, Guy Orien.** Court decisions of Ohio relative to public schools. Master's, 1930. Chicago. 194 p. ms.

2593. **Watt, Ben H.** A study of the legal background for a state supported school system of Indiana. Master's, 1930. Ind. St. T. C. 85 p. ms.

2594. **Weltzin, J. Frederick.** North Dakota school law digest and model school code. Grand Forks, University of North Dakota, 1930. 91 p. (School of education bulletin, no. 8, September 1930.)

The school statutes are organized and unified under appropriate heads and subheads. The laws are so assembled as to outline in skeleton form a model school code for the State of North Dakota.

2595. ———. The status of courses in educational law. Grand Forks, University of North Dakota, 1931. 10 p.

Reports on practices and nature of courses in 67 institutions are analyzed. The tendency is to introduce courses in general common law rather than courses in local statutes.

2596. **Wible, Adrian Lorain.** The use of permissive school legislation. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The information on which the study is based was obtained from the clerks of the boards of education within the district. The superintendents of the schools in the districts were interviewed on the same subjects of law, but in a manner that necessitated an indirect reply.

2597. **Wilson, Frederick Leigh.** The police power of the state as it affects the public schools. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study represents an attempt to determine the extent to which the state or its functionaries have been permitted, in the administration of the public schools, to regulate or otherwise interfere with the natural liberty of the individual.

See also 25, 40, 127 (23), 1980, 2011, 2071, 2186, 2286, 2289, 2322, 2346, 2539, 2633, 2651, 2778, 2783, 2864, 3121, 3173, 3246, 3451-3452, 3464, 3500, 3540, 3648, 3711.

COMPULSORY ATTENDANCE

2598. **Bishop, Henry Francis.** Compulsory education in California; with recommendations for work permits. Master's, 1931. Stanford.

2599. **Crow, Wayne William.** Compulsory education laws of California. Master's, 1931. Stanford.

2600. **DePriest, Leland Elias.** The history of compulsory attendance in Ohio from 1900 to 1929. Master's, 1930. Ohio. (For abstract see no. 712.)

This study traces the development of compulsory attendance in Ohio by presenting the forces favoring or opposing it and the arguments they presented, and the changes and results of the law enforcing it.

2601. **Diley, James Monette.** The development of a compulsory system of education for Ohio, down to 1900. Master's, 1930. Ohio. (For abstract see no. 712.)

2602. **Durbin, Bernard Marcellus.** The extent to which pupils of junior and senior high school age fulfill the requirements of the "Bing law" in Seneca county. Master's, 1930. Ohio. (For abstract see no. 712.)

This study included 3,759 boys and girls living in the confines of Seneca county, or in Seneca county school district, who had reached their twelfth birthdays by September 1, 1928, and who had not yet reached their eighteenth birthdays by September 1, 1928. Conclusions: The schools of Seneca county, including those in cities in the county, have no record system at the present time from which to secure data of this kind. Pupils in rural districts have not secured working permits to work on the farm and in the homes.

2603. **Heck, Arch O.** A study of the Ohio compulsory education and child labor law. Columbus, Ohio State university, 1931. 210 p. (Bureau of educational research monograph, no. 9.)

This study analyzes the 37 criticisms of the Ohio law, to show whether or not the criticisms were justified. Eight studies based on these criticisms were completed and are described in this bulletin.

2604. **Kuntz, Harry Earl.** The operation of the Ohio compulsory-education law in Medina county. Master's, 1930. Ohio. (For abstract see no. 712.)

This is a report of the employed and the idle children 14 to 18 years of age residing in the school districts under the jurisdiction of the superintendent of schools of Medina county.

2605. **Lawing, J. Leslie.** State enforcement of compulsory attendance and census service. Doctor's, 1930. T. C., Col. Univ. 198 p. ms.

A study to determine the present status of state control of compulsory school attendance and census service in the United States, and what the States might do to make the service more effective.

2606. **Overholt, Ward Hearld.** A study of the functioning of the Bing law in the county school system of Franklin county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

In this study the attendance or nonattendance at school of boys and girls who lived in the county districts and who were 14, 15, 16, and 17 years of age on September 1, was investigated. Findings: The Bing law is functioning well in Franklin county schools.

2607. **Philadelphia, Pa. Board of public education.** Bureau of compulsory education. Report for the year ended June 30, 1930. 168 p.

An analysis of absence contained in this report shows that boys have attended more regularly than girls in all types of schools excepting special classes; the amount of unexcused absence of boys is half again as large as the amount of unexcused absence of girls; 84.5 per cent of all absence was excused; approximately one child in every hundred is absent daily on account of parental negligence; etc.

2608. **Severs, Jacob Dugan.** To what extent are pupils 16 and 17 years of age forced to remain in school by operation of the Bing law. Master's, 1931. Ohio. 115 p.

2609. **Snow, Festus Cornelius.** The administration of the widow's compensation clauses of the compulsory attendance school laws of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Data on the provision of free books for certain children, relief for widowed mothers, and funds provided by county commissioners for destitute mothers, as provided for by the compulsory school attendance law of Oklahoma, were secured from county clerks and county superintendents for the 2-year period, 1926-1928. Data indicate that free textbooks for poor children, relief for widowed mothers, and relief for destitute mothers were not being adequately provided in the extremely poor counties where the help was needed most.

2610. **Strehlman, Walter C.** History of the development of compulsory school laws of Missouri. Master's, 1931. Washington Univ.

2611. **Williams, Alonzo.** State participation in compulsory school attendance. Master's, 1931. Peabody. 242 p. ms.

A study of State constitutions and acts of the State legislature since 1850—the beginning of State participation in compulsory education. Findings: (1) Since States have established their systems of public schools, they have the right to exact attendance of certain children, both for welfare of the State and for the protection of the interest of children; (2) compulsory education as a State function has been practiced in the United States for 80 years. Its development is closely connected with certain historical movements, for example: Southern reconstruction, western expansion, northern and eastern industrial developments, the general revolution in education and the World war; (3) the volume of legislation for compulsory school attendance tended to increase until 1920. The tendencies have been to require a longer period of attendance since 1870, a higher educational proficiency for exemption, a larger personnel in the organization for the enforcement of attendance laws and State supervision of local units.

CONSOLIDATION AND TRANSPORTATION

2612. **Alair, Glenn Earl.** A study of centralized schools in Jefferson county, Okla. Master's, 1931. Oklahoma. 105 p. ms.

A study was made of nine consolidated schools in Jefferson county in regard to enumeration, enrollment, average daily attendance, qualification of teachers, salaries of teachers, length of term, pupil-teacher ratio, per capita cost, warrant expenditures, equipment, size of classes, and transportation of pupils. Ten 1-room rural schools of the county were studied and comparisons were made with the consolidated schools. The study reveals that a great many educational and financial inequalities exist in the county. The county unit system and larger consolidated units are recommended as methods to correct these inequalities.

2613. **Anderson, Alexander Verdaman.** The executive of the consolidated schools in Western Kansas. Master's, 1930. Kans. St. T. C., Hays.

2614. **Blauch, Clemens E.** Factors in the distribution of the proceeds of the two and sixty-five hundredths mills levy for transportation in Portage county, Ohio. Master's, 1931. Ohio.

2615. **Brough, Kenneth James.** The comparative efficiency of rural and town pupils in a consolidated school. Master's, 1931. Colorado.

2616. **Clites, Myron Spencer.** Legal aspects of a school consolidation program in Indiana. Master's, 1930. Indiana. 81 p. ms.

The legal aspects of a school-consolidation program in Indiana were taken up under the headings of: Closing undesirable schools; transfers and transportation of pupils of abandoned schools; raising fund to rebuild or to remodel; acquiring property for school purposes; and improving the conditions in Tippecanoe township, Pulaski county, Ind.

2617. **Conner, E. E.** A comparative study of some rural and consolidated schools. Master's [1931]. Peabody. 73 p. ms.

A comparative study of the achievements of 14 rural and 3 consolidated schools. Findings: The achievements of the fifth, sixth, and seventh grades of the consolidated schools were superior to those of the rural schools.

2618. Copeland, Joseph C. Costs and the measurements applied in school transportation. Master's, 1931. Ohio. 48 p. ms.

This study shows 11 years' expense on all school busses used in the Allen township school, Van Buren, Ohio, during this time. It shows the original cost of all busses, depreciation, interest on the investment, insurance, storage, etc., as well as all direct charges, from which the entire cost can be shown in various ways. Findings: Larger busses, making two trips each, are the more economical in communities like that of Van Buren.

2619. Covert, Timon. State aid for school consolidation and pupil transportation. Washington, D. C., United States Government printing office, 1931. 9 p. (U. S. Office of education. Leaflet no. 3.)

This study presents information concerning State school funds provided specifically for consolidated schools and pupil transportation in the United States and the conditions under which they are granted.

2620. Crookshank, John A. School transportation in St. Johns county, Florida. Master's, 1931. Florida.

2621. Duncan, Thomas Ireland. Consolidation of present one-room school districts of Hancock county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The problem is the consolidation of the present 1-room school districts in Hancock county with existing centralized school districts. Findings: The county unit should be established for the administration and supervision of the schools of Hancock county.

2622. Evans, Frank O. Factors affecting the cost of school transportation in California. Washington, United States Government printing office, 1930. 42 p. (U. S. Office of education. Bulletin, 1930, no. 29.)

2623. Francis, J. H. A study of certain school districts with references to consolidation. Master's, 1930. Illinois. 118 p. (For abstract see no. 699.)

This thesis is concerned with the attempt to outline a satisfactory school program for 17 elementary school districts and 1 community high-school district, lying within the boundaries of Ford county, Ill.

2624. Franklin, William Henry. A comparative study of the ability of school districts to support transportation in the State of Washington. 1931. University of Washington, Seattle. 52 p.

Findings: Cost in small district is comparatively very high. Consolidation should include at least four districts. State supervision of transportation might help situation.

2625. Gordon, Gary. School transportation in Colorado. Master's, 1930. Denver. 45 p. ms.

A technique for determining the need for school transportation in Colorado and a suggested procedure for administering State aid for this need.

2626. Hall, Faye Benson. The educational progress of the graduates of the large, small, and foreign elementary districts which comprise the Chaffey union high school district. Master's, 1931. California. 185 p.

An attempt to measure the efficiency of consolidated as compared with small non-consolidated schools by means of the subsequent records of graduates, involving 2,932 cases.

2627. Hartsook, Millard D. A survey of bus transportation to and from Ohio schools, 1929-1930. Master's, 1930. Ohio.

2628. Hastings, David C. A suggested plan for financing the proposed consolidated school center IV of Ashley county, Ark. Master's, 1931. Arkansas. 69 p. ms.

An investigation of the financial burden, if any, that the Crossett school district must assume by annexing six other districts, as suggested in the reorganization program of the State department of education. Findings: The project can be financed without lowering the educational standards of the present Crossett schools.

2629. Kinney, John Melvin. History and development of school consolidation in Washington. Master's, 1931. Washington. 83 p. ms.

2630. **Kornegay, R. O.** School consolidation of schools in North Carolina. 1930. Agricultural and technical college, Greensboro, N. C.

An account of the progress of consolidation in North Carolina; forces favoring and opposing consolidation, and an estimate of the benefits to be derived from a full realization of the program.

2631. **Lawrence, Wayne M.** A logical districting program for the consolidation of Coshocton county schools (Ohio). Master's, 1931. Ohio. 120 p. ms.

A study of the formation of larger school units for the purpose of reducing costs, equalizing educational opportunities, bettering instruction, and providing more efficient administration. Findings: The present 31 school districts can be reduced to 9 consolidated districts on the basis of natural social-economic communities, thereby reducing costs, equalizing educational opportunities, bettering instruction and providing more efficient administration.

2632. **Miller, Laud Francis.** A consolidated school district for Southwestern Athens county. Master's, 1930. Ohio. (For abstract see no. 712.)

The problem of this investigation was to determine, if possible, the feasibility of the formation of a new district, the way in which this territory might be consolidated, the best location for the building, the kind and size of building needed, and the number and location of bus routes.

2633. **Morgan, Walter E.** Report on the educational, administrative, financial, and legal aspects of the consolidation of the Glendale and Crescenta elementary school districts with the Glendale union high school district. Sacramento, Calif., 1931. 20 p. ms.

The study purposes answering the questions: What are the probable results which would accrue from the consolidation, in one administrative unit, of the Glendale city elementary-school district, the Glendale union high-school district, and the Crescenta elementary-school district; should such consolidation be recommended; and what steps should be taken to effect such consolidation if it should be recommended? It is recommended that steps be taken to unite the Crescenta elementary-school district and the Glendale city school district as one elementary-school district to be known as the Glendale city elementary-school district and to be governed by a single board of education; to change the status of the Glendale union high-school district to that of the Glendale city high-school district, so that the high-school and junior-college district will be governed by the board of education of the Glendale city elementary-school district.

2634. **Noble, M. C. S., jr.** Consolidation project. Raleigh, N. C., State department of public instruction, 1930.

Studies made in typical counties to determine the probable cost of county-wide school terms.

2635. **North Carolina.** State department of public instruction. Comparison of transportation allotments; 1929-1930. Raleigh, 1931.

Shows three bases for allotment of money for transportation, with figures for each method.

*2636. **Phillips, Wendell H.** The transportation of pupils in Susquehanna county, Pa., with suggested improvements. Master's, 1931. New York. 67 p. ms.

The problem of this study was to become familiar with the causes leading to the consolidation of schools in Susquehanna county, Pa., with the transportation of pupils at public expense from their homes to the consolidated schools; and to evolve a set of recommendations whereby the transportation of the pupils may be more satisfactory to the pupils, their parents and teachers.

2637. **Seitz, Lester E.** A proposed consolidation of high schools in Pickaway county, Ohio. Master's, 1931. Ohio. 112 p. ms.

Survey of present school conditions and a proposed program of reorganization. Findings: There are too many small high schools for economy and efficiency. They should be consolidated.

2638. **Taylor, Robert Norman.** Social effects of rural school consolidation. Master's, 1931. Lehigh. 75 p. ms.

Statistical survey of cultural characteristics of rural population in Northampton county, Pa., with study of teachers employed by rural district. Findings: The problem centers in the quality of teachers in consolidated rural schools. They are not specially trained for rural service. The disruption of rural communities goes on independent of consolidation. The chief problem is the city-mindedness of rural school teachers.

2639. **Thorp, John Henry.** Transportation of high-school pupils in Wisconsin. Master's, 1931. Wisconsin.

2640. **Westerfield, Yancy David.** The development and administration of the Forrest county consolidated schools. Master's, 1931. Kentucky. 126 p. ms.

A detailed study of the development of consolidation in Mississippi, particularly in Forrest county.

2641. **Wofford, Kate V.** A critical analysis and evaluation of the achievements of the Hickory tavern consolidated school, Laurens county, S. C. Master's, 1931. Cornell. 93 p. ms.

A critical analysis of a school four years after consolidation, disclosed enlarged educational opportunities for the children of the consolidated area.

See also 2187, 2694, 3075, 4823.

EDUCATIONAL FINANCE

2642. **Alabama education association.** Some salient facts concerning Alabama's schools. Montgomery, Alabama education association, 1931. 12 p. (Bulletin no. 10.)

This bulletin describes the working out of the 1927 equalization law in the various counties of Alabama for both white and Negro schools.

2643. **Alexander, Carter, director.** Report of the financial survey of the public schools of Greenwich, Connecticut, 1930. New York City, Teachers college, Columbia university, 1930. 37 p.

An example of how to deal with problems of school finance in a wealthy community.

2644. **Allman, Heyman Barnabas.** Origin, growth, and management of permanent school funds in Indiana. Master's, 1931. Indiana. 135 p. ms.

2645. **Arkansas. State department of education.** Financial and administrative needs of the public schools of Arkansas. Vol. 1. Little Rock, 1930. 100 p.

The purpose of this study was to make a plan for the provision of standard elementary and high schools for every child in Arkansas, and to determine the cost of such a plan. A plan of organization was set up. Recommendations as to the location of schools and the kind and extent of educational offering for each school are set forth. The cost of each proposed school system, and the amount of revenue available from present sources have been determined.

2646. **Beck, George Alfred.** High school budgeting procedures. Master's, 1931. Ohio. 180 p. ms.

Study of present practice in budgeting, with reference to three, four and six year schools, with suggested plan of budgeting. This was a questionnaire study. Replies were received from 120 schools located in 42 states and one territory.

2647. **Bissell, Dwight Montgomery.** A study of financing adult education. Master's, 1931. Stanford.

2648. **Bolmeier, E. C.** The ability of North Dakota to support its school system. Master's, 1931. Chicago. 86 p. ms.

From a study of natural resources, administrative unit, income inequality between districts, and system of taxation, it was concluded that the State has resources enough to provide for schools if the administrative unit and taxation were revised.

2649. **Bullington, Roy C.** A state aid county's ability to meet school costs. Master's, 1931. Ind. St. T. C. 95 p. ms.

Nine townships in Washington county, Ind., consistently receiving state aid 1920-1929, were studied. Findings: State aid is necessary in other than southern portion of State; townships with railroad through them support schools without state aid. Assessed valuation declined since 1926. Townships do not apply for aid when possible to do without it. If local income increased 22.21 per cent, only one of the townships receiving aid could support a school system equal to the state median school costs.

2650. **California teachers association.** Research bulletin. Papers by Elmer H. Staffebach, Fletcher Harper Swift, Alfred E. Lentz, and Ivan H. Waterman. 1930. 32 p.

Different phases of school revenues and plans of distribution of state school funds are discussed.

2651. ———. Research bulletin, 1930-1931. San Francisco, California, 1931. 40 p.

Contents: Research papers, by E. H. Staffebach, p. 3-24; California school law, by A. E. Lentz, p. 25-40 p.

Research papers by E. H. Staffebach are on: California public school finances; California property tax; California's public schools; Severance-tax idea; California junior colleges; Who pays the taxes; Teacher turnover. The papers on the California school law by A. E. Lentz, are: California elementary school district support; California high school district support; Payment of teachers salaries; Laws affecting teachers; School law items; Making of laws.

2652. **Calvert, T. B.** A brief review of the education program in the Muncie city schools along with the financial plan of supporting it. Muncie, Ind., Public schools, 1930. 14 p. ms. (Bulletin, no. 46.)

This bulletin might well be considered the message accompanying the 1930-31 budget for the Muncie schools. It contains brief mention of what the taxpayer is paying for along with comparison of like costs in other cities. These comparisons are made concrete by means of graphs.

2653. **Cammack, James W., jr.** A summary of the status of bonds executed by treasurers and depositories of Boards of education in Kentucky. Frankfort, Ky., State department of education, 1931. 105 p. ms.

A study to show the steps taken by local boards of education in Kentucky in safeguarding their school funds.

2654. **Davis, Gilbert Lawton.** Educational inequality in Garfield county, Okla. Master's, 1931. Oklahoma. 96 p. ms.

The fundamental principle motivating this study is to secure equality of educational opportunity for every boy and girl. An investigation was made to determine the facts regarding the finances of each school in Garfield county for the year 1928-29. Findings: Gross inequalities in costs of elementary schools and high schools exist; there is a wide difference in the number of pupils per teacher throughout the county; assessed valuation, bonded indebtedness, interest on warrants, and value of school equipment per child have a wide variation; education in independent districts is found to be much the least expensive, while that in the rural districts is the most expensive; school-district levies for current expenses vary from no levy at all to the constitutional limit of 15 mills; a great injustice is seen in the distribution of public service wealth; in Negro education, in both rural and city districts, the county is spending considerably above the State's average. The findings justify the organization of the schools of the county into larger units for administration and financing.

2655. **Davis, Rayburn Scott.** A study of the financial factors affecting the schools of Tulsa county. Master's, 1931. Oklahoma. 91 p. ms.

The important factors considered in this study are: Assessed valuation, total revenue, indebtedness, and expenditures. Per-pupil cost, based on average daily attendance, is the unit used in making the comparative-cost studies in education. The variations in wealth, revenue, indebtedness, and expenditures were investigated in the 27 school districts in the county. The effects of the unequal distribution of public-service wealth on educational advantages are clearly revealed. A study was made of the enrollment, average daily attendance, and current expenditures of the 10 separate schools of the county. The data assembled show that there are great educational inequalities among the schools studied, although the schools of the county rank above the average for the schools of the State in wealth, revenue, and expenditures per pupil. The inadequacy of the district as a unit for taxation and administration is brought out clearly and the need for a larger unit of support and administration is shown.

2656. **Denver, Colo. Public schools.** Estimated budget for Denver public schools for five year period from 1931-1932 to 1935-1936 inclusive. 1931. ms.

Using past expenditures and past budgets for five years preceding 1931-1932 as bases, predictions for the five years in advance were made. The budgets are in detail, not only for the chief items, but for subdivisions.

2657. Elliott, Ernest. The district system of financial support and administration among the rural schools of Noble and Kay counties. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The variations in wealth, expenditures, tax levies, scholastic population, and educational burden among 165 common-school districts in Noble and Kay counties, Okla., were studied. Data indicate that the present district system for rural schools now in use is responsible for great educational inequalities among the schools studied.

2658. Ewing, D. M. A study of the financial policies of the community high schools of McHenry county, Ill. Master's, 1930. Illinois. 132 p. ms. (For abstract see no. 699.)

Bibliography.

Data were secured from reports of various school officials, and from interviews and correspondence with superintendents of schools, board members, university men, publishers, and securities dealers. The study deals with the personnel of the boards of education of McHenry county, Ill., community high schools and the general nature of each of the high schools, the type of accounting budgeting used by these boards, the fiscal policies as to current expenditures, the policies of the boards toward incurring floating indebtedness, the policy of the boards in raising capital by bond issues, and the means used by the boards in safeguarding funds and property.

2659. Foley, Frank Sumner. Economic education. Master's, 1931. Boston Univ.

2660. Foote, John M. Plan for distributing the State equalization fund of one million dollars. Baton Rouge, La., Department of education, 1931. 40 p. (Bulletin, no. 192.)

States principles underlying state equalization and sets up definite plan of distribution for 1931.

2661. ——— The Tensas parish school budget. Baton Rouge, La., Department of education, 1931. 19 p. ms. (Bulletin, no. 201.)

2662. Fowler, Marguerite Dravo. Out of the red in finance. Louisville, Ky., J. M. Atherton high school, 1931.

2663. Gartin, William W. Financial aspects of public school education in Idaho. 1931. University of Washington, Seattle. 72 p. ms.

2664. George, Norvil Lester. An analysis of school financing in Blaine county, Okla. Master's, 1931. Oklahoma. 77 p. ms.

The sources of income and avenues of expenditure as taken from the county records for all the schools in Blaine county, Okla., for the fiscal year 1929-30 were analyzed and set forth in tables for unit comparisons. Findings: The inequalities of cost, effort, and ability that exist in one classification and between classifications warrant a change of method in handling school finance in this county; independent school districts are carrying more than their just burden in paying for the education of the country boys and girls at a financial loss to the independent districts; the larger the school the more pupils there are in average daily attendance according to the number enrolled; the highest cost of education is in the one-room schools, which is due to sparsely settled county-school districts; there should be a larger taxing unit for educational support in the county; state aid is going to the schools in the county which are putting forth the most effort.

2665. Gilmore, Charles H. Safeguarding school funds in the depositories of Arkansas. Master's, 1931. Peabody. 110 p. ms.

Study of safeguarding school funds in the depositories of Arkansas according to legal provisions and actual practice in the field. The plans used in other States were also studied. Findings: Many weaknesses in the present Arkansas plan were disclosed. No State has adequate plans. A need for a proposed plan was found.

2666. Grimm, L. B. State revenues for common schools. Springfield, Illinois state teachers association, 1931. 20 p. ms.

Summarizes sources of state school revenues, methods or principles of apportionment, and average amounts distributed per pupil in attendance in all States.

2667. **Grimm, L. B.** Statements concerning need of equalization in Illinois. Springfield, Illinois state teachers association, 1930. 8 p. ms.

Outlines extreme inequalities in ability, effort, and results reached among school districts of Illinois.

2668. **Hicks, Robert Sterling.** An evaluation of the methods of apportioning state school funds in Wyoming with proposed modifications. Master's, 1931. Southern California. 165 p.

A determination of the inequalities which result from the present method of distributing school funds together with an illustration of the reduction of inequalities effected by consolidation of districts in seven counties.

2669. **Hitchcock, Andrew Guy.** The practical effects of the weak school aid law in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

State aid for weak schools has had a rapid development in Oklahoma, evolving out of the building aid law of 1911 for consolidated and union graded schools. The present state aid law tends to discourage the organization or maintenance of small high schools.

2670. **Hodges, James Henry.** Equalization of state support of education in Oklahoma. Doctor's, 1931. Oklahoma. 230 p. ms.

Findings: At the present time in Oklahoma the districts pay 85 per cent of their school expenses by local ad valorem taxes. The districts in any county vary widely in effort and ability to support their schools. On the basis of pupil ability in one county in Oklahoma one district was 46 times as able to support its school as another district in the same county. For the year 1929-30 there were 50 districts with fewer than five pupils in average daily attendance. In general, the school districts in Oklahoma that have the least ability and therefore need state aid most are making the most effort. Of the 4,373 districts studied there were 28 that levied less than two mills for school support and 67 that levied more than 29 mills. Some districts assigned 98 per cent of their school expenditures to teachers' salaries in 1929-30. Other districts assigned less than 45 per cent of their total expenditures to teachers' salaries in the same year. The amount of state aid that a district gets should be based on the lack of ability to pay for an education as measured by the valuation behind each child in average daily attendance, and the number of children that are being educated. The financial burden of school support should be equalized so that all the children of the state will have an equal opportunity for an education.

*2671. **Horstick, Simon Motter.** A study of sources of revenue for public education in New Jersey. Doctor's, 1931. Pennsylvania. Philadelphia, University of Pennsylvania, 1931. 140 p.

The problem was to investigate public school finance in New Jersey for the purpose of suggesting sources of taxation for the support of public schools in the several counties of the State.

2672. **House, Robert Wood.** A study of rural educational inequalities in 18 counties of Virginia. Master's, 1931. Virginia.

2673. [**Houston, Texas. Independent school district.**] How the 1930 state dollar was spent. 1931. 8 p. ms. (Research bulletin, no. 8205.)

2674. **Humphrey, George Duke.** A history of the public school funds of Mississippi. Master's, 1931. Chicago. 74 p. ms.

A brief history of the public education in Mississippi with special reference to funds.

2675. **Iowa.** State department of public instruction. Public school finance in Iowa. Preliminary report. Des Moines, 1930. 56 p. (Research bulletin, no. 6)

This survey has been aimed at the entire problem of school costs and school support.

2676. **Irby, Nolen Meaders.** A program for the equalization of educational opportunities in the State of Arkansas. Doctor's, 1930. Peabody. Nashville, Tenn., George Peabody college for teachers, 1930. 162 p. (Contribution to education, no. 83.)

The problem was to determine the differences in educational opportunities which have existed and which persist in Arkansas among the schools maintained for whites and for Negroes, and to set up a program which will make these differences insignificant. Part 1

is a survey of past and present conditions among the 75 counties of the State; part 2 is devoted to the equalizing program. Findings: There are wide differences in educational opportunities among the counties of the State, which are of long standing, and which tend to be maintained. The differences in educational opportunities have a financial basis. Equality of educational opportunities could be provided by distribution of State funds according to teachers employed and pupils in average daily attendance; the State has ample economic resources to provide an 8-month school term for 12 years for every educable person in the State.

2677. **Jacobs, Chauncey.** Norms for current expenditures in the northwest district of West Virginia. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An analysis of current expenditures in all the districts of Hancock, Brooke, Ohio, and Marshall counties was made for a period of 9 years, 1922-1930, inclusive. The analysis revealed the manner in which the main items of the budget were allotted, and showed the average amounts and the percentage spent for each of the items over a period of 9 years. Data indicate that if the districts still operate under the same financial policies, that wide variation in current expenses will still exist; that they will continue to allot from each current expense dollar for the main items of the budget: 4.7 cents to general control; 72.92 cents to instruction; 10.32 cents to operation; 8.84 cents to maintenance, 2.22 cents to auxiliary agencies, and 0.98 cent to fixed charges.

2678. **James, Clayton L.** A history of Federal aid to education in Tennessee. Master's, 1930. Tennessee. ms.

2679. **Johnson, Palmer O.** Sources and distribution of income to the several units of public education, 1931. University of Minnesota, Minneapolis. 45 p. ms.

The sources and amounts of revenue for elementary, secondary, and higher education are compared for such States as California, Illinois, Indiana, Iowa, Minnesota, Ohio, and Wisconsin. Findings: Some variation exists in the extent of development of the several units in the respective States and the policies in vogue. The percentages of the total educational funds distributed to the public school system, by States, are: Illinois 93.5; Ohio 91.5; Indiana 91.4; California 90.3; Minnesota 86.9; Iowa 84.7; and Wisconsin 83.3; to State universities and colleges: Iowa, 13.8; Wisconsin, 11.6; Minnesota, 11.6; California, 8.3; Ohio, 7.5; Indiana, 7.3; Illinois, 4.8; to State teacher colleges and normal schools: Wisconsin, 5.1; Illinois, 1.7; Minnesota, 1.5; Iowa, 1.5; California, 1.4; Indiana, 1.3; and Ohio, 1.0.

2680. **Keever, J. C.** The development, administration and effect of the public school fund in Colorado. Master's, 1930. Colo. St. T. C.

This study is an attempt to analyze and evaluate the development and administration of the school fund of Colorado.

2681. **Kenney, Russell Austin.** Financial support of schools in three Oregon counties. Master's, 1931. Washington. 70 p. ms.

2682. **King, Lauren E.** The need for state aid in Colorado elementary schools. Master's, 1930. Colo. St. T. C.

This is a survey of the field of State aid for elementary schools. The first part deals with an analysis of the purposes, methods, and requirements governing the distribution of State aid to elementary schools throughout the United States; the second part is a survey of 62 rural elementary-school districts in the State of Colorado.

2683. **Kissick, Claude.** The county unit plan of financial administration desirable for financing the high schools of Kansas. Master's, 1931. Wisconsin.

2684. **Koch, John W.** Constitutional provisions for permanent common school funds in the several States. Master's, 1930. Ohio.

2685. **Larsen, Arthur Hoff.** A complete measure of the ability of a community to support public schools. Master's, 1931. Wisconsin.

2686. **Larson, Jordan L.** The status of state aid in Iowa. Master's, 1931. Iowa. 128 p. ms.

2687. **Lewis, Russell F.** Inequalities of educational opportunities in South Dakota. Master's, 1930. Nebraska. 75 p. ms.

A survey of five scattered counties of South Dakota, showing inequalities in buildings, equipment, libraries, salaries, certification of teachers, school expenditures, tax levies, and valuation of school districts.

2688. **McKimney, Chester Arthur.** The administration of the public school budget in small school systems. Master's, 1931. Nebraska. 59 p. ms.

This study is a report of the status of the budget in schools in cities of from 1,000 to 5,000 population, with statements of the values of a budget and recommendations as to its use in small school systems.

2689. **Martin, Jesse Henry.** A study of the school finances of Pawnee county, Okla. Master's, 1931. Oklahoma. 99 p. ms.

Data were obtained relative to valuations, enumerations, average daily attendance, and general and sinking-fund levies in all the school districts of Pawnee county. An analysis of these data showed that financial inequalities existed in the per pupil wealth, in the expenditures per pupil, in the tax levies, and the educational effort that was made. The county-unit system of school organization was proposed wherein the county would be taxed as a unit and the proceeds apportioned to the districts on the basis of the average daily attendance.

2690. **Massachusetts. Department of education.** State aid in financing education, 1930. [Boston, 1930.] 6 p. ms.

2691. **Minnesota. Department of education.** Financial statement of the State board of education and State aid schools, 1929-1930. [St. Paul, 1930.] 61 p. (Bulletin, no. 6, October 1930.)

2692. **Mitchell, Claude.** The development and control of state support of education in Pennsylvania. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

Throughout the educational history of the State, the facts seem to indicate that educational advancement has been dependent upon general public enlightenment, and the initiative and interests of local communities, rather than upon State guidance and control brought about by the granting of subsidies.

2693. **Moffitt, M. E. and Broom, Mrs. J. W.** A study in educational finance—city schools of Mississippi. Jackson, Miss., Department of education [1931?]. 11 p. ms. (Educational finance series, no. 9.)

This is a brief summary of data on city schools in response to a request for comparative data on the 32 Mississippi cities having populations of over 2,500. Twenty-one replies were received.

2694. ———— A study in educational finance, consolidated schools of Mississippi. Jackson, Miss., Department of education [1931?]. 14 p. ms. (Educational finance series, no. 10.)

The data on consolidated schools were collected in response to requests for comparative data on city and consolidated schools. Forms were sent to more than 70 superintendents of schools having 10 or more teachers each. Thirty-two replies were received.

2695. ———— A study in educational finance equalizing school funds. Jackson, Miss., Department of education [1931]. 11 p. ms. (Educational finance series, no. 11.)

2696. **Moody, A. E.** A severance tax for Ohio. Doctor's, 1931. Ohio. 150 p.

The study shows the inadequacies of the general property tax in Ohio. It defines and sets forth the severance tax in the States where it exists. It gives the court decisions involving the validity of the severance tax. The author then formulates a proposed severance tax for Ohio showing its administrative operation and allocating the revenue derived therefrom. Findings: Ohio could profitably enact a severance tax.

2697. **Moore, William J.** A proposed plan for the financial administration of public education in Kentucky. Doctor's, 1931. Kentucky. 130 p. ms.

An attempt was made to set up a satisfactory minimum program for equalizing current educational expenditures for the component parts of the State of Kentucky.

2698. **Mort, Paul B.** Financing Oklahoma schools. Report of the Oklahoma schools. Report of the Oklahoma survey commission to the State board of education of Oklahoma. Oklahoma City, Okla., 1930.

2699. **Mort, Paul B.** Tax relief in the financing of public schools. *Teachers college record*, 32: 628-34, April 1931.

2700. **National education association. Research division.** The personal income tax and school support. Washington, D. C., National education association, 1931. 20 p. (Studies in state educational administration, no. 8.)

2701. **New York (State) Education department.** Public school finances in cities, villages under superintendents and other villages maintaining academic departments; also tables showing total finances and other data for all public schools for the school year ending July 31, 1929. Albany, N. Y., University of the State of New York, 1931. 137 p. (University of the State of New York bulletin, no. 965.)

2702. **Newburn, Harry K.** A critical analysis of the bonding progress of certain Illinois high schools. Master's, 1931. Iowa. 185 p. ms.

2703. **Pennsylvania. Commission to study the present plan of financing the public schools and related matters.** Report. [Harrisburg, Pa., Department of public instruction, 1931.] 263 p.

The Commission recommends the elimination of outstanding inequalities in the present system of distributing state subsidies, and the provision for more efficient organization, administration, and supervision of fourth-class school districts in Pennsylvania.

2704. **Peterson, Percy S.** The application of federal aid to education in Indiana. Master's, 1931. Notre Dame. 74 p. ms.

2705. **Pippin, Bascum C.** The financial support of the schools of Canadian county, Okla. Master's, 1931. Oklahoma. 119 p. ms.

This study sets forth the results of an investigation of the different school districts of the county as to levies, expenditures, public service corporation wealth, state aid and the educational effort of the districts. It shows the amount of wealth, real and personal property, public service, and the bonded indebtedness back of each child in average daily attendance in each district, and the effect they have on the educational advantages of the various small districts. The county unit of taxation and administration is proposed and the consolidation of districts with low average daily attendance is advocated.

2706. **Pound, Clarence A.** A study of the financial condition of Terre Haute, Ind., schools. Master's, 1931. Chicago. 96 p. ms.

A study of the financial condition of Terre Haute, Ind., schools as they existed in 1929.

2707. **Reusser, Walter C.** Financing public education in Wyoming. Cheyenne, Wyoming state teachers association, 1930. 122 p. (Wyoming state teachers association. Research bulletin, no. 2.)

This study covers: An analysis of the present system of school support in Wyoming; improvement of the State's system of financing public schools; and studies related to the proposed plan of financing schools in Wyoming.

2708. **Robertson, M. S. and Foote, John M.** An administrative and financial study of the Beauregard parish school system. Baton Rouge, La., Department of education, 1931. 28 p. ms. (Bulletin, no. 200.)

Discusses existing conditions in the Beauregard parish schools, giving in detail the cost of instruction, transportation, and janitorial services in the existing schools.

2709. ——— An administrative and financial study of the Caldwell parish school system. Baton Rouge. Department of education, 1931. 23 p. ms. (Bulletin, no. 197.)

2710. ——— An administrative and financial study of the Jackson parish school system. Baton Rouge, La., Department of education, 1931. 44 p. ms. (Bulletin, no. 193.)

2711. ——— An administrative and financial study of the St. Helena parish school system. Baton Rouge, La., Department of education, 1931. 26 p. ms. (Bulletin, no. 195.)

2713. **Robertson, M. S., and Foote, John M.** An administrative and financial study of the Vernon parish school system. Baton Rouge, La., Department of education, 1931. 26 p. ms. (Bulletin, no. 202.)

2713. ———— An administrative and financial study of the West Carroll parish school system. Baton Rouge, La., Department of education, 1931. 22 p. ms. (Bulletin, no. 203.)

Part 1 of the report consists of statistical tables in which the present conditions in the parish are analyzed and comparisons made with average conditions in the State; part 2 includes a proposed budget of expected receipts and proposed expenditures for the school session 1931-32; part 3 gives a brief summary of some recommendations relative to the teaching staff, the relationship of the superintendent to the board, and other important matters.

2714. ———— An administrative and financial study of the West Feliciana parish school system. Baton Rouge, La., Department of education, 1931. 22 p. ms. (Bulletin, no. 199.)

Findings: The parish receives a comparatively large part of its school revenues from state sources; no special tax levies have been imposed for the support of the schools at any time; per-pupil cost of transportation is more than that of instruction; there is a definite need of adjustment of salaries.

2715. **Simler, Chester Lee.** Some phases of school finance as determined from a study of Crawford, Floyd, and Harrison counties. Master's, 1930. Indiana. 68 p. ms.

The problem was to determine: (1) Current expenditures of certain school corporations and the causes of variations in per-pupil costs; (2) possibility of consolidation in certain school corporations; (3) dependency of certain school corporations upon the State for relief; and (4) financial status of certain school corporations. Findings: Current expenditures vary directly with the number of teachers employed and the per-pupil costs vary directly with the number of pupils enrolled per teacher; most of the school corporations studied are heavily in debt and even with the present system of state relief it would be years before they could realize freedom from indebtedness.

2716. **Skipping, William R.** Some educational inequalities in Cameron county, Texas. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to devise a plan for equalizing educational opportunity in Cameron county, Texas.

2717. **Spann, Sylvester E.** An intensive study of the financial status of the public schools of Jackson county, Okla. Master's, 1931. Oklahoma. 93 p. ms.

This study gives the findings of an investigation of the school districts of the county as to expenditures, levies, state aid, and the educational effort of the districts. It shows the amount of assessed valuation of real estate, personal property, and public-service-corporation wealth. All districts in the county except two levy 15 mills—the constitutional limit for general fund. The indexes of effort of the four classes of schools in the county show that the rural schools make the most effort. Rural schools do not offer high-school work or furnish transportation to the children. From the results of the study, larger consolidations for administration and more state support for the schools are proposed as remedies for the inequalities found.

2718. **Stafford, James Polk.** A history of the public school funds of Mississippi. [1931]. George Peabody college for teachers, Nashville, Tenn.

A study of public school funds of Mississippi from 1803 to 1929. Findings: Before 1868 public schools were supported by local communities and counties. State distributive fund was set up in the constitution in 1868. These funds have been increased in number and amount until today they amount to over \$5,000,000. Apportionment problem for state funds is still unsettled. Equalizing fund has removed some of the inequalities of support.

2719. **Stenquist, John L.** Analysis of the budget of the Department of education for 1931. Baltimore, Md., Public schools, 1930. ms.

2720. **Stevens, Benjamin A.** An analysis of tax rates in certain tax areas in Ohio. Columbus, Ohio education association, 1930. 108 p. ms.

This study covers the 1928-29 tax rates in 1,506 tax areas in 23 Ohio counties. Findings: Evidence seems unmistakable that the municipal governmental authorities

have practiced a policy of forcing the schools to seek all current expense levies, other than the levies of 2.65 and 2.20 guaranteed by statute, outside of the limitation. The practice is general of forcing the schools to secure voted levies in a volume which is out of proportion to the extent to which they share in the inside levies.

2721. **Stevens, Benjamin A.** Economies and curtailments in school expenditures in Ohio. Columbus, Ohio education association, 1931. 10 p. ms.

Analysis of expenditures for current expense retrenchment programs of reporting school systems (53 cities, 20 exempted villages, parts of or all of 22 counties). Findings: Considerable variety of objects of economy or curtailment was found. In cities and exempted villages the most frequent means of retrenchment were: (1) Increase of pupil-teacher ratios; (2) automatic salary increments were suspended; (3) repairs were postponed. In county school districts reductions in teachers' salary schedules were frequently given as a means of retrenchment.

2722. **Stubblefield, Garland A.** A study of some methods of increasing the school revenue of the Springdale school district. Master's, 1931. Arkansas. 105 p. ms.

A survey of the educational responsibilities of the Springdale school district and a critical analysis of several proposed means for increasing the school revenues of the district. Findings: Under present educational legislation the district is unable to maintain a standard school for nine months unless assistance is secured from the State equalization fund.

2723. **Summers, Inez Viola.** Determining factors in the passing of a school bond issue. Master's, 1931. Wisconsin.

2724. **Sutherland, Robert Edward Lee.** An analysis of the financial bases for the support of Mississippi schools. Master's, 1931. Peabody. 144 p. ms.

2725. **Sutton, D. H. and Holy, T. C.** The disposition of school bond issues and special levies submitted by Ohio school districts on November 4, 1930, 1930. Ohio State university, Columbus. ms.

2726. ————. Financial data for Ohio cities and exempted villages as of September, 1930. 1930. Ohio State university, Columbus. ms.

2727. **Syracuse, N. Y. Public schools.** A study of the financial statistics of the City of Syracuse, N. Y., as compared with 10 New York cities with a population of 50,000 or more and 30 comparable cities from the entire country with a population of from 100,000 to 300,000. 1931. 39 p. ms.

2728. **Thompson, J. L.** Analysis and comparison of expenditures comparing 12 other communities. Newburgh, N. Y., Public schools, 1931. 12 p. ms.

*2729. **Tibbetts, Keim Kendall.** A study of the financial condition of the public schools at Wheaton, Ill. Master's, 1931. Chicago. 125 p. ms.

Bibliography: p. 124-25.

This study gives a brief review of receipts and expenditures during the past decade, and presents a plan of procedure for the management of annual operating and capital costs so that revenue receipts and expenditures will closely match each other.

2730. **Tupper, C. B.** Survey of accounting distributions for 100 selected items in 20 California cities. San Diego, Calif., City schools, 1931. 8 p. ms.

2731. **Tyler, Samuel.** A survey of the items of school expenditures. Master's, 1931. Iowa. 80 p. ms.

2732. **Ward, W. H. and committee.** A study of state aid for public education. Columbia, South Carolina teachers association, 1930. 55 p. ms.

Survey of State aid in 10 States including South Carolina, with recommendations.

2733. **Welsh, Edith B.** A study of state income taxation as a means of school support. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was to search the State income-tax laws in order to learn their provisions; to examine the literature pertaining to income taxation; to assemble the data relating to the practical working of these laws; and to present materials in such a way that they may be of assistance to students or other persons interested in State income taxation as a means of increasing school support.

2734. **Whitfield, George McCabe.** Financing the Tacoma public school system. Master's, 1931. Stanford.

2735 **Whiting, Edward Thomas.** Codification of controversial items of school expenditure. Master's, 1931. Nebraska. 54 p. ms.

This study included items not codified in previous studies by Charles Velte, John Weatherhogg, and John Martzen. The group of studies of which this is the last was undertaken for the purpose of giving to the school superintendents and boards of education a uniform guide to use in placing expenditures for various items of school supplies, services, and equipment. The present study collected the items upon which there was a disagreement in the first three studies and placed these items. This study also recommends certain changes in the uniform accounting forms used in Nebraska and which would be used in States whose forms follow certain recommendations of the Office of Education.

2736. **Whitney, F. L. and Kind, L. E.** State aid for elementary schools. *Elementary school journal*, 31: 678-83, May 1931.

2737. **Wolfe, Raymond L.** Financial policies of small schools of Nebraska. Master's, 1931. Nebraska.

A study of the financial policies of 15 small schools in Nebraska as revealed by the records, interviews with the superintendents and board members of the schools. Information relative to current expenditures, cost per average daily attendance, bond issues and collections, financial records and forms, assessed and real valuation of property, methods of handling finances, purchasing of supplies and equipment, salaries of teachers, etc., was secured.

2738. **Wright, Arkley.** A study of the fiscal ability of certain Kentucky cities. Master's [1931]. Peabody. 52 p. ms.

This study is limited to the five third-class cities of Kentucky—it inquires into the margin of wealth they have for school uses. Findings: (1) They have ample wealth; (2) the citizenship has and is devoting ample funds to school use; (3) tax burden should be lifted in part by larger contribution from State.

2739. **Wrinkle, Herbert Etsal.** An analysis of the expenditures for public education in selected cities of Oklahoma. Master's, 1931. Oklahoma. 113 p. ms.

The expenditures of 34 cities in Oklahoma were reduced to the unit basis per pupil in average daily attendance, and comparisons made. The comparative unit costs revealed a wide variation in expenditures by the selected cities.

2740. **Young, Gordie.** Budgeting school funds. Frankfort, Ky., State department of education, 1931. 75 p. ms.

See also 127 (1), 133, 150, 176, 1976, 1979, 1982, 2081, 2532, 2544, 2553, 2557, 2571, 2628, 2633, 2635, 2788, 3167, 3172, 3784, 4329.

COST OF EDUCATION

2741. **Anderson, Homer.** Unit costs in Montana public schools. Master's, 1931. Montana.

2742. **Berning, T. J.** One-teacher ungraded elementary (rural) school costs in districts maintaining seven, eight and nine month school terms, 1929-1930. St. Paul, Minn., Department of education, 1931. 60 p.

A total of 3,334 school districts are included in this study: 374 school districts maintaining a term of seven months, 968, eight months, and 1,992, nine months. Findings: Size of school, attendance, and assessed valuation increase with length of term. Cost per pupil per month decreases as length of term increases. Maintenance mill rate decreases as length of term increases.

2743. ——— A study of elementary and secondary school costs in districts maintaining class B and class C 4-year high schools and class B and C junior high schools and senior high schools. St. Paul, Minn., Department of education, 1930. 98 p.

Data used in this study are for the school year 1928-29.

2744. **Carbaugh, G. E.** Costs of 150 Kansas rural high schools, 1929-1930. Master's, 1931. Kansas.

Comparison of median costs per pupil in average daily attendance according to annual financial reports. The schools were classified according to enrollment.

2745. **Comstock, Lula Mae.** Per capita costs in city schools, 1929-1930. Washington, United States Government printing office, 1931. 13 p. (U. S. Office of education. Pamphlet no. 19.)

This pamphlet presents a study of per capita costs in 285 city school systems for the school year ended June 30, 1930.

2746. **Coutts, Hazel Ruth.** Comparative cost study of commercial with other high school departments. Master's, 1930. Iowa.

2747. **Daniel, Wilbur Elsworth.** A study of unit costs in schools of western Washington. Master's, 1931. Stanford.

2748. **Finch, J. D.** A comparative per capita high school cost of centralized and non-centralized county schools. Master's, 1931. Mississippi.

The study showed the need of definite educational readjustments, especially in the noncentralized county system of education.

2749. **Foot, John M.** How can the school board of St. Tammany parish reduce school costs without impairing the efficiency of the school system? Baton Rouge, La., Department of education, 1931. 17 p. ms. (Bulletin no. 177.)

2750. **Georgia education association.** Research bulletin of facts about education. Where the citizen's dollar goes. 1931. 16 p.

This study compares the cost of education in Georgia with that of other States.

2751. **Henning, Paul T.** Daily instructional costs per pupil in the high schools of Huntington county, Ind. Master's, 1931. Indiana. 100 p. ms.

2752. **Hetrick, Charles S.** Trends of current expense costs for Nebraska schools having from 11 to 30 teachers. Master's, 1930. Nebraska. 60 p. ms.

The trends of elementary, high school, and total current expense costs are studied for a period of six years (1923-1929) and these costs are compared for Article VI and Article XXV schools.

2753. **Houston, Texas. Independent school district.** Analyses and trends of school costs, 1924-1931. 1931. 6 p. ms. (Research bulletin, no. 8214.)

2754. ———— Analyses of school costs for the school year June 1, 1930 to May 1, 1931. 1931. 5 p. ms. (Research bulletin no. 8215.)

2755. ———— Costs and pupil statistics of the Houston schools (1924-1930). [1931.] 54 p.

2756. **Lee, J. Murray.** A study of departmental costs in the junior and senior high schools for a three-year period. Burbank, Calif., City schools, 1931. (For abstract see no. 717b.)

The cost per capita for each department in grades 7-12 was studied from 1927 to 1930.

2757. **Los Angeles, Calif. City schools.** Cost of instruction by subjects in the junior and senior high schools of Los Angeles. 1930.

2758. **McVey, John Philip.** Subject and grade costs of instruction in the high schools of Arizona. Master's, 1931. Stanford.

2759. **Makepeace, Frank George.** The instructional costs of vocational subjects in the senior high schools of Los Angeles. Master's, 1931. Southern California. 92 p.

2760. **Miller, Erie W.** A study of the relation between achievement and cost of 72 Colorado high schools. Master's, 1930. Colo. St. T. C.

The purpose of this study was to find out what relation, if any, exists between achievement as measured by the Stanford achievement tests and school costs, the influence of size on this relationship, and to develop a measure of efficiency which could be used to make comparisons of school systems.

2761. **Nelson, Thomas H.** Preliminary report on the unit cost studies of 21 larger Y. M. C. A. schools based upon form one analyses for 1925-1926 to 1928-1929. Lancaster, Pa., Educational council of the Young Men's Christian associations of the United States of America, 1930. 40 p. (Educational council bulletin, vol. 1, no. 4, November 1930. Supplement, no. 2.)

2762. **New Jersey. Department of public instruction.** Statistical and cost studies of education in New Jersey. Trenton, 1931. 505 p. (Education bulletin, vol. 17, June 1931. Special.)

Figures for the school year 1929-30 were summarized by the commissioner of education from the annual reports of the county superintendents of schools.

2763. **Peery, James Emmet.** Comparative study of unit costs in selected schools in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Fifteen North central schools and 15 other accredited schools of Oklahoma, which were comparable in enrollment and number of teachers, were studied to find if there is any real difference in the two types of schools.

2764. **Pusey, Edwin D.** Per-pupil costs in the public schools of Georgia. A study made for the committee on research of the Georgia association of school superintendents. Athens, Georgia association of school superintendents, 1931. 23 p.

The purpose of the study was to show the relative per-pupil costs of elementary and secondary schools in the State of Georgia, and the per pupil costs of the different subjects taught in the secondary schools.

2765. **San Francisco, Calif. Public schools.** Costs—oil, water, gas and electricity. 1931. 19 p. ms.

This study was made for the purpose of comparing the consumption of fuel, oil, water, gas and electricity in the San Francisco public schools. Comparative costs were computed for all the schools of similar size and type.

2766. **Smart, Thomas J.** How better schools for less money may be made available for a Kansas community. University of Kansas bulletin of education, 3:3-19, February 1931.

This is a study of the effect of adopting a proposed plan of reorganization in reducing both elementary and high school costs. The plan is a flexible federation rather than legislating new districts.

2767. **Snyder, James Paul.** The distribution of school costs between state, county and local districts in the State of Washington. Master's, 1931. Washington. 104 p. ms.

2768. **Taulbee, Mills Horton.** Comparison of the per pupil costs of instruction in rural independent, school township, consolidated, and city independent schools of Hardin county, Iowa. Master's, 1930. Iowa St. Coll. 43 p. ms.

2769. **Thompson, J. L.** Cost study of schools and departments. Newburgh, N. Y. Public schools, 1931. 8 p. ms.

2770. **Thurman, Wesley B.** Unit costs of supplies in the four year high schools of Los Angeles county. Master's, 1931. Southern California. 54 p.

Unit costs based upon mean expenditures per average daily attendance in 10 schools, computed for 48 items.

2771. **White, Warren Travis.** Per capita costs of, and ability to pay for, schools in Texas cities of more than 2500 population. Master's, 1931. Texas.

2772. **Williams, Florin C.** Daily instructional costs per pupil per subject in the high schools of Wabash county. Master's, 1930. Indiana. 137 p. ms.

Findings: There are too many high schools in the county; there are narrow curricula in some schools because of small enrollments; there is much duplication of equipment and in the matter of subjects; daily per pupil instructional costs are high because of small class enrollments.

2773. **Wilson, Arthur Kitterman.** A study to determine the relative cost per pupil of classroom periods of different time allotments. Master's, 1931. Southern California. 64 p.

A study of the total teacher cost per pupil in 31 senior high schools using the lengthened period of 50-60 minutes compared with the cost in 46 schools using the shorter period of 40-45 minutes; also a comparison of departmental costs in five typical high schools of each type.

See also 1708, 1984, 2369, 2502, 2618, 2622, 2834, 2861, 3024, 3239, 3606.

RURAL SCHOOLS

2774. **Bowers, Charles Homer.** An analysis of teacher participation in the administration of the high schools of Cambria county, Pa. Master's, 1930. Cornell.

2775. **Butterworth, Julian E.** The county superintendent in the United States, 1931. Cornell university, Ithaca, N. Y. 82 p. ms.

Data were received from 2,009 county superintendents and comparable officers regarding age, sex, marital condition, educational experience, training, degrees held, position held at time of first election, salary, salary limitations, etc.

2776. **Callahan, Maurice A.** Status of the county superintendent in Kansas in the years 1921 and 1929. Master's, 1931. Kans. St. T. C., Pittsburg.

2777. **Clarke, Harvey Fisk.** A study of the annexation of elementary districts to high school districts in California, with special reference to the general annexation law of 1921. Master's, 1931. California. 220 p. ms.

Examines the implication that all California territory should be high-school territory. Subserving to that purpose, it is the hope to make available a large amount of exact facts regarding the operation of California's annexation laws, and the territory which has been affected by them. Findings: 25 counties out of the 58 in the State are completely unionized; 37 counties or two-thirds have better than 90 per cent of their districts unionized; and 8 counties have between 70 and 90 per cent unionized.

2778. **Crawford, Otis Odell.** The position of the county school administrator. A study of the relationship of training, experience, and tax duplicate to salary, together with suggested legislation in county school administrative positions in Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

This study deals with the status of the county school superintendent and the assistant county school superintendent.

2779. **Frankfather, Harry V.** Redistricting of the high schools of Auglaize county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of this survey was to determine whether there are any weaknesses in the present school districting of Auglaize county and to establish basic facts for determining more logical and more efficient school districts.

2780. **Gaumnitz, Walter H.** Availability of public school education in rural communities. Washington, United States Government printing office, 1931. 53 p. (U. S. Office of education. Bulletin, 1930, no. 34.)

2781. **Gauer, Melbourne.** Certain phases of the problem of larger units of school administration with a particular study of Orange county, California. Master's, 1931. Claremont.

2782. **Heifner, James R.** The county unit of education in Tennessee. Master's, 1930. Tennessee. ms.

2783. **Hertenstein, Charles Rudolph.** Legal provisions in relation to county unit school organization. Master's, 1930. Indiana. 185 p. ms.

The problem was to determine what the provisions of school law in the 11 county unit States are, with a view to improving the rural schools of Indiana. Findings: Of the 48 States of the Union, only 3 have the township unit of control with partial elements of a county organization. The statutes of 6 States provide for an optional county-unit plan of school organization. The statutes of 11 States provide for a mandatory county-unit system of school organization.

2784. **Kelly, Annis.** The three most important duties of a county school superintendent of Georgia. Master's, 1931. Mercer.

2785. **Krausbeck, M. Earl.** A study of the administration of township schools in Indiana. Master's, 1931. Ind. St. T. C. 97 p. ms.

Analysis of practices of Indiana township trustees in hiring employees, purchasing of supplies and equipment and making and executing the school budget. Findings: Trustees are autocratic in control of employment; few use requisition system for purchases; they are autocratic in preparing budget.

2786. **Lenhardt, Lawrence Edwin.** The social-economic composition of the Board of trustees of Anderson county, S. C. Master's, 1931. South Carolina. 38 p. ms. (For abstract see no. 717.)

The purpose of the study was to point out the strong and weak points of the boards of trustees of Anderson county, and to suggest remedies for the weaknesses.

2787. **Leonard, Herbert C.** Plan for reorganization of school districts of Columbiana county. Master's, 1931. Ohio. 110 p. ms.

Rural and village school districts of Columbiana county were studied and recommendations made for immediate formation of districts on basis of community of interest plan and the adoption ultimately of a complete county-unit plan.

2788. **Moreland, Jerte F.** Some educational inequalities in Weld county. Master's, 1930. Colo. St. T. C.

In this study the writer attempts to determine the educational inequalities in Weld county, Colo., schools due to finances; the inequalities in sites, buildings, equipment, and teachers; and to compare the cost of the school to what it has in site, building, equipment, and teachers.

2789. **Morrison, J. Cayce.** Changing conditions which affect the work of the district superintendent of schools in New York State. Albany, N. Y., State education department, 1930. 16 p. ms.

A study of the social economic changes from 1910 to 1920 which have a bearing upon the work of district superintendents of schools in New York State with special attention to various factors involved in transportation, communication, and occupations. Findings: Certain definite changes are needed in the office of district superintendent in order to make it more adaptable to the educational needs of the present time.

*2790. **Nuttall, L. John, jr.** Progress in adjusting differences of amount of educational opportunity offered under the county-unit systems of Maryland and Utah. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 105 p. (Contributions to education no. 431.)

Bibliography: p. 96-105.

Part 1 of this study deals with the meaning of the county unit, its promise of equalization, and its development in Maryland and Utah. Part 2 deals with the progress in equalizing educational offering during the years under the county-unit system as measured by the length of school term, enrollment and attendance of pupils, and by the teaching staff.

2791. **Peck, Harry Elmer.** A survey to determine the advisability of a reorganization of the school districts of Geneva township, Ashtabula county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The recommendation of the survey was that the three districts should unite as the Geneva exempted village school district as a move towards economy and efficiency in administration of the schools and as a method of securing equality of educational opportunity among the children of the township.

2792. **Schuyler, Paul.** A plan for the reorganization of the schools of Menominee county, Mich., to bring about increased service and efficiency. Master's, 1931. Michigan.

2793. **Shaw, John Overton.** Educational opportunity in the schools of Tillman county, Okla. Master's, 1931. Oklahoma. 70 p. ms.

The sources of income and method of expenditure as taken from the records for all the schools of Tillman county, Okla., for the year 1929-30 were analyzed and set forth in tables for comparisons. Findings: The old district type of administration has failed to give a democratic system of schools in the county; inequalities of expenditure, ability,

and effort that exist in the county justify a change in the method of handling school finances; taxes on public utilities are not fairly distributed; a one or two room school should not try to do high-school work; districts that have an average daily attendance of 12 or less should not have schools of their own; the highest cost of education is in the rural schools, the lowest in the independent districts; districts that are the least able to support education are making the greatest effort. The local district should be replaced by the county as the unit for organization, support, administration, and supervision of the public schools.

2794. **Totten, William Fred.** A partial survey and plan for reorganization of the schools of Franklin township, Marion county, Ind. Master's, 1931. Indiana. 386 p. ms.

2795. **Wilson, Albert V.** School publicity in the smaller schools of Colorado. Master's, 1931. Colo. St. T. C.

The purpose of this study was to determine the status of school publicity in the smaller town and rural communities of Colorado.

2796. **Wood, Floyd Gilbert.** Duties of California school superintendents and principals of union high schools having 15 to 100 teachers. Master's, 1931. Southern California. 90 p.

An analysis of the relative degree of importance of 30 duties performed by public school administrators, based on replies from 122 individuals.

2797. **Wyrill, Pearl.** The county superintendent of Kansas. Master's, 1931. Wichita. 58 p. ms.

SCHOOL SUPERVISION

2798. **Adams, Olive M.** A study to determine the specific effects of individual supervisory conference on observed teaching. Master's, 1931. Michigan.

2799. **Alexander, Thomas; Stratemeyer, Florence; and Mead, A. R.** A comprehensive bibliography on supervision. New York City, Teachers college, Columbia university, 1930.

2800. **Austin, Emory Adair.** Teacher intervisitation as a means of supervision in the smaller school system. Master's, 1931. Nebraska. 68 p. ms.

A survey of current literature and a study of the practices in the schools of Nebraska in regard to teacher intervisitation as a means of supervision in the smaller school systems, with suggestive methods, techniques, and plans to be used in teacher intervisitation.

2801. **Barnes, Charles Olin.** A study of rural school supervision in Florida. Master's, 1931. Florida.

2802. **Bryant, C. L.** Supervisory procedures and evaluation of supervision in the Arlington school, Jacksonville, Fla. Master's, 1931. Mercer.

2803. **Cates, John H.** A year and a half's accomplishments in rural school supervision in Carter county. Master's, 1930. Tennessee. ms.

2804. **Conner, Jay Davis.** A cooperative study of teaching difficulties and supervisory activities. Master's, 1931. Stanford.

2805. **Cook, Emma Miller.** A study of rural school supervision in certain Kansas counties. Master's, 1930. Kans. St. Coll.

*2806. **Dales, Orrin Penfield.** A study of supervising officials in New York State. Doctor's, 1931. New York. 173 p. ms. Appendix: 142 p. ms.

The purpose of this study was to discover and analyze important facts about the persons engaged in supervisory work in the public schools of New York State outside of New York City. Questionnaires were sent to 38,875 persons, and replies were received from 98.1 per cent of the personnel.

2807. **Emerson, D. W. and Hackworth, Lector.** Northeastern teachers college supervisory yearbook for superintendents, principals, and teachers in elementary schools, 1930-1931. Tahlequah, Okla., Northeastern teachers college, 1931. 66 p.

The purpose of this yearbook was to give to the teachers of Northeastern district a summary of the results of the supervisory work for 1929-30; and to submit a plan by which the supervisory work may be continued during 1930-31.

2808. **Emmons, Spencer R.** To evaluate a supervisory program. Master's [1931]. Peabody. 222 p. ms.

A supervisory program applied to 10 teachers and 300 pupils in one school, showed that, by use of a definite program of supervision, improvement in teaching can be secured.

2809. **Fry, Mattie B.** Supervision. Master's, 1930. T. C., Col. Univ. 45 p. ms.

Findings: An efficient program of analysis and diagnosis of school problems, followed by proper remedial measures, lowers the number of failures; conserves time and energy of the pupil, teacher, and supervisor; reduces the number of problem cases; saves money for the school city; improves the morale of the teaching body; and creates a better understanding between the home and the school.

2810. **Garnes, Ruth F.** Supervisory duties of county superintendents. Master's, 1931. Colo. St. T. C.

This study attempts to answer three questions: (1) What are the professional activities in which county superintendents actually engage? (2) what are the professional activities considered to be most difficult to perform by county superintendents? (3) where, in the opinion of the county superintendent, is the best source of training for these activities?

*2811. **Hahn, Julia L.** A critical evaluation of a supervisory program in kindergarten-primary grades. Doctor's, 1931. T. C., Col. Univ. New York City. Teachers college, Columbia university, 1931. 156 p. (Contributions to education, no. 495.)

The problem was to describe the reorganization of the work of kindergarten and primary grades of the San Francisco schools over a period of six years, to examine critically the major elements of the supervisory program concerned with the reorganization in the light of the educational philosophy which guided its development, and to evaluate the procedures for purposes of possible application in similar situations.

2812. **Helm, Emma Jane.** A study of the supervising teachers in the Southern States. Master's, 1931. Peabody.

A study of 125 elementary supervising teachers in 44 colleges in 14 Southern States. Findings: A growing spirit of cooperation exists between the college and training-school faculties. The training teachers are more highly qualified than before from the standpoint of professional training and years of experience. Salary is being increased, but does not equal that of the college teacher, the average being \$2,002 annually. The supervising teacher is overloaded when compared with the college teacher. Student teachers ranged from 1 to 31 teachers, with average of 8 per term. The training school is being recognized as an integral part of the teachers college. Every phase of the training-school work is being improved, to meet the new requirements of the standardizing agencies.

2813. **Johnson, Irving W.** A specialized supervisory program dealing with a school's weakest subject. Master's, 1931. Colo. St. T. C.

It is the purpose to determine the influence of special supervisory efforts on achievement in a school's weakest subject and to make recommendations as to the desirability of the above type of procedure.

2814. **Lanier, J. M.** Principal's program of supervision. Master's, 1931. Mercer.

2815. **Lockard, Annie Kate.** Rural supervision in Harrison county, Miss. Master's, 1931. Peabody. 81 p. ms.

A study of rural supervision in Harrison county from 1928 to 1930. The needs of supervision were found to be: (1) Activities that will cause teachers to make more preparation for classes, to have more definite aims, and to meet more needs of the individual pupil; (2) standardization of study materials; (3) provision for and demonstration of use of extra helps; and (4) helps in correction of bad habits of pupil study.

2816. **Martin, Claire Arnot.** Studies in the supervision of the schools in Dickinson county. Master's, 1931. Kans. St. Col. 60 p. ms.

2817. **Massey, Herbert N., and others.** A study of the status of the subject supervisor in the junior and senior high schools of the largest 100 cities of the United States. Washington, D. C., National education association, 1931. (N. E. A. Department of secondary school principals. Bulletin, 35:194-200, March 1931.)

The objective of the study was to determine the administrative relationship existing between the subject supervisor, principal, and superintendent as shown by certain practices in city-school systems. Data were secured from questionnaires sent to city-school superintendents.

2818. **National education association. Department of supervisors and directors of instruction.** The evaluation of supervision. The fourth yearbook . . . Compiled by a committee of the department, Clifford Woody, chairman. New York City, Teachers college, Columbia university, 1931. 181 p.

"This yearbook is in part theoretical, in part a summarization of published investigations, and in part a compilation of the investigations and supervisory activities undertaken by the membership of the Department."

2819. **Neary, Frances.** An analysis of the duties of supervisors in the schools of New York State. Master's, 1931. N. Y. St. Coll. for Teach.

From material taken from the office of Dr. W. J. Cox, State education department, New York, the author has tabulated data in such a way as to give a fairly clear picture of the activities in which supervisors in the elementary schools engage. Tables show great differences in the number of grades supervised, the number of teachers coming under the direction of a single supervisor, the amount of time spent in supervision, the amount of teaching done by supervisors, etc.

2820. **Overn, A. V.** Survey report of instruction and supervision at East Grand Forks, Minn. [1931.] University of North Dakota, Grand Forks.

2821. **Frandoni, Sister Mary Carmela.** An analysis of the aids received by teachers in community school supervision. Master's, 1931. Catholic Univ. 39 p. ms.

2822. **Reynolds, Annie.** Supervision and rural school improvement. Washington, United States Government printing office, 1930. 42 p. (U. S. Office of education. Bulletin, 1930, no. 31.)

2823. **Southwick, Mrs. Ida M.** The county superintendent and rural supervision. Master's [1931]. Montana.

2824. **Travis, Leo B.** An analysis of the research, practice, and opinion in supervision in secondary schools. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

In this study an attempt was made to compile the practices in certain leading school systems, and the opinions of frontier thinkers in the field of supervision in secondary schools. The research was procured from 10 educational journals published between the years 1915 and 1930 inclusive. The opinions were selected from the publications of 25 authorities. The practices were assembled by means of a check list, which surveyed 115 representative school systems throughout the United States. The data were organized and displayed in tabular form.

See also 985, 1196, 1322, 1365, 1664, 1756, 2043, 2129, 2131-2132, 2138, 2814, 2841.

SCHOOL PRINCIPALS

2825. **Baker, H. K.** The status of the high school principal in the exempted village and small city school of Ohio. Master's, 1931. Ohio. 88 p. ms.

The study included 33 or 60 per cent of the exempted village and 32 or 68 per cent of the small city schools. Schools in cities between 5,000 and 15,000 were included in the small city group.

2826. **Bundrick, Olin Wyse.** The elementary school principal of South Carolina and his relationship to instruction. Master's, 1931. North Carolina. (For abstract see no. 710.)

The major attempt of the study was to show the factors which contribute to the professional growth of the elementary school teachers of the State. The study reveals:

(a) The worth-while changes which teachers have made in their instruction during the past few years with the causes of such changes; and (b) the activities of principals for the improvement of instruction in their schools.

2827. **Burdick, Rampy J.** Activities of the principals of Tennessee's approved four-year county high schools in improving their teachers in service. Master's, 1931. Tennessee. 113 p. ms.

2828. **Burtsfield, James Scott.** The principal as a probation officer. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The plan to have principals act as school probation officers originated with the judge of the juvenile court of Mahoning county, Ohio, in 1919. The plan has been used extensively in East high school, Youngstown. A total of 755 cases were heard in four years, of which 93 reached the juvenile court. The number of cases heard annually at the East high school has decreased from 2.5 per cent of the total enrollment in 1927-1928 to .61 per cent in 1929-1930. Chaney high school, using the same plan, shows a corresponding decrease during the same period. The principals in Youngstown using this plan feel that it is an aid in bringing about better attendance and discipline. Its strong points are that it places more responsibility on the parents, causes closer cooperation of school and home, gives the principal the support of the court, and saves the child from the dishonor of a court record.

*2829. **Carter, James Franklin.** The status of the high school principal in the State of Pennsylvania. Doctor's, 1931. Temple.

2830. **Couch, Mary D.** The desirable activities of elementary school supervising principals. Master's, 1930. Oklahoma. (For abstract see no. 713.)

A study was made of the time apportionment of 26 elementary principals of Oklahoma City. The study indicates that the principals are not apportioning their time wisely. The reasons for the unwise use of their time were secured by personal interviews with principals. Remedies for the defects are given.

2831. **Cox, Willis Burton.** The high-school principal in Indiana. Master's, 1931. Chicago. 96 p. ms.

An analysis of the principal's work, and a study of the training, salaries, experience, etc., of the personnel. Findings: The Indiana high-school principals do considerable teaching of a wide variety of subjects, due to the prevalence of small high schools in the State. Their training is above average, comparing with other studies, with a median of 177.9 weeks. The median salary is \$2,088. Only 4 per cent are women. The median experience is higher than the average.

2832. **Dannug, Leon Gurgos.** The status of the high school principal in the Philippines. Master's, 1931. Washington. 130 p. ms.

Findings: Principals occupy an important position in the development of secondary education in the Philippine Islands. Several suggestions for improvement are given.

2833. **Downs, Harold T.** Status of the elementary school principal of St. Louis county. Master's, 1931. Washington Univ.

2834. **Ellis, William G.** The overlapping of the duties of the school superintendent and principal. Master's, 1931. Nebraska. 100 p. ms.

Intensive and extensive study of the duties of the superintendent and the principal. Sets up some possible criteria to aid each person in judging his own work.

2835. **Foster, Frank Kale.** Status of the junior high school principal. Washington, United States Government printing office, 1930. 75 p. (U. S. Office of education. Bulletin, 1930, no. 18.)

2836. **Grise, Strauther Wade.** The time distribution of certain elementary school principals of Arkansas. Master's, 1931. Peabody. 61 p. ms.

Thirty-nine questionnaires were sent to principals in the State of Arkansas who devoted their full time to duties of principalship. Findings: (1) Arkansas principals give on the average 28.2 per cent of their time to supervision, 18.4 per cent of their time to administrative duties, 3.7 per cent to clerical duties, 37.4 per cent to teaching duties, and 11.9 per cent to other duties; (2) on the whole the time distribution of Arkansas principals compares favorably with that of principals represented in other studies except in that Arkansas principals have very heavy teaching duties; (3) the time distribution of Arkansas principals does not in matters of supervision and teaching compare favorably with what is considered the ideal time allotment of these duties; (4) data for this study

indicate that Arkansas principals as a group do not believe in a great deal of supervision and that they believe a principal should devote much of his time to teaching duties.

2837. Harrold, John W. An analysis of the small union high school principalship in New York State. Master's, 1931. N. Y. St. Coll. for Teach. 81 p.

Taking facts in part from the State education department and in part from the replies to a questionnaire, this study presents an analysis of the experience, the daily, weekly, and monthly duties, the distribution of time, the academic preparation, and the salaries of the principals in 64 widely distributed small high schools in New York State. Definite recommendations are made with reference to the amount and kind of preparation and the type of previous experience that should be required of persons assuming the duties of this office. The desirability of special preparation in educational administration and supervision is emphasized.

2838. Jagers, R. E. and others. The status of the twelve-grade principal in Kentucky. Louisville, Ky., Kentucky educational association, 1931. 33 p. ms.

A study of the status of the principal in Kentucky with reference to training, tenure, economic status, activities, etc.

2839. Lewin, Lillie. Survey of duties and services performed by vice-principals and opportunity teachers in elementary schools. San Francisco, Calif., Public schools, 1931. 15 p. ms.

2840. Morrison, J. Cayce. Standards for the preparation and certification of elementary school principals. Albany, University of the State of New York press, 1931. 13 p.

On and after September 1, 1932, all elementary school principals shall be required to hold a principal's certificate issued under the authority of the Commissioner of education. Permanent certificates will be issued to all principals who are in service on that date, who have served continuously for a period of three or more years and who possess a teacher's certificate valid in the elementary schools; and to all other principals in service on that date who are recommended for certification by the employing superintendent.

2841. National education association. Department of elementary school principals. The principal and supervision. Tenth yearbook. Washington, D. C., National education association, 1931. 652 p. (Bulletin of the Department of elementary school principals, vol. 10, no. 3, April 1931.)

2842. ——— Research division. The principal at work on his problems. Washington, D. C., National education association, 1931. (Research bulletin, 9: 94-159, March 1931.)

2843. Pedicord, Harry Lewis. The most difficult duties performed by supervising principals. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was to ascertain the most difficult duties performed by supervising principals of the fourth class townships of Allegheny, Washington, Fayette, and Westmoreland counties of Pennsylvania. Returns to a questionnaire were received from 95 of the 130 principals to whom they were sent. Data were grouped under 14 headings. The most difficult duties are those pertaining to supervision. Difficult duties pertaining to school boards are a close second to those of supervision. Teacher, pupil, community, and parental difficulties follow closely in order.

2844. Roberts, Nar. The status of the elementary principal of West Virginia. Master's, 1931. Ohio. 124 p. ms.

The data were collected by means of a questionnaire, which was sent to 253 elementary principals supervising 5 or more teachers. Ninety-eight principals replied. Seventy-five towns and cities were represented. The data were grouped into tables according to size of city and school.

2845. Strausbaugh, D. L. The status of the high school principal in Ohio. Master's, 1931. Ohio. 85 p. ms.

Senior, 4-year, and 6-year high schools over the entire State were studied. Findings: (1) Educational status is not what it should be (five years above high school). The outlook is encouraging due to a large percentage of attendance at summer training schools; (2) principals sidestep their most important duty, that of supervision; (3) office equipment in general is fairly adequate; (4) office help is inadequate—much student help is being used; (5) the principal in Ohio enters the profession from a teaching position, most frequently he is a successful athletic coach.

See also 292, 2056, 2069, 2222, 2352, 2537, 2796.

SCHOOL MANAGEMENT

2846. **Anderson, Mrs. Esther Luse.** Standards for measuring the discipline of high school girls. Master's, 1931. Indiana. 141 p. ms.

2847. **Bajrd, Philip Edward.** Procedures utilized in Ohio high schools to simplify closing the school year. Master's, 1930. Ohio. (For abstract see no. 712.)

The thesis offers summations of common practices, a definition of "closing the school year" and a suggestive identification of all that may be embraced under the term, together with a tentative procedure of organization and administration which is offered to the principal to test and modify to fit his needs.

2848. **Bozek, Brother Edwin.** A study of the four major factors influencing discipline in a Catholic high school, from the point of view of the prefect of discipline. Master's, 1931. Notre Dame.

2849. **Brokaw, Arthur H.** An experiment in the improvement of school spirit. Master's, 1931. Wisconsin.

2850. **Carlson, Herman E.** Discipline. Fresno, Calif., Public schools, 1931. (For abstract see no. 717b.)

A study was made of data on cases of discipline sent to the office of the vice-principal in a 6 year school of 1,800 pupils.

2851. **Denver, Colo. Public schools.** Required and optional expenses of pupils in Denver public schools. 1931.

Principals and teachers made inquiries of pupils regarding their expenses in attending school. These expenses included the required fees, books, paper, pencils, etc., and optional expenses. The latter made a long list of items.

2852. ———— School calendars in cities over 100,000 population. 1931. ms.

The questionnaire related to dates of beginning, closing, holidays, vacations, and number of days school was in session. Replies were tabulated from 36 cities.

2853. **Flemming, Cecile White.** The adjustment of pupils in the modern school. New York City, Teachers college, Columbia university, 1931. 101 p.

2854. **Frazier, M. R.** A case study of school discipline. Master's, 1931. Wisconsin.

2855. **Garrison, Ralph Merrill.** An age-grade and grade-progress study of Richland county schools. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of the survey was to determine the efficiency of the school system by means of an age-grade and grade-progress study. The schools were divided into township elementary, centralized elementary, village elementary, and high schools. The pupils were classified according to sex so that a comparison was possible. A study of age of entrance, frequency of failures, and double promotion was included.

2856. **Gnagay, Lelo J.** A study of school disciplinary problems. Master's, 1931. Wisconsin.

2857. **Hartwig, Herman J.** Characteristics and tendencies in the making of class assignments. Master's, 1931. Nebraska. 79 p. ms.

Study of current tendencies in assignment in public schools as shown by the literature and personal visits to 120 classrooms.

2858. **Heim, Ernest Theodore.** Policies and practices of home study in small schools of Nebraska. Master's, 1931. Nebraska. 100 p. ms.

Gives the results of a survey of 22 articles written in the past 10 years by prominent educators on home study, and a questionnaire study of 248 pupils in five small schools and 178 teachers and superintendents in Nebraska.

2859. **Horn, Ralph.** Lesson planning in the secondary school. Master's, 1930. Ohio. (For abstract see no. 712.)

Inquiry was made by sending questionnaires to the teacher-training institutions and to a representative group of school administrators and classroom teachers of Ohio to determine the present attitudes toward practices in the use of the written lesson plan in the secondary schools of Ohio.

2860. **Kruh, Frank O.** A study of the factors involved in making a high school schedule of recitations. Master's, 1931. Washington Univ.

2861. **Myers, Charles Everett.** Length of school term, school attendance, and school costs in 100 Virginia counties. Richmond, Va., State board of education, 1931. 34 p. ms.

Gives data for 1925-26 and 1929-30 for each county in Virginia. Findings: There is very little correlation between length of term and attendance with terms ranging from 6 to 10 months in length. With the length of term decreased, the chances are even that attendance will increase or decrease. There is a constant trend toward longer terms and better attendance, apparently operating independently among the counties of the State.

2862. **New York (City) Board of education.** Thirty-second annual report of the superintendent of schools for the year ending July 31, 1930. 1931. 843 p.

Statistical section contains tables and charts showing class size, promotions, age-grade, progress of pupils, etc.

2863. **Olson, Willard C.** A study of classroom behavior. *Journal of educational psychology*, 22: 449-54, September, 1931.

A study of whispering among about 200 elementary school children. Whispering is measured by a time sampling method and related to such factors as grade, sex, intelligence, teachers ratings for conduct, etc.

2864. **Risen, Maurice L.** Legal status of corporal punishment in the United States. Master's, 1931. Temple.

2865. **San Diego, Calif. City schools.** An analysis of merit and demerit systems used in San Diego city secondary schools. 1931. 24 p. ms.

A summary and critical analysis of merit plan practices in San Diego city secondary schools.

2866. **Sweigart, Bert A.** A study in high school discipline with special reference to 100 Indiana high schools. Master's, 1930. Indiana. 175 p. ms.

A study was made of 100 Indiana high schools to determine how discipline is administered; the frequencies of disciplinary infractions; the time of day and day of week, and location in building or activity of disciplinary infractions; and the methods used in dealing with type problems.

2867. **Wilkinson, Morris H.** Administrative control of discipline in junior high schools. Master's, 1931. Southern California. 125 p.

Based on a study of the literature, on surveys of merit systems, of student body organizations, of case-record systems, and on interviews with principals and vice principals.

See also 2502, 2551, 4170; *and under* Educational surveys.

ATTENDANCE AND CHILD ACCOUNTING

2868. **Chapman, Alvan Lothair.** A study of child accounting in Alabama. Master's, 1931. Cincinnati.

2869. **Clark, Lee.** Child accounting in the hospital school at the University of Michigan. Master's, 1931. Michigan.

2870. **Fleming, Paul.** A survey of truancy in Oakland, 1928-1929. Oakland, Calif., Public schools, 1930. 43 p. ms.

Tabulations made of age and grade distribution show that truancy is a problem of junior and senior high schools; of boys about the ages of 15 and 16. Little relationship was noted between day of the week, holidays, special events, or the weather and the occurrence of truancy.

2871. **Greene, H. A.** Uniform child accounting system for Iowa. Des Moines, Iowa State teachers association, 1931.

A proposed program and system of record forms for the administration of a state-wide uniform child accounting system adapted to graded and rural school situations in the State of Iowa.

2872. **Long Beach, Calif. City schools.** Child accounting records. 1931. 4 p. ms.

2873. **McNicholas, Rev. Martin Leo.** Child accounting in Catholic elementary schools. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university of America, 1931. 93 p.

2874. **Martin, Paul E.** Analysis of enrollment, attendance and graduation, 1910-1930. Compton union district, Calif., Public schools [1930].

Tabulation on enrollment by class and sex, of average daily attendance by months and years, and size of graduating classes. There was an average annual increase in enrollment of 12 per cent, and in graduation of 20 per cent for the 20-year period.

2875. **Moffitt, M. E. and Broom, Mrs. J. W.** Population, school census, and school attendance in the State of Mississippi, 1927-1928 and 1928-1929. Jackson, Miss., Department of education [1931] 15 p. ms. (Child accounting series no. 1.)

Data are taken from the annual reports of the county superintendents of education in the 82 counties of Mississippi and of the superintendents of 171 separate school districts. The items are treated by races in order that judgment may be passed on the obligation to each race separately.

2876. **Sanford, C. W.** A study of child accounting records. Master's, 1930. Illinois. 139 p. (For abstract see no. 699.)

Bibliography.

"Included in this study is first, a consideration of the functions and purposes of child accounting records; second, a consideration of the results of an analytical study of the child accounting practices in some 60 representative schools in the State of Illinois; third, a consideration of the criteria which were used in the selection of the records and the items contained thereon for use in each of the different schools; and fourth, a consideration of the records for use in each of three different sized schools. Data were secured chiefly from a questionnaire and from an examination of the literature on the problem, or related problems . . . The findings reveal that few of these schools possess an adequate set of child accounting records . . ."

2877. **Senour, A. C.** Annual report on pupil accounting for the regular day school in East Chicago. East Chicago, Ind., Public schools, 1930. p. ms.

2878. **Smith, Walton A.** Causes of absence and tardiness in the Wyandotte high school. Master's, 1931. Chicago.

A study of the various factors related to the absence and tardiness of pupils in high school, such as age, sex, IQ, scholarship, nationality, occupation and education of parents, distance from school, and employment of pupils, as well as immediate causes as given by pupils and parents.

2879. **South Dakota.** Department of public instruction. Uniform accounting system for South Dakota schools. Pierre, 1931. 37 p.

This study describes the uniform accounting systems planned for use in the school districts of South Dakota.

See also 107, 176, 496 (19), 2552, 2861, 3276; and under Compulsory attendance.

CLASS SIZE

2880. **Abraham, Richard I.** Survey of length of session and size of classes in San Francisco kindergartens. San Francisco, Calif., Public schools, 1930. 4 p. ms.

*2881. **Brown, Albert Ernest.** The effectiveness of large classes at the college level: an experiment involving the size variable and the size-procedure variable. Doctor's, 1931. Iowa. Iowa City, University of Iowa, 1932. 66 p.

2882. **Chapman, Harold B.** Size of classes and teaching sections in elementary, junior high, senior high and vocational schools as of October 1929. Baltimore, Md., Department of education, 1930. 64 p. ms.

2883. **Chicago, Ill.** Board of education. A frequency distribution of class memberships in Chicago. 1931. 19 p. ms. (Statistical bulletin no. 14.)

A frequency distribution is given in order to give an accurate picture of the actual memberships in the classes in elementary schools. Data reveal a very marked reduction in the teacher load in the elementary schools in the semester ending February, 1931.

2884. **Erickson, J. A.** Small versus large classes. Master's, 1930. Nebraska. 91 p. ms.

A study of previous investigations and findings relative to class size. Shows the advantages claimed for small classes; the opinion of teachers relative to class size, and their reaction to the advantages claimed for small classes; and results attained by pupils in small classes in the private school in which the author teaches compared with the results attained by pupils in other schools.

2885. **Gerberich, J. B.** Class size in principles of economics, 1930-1931. University of Arkansas, Fayetteville. 7 p. ms.

The results indicate no certain differences showing superiority for either small or large classes.

2886. **Gould, Arthur, and Nettels, Charles H.** An experiment in class size. Los Angeles, Calif., City schools, 1931.

A study made to determine the possibilities of instruction in large classes in English, algebra, and history.

2887. **Houston, Texas.** Independent school district. Enrollment and size of classes—junior and senior high schools, March 1931. (First six weeks—second semester, 1930-1931.) (Research bulletin no. 8207.)

2888. ——— Size of classes—May, October 1930. 4 p. (Research bulletin no. 8201.)

2889. **McRae, Rhoda.** Differences in technique required in the teaching of large and small classes in United States history and government. Oakland, Calif., Public schools, 1931. (For abstract see no. 717b.)

In order to discover the techniques best suited to large classes, 5 classes of 51 each were organized, 1 fast and 4 medium sections.

2890. **Martin, Vibella.** Differences in techniques required in the teaching of large and small classes in the senior high schools. Oakland, Calif., Public schools, 1931. (For abstract see no. 717b.)

A study was made of one unselected larger class of 50 pupils and one unselected smaller class of 20 in low 10 English during each of three succeeding semesters.

2891. **National education association. Department of superintendence and Research division.** Size of class in 101 cities 30,000 to 100,000 in population and 56 cities under 30,000 in population. Washington, D. C., National education association, 1931. 63 p. (Educational research circular, no. 6, May, 1931.)

2892. ——— Size of class in 47 cities over 100,000 in population. Washington, D. C., National education association, 1931. 36 p. (Educational research circular, no. 1, January, 1931.)

2893. **Reading, Pa.** Public schools. Range of class sizes, secondary schools 1931. 28 p. ms.

2894. **Waterman, Ivan B.** Size of high school classes, fall semester, 1929-1930. San Francisco, Calif., Public schools [1930].

The classes of each high school were tabulated according to subject and size of class. The average sizes of classes in the different subjects and in the several schools were compared.

2895. ——— Size of junior high school classes, fall semester, 1929-1930. San Francisco, Calif., Public schools [1930].

The class sizes in each subject, physical education excluded, in each junior high school, were tabulated and averages computed. Comparisons were made between the average size of class in the several subjects among the different schools.

2896. **Whiteneck, Hosea A. N. E. A. report on class size.** Long Beach, Calif., City schools, 1931. (For abstract see no. 717b.)

Findings: The medium number of pupils in average membership in the kindergarten for a total of 55 classes is 35.7; in the elementary schools, grades one to six, for a total of 442 classes the median is 29.5; for a total of 1,497 classes in the junior high schools the median is 30.9; and for 844 classes in the senior high school the median is 30.3.

See also 1039, 2863; and under Teacher load.

CLASSIFICATION, GRADING, AND PROMOTION

2897. **Albany, N. Y. Board of education.** The relation of performance to ability under formal grade organization continued. A seventh grade study supplementary to that published in March 1930. 1931. 6 p.

2898. **Bolan, Harvey S.** The relation of performance to ability under formal grade organization. Master's, 1931. Rutgers.

2899. **Brooks, Fowler D.** Pupil placement. 1931. DePauw university, Greencastle, Ind.

2900. **Calvert, T. B.** Promotion rates in Muncie city schools for semester ending January 23, 1931. Muncie, Ind., Public schools, 1931. 11 p. ms. (Bulletin, no. 58.)

This report sets forth promotion rates for the three departments—elementary, junior high school, and senior high school, and compares them with rates for the last five semesters. Rates are shown by grades and by schools in elementary and junior high school, and by subject and grade in junior high and senior high school.

2901. ——— Promotion rates in the Muncie city schools for semester ending June 6, 1931. Muncie, Ind., Public schools, 1931. (Bulletin, no. 67.)

2902. **Chapman, Harold B.** Elementary promotion rates of January 1931. Baltimore, Md., Department of education, 1931. 19 p. ms.

The white elementary schools of Baltimore promoted 85.4 per cent of the boys and 90.2 per cent of the girls in grades one to six, inclusive, in January 1931. The rates are practically identical with those of June 1930.

2903. **Cowan, Philip A.** Sociological bases of school organization. Albany, New York State education department, 1931. 48 p.

Survey and interpretation of sociological literature which has a bearing upon the problems of which pupils should be grouped into a class under one teacher. Findings: Certain social aims are presented as a criterion for class information.

2904. ——— What is wrong with our graded system? Albany, New York State education department, 1931. *Nation's schools*, 8: 45-50, November 1931. An analysis of the criticisms of the grade system which began about 1870.

2905. **DeBusk, Burchard Woodson and Leighton, Ralph Waldo.** A study of pupil achievement and attendant problems. Eugene, University of Oregon, 1931. (University of Oregon publication. Education series, vol. 2, no. 6, p. 158-200, February, 1931.)

This study is based upon a sampling within a school system with an enrollment of some 35,000 pupils in its grades, and within the curriculum rather than upon a city-wide study and curriculum-wide study. Data indicate that the system of grading achievement and classifying pupils in this school system resulted in: Extreme spreads of mental ability within grades and within classes; extreme differences in achievement standards in different schools; extreme differences in achievement in each class and in each grade; low teaching efficiency when the mental ability of the pupils is taken into consideration; poorer functioning of the school system in the upper grades than in the lower grades, due to wider ranges of pupil ability; and poorer classification of pupils by grades.

2906. **Engle, T. L.** A study of the scholastic achievements in high schools of pupils who have had double promotions in elementary school. Michigan City, Ind., Public schools, 1930. *Elementary school journal*, 31: 132-35, October 1931.

Of the 156 students graduating from the Isaac C. Elston senior high school in 1930, 46 had had one or more double promotions. The accelerated group was compared with the remainder of the graduating class, and with a random sampling of 46 from the entire high school. The accelerated group had better marks in high school than their classmates, and better than a random sampling for the entire school.

2907. **Gray, Robert F.** Mental survey of pupils entering senior high school as a basis for classification. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

The Terman group test of mental ability was given all pupils leaving the eighth grade of elementary schools. The range of mental abilities of pupils entering the senior high school is from the fifth to the twelfth grade level.

2908. Houston, Texas. Independent school district. Tentative recommendations concerning classification and testing procedures growing out of the survey of junior high schools. 1930. 4 p. Questionnaire on certain high school procedures (classification, testing, records). 5 p. (Research bulletins, no. 8202 and 8202a.)

2909. ———— Tentative results from a classification study in the low eighth and high eighth grades in the Houston junior high schools. 1931. 5 p. ms. (Research bulletin, no 8209.)

*2910. Lucas, Ida Childs. A study of acceleration in the schools of Reading, Mass. Master's, 1931. Boston Univ. 48 p. ms.

This study gives the results of a promotion plan which has been in effect in the schools of Reading, Mass., for the past five years. The types of pupils studied were those who have been allowed to complete the work of the six grades of the elementary schools in five years; the gifted children who have taken the full six years to cover the work of the elementary school; the dull pupils who have been put into the junior high school at the end of their sixth year in school; and the pupils put on a special program who have taken seven or more years to reach the junior high school.

*2911. McGinity, Helen V. A comparative study of the EQ and the IQ as an aid in the classification of pupils. Master's, 1931. New York. 42 p. ms.

2912. Montgomery, John. Grade placements in the Bishopville public schools, grades 2 to 7 inclusive. Master's, 1931. South Carolina. 58 p. ms. (For abstract see no. 717.)

Mental and achievement tests were given in the Bishopville public schools in order to determine if the grade placements were well made. Findings: There is a wide range of educational ages within a single grade; undeserved promotions have been made; there are children in each grade who would be benefited either by demotion, nonpromotion, or promotion; grades two to seven, taken as a group, are well classified according to grade; marking is not done according to the accomplishment of what pupils are capable of doing but by arbitrary standards.

2913. Oakland, Calif. Public schools. A graphical presentation of pupil progress in the Oakland public schools. 1930. 28 p. (Superintendent's bulletin, vol. 9, no. 14.) Supplement.

Gives information concerning tests, achievement, promotions, failures, follow-up, etc.

2914. Prewett, Hattie O. The economic advantage of special promotions. Fort Worth, Texas, Public schools, 1931. 27 p. ms.

A study of the advantage accruing to the Fort Worth public schools because of half-grades skipped by pupils during the 10 years from September, 1920, to June, 1930. Findings: Based on the per capita costs in the elementary schools, the saving was \$81,494. For those permitted to skip on the basis of the intelligence quotient alone, the saving was \$10,259. The problem was also considered from the viewpoint that one-half year was saved to each pupil because of graduation taking place one-half year earlier.

2915. Pritchard, Mrs. Pauline. A study of the classification procedure in the low sixth grade. Houston, Texas, Independent school district, 1931. 4 p. ms. (Research bulletin no. 8210.)

2916. Santa Monica, Calif. City schools. Preliminary classification survey. 1930. 25 p. ms. (Report no. 4.) (For abstract see no. 717b.)

This study was made in October, 1930, and included: (a) A study of age-grade distribution, yielding facts concerning retardation and acceleration; (b) race distribution. Findings: In age-grade distribution for all elementary schools 59.7 per cent of all pupils are found at age; 22.2 are retarded; and 18.1 per cent are accelerated. In junior high schools, 47.2 per cent are at age, 27.8 per cent are retarded, while 25 per cent are accelerated. Racial distribution for all schools was as follows: 88.8 per cent American whites, 6.7 per cent Mexican, 2.2 per cent colored, 1.9 per cent Japanese, 0.4 per cent Chinese, and others.

2917. ———— Promotion and nonpromotion. Date of first study, June 1930; second study, January 1931. 20 p. ms.

School progress is one of the chief concerns of the department of research and therefore systematic surveys of promotion and failure are given an important place in the yearly program. The main purpose of such studies is to measure the distribution of promotions by grades, schools, and subjects, in order that significant changes and improvements may be noted.

2018. Schenectady, N. Y. Public schools. Report on promotions in the elementary schools, January 1930. 20 p. ms.

2019. Thompson, K. L. Promotions and non-promotions in Jersey City elementary schools, fall, 1930 and term ending June 30, 1931. Jersey City, N. J., Public schools, 1931. 10 p., each.

2020. Waterman, Ivan B. Promotion and non-promotion of elementary pupils, 1929-1930. San Francisco, Calif., Public schools, 1931. 7 p. ms. (Bulletin 23.)

See also 20, 627, 747, 902, 1232, 1819, 1955, 1987, 2005, 2007, 2493, 2544, 2862; and under Ability grouping.

CURRICULUM STUDIES

2021. Akron, Ohio. Public schools. Kindergarten course of study. 1930. 64 p. (Publication, no. 3.)

This course of study is organized about a suggested activity for each month. The main objective is that in each kindergarten the work shall be planned about some large unit of interest which will make provision for as many of the regular kindergarten activities as possible.

2022. American educational research association. The curriculum. Review of educational research, vol. 1, no. 1, January 1931. 64 p. (Prepared by the committee on the curriculum, William L. Connor, Ralph W. Tyler, Henry Harap, chairman, and others.)

Reviews scientific work in the field of the curriculum. Includes a bibliography of the references upon which the reviews are based.

2023. Badertscher, J. Milton. A program for curriculum revision for grades 7, 8 and 9 of the Portage county, Ohio, school district. Master's, 1931. Ohio. 143 p. ms.

Study of county status and methods of curriculum revision. Findings: There are well trained teachers in the county but very heavy teaching loads; libraries are inadequate. Average experience of county high-school teachers is four years. Professional organization of county is strong. Unit plan of organizing subject matter offers an excellent means of curriculum revision. Present organization and subject committees may be utilized for effecting plan.

2024. Bell, Millard D. Plans for securing an enriched curriculum for the small high school of Nebraska by more complete alternation of subjects. Master's, 1930. Nebraska. 50 p. ms.

A study of 3, 4, and 5 teacher high schools of Nebraska, involving curricula, teacher loads and combinations.

2025. Berrong, Marvin Troy. A curriculum study of the public high schools of Georgia. Master's, 1930. Tennessee. ms.

2026. Broady, Knute O., Platt, Earl T. and Bell, Millard D. Practical procedures for enriching the curriculums of small schools. Lincoln, University of Nebraska, 1931. 88 p. (University of Nebraska publication, no. 84. Educational monographs no. 2, June 1931.)

2027. Bruner, Herbert B. Judged outstanding courses of study in America. New York City, Teachers college, Columbia university, 1931.

*2028. Conley, Lillian M. A study of the coordination of the subject matter of the curriculum of the elementary schools of New York City. Master's, 1931. New York. 35 p. ms.

The study purposes to discover new trends in education as indicated by revised curriculum; to find the relation between the revised curriculum and modern accepted

theory and practices; to discover what modifications might be necessary to harmonize the two. Findings: Courses of study need coordination within themselves and with the curriculum as a whole; materials of instruction prescribed in courses need evaluation; a general committee for revision of the curriculum should be maintained.

2929. Cooley, June Louise. Content of specified courses in four-year kindergarten-primary curricula. Master's, 1931. Peabody. 140 p. ms.

A study of 4-year kindergarten-primary curricula from 14 colleges of class A of the American association of teachers colleges, 1930 list. Findings: From a study of the number of specified courses and their credit hours, the most important departments, and groups of courses in departments, were found. The titles of specified courses revealed: (1) Little agreement as to which courses were most helpful; (2) that practically half of the titles were used only once, and (3) that only one-fourth of the specified courses were especially for kindergarten-primary teachers. Topics from catalogue descriptions of courses revealed more courses of general than of particular value to kindergarten-primary teachers, and the fact that some topics occurred in different courses and departments, indicated lack of agreement as to which courses and which departments certain topics belonged.

2930. David, Flavius L. The organization of personnel for curriculum revision. 1930. Western Reserve university, Cleveland, Ohio. ms.

A study of the replies to a questionnaire from 41 progressive school systems in the United States.

2931. Edmunson, Richard C. A comparison of the curriculum of private high schools and public high schools. Master's, 1931. Iowa. 108 p. ms.

2932. Fishpaugh, Clara. Principles of curricula making for the elementary schools of bituminous coal-mining communities. Doctor's, 1931. Johns Hopkins.

Twelve hundred miners and their families and 6,000 school children in the West Virginia coal fields are involved in this study.

2933. Glasgow, William David. A suggested curriculum for the small high school based on the opinion of 500 adults other than those engaged in educational work. Master's, 1930. Iowa St. Coll. 57 p. ms.

2934. Gray, Robert Floyd. Inquiry into need for revising high school course of study. San Francisco, Calif. Public schools [1930].

Information blanks consisting of items concerning the adequacy of the present high-school courses of study were sent to all high-school teachers. Data indicate that certain of the courses should be revised with a view to differentiated materials for the several ability groups; certain courses need more review materials.

2935. Harap, Henry. Annotated bibliography of curriculum objectives, 1931. Western Reserve university, Cleveland, Ohio. 37 p. ms.

This bibliography is a list of investigations to determine the objectives of courses of study. The entries are classified by subjects.

2936. Hereford, E. H. Programs of study in Texas high schools. Doctor's, 1930. Texas.

Traces the development of the program, notes the changes, explains these changes, and make suggestions for the future.

2937. Hermans, Mabel C. Utilizing adolescent interests. Los Angeles, Calif., City schools, 1931. Los Angeles educational research bulletin, 10: 2-29, May-June 1931.

A study of pupil interests to be used as criteria in course of study making. Part 1 deals with general life interests and part 2 with reading interests.

2938. Houston, Texas. Independent school district. Curriculum revision and development, Houston, Texas. (1924-1930.) 103 p.

2939. ——— Integrated curriculum materials. Handbook for elementary teachers, grades 1-5. 1931. 176 p. ms. (Curriculum bulletin no. 1271C.)

The plan of this study was to put into operation the new course of study, which is called the-integrated curriculum, as a try-out, to test its value and desirability for use.

*2940. **Kent, Ronald Wilson.** Curriculum revision in the Essex county vocational schools. A practical revision of the curricula of the Essex county boys' vocational schools and the reorganization of instructor and student assignments and schedules to meet the requirements of the revised curricula. A program carried out in its entirety by the regular personnel of the Essex county vocational schools in connection with their regular duties. Doctor's, 1931. New York. 189 p. ms.

The study deals with the practical revision by the regular personnel of the schools of the curricula of the three all-day vocational schools for boys operated by the Essex county vocational school board.

2941. **Kreunen, Warren Christian.** A survey of the courses of study offered in the smaller Wisconsin high schools. Master's, 1931. Wisconsin.

2942. **Langvick, Mina M.** Current practices in the construction of state courses of study. Washington, United States Government printing office, 1931. 84 p. (U. S. Office of education. Bulletin, 1931, no. 4.)

The purpose of this study was to analyze current practices in the construction of State courses of study. The reports studied indicate that, in a few of the States preliminary to curriculum revision, the causes of pupil failure have been analyzed, and data for desirable changes in time allotment, in grade placement of subject matter, and basis criteria for determining promotion, have been sought.

2943. **Minnesota. Department of education.** Curriculum for secondary schools. Introduction. St. Paul., Minn., 1931. 81 p. (Bulletin no. 1.)

2944. **Missouri. State department of education.** Courses of study for elementary schools, 1931. Jefferson City, Botz printing and stationery company, 1931. 660 p.

2945. **Mulligan, Thomas Charles.** A study of the curriculum of a preparatory seminary. Master's, 1931. Washington. 41 p. ms.

Some suggestions for the better equipment of students for effective work are given.

2946. **New Mexico. State department of education.** New Mexico course of study for elementary schools. Santa Fe, 1930. 79 p.

President A. O. Bowden, of New Mexico State teachers college, Silver City, was general chairman in charge of the work.

2947. **North Dakota. Department of public instruction.** North Dakota elementary courses of study with suggested daily program and organization for rural schools. Bismarck, 1931. 447 p. (Revised ed.)

This course of study is presented in an effort to meet the needs of the one, two, and three teacher schools.

2948. **Osburn, W. J.** Syllabi in history, English composition and grammar, algebra, geometry, chemistry, Latin, physics, general science, world history, and French. Columbus, Ohio, State department of education, 1931.

All of these syllabi were published by the Ohio State department of education to be used in connection with the State scholarship contest.

2949. **Parker, George Thomas.** The evolution of Kentucky high school curricula, 1908 to 1928. Master's, 1931. Kentucky. 176 p. ms.

An attempt to show the development of the different fields of study in Kentucky high schools from 1908 to 1929.

2950. **Peterson, Vincent.** Comparison between present curricula and desired curricula in three-year public high schools of Michigan. Master's, 1931. Michigan.

2951. **Platt, Earl T.** Techniques for the enrichment of the curriculums of the two-teacher, four-year high schools of Nebraska. Master's, 1930. Nebraska. 139 p. ms.

An attempt to enrich the curriculums of the 2-teacher, 4-year high schools of Nebraska by combining classes, by individual instruction, by the use of correspondence study, and by proper schedule and alternation.

2952. Proctor, William Martin. The conference method in curriculum construction. *Teacher's journal*, 1: 3-4, January 1931.

2953. Beid, Hale C. The program of studies in seventh, eighth and ninth grades. Master's, 1931. Iowa. 101 p. ms.

2954. Ricciardi, Nicholas. The application of the conference method to curriculum making. Sacramento, California State printing office, 1930. 35 p. (California State department of education. Bulletin no. G-5.)

This bulletin shows how school administrators and supervisors may assume leadership and direction in effectively building curricula with the teachers.

*2955. Boe, Warren Adams. The effect of pupil transfers upon the curriculum offered by city high schools in metropolitan areas. Master's, 1931. New York. 50 p. ms.

Findings: Curricular changes from special-type high schools to comprehensive high schools are probably due to adjustment needs of transferring pupils.

2956. South Dakota. Department of public instruction. Preliminary reports on approaches to and theories regarding curriculum construction, general aims and guiding principles of education for the State of South Dakota. Pierre, 1930. 120 p. (Bulletin no. 1.)

The purpose of the committees preparing the bulletin has been to state as clearly as possible the outstanding points of view regarding education and curriculum construction with a hope of challenging the thinking of all who read it.

2957. Sprouse, Annie Mary. The various techniques employed in making the elementary school curriculum. Master's [1931]. Peabody. 68 p. ms.

A study of the literature of the field. Findings: The techniques most frequently mentioned are social objectives; analysis of adult activities; analysis of children's interests and activities; job analysis; present practice or frequency of use; "scissors and paste"; and acceptance of tradition.

2958. Stormzand, M. J. A summary of the curriculum work in the Santa Monica, Calif., city schools, for the four school years, September 1927, to June 1931. Santa Monica, Calif., Public schools, 1931. 8 p. ms. (Abstract in California quarterly of secondary education, 7: 111, October 1931.)

The summary indicates the principal curriculum problems taken up during each of the four school years.

2959. Tejera, Carmen Gomez. Programas escolares para la escuela elemental. San Juan, Puerto Rico, Department of education, 1931. 264 p.

Courses of study for the elementary school of Puerto Rico.

2960. Wells, Thornton W. A course of study for elementary schools of Kansas. [Master's] 1930. Kans. St. Coll.

2961. White, W. T. Bibliography: the curriculum, sources and materials. Texas state teachers association, 1930. 56 p.

2962. Wood, Albert O. Comparison between present curricula and desired curricula in four-year public high schools of Michigan. Master's, 1931. Michigan.

See also 21, 40, 263, 328, 347, 355, 611, 1946, 1990, 1998, 2003, 2017, 2036, 2073, 2078, 2108, 2409, 2418, 2420, 3252, 3268, 3275, 3284, 3307, 3312, 3496, 3558, 3572-3573, 3590-3591, 3650, 3653-3654, 3659, 3665, 3677, 3683, 3713-3714, 3734, 3743, 3756, 3771, 3780, 3782, 3796, 3804, 3822, 3834, 3843, 3847, 3861-3862, 3867, 3884, 3894, 3915, 4088, 4254; and under Special subjects of curriculum.

EXAMINATIONS

2963. Darden, Bernice Spear. The predictive value of the North Carolina senior high school examinations in mathematics and reading. Master's, 1931. North Carolina. (For abstract see no. 710.)

The scores on the mathematics section and the reading comprehension section of the high school senior examinations and the grades on the two required freshman mathematics

courses at the University of North Carolina were used as the basis of this study. Equations were derived whereby the university grades may be predicted through the use of both the high school subjects.

2964. DeWitt, Cletus Klahr. The present status of semester examinations in Ohio high schools. Master's, 1931. Ohio. 87 p. ms.

A study to determine the examination practices in vogue in Ohio at the present time. Findings: Semester examinations are required in over 75 per cent of the Ohio high schools. New type questions are rapidly supplanting discussion type.

2965. Fish, Louis J. Examinations seventy-five years ago and to-day. Comparison and results of entrance examinations to high schools. Yonkers-on-Hudson, N. Y., 1930. 29 p.

Data were secured from a complete set of examinations for entrance to high school in 1853, with a careful tabulation of the results of this examination; the tabulation of the results of the same examination given to an equal number of pupils in 10 different sections of the city of Boston; and conclusions were drawn from a comparison of the results of these examinations. Findings: In 1853 the average number of mistakes by subjects was: Arithmetic, 5.4; grammar, 6.5; geography, 4.4. In 1929 the average number of mistakes by subjects was: Arithmetic, 1.6; grammar, 3.1; geography, 4.2. The results of this comparison indicate clearly the superiority of the pupils of to-day and of the training which those pupils are given in the fundamentals.

2966. Fiske, Thomas Scott. Thirtieth annual report of the secretary. New York City, College entrance examination board, 1930. 201 p.

The report gives an account of the operations of the Board during its thirtieth year and contains statistical tables indicating the results of the examinations held in June 1930. It includes a list of 3,494 secondary schools sending candidates to the Board examinations during the 5-year period 1926-1930.

2967. Hillyer, T. E. Achievements in a standardized eighth grade examination by pupils from rural schools in comparison with those from village schools. Master's, 1931. Penn. State. 66 p. ms.

The study covered 698 pupils from 132 schools in Bradford county, Pa. It was found that 9-month schools yielded about 12 per cent higher average test scores than 8-month schools; and that there was a general trend upward in scores with increase in the number of rooms grouped in a building. The correlation between number of months transfer pupils spent in borough schools and their achievement score was plus .26. The study, therefore, shows from each of several points of view, increasing attainment with increasing concentration of school populations.

2968. Martz, H. B. A study of the validity of various types of examinations. Master's, 1930. Penn. State. (For abstract see no. 714.)

The study was conducted in the public schools of Glen Campbell, Pa., during the academic year of 1928-29. The examinations in all the classes of the school system beyond the second were set up in a four-fold form; 50 true-false statements, 10 four-alternative-multiple-choice items, 10 completion exercises and one or two questions for essay-discussion answers. Each form of the examination was allotted 10 minutes. One hundred and twenty high school pupils and 132 elementary-school pupils were included in the study. One hundred and nine-six validity correlations were computed. Findings: The different tests do not vary greatly in their validity; the true-false is somewhat less valid than any other type, especially for elementary pupils; the multiple-choice and essay-discussion type are about equally valid in the elementary school. The completion type is most valid in the elementary school. The essay-discussion type, when objectively scored by fixed standards, is valid in any grade.

2969. Philadelphia, Pa. Board of public education. Division of examinations. Report for the year ended June 30, 1930. 56 p.

The report is in three main divisions: (1) Introduction giving the scope and organization of the division; (2) a brief review of the work of the past year; and (3) statistical tables giving in detailed form an accounting of many activities of the school system. It includes tables showing academic and professional education and experience of the supervisory force, principals, teachers, and office force.

2970. San Francisco, Calif. Public schools. The written examination for applicants for junior and senior high school positions. 1931. 8 p. ms. (Bulletin, no. 28.)

A description of the construction of the written examination for applicants for positions in San Francisco junior and senior high schools. A detailed analysis of the treatment of results is also given.

2971. Schenectady, N. Y. Public schools. Report on uniform examinations, intermediate schools. January 1930, 15 p. ms.; June 1930, 7 p. ms.

*2972. Schwalje, Walter. New York state academic Regent's examinations; analysis and recommendations. Doctor's, 1931. New York. 306 p. ms.
Appendix: 107 p.

Historical review, showing changes which have come about; and viewpoint of executives, teachers and students with regard to examination schemes. Gives an evaluation of organization and content of certain core subjects in which examinations are given. Findings: The examination is an administrative device by means of which instructional efficiencies may be analyzed; local executives find the examination a protection and defense; the study shows need for greater teacher participation in the reorganization of syllabus content; examinations tend frequently to level down both teaching and student activity to a minimum of accomplishment; there is repeated evidence of lack of balance in examinations.

2973. Young, Harold E. The entrance examinations as a basis for the prediction of success in Washington university. Master's, 1931. Washington Univ.

2974. Zabarowski, Sister Mary Theodoretta. A study of diocesan examinations: construction, use and administration. Master's, 1931. St. Louis. 88 p. ms.

See also 559, 765, 841, 962, 1394, 3688.

EXTRACURRICULAR ACTIVITIES

2975. Andrew, Paul J. A study of the administration and activities of supplementary organizations in Ohio high schools. Master's, 1931. Ohio. 80 p. ms.

2976. Bacon, Samuel Frederick. Scouting as an extracurricular activity in the secondary school. Master's, 1931. Catholic Univ. 39 p. ms.

2977. Bailey, Helen C. The effect upon scholarship of pupil participation in extracurricular activities. Master's, 1931. Pennsylvania. 60 p. ms.

2978. Bates, H. S. Administering a program of extracurricular activities in a senior high school of 350. Master's, 1931. Oklahoma. 160 p. ms.

An attempt was made to develop a plan which would be scientific in teacher preparation, in development of student body ideals, and in procedure for gradual development from year to year. The basis of the method lies in an analysis of the particular fields of activity, their aims, materials, and their possible and probable outcomes. The aim is to fit the program to a concrete situation in a manner that would be of value to school men throughout the country.

2979. Boals, Carrie Dhu. A study of assembly in secondary schools. 1931. George Peabody college for teachers, Nashville, Tenn. 53 p. ms.

Two hundred questionnaires, filled by graduate students in English and secondary education at Peabody college and three books on assembly programs, limited to secondary schools, were studied. Findings: (1) Organization and presentation of assemblies in 200 southern schools are not what they should be, according to the three books studied. The results show that the assembly is an activity conducted for the purpose of training for citizenship; (2) the frequency of programs should be weekly or every two weeks; (3) the time for programs varies from first period to any period during the day; (4) the presentation of programs in 200 schools varies in length, frequency, and time; (5) little organization for programs is found in these schools; (6) students attend assembly all together; (7) club work, class work, special days, and outside speakers are used for programs in more than half of the schools; and (8) a variety of subjects appears in the programs.

2980. Bown, Robert Frederick. Curricular and extra awards in the junior high school, 1931. University of Washington, Seattle. 80 p. ms.

The purpose of the study was to place extracurricular activities in proper relation to other curricular and noncurricular interests of junior high school; to classify them in respect to their purposes; and to illustrate the operation of a point-award scale for all school interests, curricular and noncurricular.

2981. **Carey, Raymond B.** The administration of the finances of extracurricular activities. Master's, 1930. Nebraska. 110 p. ms.

Covers a 5-year experiment in centralized control of activity finances at Beatrice, Nebr.; a survey of the literature of the field; and statement of principles that should govern in organizing extracurricular activities.

2982. **Clogston, Evan Bernard.** A survey of extracurricular activities in the public senior high schools of Indiana. Master's, 1930. Indiana. 125 p. ms.

A questionnaire was sent to each of 765 Indiana high schools of senior grade in the first part of 1929 in an effort to determine the number and kinds of schools supporting extracurricular activities; the number and kinds of activities; the number and kinds of teachers and their relationship to extracurricular activities; some of the characteristics of student participation in these activities; some of the administrative problems and procedure centering about extracurricular activities; and the nature of their financial management. The findings were based on the replies contained in 456 returned questionnaires. Findings: The chief type of school answering was the 32-week, 6-year, academic, township high school located in a rural community; the average size school in this study was 180.7 students of which 121.8 were taking part in extracurricular activities; the average number of teachers was 9.5 of which 6.7 were activity sponsors; each student averaged two activities for participation; the average number of activities per school was 12.3; scholarship is the greatest single determining influence in the limitation of participation; centralized finances for activities are not generally prevalent; there seems to be no central organization for the activity program in most schools.

2983. **Cochrane, Minnie T.** A study of the girl reserve organization. Master's, 1931. Colo. St. T. C.

2984. **Corbitt, Gordon P.** A method of financial administration of extracurricular activities for small to medium size high schools. Master's, 1931. Ohio. 152 p. ms.

This is principally a survey of 112 high schools in 28 States to determine nation-wide trends and practices in the methods and systems used in the financial administration and control of extracurricular activity funds. Only two "ready-made" systems of financial administration and control were found. These two did not completely meet the needs of such systems for small to medium size schools. For the schools surveyed in all sections of the United States the tendency is to have the centralized method of financial administration with a central school treasurer. Under such a centralized system there is no uniformity as to the employment of the better practices such as the use of the budget, auditing of accounts, bonding of treasurer, etc.

2985. **Cottrell, Clarence Arthur.** Public school cooperation with the boy scout movement. Master's, 1931. Colorado.

2986. **Emery, Delbert Frederick.** A study of the responsibilities of an extracurricular activity director in the Manhattan, Kans., senior high school. Master's, 1931. Kans. St. Coll. 73 p. ms.

Gives a list of recommendations for improving the extracurricular activity program for the assembly, the home room, the student council, the point system, the commencement, the H-Y, the school newspaper, the school yearbook, the parent-teacher association, and other organizations.

2987. **Foster, William W.** Point systems of controlling and encouraging extracurricular activities. Master's, 1931. Iowa. 233 p. ms.

2988. **Fretwell, Elbert K.** Extracurricular activities in secondary schools. Boston, Houghton-Mifflin company, 1931. 552 p.

This volume contains bibliographies on the various activities included, some references of which are to research materials and some to descriptions of work in particular schools.

2989. **Galvin, Eileen H. and Walker, M. Eugenia.** Assemblies for junior and senior high schools. 2d ed. New York, N. Y., Professional and technical press, 1930. 367 p.

Gives a very complete compilation of assembly plans now in use in the Denver high schools. Deals with the method and administration of assemblies and the results to be expected.

2990. Garnett, William Edward. Young people's organizations in relation to rural life in Virginia with special reference to 4-H clubs. Virginia polytechnic institute bulletin, no. 274: 1-81, June 1930.

This bulletin gives a summary picture of 4-H club aims, organization, and procedure, with an analysis of results obtained and conditioning factors; the educational principles and policies of the club program are given.

*2991. Gibson, Ruth T. A study of the extracurricular activities of senior high school business teachers of Missouri as a basis for suggesting the aims and subject matter of a teacher-training course in extracurricular activities for business teachers. Master's, 1931. New York. 119 p. ms.

Findings: All except 7 of the 161 teachers reporting have extracurricular activities. Twelve per cent of the teachers reporting were in their first year of teaching; 34 per cent of them have had no business experience; 14 per cent have less than a bachelor's degree. Missouri teachers have apparently been trained for extracurricular activities.

2992. Green Bay, Wis. Board of education. Extracurricular activities. Green Bay high schools, 1930-1931. 106 p. ms.

Part 1, Report on extracurricular activities' literature by the reading committee, H. Grace Andrews, subchairman, p. 21-32; part 2, Extracurricular activities in public high schools of the North central association by the cities' committee, Irene Scanlan, sub-chairman, p. 34-54; part 3, Survey of extracurricular activities, Green Bay high schools by the home study committee, Marie B. Ronan, sub-chairman, p. 55-106.

2993. Hamblen, Malinda. A study of the leisure time activities of the women students of a teacher's college with specific reference to activities offered by the Women's athletic association. Master's, 1931. New York. 159 p. ms.

A study of the participation of all women students in extracurricular activities offered by the college; a study of all nonacademic activities of the students; case studies of members of the women's athletic association and nonmembers, selected by sampling; survey of facilities. Findings: Students participate mainly in sedentary activities, where they are spectators, and where there is little necessity for creative work or effort, though they enjoy most the "active" type.

2994. Hawkins, Wayne Lee. The relation of extracurricular activities to leisure time education. Master's, 1931. Stanford.

2995. Hawkins, Willard Lee. A survey of the extracurricular activities in the Maryland high schools. Master's, 1931. Virginia.

2996. Holman, Flo E. Training valuable to class sponsors. Master's, 1930. Kans. St. T. C., Pittsburg.

2997. Huff, Oattie. Interests expressed in the literary clubs of Phillips high school. Master's [1931]. Peabody. 70 p. ms.

A year's study of the work done in 11 literary clubs showed that the interests of the clubs were divided among the following: People, places, theaters, topics of the day, and unclassified topics.

2998. Johnson, Charles T. A study of the boy scout organization. Master's, 1930. Colo. St. T. C.

This study attempts to determine the present status of boy scout troop practices by a detailed study of the organization, administration, activities, and problems of scouting with some evaluation of them in terms of scouting objectives.

2999. Johnston, Russell Bueben. Social extracurricular activities and fraternities in the senior high schools. Master's, 1931. Stanford.

3000. Kampschroeder, W. C. Extracurricular accounting practices in 280 high schools of Kansas. Master's, 1931. Kansas.

Tabulation of extracurricular activities for which money is raised in high schools having enrollment of 100 or less. An analysis is made of methods of handling money and total money handled.

3001. Kizer, Elmer Winfield. The relationship between high school scholarship and membership in extracurricular activities in Hughes high school, Cincinnati, Ohio. Master's, 1931. Cincinnati.

3002. **Klopp, W. J.** Extracurricular activities and their effect on organized teaching procedure. Long Beach, Calif., City schools [1930]. High school teacher, 6: 398-99, December 1930.

The study revealed the fact that pupils participating in extracurricular activities in the high school are selected from the general student body and not from classes where such activities are taught. A plan for correcting this situation is described.

3003. **Larson, Benjamin Edward.** Relationships among intelligence, scholarship, and participation in extracurricular activities in high school. Master's, 1931. Stanford.

3004. **McCluggage, M. M.** Personal expenditures of 482 Lawrence high school students for curricular and extracurricular activities. Master's, 1931. Kansas.

A study of the range of individual expenditures and averages for boys and girls, white and colored, in Lawrence, Kans., high school. The study also inquired into personal allowances and money earned.

3005. **Mahin, Amy McIntire.** Participation in community activities in senior high school and adult life. Master's, 1931. Chicago. 119 p. ms.

A study of men and women graduated from Wichita high school, Wichita, Kans., in the years 1911, 1915, 1919, 1923, 1927. Findings: The offerings for participation in extracurricular activities in Wichita high school in equipment, in leadership, and in variety of activities afford wide opportunity for participation in extracurricular activities. Adults participated richly in the extracurricular activities of their senior year in high school. Respondents rank highest interest in those activities which are open to large groups, such as athletics, music, social phases of field day, religious organizations, and assembly. Assemblies which hold interest longest rank, first, special assemblies for arousing school spirit; second, music assemblies and, third, dramatic assemblies. Regardless of whether the extracurricular activities of pupils "carry over" into adult life, adults regard them of sufficient value to that period of life to warrant their being included in the high-school curriculum.

3006. **Marvin, Kimble G.** Survey of extracurricular activities pertaining to physical education in Mansfield State teachers college, Mansfield, Pa. Master's, 1931. New York. 74 p. ms.

Findings: Students value extracurricular activities. Sufficient interest exists to warrant further development of extracurricular activities in the physical education department. Program must be elastic enough to meet needs of both superior and average students.

3007. **Mehus, O. Myking.** A comparative study of extracurricular activities in a denominational college and a state university. Doctor's, 1931. North Dakota.

3008. **Norman, Evelyn.** Organization and leadership of intramural activities for high school girls. Master's, 1931. Peabody. 112 p. ms.

3009. **Oliver, Maude L.** A study of student organizations in the secondary schools of America. Pasadena, Calif., Junior college, 1930.

The study was based on a questionnaire which was mailed to representative secondary schools throughout the United States. Summaries were made of the types of organizations in the various high schools, the aims and objectives, the method and administration of extracurricular activities as conducted through student organizations; and a series of standards developed for evaluating practices in student organizations in American high schools.

3010. **Palmer, Don H.** A study of some of the problems of the development of a club program in junior high school. Master's, 1931. Michigan.

3011. **Park, Joseph Andrew.** Extracurricular control of men students by colleges and universities. Master's, 1931. Ohio. (For abstract see no. 712.)

This study gives the methods of control exercised by colleges and universities over the men students in their life outside the classroom.

3012. **Poling, Conwell James.** An internal accounting system for schools of county school systems. Master's, 1930. Ohio. (For abstract see no. 712.)

An attempt has been made to find the problem of the small county school in the handling of the finances of extracurricular activities, to set up criteria by which a workable system would be judged, and to devise a system for operation.

3013. **Bosa, Irvin E.** The cost of extracurriculum activities in typical middle sized secondary schools of Minnesota. Master's, 1931. Chicago. 136 p. ms.

From an examination of receipts, expenditures, accounting practices, student expenditures, and cost of teacher time for extraclass activities, in 10 Minnesota high schools, it was found that: (1) Capital outlay makes up a large part of extraclass cost; (2) teacher time for extraclass activities is a real cost and should be so considered; (3) costs are grouped under classification: Athletics, dramatics, music, forensics, publications, clubs, and general; (4) athletics make up almost half of entire cost for extraclass purposes in schools studied; (5) per pupil cost for athletics is three times as great as next highest activity; (6) sources of financial support are: Gate receipts and athletic guarantees; admissions to plays, concerts, and forensic events; publications; general student fees and assessments; miscellaneous; school district funds; (7) school districts are already paying 57.9 per cent of total income for extraclass activities; (8) widely varying accounting practices were found with no standardization; (9) cost for teacher time for extraclass activities is \$112.50 per semester per teacher; (10) many pupils are prohibited from attending extraclass affairs because of cost.

3014. **Short, Fred.** Analysis, evaluation, and the improvement of the merit badge program of the Boy scouts of America. Master's, 1931. Wisconsin.

3015. **Smutz, L. S.** Administration of awards for non-physical education activities in high schools. Master's, 1931. Nebraska. 114 p. ms.

History of the practice of granting awards. Opinions of prominent educators as to the desirability of the practice, nature of the awards granted for nonphysical education activities, requirements for winning awards in various activities, and suggested plans for granting awards.

3016. **Soper, Wayne W.** The elementary school auditorium: its administration and use. Albany, New York State education department, 1931.

The study is based upon questionnaire returns from elementary school principals in New York State.

3017. **Thomas, Faith Otha.** The value of a camp fire girls organization as an extra class activity. Master's, 1931. Stanford.

3018. **Thurston, Z. Marie.** A study of the program of social activities in secondary schools. Master's, 1931. Indiana. 139 p. ms.

3019. **Walker, Joseph A.** A study of the relationship between scholarship and participation in extra-class activities in the junior high school. Master's, 1931. N. Y. St. Coll. for Teach. 37 p.

A careful statistical analysis of the scholarship of 482 pupils from two junior high schools showed that the averages of scholarship are slightly higher for "participants," "leaders," and "athletes," but these have on the average slightly higher IQ's than the "nonparticipants." While no decided advantage is indicated for the children participating in outside activities, there is no disadvantage shown. There is some indication that the better intelligences participate and that they profit by doing so.

3020. **Wickless, Joyce.** A study of current procedures in the school auditorium. Master's, 1930. Southern California. 196 p.

"A compilation and description of special problems encountered in auditorium classes in platoon schools, with suggestions for their solution derived from the literature, from observations, and from interviews with teachers."

3021. **Wilds, Elmer H.** Control of extracurricular activities in the secondary schools. Doctor's, 1931. Harvard.

3022. **Woolf, Kenneth A.** Pupil evaluation of homeroom, club, and assembly activities. Master's, 1931. New York. 96 p.

Findings: Pupils pointed out the weaknesses in the various activities; they stated that they liked the activities; that the activities helped to keep them interested in school; that the activities were not over-emphasized and that their parents approved of them. The results also showed that the method of pupil evaluation is a practical and fairly reliable way of evaluating school-life activities.

See also 1756, 2296.

FAILURE OF PUPILS

3023. **Amborn, Lewis W.** A case study of failing students in high school as a means of adjustment to its procedures and purposes. Master's, 1931. Wisconsin.

3024. **Beard, Ivan E.** A method for calculating the instructional cost of school failures. Master's, 1931. Ohio. 45 p. ms.

Method for calculating the possible saving, if repetition of failures could be eliminated without hindering the rest of the school. Findings: A formula for making the calculation is given. There is no possible saving in small schools, but the sum in a medium-sized school system amounts to several thousands of dollars.

3025. **Bixler, Harold H.** Report of failures and non-promotions, elementary, junior and senior high schools, January 30, 1931. Atlanta, Ga., Board of education, 1931. 7 p. ms.

Statistics by subjects for first semester, 1930-31, for elementary, junior, and senior high schools, are given.

3026. **Chicago, Ill.** Board of education. Percentage of non-promotions by grades. 1931. 29 p. ms. (Statistical bulletin, no. 15.)

3027. **Denver, Colo.** Public schools. Case studies of senior high school students failing for two semesters in two or more subjects. 1931.

In 1929-30 the department of research made case studies of some 200 high-school students failing for two semesters in two subjects or more, and attempted to summarize them and find the chief causes of failure. In 1930-31 teachers made similar studies and attempted to diagnose and carry out remedial programs for the students concerned.

3028. **Elwell, John William.** Pupil failures in the elementary schools of Hamilton, Ohio. Master's, 1931. Cincinnati.

3029. **Gray, Martha.** Failure in the Evanston township high school. Master's, 1931. Chicago. 50 p. ms.

A general study of extreme retardation in high school. Gives causes, and methods of reducing failure.

3030. **Hallock, L. A.** Causes of failure in the junior college of the University of Chicago. Master's, 1930. Chicago. 72 p. ms.

Investigation of estimates made by the dean as to causes of failure according to his best opinion after an interview. Findings: Causes assigned are not significant with respect to other means of evaluation, except the term designated by "ability".

3031. **Hood, Mrs. Helen V.** Failures in the elementary schools, February 1929 to June 1930. Alhambra, Calif., High school, 1930.

3032. **Kyle, Roy Everett.** A case study of failures in high school. Master's, 1931. Peabody. 100 p. ms.

This investigation included pupils who did nonacceptable work in all classes for the school term preceding the study. Diagnostic factors considered were personal, social, educational, and mental. Aid was secured from teachers, school nurse, local physicians, and dentists. Findings: (1) Low intelligence is the chief cause of failure; (2) environment is a prominent cause of failure; (3) transition has influence on failure; (4) a very small amount of failure is due to physical defects; (5) irregular attendance contributes to the cause of failure; (6) poor reading is a contributing factor in the cause of failure.

3033. **Loud, Katherine Burrell.** A consideration of some of the causes of failure in the junior high school. Master's, 1931. Stanford.

3034. **Martin, Paul E.** Analysis of pupil failures. Compton union district, Calif., Public schools [1930].

The proportion of accelerated and retarded students was determined. Findings: 8 per cent of the high school students were accelerated a year or more; 27 per cent were retarded a year or more.

3035. **Reading, Pa.** School district. Number and percentage of subjects and pupils passed and failed in the elementary schools, 1929-1930. 2 p. ms.; 1930-1931, 2 p. ms.

Findings: In the first, second, and third grades the percentage of subjects passed is greater than the percentage of pupils. The highest percentage of pupils promoted is in grade six, while the lowest is in grade one.

3036. Santa Monica, Calif. City schools. Report of pupil failures. 1930. 24 p. ms. (Report no. 1.)

This study dealt with the causes and extent of failure as regularly reported by the teachers. The report contains: (a) Distribution of failures according to reason given; (b) distribution of failure according to IQ and subject in which failure occurred; (c) distribution of failure according to grade and department.

3037. Smith, Ralph E. Causes of failure in junior high school. Master's, 1931. Iowa. 69 p. ms.

3038. Snyder, Olaf Eugene. A study of some of the factors conditioning failure in high school. Master's, 1931. Claremont.

3039. Tupper, Charles E. Promotion-failure statistics, San Diego city schools, 1930. San Diego, Calif., City schools, 1931. 28 p. ms.

A brief survey of pupil progress, as indicated by promotion-failures, compiled, in graphic form, from principals' semester reports, and State age-grade reports.

3040. ——— Promotion-failure trends in San Diego. (Graphic study.) San Diego, Calif., Public schools, 1931. 15 p.

3041. Whytock, N. E., and Fritch, C. L. Study of pupil failures in the Glendale city schools for the school year 1930-1931. Glendale, Calif., City schools, 1931. (For abstract see no. 717b.)

The analysis of failure during the current year was compared with that for previous years.

3042. Wilkes-Barre, Pa. City schools. Causes of failure and success in school. Educational method, 10: 327-33, March 1931.

See also 819, 1002, 1279, 1293, 1309, 1636, 2086, 2270, 2438, 2913, 3060, 3079, 4157; and under Retardation and elimination.

MARKS AND MARKING

3043. Baptista, Nicholas Santos. A study of the reliability of high school and university marks. Master's, 1931. Washington. 139 p. ms.

Findings: Marks of both high school and university were found unreliable. Causes of variation were numerous. There was no evidence to show standards of one school are higher than another. There is great need of improvement.

3044. Bohan, John E. Students' marks in college courses. Minneapolis, University of Minnesota press, 1931. 153 p.

One source of data for this study was the cumulative records of 1,031 students who entered the College of science, literature, and the arts, of the University of Minnesota, as freshmen in the fall quarter of 1921-22, and who were given an examination consisting, among other things, of the Miller mental-ability test, form A. The percentile ranks on the University of Minnesota freshman test of students who entered that college subsequent to 1921-22 were also made available for study. Selection was made from the distributions of all the marks reported to the registrar's office for the various colleges during the period from the fall of 1921-22 through the year 1924-25.

3045. Bursch, James F. A comparative study of the distribution of marks in the various departments of the Sacramento junior college for the school year 1930-31. Sacramento, Calif., City schools. 30 p. (For abstract see no. 717b.)

The distribution of marks for all instructors for the two semesters was assembled and studied as to per cent of A's, B's, C's, D's, F's, and incompletes awarded. The distributions were fairly similar, and approximated the normal distribution curve in both semesters in all departments except music, art, engineering, and physical sciences.

3046. Cable, J. L. Comparative study of college marks as commonly given and as a result of student self-estimates, and psychological examination scores. Master's, 1931. Ohio. 69 p. ms.

3047. Clingerman, Virgil W. Comparison of pupils' marks from 8-4 and 6-6 high schools with college success. Master's, 1931. Wisconsin.

3048. **Davis, C. A.** Application of a marking system based on standard deviation. Master's, 1931. Kansas.

Using the standard deviation of distributions of test scores in a high school of 120 pupils, 1930-31, the author found a decrease in skewness of school grades and an increase in degree of conformity to distribution of mental-ability scores.

3049. **Goodrich, T. V.** A chart for awarding of scholarship credit for efficiency certificate. Lincoln, Nebr., Public schools, 1930. 1 p. ms.

Marks of approximately 2,000 junior high school pupils were used, in order to find an accomplishment quotient technique based on school marks.

3050. **Hood, Helen Vander Veer.** A study of the quality of ability and the grades received by high-school pupils according to the various districts from which the high-school population is drawn. Alhambra, Calif., City high school, 1931. (For abstract see no. 717b.)

Grades received in June, 1930, were used in this study of 2,000 pupils in the Alhambra high school, divided into groups according to the districts from which they entered the high school. Marked differences were found in the grades of pupils from various sections of the school district.

3051. **Hughes, W. Hardin.** Analyzing the ingredients of teachers' marks. Pasadena, Calif., Public schools. Nation's schools, 6: 21-25, December 1930.

3052. **Kerr, John Andrew.** A comparative study of success grades of certain counties of central Indiana. Master's, 1930. Indiana. 58 p. ms.

3053. **Kluss, Fred J.** An appraisal of current practices in distributing high-school marks. Master's, 1931. Iowa. 191 p. ms.

*3054. **Kühlmann, Martha J.** The relationship between vocabulary scores and school marks. Master's, 1931. New York. 27 p. ms.

Determination of correlations between scores on Terman vocabulary test and final test marks for 128 children in grade 5B. Findings: Slight but positive correlation was found between vocabulary and all school subjects; greatest correlation was between vocabulary and reading.

3055. **Long Beach, Calif. City schools.** Distribution of school marks, school year 1929-1930, 5 p. ms.; 1930-1931, 4 p. ms.

3056. **Lyon, Harley Wesley.** The relationship between standardized test results in elementary school and success in junior high school as determined by teachers' marks. Master's, 1931. Southern California. 111 p.

This study is based on correlations between the test records of 525 elementary pupils and their later junior high school marks, classified by grades and by subjects.

3057. **Martin, Paul E.** Analysis of teachers' grades. Compton union district, Calif., Public schools [1930].

Proportion of grades and drop-outs were computed for each teacher, subject, department, and all academic and nonacademic subjects. Considerable difference in grading standards was found to exist among the various teachers and departments in the different subjects.

3058. **Pueblo, Colo. Dist. No. 1. Public schools.** Accuracy of teacher's judgment. 1931. 2 p. ms.

Data indicate that teachers have a tendency to rank girls higher than boys in their classes; that teacher's judgment is an inadequate basis upon which to determine pupil's achievement; and that some form of measurement is needed which does not require previous acquaintance with pupils.

3059. **Routson, M. L.** Equating high school marks of college applicants. Master's, 1931. Ohio. 26 p. ms.

3060. **Rutledge, B. E.** Teachers giving falling marks in excess of 10 per cent for the semester ending December 12, 1930. Oakland, Calif., Public schools, 1931. 4 p. ms.

3061. **Santa Monica, Calif. City schools.** High school marks. 1931. (For abstract see no. 717b.)

A distribution of teachers' marks was made at the close of each semester. The purpose was to present the facts regarding the use of the marking system in the hope that such facts might be of use in improving standards and procedures.

3062. Smith, Harry L. Marking systems and pupil report cards used in Pennsylvania secondary schools. Master's, 1931. New York. 68 p. ms.

See also 266, 634, 818, 849, 982, 1844, 1959, 2082, 2102, 2112, 2120, 2167, 2451, 2455, 2464, 2466, 2483, 2486, 2490.

RECORDS AND REPORTS

3063. Abraham, Richard I. The development of a report card for use in elementary schools. San Francisco, Calif., Public schools, 1930. 3 p. ms.

3064. Adams, Percy A. School reports to parents from the parents point of view. Master's, 1931. Nebraska. 74 p. ms.

Determination of parents' preferences as to contents of report cards and manner of expressing ratings, based upon a set of questionnaires filled out in conference with investigator.

3065. Chapman, Harold B. Statistical report for the school year 1930-1931, compiled from principal's monthly reports. Baltimore, Md., Department of education, 1931. 26 p. ms.

A report on fire drills, 1-session days in elementary schools, per cent of attendance, absence of teachers, and lateness of teachers during the school year 1930-31.

3066. Gray, Robert F. Development of a cumulative record card for pupils promoted from elementary to secondary schools. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

A new cumulative record card has been placed in the schools for use during the current term.

3067. Hebb, Bertha Y. An indexed list of city school reports, 1928-1929. Washington, D. C., United States Office of education, 1930. 20 p. ms. (Circular, no. 26.)

This circular lists, alphabetically, reports sent in by cities of 10,000 population and over, together with an enumeration of some of the topics that are treated in the reports.

3068. Osburn, W. J. A system of report forms used in the Ohio State department of education. Columbus, Ohio, State department of education, 1931.

3069. Purviance, Charles E. Development of a pupil's cumulative record card for use in elementary schools. San Francisco, Calif., Public schools, 1931.

3070. Stenquist, John L. Better schools through better individual records of pupils' progress. Baltimore, Md., Ottmar Mergenthaler school of printing [1931]. 10 p.

Reprinted from the Baltimore bulletin of education.

The problem was to devise a system for adequately recording each pupil's school history, which can be maintained with the minimum of clerical labor; and which will be cumulative, flexible, and generally practicable.

3071. Van Barneveld, Mary Alice. Administration of registration, records and allied student problems in the larger senior high schools of Los Angeles. Master's, 1931. Southern California. 152 p.

See also 1947, 1970, 3062, 3715, 3728.

RETARDATION AND ELIMINATION

3072. Aderholt, Claude Herbert. An analysis of factors contributing to over-age in pupils in Mecklenburg county schools. Master's, 1931. North Carolina. (For abstract see no. 710.)

An attempt is made to list some of the important characteristics of pupils which retard their progress in school. The investigation reveals: (a) certain home and school conditions and their effect on the progress of the pupil through the grades; and (b) the attitude teachers have toward slow pupils.

3073. Bixler, Harold H. Report of age-grade survey, elementary schools, September 1930. Atlanta, Ga., Board of education [1931]. 1 p. ms.

An age-grade survey of grades 1 through 6, in the white elementary schools. Findings: The K-6-3-3 and progressive activity program have resulted in marked decrease in over-ageness.

3074. **Bixler, Harold H.** Report of age-grade survey, junior and senior high schools, February 1, 1931. Atlanta, Ga., Board of education, 1931. 2 p. ms.

The report reveals that under the K-6-3-3 plan the seventh grade children are 0.7 year younger than under the 7-4 plan. It also shows that high-school seniors under the 13-grade plan are only 0.5 year older than under the 11-year plan.

3075. **Blose, David T. and Covert, Timon.** An age-grade study of 7,632 elementary pupils in 45 consolidated schools. Washington, United States Government printing office, 1930. 20 p. (U. S. Office of education. Pamphlet no. 8, June 1930.)

The study was undertaken in order to make available data from representative rural schools of the modern type comparable to those already available in reports of similar studies of urban school pupils. The schools are located in 24 States representing all sections of the country. Some comparisons are made between the percentages of pupils under age, normal age, and over age in the rural schools and those of pupils in city schools.

3076. **Bookmiller, Matilda.** A study of over-age girls in an intermediate school for the purpose of determining how the school can contribute more effectively to their needs. Master's, 1931. Michigan.

3077. **Branson, E. P. and Stoker, Dora D.** Analysis of the record of acceleration and retardation made on March 1, 1930. Long Beach, Calif., City schools, 1931. (For abstract see no. 717b.)

The distribution of public-school pupils on an age-grade basis for 1929-30 was compared with that of 1926-27. Data show that acceleration is virtually complete at the end of the elementary school, and that retardation decreases in the senior high school, probably because of dropping out of pupils from the senior high schools.

3078. **Burgess, Alleen.** Elimination of girls from the Bowie, Texas, high school. Master's, 1931. Colorado.

3079. **Byers, Edward Allison.** A study of graduation, elimination, and failure in Wiley high school, Terre Haute, Ind. Master's, 1931. Indiana. 113 p. ms.

3080. **Calvert, T. B.** School progress and elimination. Muncie, Ind., Public schools, 1931. 23 p. (Bulletin, no. 53.)

This report contains an analysis of enrollment and the age-grade survey for the Muncie schools as of September 1930. The entire study is replete with tables and graphs to make it concrete.

3081. **Chapman, Harold B.** Improvement in holding power, 1920-1930. In Baltimore, Md., Annual report of Board of school commissioners, 1929-1930. 1930. p. 138-48.

A study of the holding power of Baltimore public schools in 1930 as compared with 1920, based upon Bonner's method. The study also shows the grade location of pupils 14, 15, and 16 years of age in 1920 and in 1930.

3082. **Clark, Norman L.** A plan to reduce retardation of pupils. In Baltimore, Md., Annual report of the Board of school commissioners, 1930-1931. p. 110-15.

A report of an experiment in the Clifton Park junior high school in an effort to discover the number of pupils who repeat their grades at the end of each term.

3083. **Coxe, Warren W. and Soper, Wayne W.** Why do pupils leave high school? Albany, New York State education department, 1930. New York State education, 18: 499-502, January 1931.

Analysis of 10,000 questionnaires.

3084. **Davis, Olin William.** The elimination of junior and senior high school students in Dayton, Ky. Master's, 1931. Cincinnati.

3085. Dearborn, Mich. Fordson public schools. Age-grade survey. 1930. 3 p. ms. (Bulletin, no. 50.)

A study of the age and grade placement of pupils in the public schools. Shows the effect of classification and adjustment work in reducing the amount of reeducation necessary.

3086. Farmer, John William. Probable factors affecting elimination in Dallas county high school, Alabama. Master's, 1931. Peabody. 71 p. ms.

By personal visitation to the schools, to the homes of the eliminated pupils, and by correspondence with both the principals and pupils, it was found that over half, 54.11 per cent of the eliminated pupils were over-age; of the total number eliminated, the largest number or per cent was found in the eleventh grade, 8.33 per cent of the total number enrolled in that grade. The percentage of total elimination of the enrollment was 6.19. There was little difference between the percentage of elimination the first year, 6.83 per cent, and the percentage of elimination the fourth year, 6.53 per cent. The largest per cent of those eliminated, 13.02 per cent, was from families having from six to eight children: 54.11 per cent of those eliminated live less than one mile from the school attended. Sex was not a determining factor in elimination. Seventy-six, 52.04 per cent, of those eliminated were boys; 70, 47.96 per cent, were girls.

3087. Foote, Rachel M. Cause of pupil withdrawal from secondary schools. Master's, 1930. Chicago.

Study of 100 boys and 100 girls who withdrew from Forest Avenue high school, Dallas, Texas, during term 1929-30; includes study of health of pupils, home environment, school progress, etc.

3088. Fox, J. O. Some characteristics of the pupil population of Portage county, Ohio. Pupil elimination. Master's, 1931. Ohio. 97 p. ms.

Findings: Percentage of elimination among students was 40.12.

3089. Gass, Samuel Thurman. A study of the conditions of sixteen high schools in Tennessee, with special reference to elimination. Master's, 1931. Tennessee. 121 p. ms.

3090. Glendale, Ohio. Public schools. The Glendale school survey. Age-grade tables and IQ distribution. Glendale public school bulletin, 1:21-28, February 1931. (Edited by Samuel Engle Burr.)

3091. Goldbach, R. C. A study of the causes of transfer and withdrawal from the senior high schools of Cleveland, Ohio. Master's, 1931. Ohio. 89 p. ms.

Findings: Low mentality, and financial condition of the home are the main causes for withdrawal from high school.

3092. Gray, Robert F. Holding power of the secondary schools. San Francisco, Calif., Public schools, 1931. (For abstract see no. 717b.)

The purpose of this study was to determine changes in the holding power of grades 7 to 12, inclusive, for the years 1927, 1929, and 1930.

3093. Gregory, M. Cottell. A study of withdrawals in secondary schools. Louisville, Ky., Louisville girls high school, 1931. 13 p. ms.

A 4-year survey of the class of 1930 in the Louisville girls high school.

3094. Holland, Juney Jackson. Elimination and continuation of high school students, Benton county, Tenn. Master's, 1931. Peabody. 48 p. ms.

Investigation of replies to questionnaires which were sent to pupils, principals, patrons, and magistrates of Benton county. Findings: Of the 81 students, 38 were found to be eliminated or 42.5 per cent. Seventy-two per cent of those eliminated were girls. The eliminated pupils were slightly older than the continued pupils. Distance from school is a factor in elimination. Ninety-two per cent of the eliminated pupils lived from four to six miles from school. Forty-seven per cent of the continued pupils lived from one to two miles from school. Economic conditions were shown to be a weighty influence in elimination and continuation. Health of the family is an important factor. There is little evidence that the type of elementary school in which the pupils received their training affected elimination or continuation. There is some evidence that the larger the number of children in a family the greater the possibility of elimination.

3095. Hunter, Lavinia. Causes and means of reducing retardation in a mill school. Master's, 1931. Peabody. 107 p. ms.

A study of an elementary mill school in Gaston county, N. C., with an enrollment of 451 pupils. The predominating causes of retardation were found to be low mentality, poor average daily attendance, physical handicaps, frequent moving, poor home conditions, age at entrance, irregular attendance caused by personal illness, and late entrance.

3096. Lee, J. Murray. Pupil progress through the grades as shown by age-grade distribution. Burbank, Calif., City schools, 1931. (For abstract see no. 717b.)

Data indicate that too many pupils are retarded more than one year; individual schools are not studying as carefully as they should the proper placement of their pupils; and the average retarded pupil is not being held by the junior and senior high schools.

3097. McMurray, Tom Roy. Eighth grade graduates of the schools of Monroe county. Master's, 1931. Peabody. 79 p. ms.

A study of eighth-grade graduates of Monroe county, Tenn., during the years 1928-1929-1930 who failed to enter high school and the reasons why. Findings: More girls fail to enter high school than boys. Low intelligence score was a potent factor. The older the students at the time of graduation the greater the chance of elimination.

3098. Meyer, Edna R. The percentage and causes of student mortality and retardation at New Jersey college for women. Master's, 1931. New York. 46 p. ms.

The purpose of this study was to answer the questions on the number of students who enter college who graduate, the number who graduate within four years, the reasons so many drop out, and the causes of retardation of those who do not graduate with their class. Data were secured from 4-year record cards, individual student folders, and returns from questionnaires. Findings: There was a rather stable mortality rate, averaging 32½ per cent; the largest group of students left college for personal reasons, the next largest group transferred to another institution; retardation averages 4 per cent; causes and rate of retardation closely parallel mortality.

3099. Morat, Catherine L. A study of permanent withdrawals, J. M. Ather-ton high school for girls, September 1930-February 1931. Louisville, Ky., Board of education, 1931. 15 p. ms.

This study is a continuation of a study of permanent withdrawals, covering a 6-year period, February 1924-February 1930.

3100. O'Connor, Sister Mary Benita. Retardation and repetition of the 1926 freshmen throughout their high school career in 15 accredited parochial schools of Iowa. Master's, 1931. Notre Dame.

3101. Poppell, Thomas Jay. Factors influencing pupil mortality in the high school of Groveland, Fla. Master's, 1931. Florida.

3102. Rutledge, R. E. Per cent acceleration, retardation, and at-age. Oakland, Calif., Public schools, 1930. 3 p. ms.

3103. ——— Report on the holding power of the Oakland public schools, 1930-1931. Oakland, Calif., Public schools, 1931. 5 p. ms.

Indications are that the increase in holding power of the high school will be offset by small incoming classes so that present housing accommodations will be adequate until population growth begins again.

3104. Sinsinger, Harlan. An age-grade study of the San Jose training school and its two control schools. Albuquerque, N. M., University of New Mexico press, 1931. 30 p. (Bulletin, Training school series, vol. 1, no. 2, Whole no. 188, March 15, 1931.)

The bulletin is designed to portray certain aspects of the San José training school as it existed at the beginning of the experiment. No attempt has been made to interpret the data. Three county elementary schools, the San Jose training school and its two control schools, with a total enrollment of 1,009 pupils, provide the data for this study.

3105. Tupper, Charles B. Age-grade analyses in San Diego. (Graphic study.) San Diego, Calif., City schools, 1931. 15 p. ms.

3106. ——— Age-grade status, San Diego city schools, 1930. San Diego, Calif., City schools, 1930. 19 p. ms.

A brief study of age-grade retardation and acceleration, compiled from annual reports to the California State board of education. The report is presented largely in graphic form.

3107. Waterman, Ivan B. Mental ability and school achievement of over-age pupils. San Francisco, Calif., Public schools, 1930. 20 p. ms.

3108. West Allis, Wis. Public schools. Age-grade survey. 1931 34 p. ms. (Bulletin 11-7, April 1931.)

This is a comparative study of enrollments by year and grade for the years 1924-1929.

3109. Young, William L. An investigation of the causes of retardation and maladjustment in public school and remedial measures. Master's, 1931. Boston Univ. 116 p. ms.

Research for results of past investigations and an investigation of causes of retardation in Everett, Mass., for 1929, showed the need for the early elimination of double schools; more educational and vocational guidance; more study of individual differences in pupils; psychological clinic; social education; prevocational classes; better provision for gifted pupils; parental education; and need for more health education.

See also 107, 149, 909, 1969, 1986, 2121, 2438, 2472, 2475, 3811, 4078; and under Failure of pupils.

STUDENT SELF-GOVERNMENT

3110. Bosse, F. H. Report of pupil participation in school government as found in the elementary schools of Evansville, Ind., November 10, 1930. [Evansville, Ind. Public schools, 1930.] 6 p. ms.

3111. Hogan, Ralph W. A study of the systems of student self-government in the junior high schools of Kansas. Master's [1931]. Montana.

3112. Mathews, C. O. Bibliography on the honor system and academic honesty in American schools and colleges. Washington, United States Government printing office, 1930. 18 p. (U. S. Office of education. Pamphlet no. 16.)

The bibliography contains about 140 entries, each one annotated to show the scope of the reference. Those articles and books which contain reports of research have been annotated so as to show the technique used and the principal findings.

3113. Mount, Florence Duvall. An evaluation of pupil participation in school government in the elementary schools of the United States. Master's. 1931. Southern California. 150 p.

Based on visitation and on questionnaire replies from 92 schools in 48 states, relating to aims, methods, and values of such activities.

3114. Mullin, William D. An evaluation of student government in theory and practice. Master's, 1931. Penn. State. (For abstract see no. 714.)

The writings of 20 leading authorities in the field were analyzed to find the theoretical principles or objectives. Interviews were held with 25 principals or faculty advisors of student organizations, and 40 questionnaires were obtained from schools having these organizations. The specific activities performed by 65 student governments in 65 different schools were obtained. Findings: As a rule the activities tend to fall under headings not considered paramount by authorities. Too many activities are headed towards discipline and not enough towards aims stressed by authorities.

3115. Richey, C. L. A study of pupil participation in school control. Master's, 1931. Ohio. 104 p. ms.

Study of attitudes formed toward pupil participation in school control as practiced at Lincoln junior high school, Canton, Ohio. Findings: Over 91 per cent of pupils are in favor of the organization and its activities. Activities do not reach or affect less than 15 per cent of the student body.

3116. Vineyard, Jerry J. and Poole, Charles F. Student participation in school government. New York, A. S. Barnes and company, 1930. 104 p.

TEXTBOOKS

3117. Brown, John Prentiss. The construction and use of textbook rating scales. Master's, 1930. Stanford.

3118. Chase, Vernon E. Free textbooks, their use and cost, in the Fordson school district. Dearborn, Mich., Fordson public schools, 1930. 5 p. ms. (Bulletin, no. 54, abridged.)

A study of the textbooks in use, classification, cost trends, etc.

3119. **Ching, J. Frederic.** Report on a survey of the work of textbook clerks. Oakland, Calif., Public schools, 1930. 2 p. ms.

3120. **Georgia education association.** Report of committee on textbooks. 1931. 14 p.

The committee believes that the two chief ideas in selecting school textbooks for the use of the children of Georgia should be: To get the best books in quality of material and in illustration that can be found; and to secure the books at the lowest reasonable price. Several plans are offered in endeavoring to carry out the two purposes.

3121. **Henderson, R. D.** Revised textbook regulations containing Texas textbook law, a list of the State adopted books, biennial report of textbook division and general information. Austin, Tex., State department of education, 1931. 93 p. (Bulletin, no. 278.)

Due to the fact that many of the textbooks in use in the schools prior to the 1928-1929 session had been in use for a long period of time and were in many cases out of date and antiquated, it was necessary for the State board of education to adopt new textbooks displacing the old books and throwing heavy burdens of cost and many problems of distribution on the division of textbook administration.

3122. **Herriott, M. E., Fuller, Florence D., and Nettels, Charles H.** Textbook adoption and evaluation procedures. Los Angeles secondary schools. Los Angeles, Calif., City schools, 1930. Los Angeles educational research bulletin, 10:2-20, October 1930.

Evaluation of geometry textbooks, by Florence D. Fuller, p. 5-9; The selection of a textbook for BS science, by Charles H. Nettels, p. 10-14; The selection of physics textbook, by M. E. Herriott, p. 15-20.

The purpose of the study was to develop adequate adoption and evaluation procedures and to secure the best textbooks available in such subjects as sciences, mathematics, home economics, etc. Through a committee and carefully controlled investigation, these procedures are developed and tried out. The adoption and use of textbooks give a check on the merit of the procedures employed.

3123. **Lewerenz, Alfred S.** Grade placement of elementary supplementary textbooks. Los Angeles, Calif., City schools, 1931.

An analysis of the vocabulary difficulty of supplementary textbooks with regard to the grade in which used.

3124. **MacGregor, Virginia Claire.** Standards of measurement for the objective evaluation of textbooks, especially as applied to the subject of oral expression. Master's, 1931. Stanford.

3125. **National society for the study of education.** The textbook in American education. Bloomington, Ill., Public school publishing company, 1931. 359 p. (Thirtieth yearbook, part 2.)

Contains studies on techniques of textbook authors, typography of textbooks, selection, evaluation, costs, state publication, legislation, etc. A selected and annotated bibliography of literature relating to textbooks is included.

3126. **Smith, M. Ellwood, Finnerty, G. E., and Tallman, H. C.** State printing of public school textbooks. Portland, Oregon State teachers' association, 1931. 20 p.

3127. **Vanderwal, R. A.** Textbook management in Iowa public schools. Master's, 1931. Iowa. 133 p. ms.

SCHOOL BUILDINGS AND EQUIPMENT

3128. **Alabama.** State department of education. Rooms, furniture and equipment for home economics. Montgomery, Alabama State board of education, 1930. 40 p.

3129. **Applegate, Earl Harry.** A digest of educational objectives and activities to determine a check list of equipment for the elementary school. Master's, 1931. Cincinnati.

3130. **Barrows, Alice.** School building survey and program for Warwick, Rhode Island. A study of a town in the path of an expanding metropolitan

area. Washington, United States Government printing office, 1931. 77 p. (U. S. Office of education. Bulletin 1930, no. 33.)

3131. Benson, Harry Ray. Problems in the selection of school building materials. Master's, 1931. Stanford.

*3132. Blom, Edward Charles. Radio and electric power supply equipment for schools. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college. Columbia university, 1930. 189 p. (Contributions to education, no. 409.)

This study deals with electrical equipment used for instructional purposes. The kinds of equipment considered are those associated with school radio installations, and electric power supply for high-school science rooms. The study purposes furnishing school administrators with information to guide them in selecting equipment and in placing installations, and informing the manufacturers of the needs of the schools which their products must satisfy.

3133. Blue, Lloyd Nial. Heating and ventilation practices of school houses in central Indiana. Master's, 1931. Wisconsin.

3134. Brodshaug, Melvin. Buildings and equipment for home economics in secondary schools. Doctor's, 1931. T. C., Col. Univ.

This is a study of plants and equipment for teaching home economics in junior high schools and senior high schools in cities with a population of 10,000 to 50,000. Findings: The scope of the home-economics program on the senior high school level is broader than that on the junior high school level. The curriculum is in a process of rapid and varied transition and leaders are far from any agreement as to what is proper curricular material. This makes it difficult to plan a suitable plant layout which will not immediately become obsolete.

3135. Brooker, J. W. Bulletin on school buildings and grounds. Frankfort, Ky., State department of education, 1931. 45 p. ms.

A study to trace the evolution of school architecture in Kentucky and to develop minimum requirements for schoolhouse construction in the State of Kentucky.

3136. Bursch, James F. Study of junior high school housing needs in Sacramento. Sacramento, Calif., Public schools, 1931. 15 p.

*3137. Byrne, Lee. Check list materials for public school building specifications. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college. Columbia university, 1931. 195 p. (Contributions to education, no. 492.)

The primary purpose of the investigation was to provide city superintendents of schools and school business managers with a tool that would be of aid to them in judging sets of specifications submitted by the architects' offices for new school buildings and in securing improvements in them. Eighteen sets of specifications were exhaustively analyzed with 13 more available for consultation. Better present practice is taken as a criterion for the judging of individual specifications. The check list is intended to aid in the discovery of the presence or absence of determinables commonly found in school building specifications.

3138. Caldwell, D. E. A school building survey and program for Washington township, Lucas county, Ohio. Master's, 1931. Ohio. 104 p. ms.

3139. California. State department of education. Standards for public school sites. Sacramento, California State printing office, 1930. 31 p. (Bulletin no. E-2.)

3140. Carpenter, Katie Dalton. Equipment in rural white schools in Kentucky. Master's, 1931. Kentucky. 89 p. ms.

A comparison of the equipment found in 150 white rural schools in Kentucky with various standards.

*3141. Chamberlain, Leo M. The housing of 30 public junior colleges of the Middle West and tentative standards and principles relating to buildings, equipment, and associated administrative problems. Doctor's, 1931. Indiana. Lexington, Ky., University of Kentucky, 1931. 210 p. (Bulletin of the Bureau of school service, vol. 3, no. 4, June 1931.)

A report of an investigation of the buildings and equipment of 30 public junior colleges of the Middle West. On the basis of current conditions an effort has been made

to set up tentative standards for the housing of the public junior college. Consideration is given to the factors of enrollments, the administrative and educational organization, and curricula, particularly as these factors are related to the housing problem.

3142. Chase, Vernon E. A survey and building program. Dearborn, Mich., Fordson school district, Board of education, 1931. 72 p.

Analysis of school building requirements, utilization of present plant, and projection of 5-year building program. Findings: A standard unit, the P.T.A. coefficient, was developed and used in this survey for the purpose of determining for comparative purposes the utilization of different types of rooms, operating on different daily schedules, in different types of schools, i. e., elementary, junior high, senior high, vocational, etc.

3143. Chatterton, Roland Henry. School building survey and program for Portsmouth and Middletown, R. I. Master's, 1931. Boston Univ.

3144. Ching, J. Frederic. Building and sites program for the Oakland public schools, Vol. I. Oakland, Calif., Public schools, 1931. 140 p. ms.

A study of the population trend and the adequacy of each school plant in order to formulate a building and sites program which will eventuate in the most economical and efficient administration of the school system.

3145. Christiansen, Ernest Martin. Essential laboratory equipment for physics in the junior college. Master's, 1931. Stanford.

3146. Clark, Theodore L. Study of school building programs in South Dakota. Master's, 1931. South Dakota. 62 p. ms.

A study of consolidated school buildings, costs, needs of communities, methods of financing, etc.

*3147. Cleland, Paul Swift. A study of the present use of certain college stadia. Master's, 1931. New York. 210 p. ms.

A study of 50 college stadia in the United States. Findings: Athletic activities were conducted in all the stadia and consumed most of the time. Activities such as college functions, fireworks, displays, and pageants ranked next in order. The stadia in the Northern States were used more months of the year for athletic activities and the stadia in the Southern States were used more months of the year for nonathletic activities.

3148. Delp, I. W. A survey of the secondary school building facilities of Canton, Ohio, for the determination of needs for readjustment and expansion. Canton, Ohio, Public schools, 1931. 95 p. ms.

The purpose of this survey was to establish for the city of Canton, Ohio, a building program which would more adequately provide for the needs of the secondary school pupils of the next five years.

3149. Dresslar, Fletcher B. and Pruett, Haskell. Rural schoolhouses, school grounds, and their equipment. Washington, United States Government printing office, 1930. 74 p. (U. S. Office of education. Bulletin, 1930, no. 21.)

3150. Engelhardt, Nikolaus L. and Engelhardt, Fred. Planning school building programs. New York City, Teachers college, Columbia university, 1930. 574 p.

3151. ——— Strayer, George D., and Burton, T. C. Campus standards for country day and boarding schools. New York City, Teachers college, Columbia university, 1930. 51 p.

3152. Gardiner, James A. A study of the janitorial service of the public schools of Wilmington, Delaware. Master's, 1931. Pennsylvania. 94 p. ms.

This study was undertaken with two main purposes in view. One was to present a study in an aspect of public-school administration in fulfillment of practicum requirements for the degree of master of arts in education at the University of Pennsylvania. A second purpose underlying this study was the hope of rendering a real service to the public-school system of Wilmington, Del., through a careful analysis of the janitorial service in the schools of that city. The analysis itself has been made with the hope of discovering and isolating those features of the Wilmington janitorial service which may be detrimental and likewise those which have, in them, points of merit. An attempt has been made to show how the detrimental features may be eliminated or improved upon and how the desirable features may be made to yield their maximum values.

3153. Goins, Jesse Lee. Utilization of blackboard space in secondary schools. Master's, 1931. Chicago. 71 p. ms.

The study was confined to five high schools in the State of Wyoming. Findings: More blackboards are installed than are used by teachers and pupils.

3154. Goldthorpe, J. Harold. How 94 schools divided their floor area. 1930. Nation's schools, 8: 51-58, September 1931.

Data were secured from plans of 94 junior high schools published in the American school board journal since 1920. Analysis revealed 184 types of space provisions and facilities. Data suggest that building units designed to house less than 700 students can not supply adequate and economical facilities for differentiated curricular offerings.

3155. ——— Ventilation methods and practices in village schools. Journal of educational research, 22: 274-87, November 1930.

Data indicate that four-fifths of the village schools studied have mechanical ventilation systems but that only one-fourth operate them outside of the winter months. Legal standards need to be raised.

3156. Handy, Etta H. Standards of furnishings and equipment for residence halls in institutions. Master's, 1931. T. C., Col. Univ. 66 p. ms.

A survey was made of the standards of furnishing in 46 colleges as a basis to determine average cost allowance. Architectural plans, and interior-decoration schemes were also studied.

3157. Heywood, Stella May. Planning and equipping home economics rooms in Kansas high schools. Master's, 1930. Kans. St. Coll.

3158. Holy, Thomas C. A school building survey and program for Columbus Grove, Ohio. 1931. Ohio State university, Columbus. 9 p. ms.

3159. ——— A school building survey and recommended program for Hartford and Bennington rural school districts, Licking county, Ohio. 1931. Ohio State university, Columbus. 43 p. ms.

3160. ——— A study of school auditoriums and gymnasiums in Ohio. [1931.] Ohio State university, Columbus.

A study was made of the types of auditorium-gymnasium combinations, the relation of their capacity to school enrollment, and the extent they are used in both time and capacity in a group of Ohio systems.

3161. Houston, Texas. Independent school district. The building program of the Houston independent school district (1924-1930). [1931.] 121 p.

3162. Hungerford, Frances Ann., comp. Preschool equipment. Descriptions and plans of play apparatus made and used locally in the preschool laboratories of the Iowa child welfare research station. Iowa City, The University, 1931. 78 p. (University of Iowa extension bulletin, no. 263, March 1, 1931.)

This equipment represents the accumulated experience of teachers in the station as to what devices appear to fit in well with present practices in preschool education.

3163. Huus, Randolph O. and Cline, Dorothy I. Municipal, school and university stadia. New York, N. Y., Municipal administration service, 1931. 78 p. (Publication, no. 18.)

This study includes types, design, site, costs, financing, and stadia activities.

3164. Joyal, Arnold and Rutledge, R. E. Equipment standards for general science, grades 7, 8, and 9. Oakland, Calif., Public schools, 1931. (For abstract see no. 717b.)

Teachers requested that general-science classrooms be remodeled. Findings: As laboratory work is being carried on in groups, from 4 to 8 units of laboratory equipment per laboratory instead of 1 per pupil would be sufficient for 32 pupils.

3165. Kentucky. University. Report of a school building survey of Harlan, Ky. 1931. University of Kentucky, Lexington. 60 p. ms.

This survey treats of the school district of Harlan, Ky., and its educational program; the present physical plant; a proposed building program; and a method of financing the program recommended.

3166. Knapp, T. C. A school building survey and program for Ashtabula county, Ohio. Master's, 1931. Ohio. 114 p. ms.

3167. Los Angeles, Calif. City schools. The need for school bonds. 1931. 8 p. Needs of school buildings and advantages of building at present low level of costs.

*3168. McKelvie, William David. Selection of a school site in Washington, N. J. Master's, 1931. New York. 35 p. ms.

This study covers the need for a school, future growth of school and community, the ability of the town to finance a new school, possible locations, and the best location. The location for the new school was chosen by a comparison of various sites.

3169. McKenney, Howard Lathrop. Determining the classroom janitor load. Master's, 1931. Cincinnati.

3170. Mason, William Lester. School building utilization in Ashley county, Ark. 1931. George Peabody college for teachers, Nashville, Tenn. 74 p. ms.

A complete study was made of building utilization in the schools of Ashley county, Ark. Findings: Elementary schools have better utilization than high schools. Consolidation, type and amount of equipment, adjustment of classes to rooms, and length of school day were factors affecting utilization. Buildings were used very little for purposes other than regular school work.

3171. Massachusetts. Department of education. Report on equipment, apparatus, and materials for teaching science in the secondary schools of Massachusetts. Boston, 1931. 45 p. (Bulletin 1930, no. 8. Whole no. 219.)

(N. Henry Black, chairman of committee.)

The first part of the report deals with equipment, meaning the more or less stationary and permanent layout; and the second, with apparatus, meaning that material which is movable and which has to be renewed from time to time. The committee has been more concerned with the smaller schools in which the facilities for teaching science are apt to be inadequate, rather than with the large metropolitan high schools.

3172. New York (State). Education department. School buildings, sites, and school district bonds. Law pamphlet 1. Albany, University of the State of New York press, 1931. 61 p. (Bulletin, no. 979, September 1, 1931.)

This pamphlet includes information as to the selection and acquisition of school-house sites; the erection of new school buildings; the erection of additions to, and the alteration and improvement of, existing school buildings; and the issuance and sale of school-district bonds for any or all of these purposes.

3173. Nowak, Joseph Wencel. Legal requirements governing bids for school buildings. Master's, 1931. Wisconsin.

3174. Nugent, Donald Ross. Palo Alto elementary school sites. Master's, 1931. Stanford.

3175. Peery, Elmer Joseph. A study of the construction, equipment, and utilization of boys' gymnasium locker and shower rooms in Southern California high schools. Master's, 1931. Southern California. 133 p.

Based on interviews, copies of floor plans, and information gathered by means of a check list developed for this purpose.

3176. Powers, Elmer Walter. Space-provisions in elementary and junior high school building plans. Master's, 1931. Chicago. 200 p. ms.

Analysis of 90 elementary and 60 junior-high-school building floor plans to discover space-provision—nature and number—for 1910-1920-1930. Tendencies are shown with respect to increase or decrease of space accommodations in buildings of the three periods named for elementary schools in cities over 10,000, in cities of 10,000 and less, and for junior high schools in cities over 10,000. Tendencies are also shown with respect to omission or inclusion in buildings of vault, balconies in gymnasium, and ventilating apparatus. Space accommodations are listed both by title and function.

3177. Providence, R. I. School department. The regional senior high schools of Providence. 1931. 18 p. ms.

Plans for three new regional senior high schools of 1,800 capacity each. Findings include population-growth study and standards for sites.

3178. Pruett, Haskell. Rural school buildings for the State of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

After making a survey of rural school buildings of the past and present, establishing criteria for planning rural school buildings in Oklahoma, collecting and preparing

school building plans for various sizes of buildings to meet the criteria, the conclusion was reached that rural school buildings of any size and with any frontage may be properly planned according to the best criteria for safety, efficiency, and health at almost the same cost that is usually paid for the poorly planned buildings.

3179. Rickards, Thomas Parker. The utilization of a high school plant. Master's, 1930. Pennsylvania. 65 p. ms.

3180. Robertson, C. L. A building survey of the public schools of Jamestown, N. D. Master's, 1931. North Dakota.

An investigation of the utilization of the present school buildings in relation to the educational program adopted by the board of education, a forecast of future building needs, and a proposed program of building to meet such needs.

3181. Schmidt, H. W. Blackboards: their height and width. Madison, Wis. [1931]. 8 p. American school board journal, 81:43-45, September 1930. (Reprint.)

The study was carried on through data obtained from 16 schools and 94 rooms, recording the writing of 1,449 pupils. Findings: Judged by various standards a blackboard 42 inches in width, mounted 42 inches from the floor, will satisfy most cases.

3182. Shields, Arthur W. Auditorium-gymnasium facilities in Ohio high schools under county supervision. Master's, 1931. Ohio. 77 p. ms.

A study of the extent to which boards of education are complying with requirements of state department, types of facilities provided and influence of school organization upon type of auditorium-gymnasium used. Findings: A large proportion of Ohio high schools under county supervision are equipped with auditorium-gymnasium facilities; school organization has little effect on type of facility provided; combination auditorium-gymnasium is the most common type.

3183. Smith, Arthur David. A study of gymnasiums. Master's, 1930. Stanford.

3184. Strayer, George D. and Engelhardt, N. L. A school building program for the city of Utica, N. Y. Utica, N. Y., Board of education, 1930. 63 p.

A thorough survey of public school buildings in Utica, with recommendations for their improvement.

3185. ——— The school building survey and a building program for the school city of Richmond, Ind. Richmond, Ind., Board of school trustees, 1930. 86 p.

A survey of the public school building situation in Richmond, with recommendations for its improvement.

3186. Tillotson, Floyd Dewey. General tendencies and characteristics in the lighting of public school classrooms. Master's, 1931. Nebraska. 229 p. ms.

An analysis of the literature in the field and an examination of 101 classrooms in 12 public school buildings in the State of Nebraska with reference to natural and artificial lighting.

3187. Vaughan, Ernest Norman. Trends in floor-space provisions and related standards in junior high school buildings. Master's, 1930. Northwestern.

3188. Waterman, Ivan R. Elementary school building needs. San Francisco, Calif., Public schools, 1930. 13 p. ms.

An analysis of elementary school building needs for San Francisco.

3189. ——— Utilization of San Francisco high school buildings. San Francisco, Calif., Public schools, 1930. 23 p. ms. (Bulletin, no. 21, November 1930.)

An analysis of the extent to which the seven high school buildings are utilized. Three measures are used: (1) Per cent of time rooms are used; (2) per cent of pupil stations used; and (3) per cent of standard pupil accommodations used.

3190. Welles, Paul T. A standard layout for science rooms for fourth, fifth, and sixth grades in a platoon school. Master's, 1931. Southern California. 113 p.

A study of layouts for science rooms in three cities with evaluations in terms of the courses of study followed in this subject.

3191. **Williams, Frank.** Functions of state departments of education in schoolhouse planning. Master's, 1931. Peabody. 64 p. ms.

In this study emphasis was placed on Southern states or those in the inter-state school building service. Findings: State departments of education have been forced to do schoolhouse planning. The State should furnish plans for buildings up to and including those for six teachers. In some cases it will be necessary to furnish plans for larger buildings. There are not enough people in the State departments of education devoting time to planning of school buildings to do well all the work attempted. As approximately three-fourths of the children of the South are in rural districts or in towns of less than 2,500 population the State should devote most of the time to the rural school. The primary function of the State in this work is to give educational rather than architectural service.

See also 1940, 3313, 3683; and under Platoon schools.

HEALTH AND PHYSICAL EDUCATION

3192. **Abraham, Richard I.** Survey of lunch service for undernourished pupils. San Francisco, Calif., Public schools, 1930. 5 p. ms.

3193. **Alabama.** State department of education. Music appreciation materials and records for physical education in elementary schools and high schools. Supplement to library lists. Montgomery; Wilson printing company, 1930. 34 p.

*3194. **Aldworth, Eleanore.** A comparison of principles for evaluating health source materials with those designed for general textbooks. Master's, 1931. New York. 107 p. ms.

Principles for judging textbooks in general received as much critical study as did the seven health authorities used in the comparison. Findings: There was more agreement among authorities on mechanical make-up of textbooks than upon subject matter, organization, style, etc., although the latter were investigated more thoroughly.

3195. **American physical education association.** A study of the relative values of 30 important activities in the physical education program for boys. American physical education association research quarterly, 2:115-74, March 1931.

This is the third report of a special committee appointed in 1929, and is really the completion of the report for the second year's work.

3196. **Andres, Helen G.** Integrating health education activities in a junior high school. Master's, 1931. T. C., Col. Univ. 47 p. ms.

As health counsellor two days each week, the author attempted to integrate health instruction with scientific and academic subjects. She believes that successful integration can be accomplished. The greatest need seems to be for sound, scientific material that can be used by teachers who have not had a specialist's training in health instruction.

3197. **Archer, Julian L.** Certain aspects of narcotic education in the United States. Doctor's, 1931. New York. 290 p. ms.

A study of (1) Legal status of narcotic education in the United States; (2) procedures in narcotic education; (3) what boys and girls know about narcotics and where they obtain their information.

3198. **Arnold, Martha Virginia.** Trends in physical educational periodicals. Master's, 1931. Peabody. 176 p. ms.

Those periodicals found in the library of George Peabody college for teachers and in the office of Dr. A. D. Browner, professor of physical education, Peabody college, were studied. Findings: There are six outstanding trends in physical education. The excerpts showing these trends are arranged under the following topics: Philosophy of physical education; Administration; Equipment; Types of programs; Tests and measurements; Health through physical education.

3199. **Asbury, D. LaBarre.** Health knowledge versus health practices in the sixth, seventh and eighth-grades of the Ridge Avenue school in Neptune, N. J. Master's, 1931. New York. 43 p. ms.

A study of the health knowledges and health practices of the sixth, seventh, and eighth grade classes. Findings: The lack of health practices is not due to the lack of health knowledge, but undesirable home situations.

3200. Beatty, J. Ewing. Some studies in physical education. Master's, 1931. Denver. 65 p. ms.

Tests were administered to 667 pupils (girls and boys) of a Denver junior high school to measure native skill. These tests consisted of a group of 10 exercises performed on a gymnasium mat that was covered with a canvas marked into squares and lines. The underlying purpose of the study was to determine: (1) The validity of the tests from the standpoint of classifying students into homogeneous groups; (2) to see if this homogeneity paralleled the sectioning practiced for academic subjects through the use of mental tests; and (3) to determine whether the physical factors of height and weight bore any relation to this sectioning; etc.

3201. Begg, Foster A. A comparative study of the extreme reactions of the heart recorded by the cardiometer for a controlled group of 28 boys. Master's, 1931. New York. 83 p. ms.

This is a study of a controlled group of 28 boys attending the St. Thomas' choir school, New York city. The cardiometer record showed a complete picture of the heart beat before exercise, standing, walking, running, and return toward normal while lying. In some cases the heart beat went as high as 200 beats a minute. Comparative tables were made to determine what effect age, systolic blood pressure, nervous stability, and physical types had on the increase of heart beat.

3202. Beise, Dorothy. Reliability and validity of physical tests compared with mental tests. [1931.] Ohio State university, Columbus.

Statistical findings of certain physical tests as regards their reliability and validity.

3203. Berkaw, George B. Report on special ultra-violet transmitting glass in open-air schools. Detroit, Mich., Board of education, 1930. 7 p. ms.

The results of this investigation showed that when children in rooms glazed with special ultra-violet transmitting glass were compared with children in rooms glazed with ordinary glass, there was no appreciable difference in physical health or in school progress.

*3204. Birnbaum, Henrietta L. The relationship between health attitudes and health behavior practices of a group of elementary school children. Master's, 1931. New York. 93 p. ms.

Two health tests were given in three different environments to determine the relationship between health attitudes and health practices of boys and girls in different social environments; of bright and dull groups; and in higher and lower grades. There is a relatively high relationship between health attitudes and health practices. The relationship between attitudes and practices was higher as the neighborhood changed for the better. Health training is an important factor in influencing the health attitudes and health practices of children.

3205. Bonnett, Howbert Bainter. A determination of the present status of the physical education program for boys in the Pacific Coast secondary schools. Master's, 1931. Washington. 126 p. ms.

Gives a factual presentation of the status of curricular physical education, intramural sports, and inter-school athletics for boys in the medium and large senior and junior high schools of the States of California, Oregon, and Washington; shows the types of activity found in these schools; and discusses and analyzes the data collected by comparison with underlying educational principles, standards, and opinions expressed by recognized educational authorities. A list of distinctive features in these three fields which might be of value to others and worthy of adopting in other systems, was made.

*3206. Boone, George C. Health habits and the scholastic standing of seventh grade public school pupils. Master's, 1931. New York. 38 p. ms.

The purpose of the study was to show the correlation between health habits, as practiced by the pupils, and their scholastic standing. There is very little correlation between health and safety or health practices and scholastic standing.

3207. Booth, Thornly Watson. Physical growth and pubescence. Master's, 1930. Int. Y. M. C. A. Coll.

3208. Bovard, J. F. and Cozens, F. W. Tests and measurements on physical education. Philadelphia, Pa., W. B. Saunders company, 1930. 306 p.

3209. Boyd, Tillman Eldon. A program of physical education for the average Wyoming high school. Master's, 1931. Wyoming. 71 p. ms.

3210. **Breslov, Mrs. Florence Ullman.** Psycho-developmental consequences of ricketts. 1931. Yale psycho-clinic, New Haven, Conn.

Deals with the effects of ricketts upon mental development in early life.

*3211. **Brombacker, Burton Arthur.** The techniques used in New York City schools as follow-ups to health inspection to guarantee health correction. Master's, 1931. New York. 84 p. ms.

Study of a number of questionnaires sent out to 633 New York City principals to determine what methods are used to correct health defects, which are found during the health-day examination. Findings: Most principals use a definite method of check-up and do all they can to improve poor health. The city furnishes free clinics to take care of people who can not afford to pay for treatment. There is a need for a greater number of clinics centrally located.

3212. **Brown, John, jr.** Studies, experimentation and research projects. Journal of physical education, 28: 85-88, January 1931.

This article lists studies, experiments, or research projects carried on by Y. M. C. A. physical directors as of December 1, 1930.

3213. **Browne, A. D.** Classification of completed theses and selected subjects written by students of physical education in various colleges and universities in the United States, in partial fulfillment of the requirements for the degrees of master of arts or master of science. 1931. George Peabody college for teachers, Nashville, Tenn. 38 p. ms.

3214. **Burnett, Louis B.** Physical education achievement records, junior and senior high schools. Baltimore, Md., Department of education, 1931. 92 p. ms.

3215. **Burt, Madge S.** A critical evaluation of the status of physical education in the high school. Master's, 1931. Arizona. 57 p. ms.

An attempt to discover current practices in the administration of physical education. Findings: Each school or State is a law unto itself. Great need for more uniformity was found.

3216. **Campbell, Harry William.** The organization and content of required courses in physical education for men in junior colleges. Master's, 1931. Southern California. 126 p.

A questionnaire study of practices in 40 institutions emphasizing such factors as aims, departmental organization, health education, health service, testing, and departmental mechanics.

3217. **Campbell, Leroy T.** A strength test based upon exercises of endurance. Master's, 1931. Iowa. 41 p. ms.

*3218. **Chambers, Raymond L.** Changes in achievement following the removal of certain physical defects in elementary school pupils. Doctor's, 1930. Pennsylvania. Philadelphia, University of Pennsylvania, 1931. 131 p.

Data were secured from the records of about 3,000 children in grades 3 to 5, in 6 selected Philadelphia public schools. Data regarding defective vision, diseased tonsils, nasal obstruction, and dental caries among these pupils were obtained from the records of the school medical examiners. Findings: The correction of defective vision appeared to have been associated positively with increased growth in achievement in arithmetic fundamentals, reading, and spelling; the removal of nasal obstruction appeared to have been associated positively with increased growth in achievement in spelling; the removal of diseased tonsils appeared to have been associated negatively with increased growth in achievement in arithmetic fundamentals, reading, and spelling. The changes were so small that the removal of the defects studied was not followed by any marked changes in arithmetic fundamentals, reading, and spelling.

*3219. **Clarke, H. Harrison.** Required physical education for men in universities. Master's, 1931. Syracuse. 115 p. ms.

The purpose of this study was to determine what should constitute the required physical education program for men in a university; what organization is best fitted to direct the program; what relationship should exist between the professional school of physical education for men and the required physical education program; and to determine what should constitute the required physical education program for men at Syracuse university.

3220. Cleanliness institute. Handwashing in schools. New York City. Cleanliness institute, 1931. 20 p.

A study was made of the handwashing facilities in 145 schools in 15 States, representing a total student enrollment of 124,088 pupils. Twenty-one manufacturers and other companies cooperated with the Institute, by contributing the equipment used. It was found that in only 31 per cent of the schools were water supply, soap, and drying equipment all supplied.

3221. Cohen, Jacob. Historical intimations of the idea of physiological gradients. Master's, 1930. Ohio. (For abstract see no. 712.)

3222. Cook, Marion I. Induction into teaching in physical education. Master's, 1931. New York. 78 p. ms.

A study of leadership experiences of students in Wellesley college, Department of hygiene and physical education, 1928-1931. Suggests a plan of laboratory experiences in leadership in physical education, according to educational principles, as preparation for professional service.

3223. Cornwell, Oliver K. Physical education in the light of modern educational theory. Master's, 1931. Ohio. Columbus, Ohio State university, 1931. 110 p.

The book is divided into three sections: Problems of modern education; philosophy and principles; and a suggested program.

3224. Cureton, Thomas K., jr. Objective tests of swimming. Master's, 1930. Int. Y. M. C. A. Coll.

3225. Cutright, Prudence and Anderson, Walter A. Essential items for a health education course. Minneapolis, Minn., Public schools, 1931. 7 p. ms.

The complete scale was selected from Woods and Lerigc "Health behavior," and submitted to several medical groups with the request that they indicate items which in their opinion should be included and also those they were quite sure should be omitted in a health education course. Many statements were considered misleading by the local group. Aside from about 20 or 25 items, there was a wide range of opinion as to what should be included in a health education course.

3226. Darnall, Maynard Carver. Administration of physical education, health and athletics in Indiana. Master's, 1931. Indiana. 75 p. ms.

3227. Davis, Elwood C. Health and physical education survey techniques in public schools. Doctor's, 1931. T. C., Col. Univ. 316 p. ms.

Analyzes and evaluates techniques used 1920-1930 in public-school surveys and devises survey forms for surveys and where possible improved techniques.

3228. Dearborn, Walter F. Relations of mental and physical development. Washington, D. C., White House conference on child health protection, 1931. 17 p. ms.

The available information regarding the relation of mental and physical growth is reviewed and evaluated. Suggestions are made for further study and the types of relationships found between mental and physical growth curves of twins and others are described.

3229. Denver, Colo. Public schools. The use of portable dental clinics in cities over 100,000 population. 1931.

The report gives a tabulation of replies from 40 cities and describes the practices of the cities concerned together with opinions as to the success of the portable dental clinic.

3230. DeWeese, A. O. A study of the health habits of college freshmen in Kent State college. In American student health association. Proceedings, 1930. p. 34-37. (Bulletin, no. 14.)

A study of the health habits of freshmen since 1927 showed a gradual improvement. The percentage of those consulting their dentist regularly in 1927 was 76.5 per cent, in 1930, 85.4 per cent. The percentage having an annual health examination was 41 per cent in 1927 and 51.4 per cent in 1930.

*3231. Dillon, Marie. High school physical examinations and recommendations for improvement. (A case study of three city high schools.) Master's, 1931. New York. 56 p. ms.

A case study of three girls' secondary schools in New York City over a period of three years. All three schools examined the students in the same 10 items, but there was no consistent improvement in any one item in three years.

3232. Downes, Jean. Sickness records in school hygiene. *American journal of public health*, 20: 1199-1206, November 1930.

Adequacy of school medical examinations in bringing the child who has conditions needing attention under supervision. Conclusion: Sickness records currently kept by the teacher would bring to light children needing special health supervision who are not discovered by the annual health examination.

3233. Freehill, Rev. Alphonse Michael. Physical culture and recreation in the Middle Ages. Master's, 1931. Catholic Univ. 29 p. ms.

3234. Freeman, B. G., jr. Seasonal variation in hemoglobin. New York City, Teachers college, Columbia university, 1930. *In Society of experimental biology and medicine. Proceedings, 1930.* p. 687-88.

Hemoglobin tests by the Cohen-Smith method were made at monthly intervals during the school year and during two summer months on 84 preschool children. Seasonal variations are considered.

3235. Gemme, Arthur Lewis. A study of corrective work for college and secondary groups. Master's, 1930. *Int. Y. M. C. A. Coll.* ms.

3236. Gibson, Thomas Ray. Opportunity for health habit promotion in a unit activity program. Master's, 1931. Peabody. 187 p. ms.

3237. Green, Blanche Valette. Nature study as an incentive to physical education. Master's, 1931. Peabody. 164 p. ms.

3238. Greenough, Clara. Aims and objectives in the freshman hygiene examination at Skidmore college. *In American student health association. Proceedings, 1930.* p. 12-30. (Bulletin, no. 14.)

3239. Griffin, M. F. Unit cost of physical education in Long Beach high school and junior college. Master's, 1931. Kansas.

A study of average expenditure by students and average cost per pupil to the school system of physical education during 1930-31. Data were gathered on enrollment of 1,339 high-school students and 957 students in junior college.

3240. Gyorda, John Michael. The health education program in the boys' club. Master's, 1931. Notre Dame.

3241. Handy, Elvin Roy. The measurement of individual differences of maximum contraction force of the large muscle groups of the legs, back, and shoulder girdle as related to efficiency of performance in sprinting and in the standing vertical jump. Master's, 1930. Iowa.

3242. Hanke, Milton Theo. Nutrition and the teeth. The dietary study of Mooseheart. 1931. Mooseheart laboratory for child research, Mooseheart, Ill. 13 p. ms.

3243. Harby, Samuel F. Tumbling, for student and teacher. Master's, 1931. T. C., Col. Univ. 166 p. ms.

3244. Hatlestad, Stella Lucille. A program of health and physical education for the Iowa schools. Master's, 1930. Iowa.

3245. Haver, Jennie M. Rural health education. Master's, 1931. Rutgers. 104 p. ms.

3246. Hilby, Sylvester Lyman. Statutory provision for physical education in the United States from 1899 to 1930. Master's, 1931. Stanford.

*3247. Hildreth, Louise A. The present status of intramural physical education activities in the state teachers college of Pennsylvania. Master's, 1931. New York. 55 p. ms.

The study covered nine State teachers colleges in Pennsylvania.

3248. Hu, Chi Nau. The different steps in the Babinski reflex. Master's, 1931. Ohio. 60 p. ms.

3249. Hughes, Robert Payton. A study of short static strength of muscles in relation to posture of school boys. Master's, 1930. Int. Y. M. C. A. Coll. ms.

*3250. Hussey, Marguerite M. Principles and methods of teaching health. Doctor's, 1931. New York. 176 p. ms.

The purpose of this study was the evaluation of present methods of teaching health by means of specific principles which are used as criteria, and the establishment of general principles which should serve as guides for a methodology in teaching health.

3251. Illinois. Department of public health. An outline of mouth hygiene education. Springfield, Ill., Journal printing company, 1931. 67 p.

This outline was prepared to assist teachers in their daily hygiene classes to devote some time to the care of the mouth. The outline has been divided into five different and distinct groups of activities that are necessary to promote and maintain bodily function and tooth integrity.

3252. Indiana. Department of public instruction. Tentative course of study in health and physical education, grades 7 to 12. Indianapolis, 1931. 158 p. (Bulletin, no. 100F4.)

3253. Irwin, Leslie William. Determining the content of physical education for secondary school boys (as revealed by an analysis of the most authoritative textbooks). Master's, 1930. Iowa.

3254. Jersild, A. T. and Thomas, W. S. The influence of adrenal extract on behavior and mental efficiency. American journal of psychology, 43 : 447-62, July 1931.

The purpose of this study was to find whether bodily changes similar to those found in emotional excitement aid or interfere with efficient mental performance. Hypodermic injections of 1 : 1000 solution adrenalin chloride were given to adult subjects. Measurements of pulse rate, blood pressure, and tests for glycosuria were made. A variety of mental and motor tests were used. Performance on days when adrenalin was administered was compared with performance on days when no injection was given and on days when a saline solution control was given.

3255. Jessen, Paul T. Physical education for the college man; individually prescribed. Master's, 1931. Peabody.

The physical examination now most commonly given to college students, upon which the prescription of physical exercise is based, includes only examination for disease and physical abnormality. An attempt has been made to suggest an examination more inclusive; one that will include making a diagnosis of the individual—muscular strength, ment-motor coordination, organic mechanisms, and mental health in addition to the two above-named factors.

3256. Johnson, Harry C. Physical measures of growth and nutrition. Master's, 1930. Int. Y. M. C. A. Coll. ms.

3257. Jones, Dorothy E. Western Reserve university, Cleveland tests in personal regimen. Master's, 1931. Western Reserve. 100 p. ms.

3258. Jones, Zelda. Health course of study, kindergarten through the fifth grades. Norfolk, Va., Public schools, 1930. Kindergarten, 20 p.; primary, 45 p.; fourth grade, 34 p.; fifth grade, 32 p.

3259. Kauffman, Earl, jr. A study to determine present procedures in conducting the medical (health or physical) examinations in colleges. Master's, 1931. New York. 63 p. ms.

An examination of personnel and procedures used in conducting the examinations in 44 colleges in the United States. Findings: Physicians usually give the examination. Physical educators and physicians cooperate in many instances. The physical educator often has complete responsibility for the examination in small colleges, with enrollment up to 900, and in medium-size colleges, with enrollment up to 3,000. The college health service usually chooses the examiners, although other agencies, such as trustees, also select examiners. Examiners are chosen because of special training; this applies to physical educators especially.

3260. Kelley, Donald A. An investigation to determine the frequency with which 400 words commonly used in oral instruction in swimming are not comprehended by 150 eleventh-grade boys at Central high school, Detroit. Master's, 1931. Michigan.

3261. Kingsbury, Fay. Comparison of formal and informal health instruction in intermediate grade. Master's, 1931. Peabody. 86 p. ms.

Seventy-two pupils in equated groups in platoon school were studied for nine months. Findings: The informal group made a greater gain than the formal group in intermediate-grade health.

3262. Knoxville, Tenn. Public schools. An outline for the teaching of nutrition and health in the first and second grades. 1930. 14 p. ms.

*3263. Krakower, Hyman. A study of the health status of college students as indicated by medical (or health) examinations. Master's, 1931. New York. 62 p. ms.

The study deals with the health status of college students at entrance and at graduation; correlation between health status and physical proficiency tests; correlation between health status and class grades in physical education; and the health-status trend from the freshman to the senior year. Findings: A decrease in number of defects from entrance to graduation and a significant correlation between physical proficiency test scores and class marks in physical education.

3264. Labree, Lawrence W. Study of short static contractions as an aid in the department of corrective and remedial gymnastics in universities and colleges. Master's, 1930. Int. Y. M. C. A. Coll. ms.

3265. Langemo, Marcus T. A study of the county nurses' corrective health measures. Master's, 1931. North Dakota.

3266. Lauritson, William Harold. Programs and practices in health and physical education for boys in the junior high schools of Lincoln, Nebr. Master's, 1930. Nebraska. 174 p. ms.

This study deals with the health and physical-education programs, equipment, activities, and methods used in the junior high schools of Lincoln, Nebr. The schools included are Everett, Irving, and Whittier junior high schools.

3267. Light, Alice C. A study of the relation of posture to school success. Master's, 1930. New York. 64 p. ms.

Poor, fair, and good posture was related to grade advancement according to age, hygiene, physical-training grades, academic average, athletic accomplishment, and school-club membership among girls attending the James Monroe high school, New York City, February through June, 1929. There is no significant correlation found between posture and any one of the other factors with the group studied.

3268. Lincoln, E. A. The reliability of anthropometric measurements. Pedagogical seminary and Journal of genetic psychology, 38: 445-50, December 1930.

This study reports the techniques used in getting the anthropometric measurements in the Harvard growth study. The first technique, which did not include checking measurements by a second operator, had to be abandoned, and a technique which included careful checking was adopted. Three tables showing median differences in two series of measurements on the same pupils are included.

3269. Livingstone, Alfred. Effect of intercollegiate swimming on the sinuses. Master's, 1931. New York. 78 p. ms.

The purpose of the study was to determine the effect of college swimming on the sinuses, and to determine the best results of different forms of breathing.

3270. McCarraher, John D. Survey of physical education and hygiene in country day schools for boys. Master's, 1931. Int. Y. M. C. A. Coll. ms.

3271. McDaniel, Monte. Contributions of physical education to secondary education. Master's, 1931. Peabody. 50 p. ms.

Findings: Physical education is not measuring up to its possibilities.

3272. Martie, John Edward. Exercise and physical development. Master's, 1930. Int. Y. M. C. A. Coll. ms.

3273. Meredith, Bertha Crockett. The effect of health supervision in the rural schools of certain counties in Indiana and health service history of these counties. Master's, 1931. Indiana. 81 p. ms.

3274. Miller, Mary Kate. English dances—their development and place in physical education. Master's, 1931. Peabody. 134 p. ms.

3275. Missouri. State department of education. Courses of study for elementary schools. Physical education for grades 1 to 6 inclusive. Jefferson City, Botz printing and stationery company, 1931. 222 p.

3276. Moerschel, Henry E. Classification of absences due to illness in the Emerson junior high school for 1930-1931. Master's, 1931. Wisconsin.

3277. Moore, Harry W. Health education in Hunterdon county, N. J., with special reference to the school system. Master's, 1931. Lafayette. 83 p. ms.

The study shows the aims of health education in general as a goal for the objectives of this county, and the reasons for these aims. It reviews the agencies working in the county, traces certain steps of progress which have been evidenced by the records kept, and finally presents some conclusions as to the present status of health education in the county and as to those aims which would be desirable for the future.

3278. Moore, Luella Zerelda. History of curriculum health education in Los Angeles city elementary schools. Master's, 1931. Southern California. 97 p.

Past and present practices in giving health instruction in the Los Angeles city elementary schools from 1880 to 1931, were evaluated in the light of recent progressive developments in this field.

3279. Moore, Luther Franklin. The county unit plan of public health administration in the United States. Master's, 1931. Stanford.

3280. Naismith, James. An improved basis for judging and comparing the physical development of children. University of Kansas bulletin of education, 8: 14-24, December 1930.

The usual age-weight tables are criticized for assuming constancy in weight for a given height. Tables are presented to show varying height for given weight and varying weight for given height pertaining to boys and girls.

3281. Nash, Jay B., ed. Interpretations of physical education. Volume II. Mind-body relationships. New York, N. Y., A. S. Barnes & co., 1931. 276 p.

3282. National recreation association, New York, N. Y. National physical achievement standards. Instruction booklet; record cards for five age groups; certificates. March, 1931. ms.

These standards are based on a study of 75,000 boys in 10 cities, and developed by a national committee of 11 experts over a period of 3 years. Gives a nation-wide program, telling what boys at different ages should be able to do in a rounded balanced program of game skills, track and field events, gymnastics and aquatics.

3283. New Jersey. Department of public instruction. Study of certification of school nurses by state departments of education, 1930. Trenton [1931]. 19 p. ms.

This study gives the present status of school-nurse certification practices in the United States as reported by members of State departments of education.

3284. New Orleans, La. Public schools. Course of study in health and safety. Kindergarten through seventh grade. 1930. 310 p.

3285. New York (State) Education department. Health education. A manual of information for rural teachers. Albany, University of the State of New York, 1930. 161 p. (University of the State of New York bulletin, no. 900, November 15, 1930.)

3286. Norfolk, Va. City schools. Health course of study, upper elementary grades. Developed under the direction of the Health committee of the division of research and experimentation, Norfolk elementary schools. 1931. 108 p.

This course of study includes environmental conditions, protection and prevention, physical education, and instruction.

3287. Oktavec, Frank L. Grading student achievement in physical education activities. American physical education association research quarterly, 2:91-104, March 1931.

*3288. O'Neil, Richard J. An experimental observational survey of the physical status of students in college. Master's, 1931. New York. 94 p. ms.

Data for this study were based on the results of a medical examination given in February, 1931, to 339 students applying for admission to a municipal institution of higher education established in 1930 by the Board of higher education of the City of New York.

3289. O'Neill, Florence and McCormick, Mary G. Present practices in health teaching in elementary schools. Albany, N. Y., State education department, 1930.

Analysis of detailed questionnaire filled out by 800 elementary teachers in New York State.

3290. Oral hygiene committee of greater New York. School health research monograph no. 3 of the American child health association, entitled "Public health aspects of dental decay in children." An analysis, a protest, and a correction. p. 487-546.

Reprinted from the Journal of dental research, October 1930.

3291. Orlando, Anthony. The physical proficiency of City college students on entering and at the end of the first year. Master's, 1931. Coll. of the City of N. Y. 37 p. ms.

Comparison of students' attainments in five physical proficiency tests upon entering college and at the end of the first year. Conclusions: There is little improvement after the first year; tall and medium men, as a group, are superior to short men; heavy and medium men, as a group, are superior to slender men; the age group above 17 show a total average for all tests higher than all groups below that age.

3292. Osterholt, William B. B. Physical education and athletics in Southern California churches. Master's, 1931. Southern California. 88 p.

A study of the athletic programs of 75 churches, based on questionnaire replies, personal interviews and visitations, and on official reports, with special emphasis on the aims and values of such work.

3293. Papurt, M. J. Psychological studies in epilepsy. Doctor's thesis, 1931. Ohio State university, Columbus. ms. (Abstract reprinted from Abstracts of doctors' dissertations, No. 6, Ohio State university, p. 275-82.)

3294. Park, Royal Wheeler. Health problems in private junior military academies. Master's, 1931. Stanford.

3295. Parker, Eldon. The measurement of individual difference of maximum contraction of speed of the leg muscles as related to velocity in springing and in the standing vertical jump. Master's, 1930. Iowa.

3296. Patterson, Donald G. Physique and intellect. Minneapolis, University of Minnesota, 1930. 304 p. (Review in Phi delta kappan, 14:82-83, October 1931.)

The purpose of the book is to show the present status of scientific knowledge regarding the relation between physical traits in both children and adults, and to reveal to what extent popular beliefs regarding the physical basis of mind are true.

3297. Perry, L. B. Relationships between some physical and educational measures. Master's, 1931. Kansas.

Height and weight measurements were compared with the scores in certain reading and arithmetic tests of 619 boys, 11 to 14 years old, in Lawrence, Kans., junior high school.

3298. Quay, C. Herbert. Correlation between lung capacity and physical strength. Master's, 1931. Temple.

3299. Reinert, Russell C. A survey of Meshoppen Borough to determine the health problems existing in the school and the community. Master's, 1931. New York. 65 p. ms.

Study of health problems of school and community of Meshoppen Borough. Findings: Health conditions and practices are inadequate and health agencies insufficient.

3300. Robson, J. Stanley. A study of health interests and behavior of high school students. Master's, 1931. Southern California. 220 p.

A study based on questionnaire replies from 42,000 students in 14 schools over a period of 8 years, indicating their response to health education, their normal health activities, and any further instruction needed or desired.

3301. Rogers, Frederick Rand. Physical capacity tests. New York, A. S. Barnes and co., 1931. 53 p.

Notes on testing techniques and the significance of tests, prepared with the assistance of many specialists who through years of testing experience with thousands of students have discovered many techniques for increasing the accuracy of testing or reducing time necessary to determine fitness indices.

3302. Rogers, James Frederick. School health activities in 1930. Summary of information collected for the White House conference on child health and protection. Washington, United States Government printing office, 1931. 33 p. (U. S. Office of education. Pamphlet no. 21.)

Schools in all urban communities, and those enrolling about half the rural children were canvassed. The returns reflect school health work in about 70 per cent of city and 25 per cent of rural schools, or in a total of about 55 per cent of our schools.

3303. Romeiser, Alvin. A study of physical education activities for high school boys from a standpoint of interest. Master's, 1931. Indiana. 129 p. ms.

3304. Rose, Mary Swartz; Gray, Cora E. and Foster, Katherine L. The relation of diet to health and growth of children in institutions, with a method of evaluating dietaries and a three-weeks dietary conforming to the standards proposed. New York City, Teachers college, Columbia university, 1930. 128 p. (Child development monographs, no. 2.)

Bibliography, p. 101-102.

Model dietaries were prepared for children ranging in age from 5 to 16 years, and standards proposed for children of those ages. A study was made of 4 institutions caring for children between the ages of 5 and 16 years, in which weight and height records had been kept for at least 1 year. The dietary studies were made from the weight of food actually purchased. As a result of these studies, a method has been developed by which the quality of the dietary can be judged with considerable reliability.

3305. ——— and others. Iron requirements in early childhood. *Journal of nutrition*, 3: 229-35, 1930.

The iron consumption and output of a two and a half year old girl were studied under carefully controlled and supervised conditions for a period of 12 days. Tables showing the comparison between iron intake and iron output are given.

3306. Ryan, Loretta Cecilia. A survey of the medical, physical and health examination procedures in the New York City high schools. Master's, 1931. New York.

A study of 28 high-school departments of health education in New York City. Findings: The medical, physical, and health examinations are quantitative rather than qualitative; they require a standardized type of procedure as to examiner, items examined, health habits checked, personal history recorded, filing of records, etc.

3307. St. Louis, Mo. Public schools. Health. Report of the committees appointed to revise curriculum bulletins no. 8—health in the kindergarten and grades 1 through 6; and no. 15—health in grades 7, 8, and 9. *Public school messenger*, 28: no. 3, September 8, 1930. 57 p. (Curriculum series.)

3308. ——— ——— Physical education. A service bulletin for use in elementary schools. Prepared by A. E. Kindervater and others, for all elementary teachers in charge of physical education in grades 1 to 8. *Public school messenger*, 28: no. 7, September 8, 1930. 115 p. (Curriculum series.)

3309. Sanders, Edward. A safety and health code for organized summer camps. Doctor's, 1930. T. C., Col. Univ. 142 p. ms.

A study undertaken to discover the present conditions as to health, safety hazards, and provisions for assuring adequate health and safety standards for 5,000 camps.

3310. Scheuchenpflug, George. An analysis of classroom activities in teaching physical education in selected high schools of the Chicago area. Master's, 1931. Northwestern.

3311. Sisco, Rev. F. Allen. A study of health education in the churches of New York City. 1930. New York university, New York, N. Y.

A study of health education in 117 Protestant churches in New York City. Fresh-air work, clinics, and education in health are favored as most important for programs. The most important objective selected was to secure an interest in personal and community health, and the most pressing need was a more adequate program, more publicity, and a standard of measurement.

3312. Society of directors of physical education in colleges. A study of relative values of 30 important activities in the physical education program for boys. Report of the committee on curriculum research. *In its Proceedings*, 1930. p. 115-74.

The charts presented in this study, together with those included in last year's report for college division, give a complete picture of the evaluation of the various important activities in the physical-education program from the first grade through the junior college.

3313. Sortais, L. H. The problem of indoor and outdoor areas required to carry on the Oakland public schools' physical education plant. Oakland, Calif., Public schools, 1931. 7 p. ms.

3314. Sowers, Gladys Uhlis B. A study of the development of health education in elementary schools. Master's, 1931. Southern California. 111 p.

A historical summary of health education, its principles, methods, materials, and results; based on an analysis of the literature of the field.

3315. Spiers, Margaret Walker. A study of the possible relationships between the bone development of a group of eight children and their attitude toward food. Master's, 1930. Ohio. (For abstract see no. 712.)

The subjects of this study were eight children ranging in age from 29 to 48 months, enrolled at the Merrill-Palmer school in Detroit, Mich. The children were paired in sex, and chronological age; one member was advanced in ossification age, and the other retarded.

3316. Spooner, J. D. Health education through high school biology. Master's [1931]. Peabody. 64 p. ms.

A study to show how health education may be correlated with high-school biology by investigation of previous studies, educational methods, and trends in teacher training. Findings: The results of the study show that more than one-third of the content of high school biology is health material, ranging practically over the entire health field, with greater emphasis on some topics than others. The teacher-training institutions are endeavoring to meet the needs of the teacher to teach the health content in high-school biology. General educational methods that are used in teaching other subjects of the curriculum can well be used in teaching high-school biology.

3317. Stoker, Dora D. Survey of pupil achievement in health education. Long Beach, Calif., City schools, 1931. 7 p. ms.

Findings: Long Beach is well above the norm in all grades. Girls surpass boys in all grades. There is a steady improvement grade by grade.

3318. Sumption, Dorothy. Archery for beginners. Master's, 1931. T. C., Col. Univ. 90 p. ms.

A treatise on the subject of archery. The fundamentals underlying good shooting with the bow and arrow, related archery activities, and suggestions to teachers are given.

3319. Thompson, Daly. School executives and public health service in Tennessee. Master's, 1931. Peabody. 60 p. ms.

Six counties in Tennessee were studied and three having public health services were compared with three that do not have such services. Findings: Average daily attendance and holding power of schools are greater in counties that have public health service.

3320. Tousley, Charles Vernon. Seasonal increments of growth in weight according to age of grade-school boys. Master's, 1930. Int. Y. M. C. A. Coll. ms.

*3321. Trethaway, Edwin. A study of certain tests and measurements used in physical education. Master's, 1931. New York. 47 p. ms. Appendix: 8 p. ms.

This study aims to analyze the interrelationships of the Brace motor ability test, the Rogers physical capacity test, and the Leap motor test, and to determine whether they will enable a forecast of gymnastic ability with some accuracy. Findings: There is no significant relationship between the scores made by the various tests; each one apparently measures different elements of physical efficiency.

3322. United States. Department of justice. Bureau of prohibition. Alcohol, hygiene and the public schools. Digest of State laws. Washington, United States Government printing office, 1931. 44 p.

A study of 46 States that have laws requiring the teaching of the effect of alcohol on the human system in the public schools.

3323. Voltmer, Carl D. The subject matter content for a university course in the administration of physical education for men, as determined by a job analysis. Master's, 1930. Iowa.

3324. Warner, Estella Ford, and Smith, Geddes. Children of the covered wagon. Report of the Commonwealth fund child health demonstration in Marion county, Oregon, 1925-1929. New York, N. Y., Commonwealth fund, 1930. 123 p.

environment in which people live of conditions which are likely to cause disease; to guard against epidemics; to encourage the public to take advantage of preventive medicine; to educate the public in healthful living; and to keep accurate tally of births, deaths, and diseases.

3325. Warrington, Elva M. Methods of furthering physical education in schools of Delaware. Master's, 1930. New York. 53 p. ms.

A study of physical education in Delaware. Findings: The present system of physical education in Delaware is not adequate.

3326. Waterman, Dorothy Winslow. A study of the needs of graduate students and of the service group of undergraduate students in the Department of physical education in the School of education of New York university. Master's, 1931. New York. 80 p. ms.

Students' reactions were obtained through a questionnaire regarding the curriculum, the facilities, distribution of courses, and subsidiary considerations. Findings: Students choose New York university Department of physical education chiefly because of the faculty and convenience. Greatest number of complaints refer to library facilities and "mass" atmosphere.

3327. Welch, J. Mac. A study of intramural physical education programs in Ohio four-year senior high schools with suggestions for an effective program. Master's, 1931. Ohio. 200 p. ms.

A study of the intramural physical-education programs for all four-year senior high schools in Ohio having from 125 to 500 students. Conclusions and suggestions are given for setting up an effective intramural program based upon the findings.

3328. West Virginia. Department of education. Nature of alcoholic drinks and narcotics. Their effects upon the human system. Supplement to the State course of study and teachers manual for the elementary schools of West Virginia. Charleston, 1930. 63 p.

3329. ——— Units of instruction relating to the nature of alcoholic drinks and narcotics and their effects upon the human system for courses in junior and senior high schools of West Virginia. Charleston, 1930. 76 p.

* 3330. Whipple, Clarence H. Remedial treatment for physical defects of Denver high school boys. Master's, 1931. Denver. 90 p. ms.

An investigation of the defects found among Denver high school boys and an analysis of the results accomplished through corrective exercises with 92 of the 404 boys examined. Surveys the need for corrective work as evidenced by physical examinations outside of Denver and what others are doing in the correction of these defects.

3331. White, Willis H. A study of some phases of physical education in the first group white schools of the Maryland counties. Master's, 1930. Maryland. 80 p. ms.

A study of the different sports played; the number of games played in each; finances; eligibility; playing space; objectives; historical and legal angles.

3332. White House conference on child health and protection, Washington, D. C. White House conference, 1930. Addresses and abstracts of committee reports. New York, N. Y., Century company, 1931. 365 p.

The purpose of the conference was "to study the present status of the health and well-being of the children of the United States and its possessions; to report what is being done; to recommend what ought to be done and how to do it." The conference deals with all children, in their total aspects, including those social and environmental factors which are influencing modern childhood.

3333. ——— Communicable disease control. Report of the committee on communicable disease control, George H. Bigelow, chairman. New York, N. Y., Century company, 1931. 243 p.

Contents: Factors in control; prevalence among children; deaths among children; cases by age groups; general findings in a few sickness surveys; general trends, procedures recommended for the control of individual diseases; summary; recommendations; appendix; index.

3334. ——— Committee on medical care for children. Pediatric education. Report of the subcommittee on medical education, Borden S. Veeder, chairman. New York, N. Y., Century company, 1931. 109 p.

Contents: Part 1, Pediatric education: Pediatrics and the physician; undergraduate instruction; post-graduate instruction; outline of pediatric course. Part 2, General discussion and conclusions: Pediatrics and the physician; undergraduate instruction; post-graduate instruction; appendix.

3335. Whiteman, Clarence Manual. Survey of physical education in schools of Missouri. Master's, 1931. Peabody. 112 p. ms.

Findings: Before legislation there were no physical education programs except in city schools; recess periods afforded exercise in smaller schools; city school superintendents favored compulsory physical education, while those of smaller schools in most cases held the optional view; no credit was given for physical-education work. Now there is a minimum requirement of 120 minutes a week; superintendents and principals of all schools cooperate with the movement; one-fourth-unit credit is given for physical education. Requirements of physical education teachers are: major or 30 college hours for full-time teacher and minor or 15 hours for part-time teaching.

3336. Wiedman, D. E. Program of instruction—evils of narcotics. Bellingham, Wash., Austatt printing company, 1930. 16 p.

Curriculum with references, bibliography, etc., for grades one to eight, inclusive.

3337. Wilkins, Richard Charles. Physical efficiency ratings as applied to the horizontal bars. Master's, 1930. Iowa.

3338. Williamson, Donald Alexander. Classification of absences due to illness in the Emerson junior high school for 1930-31. Master's, 1931. Wisconsin.

3339. Wood, Thomas D. and Phelan, Annette M. I am growing up. Growth chart for children. New York City, Teachers college, Columbia university, 1931.

3340. Wootten, Kathleen Wilkinson. Report of 13 year old health department in Southern normal college. Master's, 1930. T. C., Col. Univ. 76 p. ms.

A study of the growth of the health department from two required courses to a complete 4-year course leading to the B. S. degree in health education. Courses and procedure are included. It was found that a whole college can be organized for health;

that direct health instruction can be vitalized; classroom teachers in training need health education, like it, and use it in their daily lives and future teaching, etc.

See also 127 (10), 220-221, 235, 256, 260, 1215, 2014, 2018, 2036, 2046, 2059, 2067, 2073-2074, 2126, 2214, 2552, 3006, 3413, 3426, 4063, 4073, 4075, 4361, 4365; and under Physically handicapped children.

ATHLETICS

3341. Atkinson, Minnie. Intercollegiate sports and physical education: an historical study. Master's, 1931. North Carolina. (For abstract see no. 710.)

Athenian, Spartan, German, Swedish, and English training is discussed, and the development of various American collegiate sports is treated. It is concluded that the program of sports has been closely related to the economic situation of the people of a country, and in the American college it has been very expensive.

3342. Caswell, J. Edgar. Competition of athletic teams on equal basis. Master's, 1931. New York. 62 p. ms.

Comparison was made of averages of teams, using physical capacity test (Rogers strength test) on equal basis, success depending upon winning of games. Games used were soccer and basketball. There were not enough data on which to base definite, detailed proof.

3343. Clauson, Donald B. The analysis of positions of body in game of basket ball. Master's [1931]. Peabody. 120 p. ms.

3344. Cooper, John A. The effect of participation in athletics upon scholarship measured by achievement tests. Master's, 1931. Penn. State. (For abstract see no. 714.)

As a basis for this study objective tests of achievement administered by the Carnegie Foundation for the advancement of teaching were used. A total of 48 athletes were found who had taken the Carnegie tests and whose freshman psychological test scores permitted pairing. Athletes were paired with nonathletes of the same school. The nonathletes showed a slight superiority in achievement. Data indicate that the athlete more nearly reaches the level of achievement that harmonizes with his ability.

3345. Davis, Herbert Frederick. The status of the athletic coach in Seattle public secondary schools. 1931. University of Washington, Seattle. 125 p. ms.

An attempt to survey main tendencies in the status of high school coaches in Seattle.

3346. Durrett, William P. State high school athletic associations and their effect on the school program. Master's, 1930. Iowa.

3347. Freeman, L. J. Clifford. The organization of athletic financial systems in Indiana high schools. Master's, 1931. Indiana. 79 p. ms.

3348. Greene, Mack M. The energy cost of track running and swimming. Master's, 1930. Int. Y. M. C. A. Coll. ms.

*3349. Gross, Osce Milton. A study of coaches reactions to some of the problems of coaching. Master's, 1931. New York. 79 p. ms.

This investigation was a study of 200 coaches' reactions to some of the problems of coaching as compared with the literary authorities' opinions about various problems. The coaches' reactions measured up creditably with the literary authorities' opinions.

3350. Grove, Clarence L. Types and amounts of athletic events engaged in by male graduates of the State teachers college, California, Pa. Master's, 1931. New York. 40 p. ms.

Two hundred and eleven male teachers college graduates of State teachers college, California, Pa., were teaching four counties, Washington, Fayette, Somerset, and Greene. Findings: Recent graduates participate more; 62 per cent of 211 graduates are participating.

3351. Halbedel, Walter N. Junior high school interscholastic athletics in the State of Ohio. Master's, 1931. Ohio. 108 p.

3352. Hauck, Wayne O. An investigation concerning the age status and grade classification of athletes in the western Pennsylvania interscholastic league. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

It was the purpose of this study to determine the age-grade status of athletes representing member schools of the Western Pennsylvania Interscholastic Athletic League in

interscholastic athletic contests, and in addition to find whether the athletes are on the average older or younger than the male students of their respective school and class. The study was limited to boys who had earned their letters in basketball and football during the year 1928-29. Data show that of the total number engaged in athletics, 7.74 per cent are freshmen, 22.24 per cent are sophomores, 35.54 per cent are juniors, and 34.47 per cent are seniors. The average freshman athlete is approximately 10 months older than his average classmate. Age differences become gradually smaller until the senior year, where there is a reversal of age positions, with the result that the senior athlete is two months younger than his average classmate.

3353. Keeth, Mary. Two forms of an objective standardized tennis test. Master's, 1931. Arizona. 29 p. ms.

The purpose of the study was to make a practical test of tennis rules which shall be valid, reliable and practical. Findings: Validity was attained by basing the test upon the only complete book of rules published. Reliability was determined by the use of two forms. Norms were secured by composite of scores of three institutions. The test was found practical as subjectively determined. Opinions from three schools were used.

3354. Kline, Harold I. Control of interscholastic athletics of public secondary schools through state associations. Master's, 1931. Temple.

***3355. Lash, Dale William.** A statistical study of college basketball measured in terms of basket shooting. Master's, 1931. New York. 90 p. ms.

A 7-year study involving over 50,000 shots taken by varsity, freshman, intramural, and class teams. Findings: Definite levels of performance by different classes of players were found, when improvement came during season; improvement was made from year to year; shows relationship of different positions; and various other relationships.

3356. Lehr, Edgar I. Suggestions for organizing an athletic program for boys in junior high schools of Illinois. Master's, 1930. Indiana. 81 p. ms.

The purpose of the study was to determine to what extent the present junior high school athletic programs are meeting the needs of the boys of these schools in Illinois, and to develop some practical suggestions for organizing an athletic program for junior high school boys in the State. Data were secured from questionnaires sent to 187 junior high schools and grammar schools in Illinois; personal interviews with men in charge of junior high school athletics; and observation of junior high school athletic programs in operation.

3357. McCloy, C. H. Some achievement standards in track and field athletic events for boys from 10 to 20 years of age. Doctor's, 1931. T. C., Col. Univ. 255 p. ms.

The purpose of the study was to devise an easily computed standard for comparing the individual performance in selected track and field events with the average performance for boys of comparable ages and with comparable sizes of bodies.

3358. McCloy, Emma. Relationship of factors common to four strength events and factors common to four athletic events. Master's, 1931. New York.

Application of Spearman "s-g" theory to eight athletic events. Findings: Strength events contain a common factor; athletic events contain a common factor; there is a relation between the two common factors.

***3359. MacDonald, Douglas S.** An investigation of the current practices in interschool athletics of the four year high schools of Connecticut. Master's, 1931. New York. 49 p. ms.

Data were secured from questionnaires sent to the principals of all 4-year high schools in Connecticut. Fifty-eight of the fifty-nine schools reporting support interclass athletics, while 82.1 per cent support an intramural program. Baseball and basketball are the two most popular sports. Eighty-two and six-tenths per cent of the schools require participants to obtain passing marks in three subjects. Ninety-three and one-tenth per cent of the schools employ teacher-coaches.

3360. Murphy, Paul G. A study of the relation of motor skills in athletic ability. Master's, 1930. Iowa.

3361. National recreation association, New York, N. Y. The awarding of badges to boys and girls passing athletic badge tests. December 1930. ms. (Bulletin no. 2343.)

A questionnaire study on the extent of use of the badges, and by whom the cost is met, in the various localities of the country. Report of study is given in bulletin headed Regarding badges.

3362. Neff, Wilbur C. The administration of interscholastic athletics in Ohio high schools. Master's, 1931. Ohio. 92 p. ms.

A study of the organization for the control of athletics—management of finances, care and purchase of equipment, and supervision of contests.

3363. Olander, M. M. Methods of teaching psychological skills in football. Master's, 1931. Illinois.

3364. Phillips, Lewis Riley. The general status of the financial control of athletics in the high schools of Indiana. Master's, 1930. Ind. St. T. C. 99 p. ms.

All high schools in the State received the questionnaire. Eighty-four of ninety-two counties replied; some counties sent more replies than others. Findings: 66 per cent of schools have gymnasiums, of which 88.4 per cent have been built since 1920, 56 per cent were built with public money, and 77 per cent are located in school.

3365. Price, H. D. An experimental study of foot-skills in soccer football. Master's, 1931. Illinois. 51 p. (For abstract see no. 699.)

"Six subjects were used in this experiment, the purpose of which was to make a study of the nature of learning foot-skills in soccer. The scope of the study includes attempts to answer such questions as 'What is the nature of foot-skills in soccer?' 'How are the foot-skills in soccer learned?' 'What technique seems to be most proficient in kicking a stationary or a moving ball for accuracy?' Eleven specific conclusions are drawn from the findings."

3366. Purdom, Harold B. The effect of athletic participation on scholarship. Master's, 1931. Michigan.

3367. Sauerman, Harold Lee. The relation of age to achievement on the basis of the Smith Park football contests. Master's, 1930. Iowa.

3368. Saunders, William H. The relationship of unit costs of intercollegiate athletics to athletic profit or deficit in teachers colleges. Master's, 1931. Colo. St. T. C.

It is the purpose of this investigation to make a contribution to the fiscal administration of intercollegiate athletics in teachers colleges.

3369. Savage, Howard J., McGovern, John T., and Bentley, Harold W. Current developments in American college sport. New York, N. Y., Carnegie foundation for the advancement of teaching, 1931. 58 p. (Bulletin no. 26.)

This study insists that the final responsibility for the effective administration of American college sport belongs to university or college officers. The purpose of the study is to set forth and evaluate as many as practicable of the significant changes that have occurred in the relation of sport to the educational process from the autumn of 1929 to the beginning of 1931. One hundred and sixty-four institutions contributed to the present inquiry.

3370. Schweiger, Carl Albert. Study of comparative athletic grades. Master's, 1930. Denver. 50 p. ms.

A study of the relation of the marks received by boys in academic subjects in the Denver public high schools during the period of athletic training compared with the grades received by the same boys while not in athletic training. Material covering the two school years, 1928-29 and 1929-30, was contributed by the five Denver public high schools.

3371. Smith, Zona Ellen. A dictionary of athletic and aquatic activities. Master's [1931]. Peabody. 207 p. ms.

A compilation of concise definitions of all the common terms used in athletic and aquatic activities.

3372. Thomason, Margaret Hope. Sportsmanship in athletics. Master's, 1931. Peabody. 100 p. ms.

This study includes interpretation of sportsmanship, codes and methods of organizing programs, an application of sportsmanship to various phases of life, an analysis of the leading games in which sportsmanship is tested, and concrete examples of men who have displayed sportsmanship in this field. Findings: Educators should make full use of the present great interest in sports to teach boys and girls the lesson of sportsmanship learned on the playing field and in the bleachers that will be remembered and applied in family, business, and political life.

*3373. Wachob, Roland. Survey of the methods and contents of basketball teaching. Master's, 1931. New York. 125 p. ms.

The study includes the fundamentals of basketball as well as phases of team development.

3374. Wallace, Vaughn C. Effect of interscholastic athletics on junior high school pupils. 1931. University of Chicago, Chicago, Ill. 154 p. ms.

Effect of football and basketball upon junior high school boys' health, physical efficiency, and scholarship. Findings: No approximate significant effect from football in any phase was found; there was an indication that basketball is injurious to health.

3375. Wiley, D. E. A survey of junior high school intramural athletics. Master's, 1931. Ohio. ms.

See also 2068, 2216, 2456, 2466, 2483, 3147, 3226, 3292, 3423, 3530.

MENTAL HYGIENE

*3376. Aleck, Adolph William. Essentials of mental hygiene in the history of education to Herbert Spencer. Doctor's, 1931. New York. 230 p. ms.

The general scope and practice of preventive mental hygiene in education prior to 1903 were taken up in this study. Findings: In nontechnical sense, preventive mental hygiene is as old as education itself, but, systematic treatment thereof is modern.

3377. Gesell, Arnold L. A decade of progress in the mental hygiene of the preschool child. Yale clinic of child development, Yale university, New Haven, Conn. *Annals of the American academy of political and social science*, 151: 143-48, September 1930.

3378. ———. Mental hygiene and the public school system. Yale clinic of child development, Yale university, New Haven, Conn. (*Bulletin of the Association of school boards and trustees of the State of New York*, vol. 2, no. 4, p. 7-9, November 1930.)

*3379. Griffiths, Walter G. An evaluation of the Indian scriptures in their relation to selected principles of mental hygiene. Master's, 1931. New York. 109 p. ms.

The purpose of this thesis was to go through representative portions of the main types of Hindu religious literature and attempt to evaluate them from the viewpoint of some selected principles of mental hygiene.

3380. Moore, Elizabeth Skelding. The development of mental health in a group of young children. An analysis of factors in purposeful activity. Iowa City, Iowa, University of Iowa, 1931. 128 p. (*University of Iowa studies in child welfare*, vol. 4, no. 6. New series no. 207, July 15, 1931.)

Twenty 2 and 3 year old children were studied in the main investigation. Five methods of approach were used. Findings: The results indicate wide individual differences among the children in all five of the aspects of behavior studied. Environmental factors, even for children within the same home, were found to differ widely.

3381. Nygard, J. Wallace. The influence of sensation qualities on spatial perception in mental disease. Master's, 1930. Iowa.

3382. Rhodes, Lloyd H. A mental hygiene inventory of 390 high school pupils. Master's, 1931. Colorado.

3383. San Diego, Calif. City schools. Bibliography of popularly written material on the psychology of human behavior. 1931. 6 p. ms.

An annotated bibliography of suggested readings for teachers interested in mental hygiene.

3384. Schock, Nathan Wetherill. Mental performances and the acid base balance of normal individuals. Doctor's, 1930. Chicago.

3385. Symonds, Percival M. Group methods for conducting a mental hygiene survey of high school pupils. *School and society*, 32: 501-506, October 11, 1930.

3386. ———. Mental hygiene in schools. *The Principal*, January 1931.

See also 414, 2033.

WOMEN

3387. Beaumont, Helen M. A study of the attitudes of women students toward physical education at the University of Michigan. Master's, 1930. Michigan.

3388. Currey, Alida Gale. Contributions of American association of university women to health education of college women. Master's, 1931. New York.

Covers work of American association of university women in health education to June, 1931.

3389. Ellis, Flora May. Certain measurements of college women specializing in physical education. Master's, 1931. Peabody. 100 p. ms.

A study of 75 physical-education majors and 75 nonphysical-education majors at George Peabody college for teachers, and 120 physical-education majors at five other colleges in different parts of the United States. Findings: The Peabody physical-education major is more masculine in shoulder and hip proportion, slightly more feminine as to trunk and lower proportion, somewhat heavier and taller, and conforms more nearly to what is considered normal in pelvic diameters and menstrual function. In general this study tends to show that vigorous physical activity is desirable for girls during childhood and early adolescence.

3390. Frey, Henryetta E. A study of the physical efficiency of women. Master's, 1930. Iowa.

3391. Ginno, Eleanora. Physical education for girls in the private secondary schools of Los Angeles. Master's, 1931. Southern California. 156 p.

A study of teacher status, equipment, departmental organization, and curricula in 11 institutions, based on personal interviews, questionnaire replies, and observations of present practices.

3392. Gowen, Loretta. A study of the pulse rates and body temperatures of 75 Philadelphia normal school girls. Master's, 1931. Temple.

3393. Jensen, Elizabeth Jutta. The organization and administration of physical education for women in the public junior colleges of California. Master's, 1931. Southern California.

3394. Lensch, Dorothea Marie. A general athletic ability test for college women. 1930. Wellesley college, Wellesley, Mass.

3395. Manahan, Helen Marie. Muscular efficiency of women. Master's, 1930. Ohio. (For abstract see no. 712.)

In an investigation to determine the muscular efficiency of women, 35 satisfactory tests on 21 college women were obtained. Findings: There was no relationship between the body weight and efficiency, nor between the respiratory quotient and efficiency.

3396. Prater, Mattie Mooneyham. The energy intake of girls 14 to 17 years old. Master's, 1931. Peabody. 79 p. ms.

The food of 18 girls, 14 to 17 years of age, was weighed for a period of one week, and a composite sample, equal to one-fifth the amount eaten, was weighed out and dried. From this the daily caloric intake was determined by use of the oxy-calorimeter. Findings: Girls of the ages 14 to 17 years show considerable variation in their energy intake when expressed as total calories per 24 hours. The average daily intake for the girls observed is highest at age 14, and there is a decrease in total calories per day from 14 to 17 years, but this decrease is not in any regular progression. The average daily food intake for the girls observed is quite close to the average intake of all healthy girls of these ages reported in literature. For the ages observed in this study there is no relation between total calories per day and weight nor between total calories per day and height in inches.

3397. Scott, Frances. Report of the health knowledge test given at Smith college to the class of 1934. In American student health association. Proceedings, 1930. p. 30-34. (Bulletin; no. 14.)

3398. Sharp, Maude V. Survey of age, height and weight as contributing factors in the athletic achievement of girls. Master's, 1931. Temple.

3399. **Skahan, Mary Reed.** Health problems in girls' high schools with special reference to the high schools of New York city. Master's, 1931. Coll. of the City of N. Y. 218 p. ms.

A statement of the health problems of the adolescent girl. Shows the way in which these problems are being met by the teacher and other educational authorities.

3400. **Tuzo, Marjorie Paul.** Anthropometrical examination of 141 college girls as an indication of their growth and development during college. Master's, 1931. New York. 60 p. ms.

One hundred and forty-one Barnard college girls were measured when they entered college in 1926 and when they graduated in 1930. It was found that growth and development do take place during four years of college and that the anthropometrical examination is a scientific indication of the extent of growth.

3401. **Wartman, Elizabeth.** An objective test in health information for women entering college. Master's, 1930. Iowa.

*3402. **Yeend, Elizabeth Widdecombe.** A study of the graduate placement and training of four undergraduate women's physical education departments in New York State. Master's, 1931. New York. 48 p. ms.

This study aimed to collect and analyze material, through a study of positions, salaries, executive and instructional duties, training, entrance requirements, and expenses, from graduates for the last four years of four undergraduate women's major physical-education departments in New York State.

See also 2068, 2092, 2154, 2993.

PLAY AND RECREATION

3403. **Bike, Edward L.** Contribution of college intramural activities to post college recreational activities of Williams college graduates of the classes of 1920, 1925, and 1930. Master's, 1931. New York. 102 p. ms.

Study of the intramural program and athletics for the last 10 years at Williams college, to find the carry over into present recreational activities. Findings: The carry-over values of the intramural program as a whole to post college recreational activities are indicated by the participation in and demand of individual sports by graduates. With the exception of golf and tennis, there is very little carry-over value of the varsity sports. The college intramural individual sport activities are the outstanding activities that contributed to post college recreational activities. The outing activities make a decided contribution to post-college recreational needs. The outstanding factors that affected participation in post-college recreation are lack of time; lack of available facilities; lack of interest; and lack of sufficient funds.

3404. **Blackman, Ethel Gentry.** A manual of water activities for play and recreation. Master's [1931]. Peabody. 88 p. ms.

A classification of play and recreational water activities. A total of 231 activities have been classified.

3405. **Brown, Irene.** Play activities for children with impaired vision. Master's [1931]. Peabody. 160 p. ms.

This study includes children from elementary grades through high school. Findings: Children with impaired vision need more constructive and corrective play. It is possible to give them play that is both beneficial and enjoyable; blind children are not different from those who can see, in their play. Their likes and dislikes are much the same.

3406. **Cangney, Marian H.** Recreation within the family as a possible aid in case treatment. Master's, 1930. Western Reserve.

3407. **Cockrell, Dora Louise.** The relative value of selective play material for preschool children: as judged by amount of time used, varieties of activity while in use, and socially accepted activity. Doctor's, 1931. Yale.

*3408. **Davis, L. W.** An investigation into the conduct and financial support of playground and recreational activities in selected States. Master's, 1931. New York. 62 p. ms.

The purpose of the study was to determine the amount of legal support for the financing and conducting of out-of-school hour programs on school property, and to determine if school buildings, grounds, equipment, and funds are being used without legal support.

*3409. Fox, John Fenton. Organization and administration of recreation in a city with a population under 25,000. Master's, 1931. New York. 100 p. ms. The study gives present recommended theories by leading recreation experts and actual practices in nine typical cities under 25,000.

*3410. Greenwood, Edward D. Recreations and amusements of the colonial period. Master's, 1931. New York. 43 p. ms.

The purpose of this study was to survey the beginnings of physical and social activities of this country. The activities of the colonies were classified into the New England, Middle, and Southern colonies.

3411. Guggenheimer, Frederick L. The camp and the new education. Master's, 1931. T. C., Col. Univ. 47 p. ms.

A survey of the genesis, development, functions and aims of the modern camp and its place in the educational process. It was found that the camp must come to be recognized as an agency with as comprehensive and definite an educational function as the school.

3412. Hargrove, Josephine. The spontaneous play activities of three, four and five year old children in Mobile, Ala. Master's, 1931. Colo. St. T. C.

The purpose of the investigation was to get a more intelligent understanding of the spontaneous play activities of 3, 4, and 5 year old children in Mobile, Ala., as a contribution to the problems of the home, the preschool, and the kindergarten.

3413. Haynes, Wilma D. After college what? American physical education association research quarterly, 2: 214-16, March 1931.

A study of the physical recreational activities of some Stephens college graduates.

3414. Henderson, John C. Playground safety practice. American city, 43: 84-85. July 1930.

A careful study of accidents was made by the Los Angeles department of playground and recreation for the past four years. During that period the 39 playgrounds have had a total attendance of more than 15,000,000 visitors. Certain activities were found to contribute a disproportionate percentage of the accidents. The number of accidents per 100,000 attendance were reduced from 2.54 in 1925-26 to 1.80 in 1928-29. In 1929 all but five of the playgrounds completed the summer season without a single serious accident.

3415. Houck, Ivan Deweese. American camp movement. Master's, 1931. Temple.

3416. Jewell, Margaret Elaine. The place of dancing in secondary education. Master's, 1931. Wisconsin.

3417. Kelleher, John Francis. The playground as a factor in reducing juvenile delinquency. Master's, 1931. Notre Dame.

3418. McDonald, Hovey Clyde. Recreation for teachers. Master's, 1931. Stanford.

3419. McPharlin, Joseph Gabriel. Recreation in rural life. Master's, 1931. Notre Dame.

3420. Martin, Gladys. Comparison of the play activities of white and Negro children. Master's, 1931. Peabody. 42 p. ms.

The play quiz of Lehman and Witly given in their study. The psychology of play activities, was used. Findings: (1) There is no difference between the total number of play activities engaged in by the members of the two races; (2) there are some outstanding differences in the extent to which individual activities are participated in by the two groups; (3) a higher percentage of the whites engage in games involving teamwork and skills, while the Negroes participated more in rhythmic and social activities.

3421. Mason, Bernard S. Camping and education. Camp problems from the campers' viewpoint. New York City, McCall company, 1930. 283 p.

Selected bibliography: p. 249-73.

The problem was to determine the typical camper reactions to certain phases of the program and management of the modern organized summer camp, and to discover to what extent the tactics used satisfy the camper-aim. The boy and girl reactions differ only in minor aspects. A study was made of 51 girls from 31 private camps, and of 49 boys from 20 various types of camps.

3422. **Millett, Geneva Tracy.** A study in determining individual differences in girls in following the rules of simple, newly acquired games. Master's, 1930. Iowa.

3423. **Murray, Verl.** A comparative study of the boys of Whittier State school and Monrovia-Arcadia-Duarte high school as to play information and athletic achievement. Master's, 1931. Southern California. 141 p.

3424. **Nicholson, Paul H.** Adult leisure activities in a Colorado rural school district. Master's, 1931. Colo. St. T. C.

3425. **Posner, David.** Critical survey of the recreational system of the public schools of Newark, N. J. Master's, 1931. Coll. of the City of N. Y. 96 p. ms.

Evaluation of the recreation system of public schools of Newark, N. J., in the light of the standards set up by authorities on the subject. Conclusions: Newark has a well-advanced system. There is at present a policy of expansion which will add to the value of its already excellent system.

3426. **Pritchard, Earle A.** A survey and critical analysis of the modern tendencies in the accepted best practices of administering the adult, lay group leadership in certain play and physical education organizations. Master's, 1931. New York. 103 p. ms.

The study deals with the administration, from a social viewpoint, of volunteer leadership in the 10 national organizations using it.

3427. **Rice, George A. and Brownlee, Robert E.** Leisure activities of eleventh grade students. University high school journal, 10: 215-34, December 1930.

3428. **Seamans, Hubert Hadley.** Social life in the dormitory and on the playground of children's institutions. Master's, 1931. Southern California. 79 p.

A study of nonathletic recreational devices for children's institutions with a 24-hour program. Data were obtained from a survey of 14 private schools and from an experimental program at the Whittier State school.

3429. **Sharp, Edwin Burnell.** Leisure-time activities of children in the district of the Church of the Covenant, Cleveland. Master's, 1930. Western Reserve.

An analytic survey with a view to discovering present group activities and indications for needed group work programs for children 4-18 years of age within this area.

3430. **Stull, Martha.** Analysis of leisure-time activities of adolescent girls in the University neighborhood centers district. Master's, 1930. Western Reserve.

3431. **Sullenger, T. Earl.** Modern youth and the movies. School and society, 32: 459-61, October 4, 1930.

Information was secured from 3,295 high-school students in Omaha on the type of pictures preferred, attendance, actors and actresses preferred, theaters preferred, attendance alone or accompanied, average age, and favorite picture show. Findings: Favorite actor, Lon Chaney; "Ben Hur" favorite picture; mystery stories ranked highest, sex pictures ranked low. Interesting reasons were given as to why they preferred certain actors and actresses.

*3432. **Witty, Paul A.** A study of deviates in versatility and sociability of play interest. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers College, Columbia university, 1931. 57 p. (Contributions to education, no. 470.)

This study deals with the characteristic features of the nature and behavior of four types of deviates in play. Five thousand children in the fifth and sixth grades of the Kansas City schools were studied. Findings: Data indicate that one should not encourage indiscriminate sociability if one desires the most wholesome development of the growing child. It appears to be the kind of social contacts made, not the number, which should concern the person charged with the guidance of children.

3433. Wolf, Anna W. M. Play and playthings. New York, N. Y., Child study association of America, 1930.

A pamphlet which is the outgrowth of the Association's discussion group work with parents.

3434. Woodin, Gwendolyn G. The development of summer playgrounds in Pittsburgh. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

In addition to the history of the playground movement in Pittsburgh, a more intensive study of summer playgrounds in 1930 is included in this project. The administration of the summer playgrounds is divided among the Bureau of recreation, the North side playgrounds and vacation school association, and the Board of education. The playground movement in Pittsburgh demonstrates a trend toward increasing complexity and specialization of its functions and a development of its concepts from the provision of an opportunity to play to an organized program to suit the needs of the modern child.

See also 1787, 1799, 2218, 2544, 2549, 2603, 2638, 2903, 3162, 3233, 4173; and under Extracurricular activities.

SOCIAL ASPECTS OF EDUCATION

3435. Aginsky, Bernard Willard. Education as the method of social reconstruction. Master's, 1931. New York. 84 p. ms.

A study of society and its problems, showing how education plays a part in all our social contacts. Findings: Education of the proper sort will enable civilization to progress more rapidly.

3436. Alabama. State department of education. Materials for school and community organization programs. Theme: Improving the child's environment—the home and the school. Montgomery, Wilson printing company, 1930. 73 p.

3437. Ambler, Samuel C. Relation between broken homes and school progress. Master's, 1931. Southern California. 83 p.

An investigation based on questionnaire responses, interviews, and school records of 101 junior high school students from broken homes, paired with an equal number of pupils, sex for sex, etc. from normal homes.

3438. Appler, Harry Arnott. Community centers as school centers, Harrison county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of the study was to make a survey of the school facilities within the county; to determine the trade and social centers of the county; and to make recommendations that would help provide a more equal educational opportunity for the children of the county.

3439. Blom, E. C. Correlating school work with the activities of newspaper boys. Louisville, Ky., Public schools, 1931.

3440. Bowen, Eugene D. Some principles of group work tested in the experience of a younger boys club. Master's, 1930. Western Reserve.

3441. Bowers, Mrs. Stella M. A study of child-parent relationship. Doctor's, 1931. Ohio. 192 p. ms.

This is a study of child-parent relationships from the point of view of the child. It is based on responses to a questionnaire, made up of 100 questions, which was given to 366 high-school students and 802 college students. Findings: In both sexes, and for all ages there was a predominant preference for the mother; there was a serious disagreement between parents as to the methods of handling the children; the children realized the lack of parental cooperation.

3442. California. State department of education. Cooperation of home and school in secondary education. A guide for conference leaders. Sacramento, 1931. 66 p.

3443. Chilson, Claude Martin. Socio-economic status of ninth grade pupils in the Chicago public schools. Master's [1931]. Chicago.

A study of the social and economic environment of 2,300 ninth-grade pupils enrolled in five 4-year high schools and 10 junior high schools. The Sims socio-economic score card was used for collecting the data.

3444. Cook, Berns W. A study of the relationship between certain out of school factors and success in high school. Master's, 1931. Wisconsin.

3445. Coyle, Grace Longwell. Social process in organized groups. Doctor's, 1930. Columbia. New York City, Richard R. Smith, 1930. 245 p. (Contemporary society series, no. 1.)

The study takes up the organized group in its social setting; the process of group formation; the determination of membership; the evolution of structure; the functions of leadership; the process of communication; the development of esprit de corps; the process of collective thinking; and some social functions of the organized group.

3446. Dillon, Mrs. Miriam. Sex education of children by parents. Washington, D. C., Washington child research center [1931]. 148 p. ms.

3447. Fisher, C. A. A survey and evaluation of Michigan rural social centers, in schools, churches and elsewhere. Doctor's, 1930. Michigan. ms.

3448. Flory, Alberta Faye. Recent methods of teaching parental education. Master's, 1931. Southern California. 107 p.

A canvass of some 300 college and university catalogues, 20 recent books, and numerous pamphlets and magazine articles for the purpose of discovering the agencies and methods used to prepare young people for parenthood.

3449. Flynn, Grace Serena. The visiting teacher movement. Its development, organization and administration. 1931. University of Washington, Seattle.

3450. Fox, Ina McCall. A study of 54 families in which both parents are living and the children were placed under the care of the Franklin county children's home. Master's, 1930. Ohio. (For abstract see no. 712.)

This study is an attempt to show the factors present in 54 Franklin county families, in which the 132 children involved were removed from their homes and were placed in the Franklin county children's home for the fiscal year 1929. Nine of the families have been rehabilitated and are managing very well.

3451. Ganyard, Glen Leiby. The early history of the regulation of child labor in Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of this study was to show the nature and the extent of, and the factors contributory to, the regulation of the labor of children in Ohio down to 1890.

3452. Gibbons, Charles E. and Stansbury, Chester T. Administration of the child labor law in Ohio. A study of children employed in Middletown, Toledo, and Youngstown. New York City, National child labor committee, 1931. 66 p. (Publication, no. 363.)

The purpose of this study was to find out how many children 14, 15, 16, and 17 years of age there were in these cities and the number who were in and out of school; to find the reasons for nonattendance of those not enrolled; and to make a detailed study of the work done by children who had left school. As a corollary to these lines of inquiry, a study was also made of the certification of these children.

3453. ——— Street-trading in Detroit. New York, N. Y., National child labor committee, 1931. 80 p. ms.

The study deals with the children and their families, the children and their jobs, the children in school, school letter rating, school failure, grade distribution, delinquency, girls engaged in street work, and recommendations. Data were based on interviews with 2,595 pupils in 28 public elementary, 5 public intermediate, and 4 parochial schools, who engage in street trading.

3454. Grandy, C. D. Sex problem. 1930. Agricultural and technical college, Greensboro, N. C.

Analysis of the problem, survey of the literature in the field, and a study of present methods of sex-instruction, with the view of determining a suitable high school course in sex hygiene.

3455. Greenstein, Julius J. Comparative studies in child labor problems. Master's, 1931. Temple.

3456. Hall, Clifton W. Collection and evaluation of socio-economic indices in relation to educational variables. Doctor's, 1931. Ohio. 262 p. ms.

The problem set for this investigation comprised the following three major objectives: (1) Securing and bringing together in one source as many indices as possible of community status for the county school districts of the State of Ohio; (2) studying these assembled indices in an attempt to answer the question "What are the variables in the community environment that are most closely associated with an effective high school environment?" (3) to map out those areas in the State of Ohio where the community environment is unfavorable to educational success of boys and girls. Findings: Through the use of correlation techniques 38 variables were studied intensively. The price paid for new automobiles, the tax valuation, the number of subscriptions to "Ohio Farmer" and the number of older brothers and sisters who have graduated from high school comprise the indices which appear to be most closely associated with the power of the high school to hold its students in school until graduation. Ownership of farms and automobiles, number of doctors per 10,000 population, the divorce rate, and the size of the high school constitute the next most powerful predictive group of indices.

3457. Halperin, Sidney L. A comparative study of children from adequate and inadequate homes. Master's, 1931. Ohio. 70 p. ms.

An attempt to compare in intelligence and school achievement children who attend the settlement houses in Columbus, Ohio, with those who come from much better homes. Findings: Children from the better homes score much higher in intelligence and school achievement than do children who attend the settlement houses.

3458. Hanny, Lucie Kinney. Social agencies of Pittsburgh cooperating with the public schools. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A study was made of 135 organizations which seemed likely to have school contacts. All of the agencies replied. The replies indicate that 38 different types of service are available to public-school children and their families. The social agencies of Pittsburgh are willing and able to give assistance to teachers in solving almost any problem of a social nature which may arise in connection with their pupils.

3459. Higbee, E. C. Qualities involved in adult-leadership and their comparison with pupil-leadership in high schools. Master's, 1931. Colo. St. T. C.

The purpose in this study was to find the qualities that seemed to be involved in adult leadership, to find the situations that appear to have had a part in the development of leadership, and to compare these findings with the data found in the study of pupil leadership.

3460. Hinterlong, Anna. A study of cooperation between the home and school. Master's, 1931. Michigan.

3461. Jack, Lois. An observation interview score card for measuring parental attitudes and practices in child rearing. Master's, 1930. Iowa.

3462. Jordan, William C. The influence of the out-of-school experience of pupils in grades one to six on classroom activities. Master's, 1931. Ohio. 67 p. ms. (For abstract see no. 712.)

From visits to 100 classrooms in grades one to six in schools in Northwestern Ohio, the amount and quality of teachers' and pupils' references to their own firsthand environmental experiences were ascertained. Findings: Pupils made but 22 references and teachers 30 to their own out-of-school experience in the 100 recitations observed.

3463. Kassoy, Irving. A history of the work of the American social hygiene association in sex education, 1876-1930. Master's, 1931. Coll. of the City of N. Y. 141 p. ms.

A description of conditions affecting the formation of the American social hygiene association from 1914-1930. The study is mostly a summary of activities with special emphasis on sex education. The author suggests curricula in sex education for the child of preschool age up to and including the adult.

3464. Keeler, Miriam. Child labor legislation—1931. New York City, National child labor committee, 1931. 18 p. ms.

Part 1 gives legislation enacted in the several States; part 2 gives legislation defeated in the various States.

3465. **Leist, Josephus Floyd.** The week-end activities of 3,260 school children. Master's, 1931. Ohio. (For abstract see no. 712.)

This study covers the activities of a single week-end of 3,260 white children of the public schools of Delaware, Findlay, and Portsmouth, Ohio. The children were in the fifth to twelfth grades inclusive.

*3466. **Mace, Ethel Marion Carolyn.** The place of the "study home" in the modern program of child care with special attention to the children's community center of New Haven. Master's, 1930. New York. 171 p. ms.

This study gives a history of child placing, and a description of institutional care and its limitations. The function of the study home is a diagnostic one. The study describes the work of the study home in New Haven.

3467. **Madden, Sister Mary Cyprian.** An analysis of magazine criticism as a source of objective in training in social living. Master's, 1930. Notre Dame.

3468. **Maloney, Sister Mary Verona.** The Catholic parent teacher association. Master's, 1931. Catholic Univ. 77 p. ms.

3469. **Mathews, Selma Martha.** The effect of mothers' out-of-home employment upon children's ideas and attitudes. Doctor's, 1931. Ohio. (For abstract see no. 712.)

A questionnaire called a home blank was constructed, based on six preliminary studies, containing 100 items representing both socially approved and disapproved situations. The blank was given to 568 children of grades five to nine found in school rooms, city playgrounds, boys' camps and dally vacation Bible schools in varied types and sizes of communities in Ohio, Colorado, and North Carolina. Blanks of 100 children whose mothers worked out of the home were selected and studied with those of 100 children whose mothers did not work. Data indicate that if a mother finds it necessary to be employed, and if by so doing she can provide more comforts for her children, she need not feel remorse or guilt for going to work. The working mothers' children who live in a poorer environment, are nearly as content with life as the nonworkers' children.

3470. **Merrill, R. B.** The effect of formal teaching of the technique of social leadership. Master's, 1931. Penn. State.

Estimates were taken on pupils by their fellow-pupils as to leadership ability by the ranking method. Then six lectures were given to about half of them on the technique of social leadership, administering these in the English class, at periods somewhat scattered. Rankings similar to those of the fall were again called for in the spring after the instruction would have had a chance to manifest a difference in leadership conduct. A difference was found in favor of the instructed group that was 1.43 times its standard deviation, involving chances of 7.3 to 1 that the differences were not due to accidental variations.

3471. **Montagnac, Hubert.** Principal methods of collecting the data in rural sociology. Master's, 1930. Ohio. (For abstract see no. 712.)

This short study is a critical analysis of the most important methods of research offered to the student of rural sociology.

3472. **Murphy, Mother Margaret Ellen.** Studies in attitudes toward home life with children, adolescent girls, and women. Master's, 1931. St. Louis. 114 p. ms.

3473. **Nevins, Alexander.** An inquiry on after-school employment. Doctor's, 1931. Fordham.

*3474. **Noonan, Kathryn D.** Integration of a school and its community. A case study. Master's, 1931. New York. 49 p. ms.

The study deals with the community, its location, and the character of its population; the school; the faculty; the children; the curriculum; the reorganization problem; and special activities. From this study it would seem that the promotion of good feeling between home and school is the key to the understanding and integration of a community.

3475. **Noyes, Florence O.** Some procedures and materials for parents to use in the home for child guidance. Master's, 1931. Nebraska. 107 p. ms.

Materials for parents to consider in the home education of preschool children were selected, an experimental preschool study group was organized, and programs for study groups were formulated.

3476. Prosser, Don Davenport. A descriptive statement of boys' work among the social agencies in Columbus in 1929. Master's, 1930. Ohio. (For abstract see no. 712.)

The social agencies studied were the Boy scouts, Y. M. C. A., city recreation department, Knights of Columbus, settlements, De Molay, and schools and churches. Findings: There is need for a more thoroughly conceived educational objective; for more adequate equipment; for a better publicity and educational program for adults; and for better and more extensive cooperation and mutual understanding among the workers with boys.

3477. Reading, Pa. Public schools. Nativity of pupils and parents, all schools. 1931. 6 p. ms.

3478. Ryder, Elizabeth Jane. Home relationships: A curriculum to aid adolescents of foreign-born parents in adjusting themselves to their home and social relationships. Master's, 1931. Boston Univ.

3479. Stewart, Berney Roscoe. How the pupils of the Seymour, Ind., high school spend their out-of-school time. Master's, 1931. Indiana. 112 p. ms.

3480. Waddock, Edith. Scholarship of siblings in relation to their home environment. Master's, 1931, St. Louis. 142 p. ms.

3481. Wilson, Madison Monroe. A comparative study of school children in communities of different types of environment. Master's, 1931. Oklahoma. 181 p. ms.

An extensive study was made of the total enrollment of three schools in a city of over 100,000 population; the first was in one of the wealthiest sections, the second in a section composed principally of a good middle class, and the third in one of the poorest districts. Findings: The wealthiest school ranked first in number of homes with telephones, the permanency in district and in attendance; the middle-class school second, and the poorest section third. The largest families were found in the poorest section, and the smallest in the wealthiest. School children were younger chronologically, older mentally, and ranked higher in achievement in school subjects in the wealthier section than in either of the other two.

3482. Wright, Lora B. An analysis of the duties and problems of the visiting teacher. Master's, 1930. Colo. St. T. C.

The purpose of this study was to make an analysis of the duties and problems of visiting teachers, and to determine what results, if any, are derived through this type of work.

*3483. Youngberg, Marie. Problems arising in the operation of a social work program in a midwestern rural community under the joint auspices of a board of county commissioners and a Red Cross chapter. Master's, 1931. New York. 156 p. ms.

The problem is one of determining and evaluating the difficulties involved in the joint public and private financing and administration of a social-work program by the board of county commissioners and the local chapter of the American Red Cross in a rural midwestern county. It aims to present an accurate picture of a single situation covering a period of three months in the summer of 1929.

See also 11, 47, 100, 223, 241, 412, 478-479, 1066, 1068, 1969, 3428; and under Extracurricular activities: Problem and delinquent children; Social studies; Tests of social adaptation.

MORAL AND CHARACTER EDUCATION

3484. Armstrong, Caroline. Boy and the automobile. Los Angeles, Calif., City schools, 1931.

Compares grand thefts of automobiles to establish their social value.

3485. Ball, Julia M. Tolerance as a character study. Master's, 1931. Colo. St. T. C.

This investigation was for the purpose of determining what the schools are doing to take care of these traits and to reach some definite conclusions that might be of use in the preparation of a program of character education to include these traits.

3486. Barnett, James H. High school attitudes toward prohibition. Philadelphia, Pa., Presbyterian board of Christian education, 1930. 8 p.

A questionnaire study of 1,000 high-school seniors in 70 high schools in 42 States.

3487. Baumgartel, Howard John. A survey of the provision for formal moral and religious education of the Protestant churches of Ebensburg, Pa., for junior pupils (ages 9, 10, 11) and intermediate pupils (ages 12, 13, 14). Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The International council of religious education standards furnished guidance for constructing the information blanks and schedules, for measuring to what extent the church-school provisions were satisfying the educational objectives for the junior and intermediate pupils, 9-15 inclusive. One of the values of the survey came from the comparison of the provision of religious education with the International standards.

3488. Beiswanger, George W. The character value of the Old Testament stories. Iowa City, The University, 1930. 63 p. (University of Iowa studies, first ser., no. 187. Studies in character, vol. 3, no. 3, September 15, 1930.)

Sixty-three Old Testament stories were judged for literary excellency, specific character value, and grade placement. In conclusion, the writer asks "Would it not be better to transfer the time, the energy, and the devotion that has been lavished upon the Old Testament narrative to more fruitful material?"

3489. Caldwell, Otis W. and Lundeen, Gerhard E. Students' attitudes regarding unfounded beliefs. Science education, 15: 246-66, May 1931.

Gives data concerning the prevalence of certain unfounded beliefs and lays the foundation for experimentation designed to change attitudes regarding these beliefs.

3490. Campbell, Helen M. Prejudiced thinking among school children. Master's, 1931. Colo. St. T. C.

The purpose of the study was to reach some conclusions that may be of use in making teachers aware of the beginnings of prejudiced thinking as concomitant products of education.

3491. Carter, Nora. Survey—moral problems arising with children, age 12-14. Master's, 1931. T. C., Col. Univ. 76 p. ms.

Data were secured from 300 children, ages 12-14, 100 from each age group, from 13 States; 150 parents of children of these ages from all economic levels and from all parts of the United States; and from 80 experienced teachers of upper grades. Findings: Anti-ideals are more numerous in moral problems than ideals. The anti-ideals which indicate a tendency toward social solidarity are in the upper third of the frequencies at each age group. Ages are not alike in their moral problems, there being much shifting of emphasis with age. These ages do not show advances toward the adult type of moral situation as far as complexity is concerned.

3492. Clarke, Dorothy E. Problems in character education in Harkness camp, with recommendations and implications for future camp programs. Master's, 1930. Western Reserve.

3493. Cottam, Marjorie M. Modern trends in character education. Master's, 1931. Temple.

3494. Davidson, Thomas Nelson. A study of a plan for character education at Neptune high school. Master's, 1931. Rutgers. 122 p. ms.

3495. Dion, Clarice Anita. Current conceptions of character education. Master's, 1931. Brown. 88 p. ms.

A study of contemporary theory and practice in character education in the school. Findings: The general tendency to-day is to look upon character as a matter of habits and attitudes to be developed in the whole process of education through the medium of life experiences. Emphasis is placed upon environmental factors as means of calling forth desirable responses rather than upon the acquisition of formal knowledge about moral living.

3496. Essert, Paul L. Curriculum content for teaching obedience and respect for law. Master's, 1931. Colo. St. T. C.

This study was made to determine how much is being done in our public schools to teach and encourage obedience and respect for law as implied in the ordinances of municipalities, and to provide curriculum content which would tend to remedy existing weaknesses.

3497. Feder, Daniel D. An evaluation of certain aspects of a program of character education. Master's, 1931. Denver. 49 p. ms.

An attempt to ascertain whether, when there are composite pictures of two groups of boys with emphasis placed upon various traits of character and behavior, it is possible to tell which group has had the special training of a certain organization and which has not. In order to do this, an attempt was made to evaluate the work as regards: (1) Knowledge of health facts and habits; (2) citizenship, as expressed in knowledge of the elements of good citizenship and as manifested in behavior; (3) attitudes toward war and peace; (4) emotional balance, as manifested in feelings of superiority and inferiority; and (5) general factors of school behavior.

3498. Friedberg, Herman. The fundamental absolutism of George Santayana, with a special reference to moral education. Master's, 1931. New York. 72 p. ms.

A short résumé of absolutism in philosophy, an exposition of naturalism, and an indication of the necessary affinity of the two. Findings: That idealism, logical but unacceptable, can be superseded by a concept of idealizing in naturalism. Such idealizing necessarily creates a definite concept of moral education which embodies a supreme faith in the omnipotence of human as opposed to supernatural activities.

*3499. Friedman, Mrs. Jule Linder. Character education in the secondary schools of New York City. Master's, 1931. New York. 68 p. ms.

The purpose of the study was to present some of the opportunities offered, the procedures followed, and the methods employed at the present time in the New York City high schools which teachers are finding most effective for character education. Findings: 92 per cent of those answering the questionnaire are consciously aware that opportunities for character education are tied up with every subject and with every experience of the student. The respect and confidence of teachers and fellow students is being found more effective than tangible rewards. Thirty-five per cent of the teachers are finding tangible awards effective.

3500. Gilman, Bernard. The legal control of character education. Master's, 1930. Colo. St. T. C.

The purpose of the study was to determine the present legal aspect and practice of character education in the States.

✓ 3501. Gleason, F. E. Preliminary survey of some conditions which influence moral and religious opinions. Master's, 1931. Ohio. 46 p. ms.

3502. Greene, Charles E. Character education. Denver, Colo., Public schools, 1931. 40 p. ms.

3503. Harris, Mrs. John Burke. Character education in the United States. Master's, 1931. Mercer.

3504. Hayes, George Lewis. An experiment in character education conducted at public school number 26, Indianapolis, Ind. Master's, 1930. Indiana. 69 p. ms.

The problem was to set up an experiment in character education which would be effective in this particular school and its community; and to conduct the experiment in such a way that the greatest benefit would result for the pupils for whom it was intended. Findings: Teachers are interested in the subject of character education and show much initiative and resourcefulness in developing such a program; pupils in all grades of the school are interested in the subject and will receive great benefit from such a program; pupils get most out of a program of character education if they are permitted to live or act the program out rather than hear about it.

3505. Heiser, Bess M. Teacher influence on character. Master's, 1931. Cincinnati.

3506. Henry C. Frick educational commission, Pittsburgh, Pa. Character: The sequence; how developed; how measured; sample lessons; the child in the universe; a character credo; selected bibliography. 1930. 90 p. (School betterment studies, Vol. 2, no. 2.)

3507. Hunt, Alice McCullough. An estimate of the relative value of certain ideals. Master's, 1931. Denver. 100 p. ms.

An attempt to obtain a community evaluation of a set of 75 ideals, grouped into 17 families, and listed in the order of estimated importance by 508 men and women taken very much at random from the community at large. The study attempts to show: What differences, if any, are brought about by different factors in the situation; (3) what

influence does church membership have upon the selection and evaluation of these character traits? (3) is there much difference in opinion between those who go to church and those who do not? (4) do the sexes differ, and if so, how? (5) does marriage, with its potential or actual parenthood, cause ideas and ideals to change? (6) what influence is brought to bear upon the opinions of husband and wife by the length of their married life? and (7) do they, as is often stated, tend to grow more alike in thought as the years go by?

3508. Jewell, J. E. and Blackler, R. C. Character education. A manual for Oregon teachers. Salem, Oreg., State department of education, 1930. 64 p.

This manual purposes to present a résumé of what seems to be the best thought so far expressed on character education, with outlines of some of the procedures that have been developed which have given promise of success.

3509. Johnson, Loaz W. Character education. Master's, 1931. Wyoming. 85 p. ms.

3510. Jones, Frank W. A study of the moral judgments of reformatory inmates. Master's, 1931. Iowa. 85 p. ms.

3511. Jones, Vernon. Children's morals. Chapter 13 in Handbook of child psychology, ed. by Carl Murchison. Worcester, Mass., Clark university press, 1931. 50 p.

This chapter reviews critically the experimental evidence available on the moral behavior of children. The influence of nature and nurture on individual differences in character is studied in some detail. A comprehensive list of objective measures which have been used in the evaluating of moral behavior is included.

3512. ——— What would you have done, true stories from biography for boys and girls. Clark university, Worcester, Mass. Boston, Mass., Ginn and company, 1931. 179 p.

This book consists of 89 true episodes from the boyhood and girlhood of famous characters in history, literature, and science. The episodes have been written up in the form of short narratives for use in free discussion periods on citizenship and character. Each story raises a moral issue. The material was prepared for and tried out with 13 and 14 year old children.

3513. Kaye, Irene M. The transfer of moral training. Master's, 1931. St. Louis. ms.

3514. Kemper, Hollis D. Cheating among high school students. Doctor's, 1931. Iowa.

Evaluates objectively the effects of the week-day school of religious instruction on high-school cheating. Findings: Religious instruction is one factor in causing less cheating along with definite programs for character training.

3515. Kiefer, Helen Elizabeth. A tentative character program illustrated by case studies of first grade pupils. Master's, 1931. St. Louis. 66 p. ms.

3516. Landeen, Gerhard E. and Caldwell, Otis W. A study of unfounded beliefs among high school seniors. Journal of educational research, 22: 257-73, November 1930.

Defines 200 unfounded beliefs and reports their use in a test to the extent to which these are known, believed, and are an influence in the activities of high school students.

3517. McCarthy, Joseph Francis. The senior high school course in English literature as a means of character development. Master's, 1931. Boston Coll. 26 p. ms.

*3518. McLaughlin, Sister Mary Aquinas. The genesis and constancy of ascendancy and submission as personality traits. Doctor's, 1931. Iowa. Iowa City, University of Iowa, 1931. (Studies in education, vol. 6, no. 5. New series no. 216, December 1, 1931.)

The study reports an investigation of the social traits of ascendancy and submission as found in a group of college students. Twenty-five of the students who had one or the other trait in an extreme degree, were reeducated during a period ranging from 5 to 7 months in length. A case study of each individual in the group was made. Various techniques were developed to help the subject in correcting social or other undesirable attitudes.

3519. Maller, Julius B. *Conflicting ideals and their place in character education.* 1931. Teachers college, Columbia university, New York, N. Y. 65 p. ms.

This is the result of a study of 70 problems, each of which involves some conflict between two or more social standards. They were given to several hundred educators and graduate students. The results revealed marked differences of opinion among educators as to what constitutes the correct solutions to the problems. The report indicates how these problems may be used for the purpose of character education.

3520. ———. *Size of family and personality of offspring.* *Journal of social psychology*, 2: 3-27, February 1931.

The study was based on the data of the Character education inquiry. It presents the correlation between the number of children in the family and scores on tests of intelligence and character.

3521. Mang, Brother William. *The value of Catholic biography in the formation of ideals.* Master's, 1930. Notre Dame.

3522. Mathews, Chester O. *An objective study of student and faculty attitudes toward academic honesty.* 1931. Ohio Wesleyan university, Delaware.

3523. Mawson, Jennie E. *Combating cheating in the classroom.* Master's, 1931. Coll. of the City of N. Y. 42 p. ms.

An experimental study of the effect of "honesty" instruction upon cheating in the classroom. The group with "honesty" instruction showed a smaller amount of cheating after the instruction. Although the difference was small (0.300-1.53 as against 0.237-0.202), definite instruction seems to have some effect on behavior of pupils.

3524. Michel, Rev. Matthew Arthur. *Some practical aspects of moral education in the Catholic high school.* Doctor's, 1931. Catholic Univ. 138 p. ms.

3525. Michigan. Department of public instruction. *Training for character and citizenship.* 1930. (Bulletin no. 33.)

This bulletin was prepared for the purpose of suggesting material and presenting plans for instilling the ideals of citizenship.

3526. Montana society for the study of education. *Report of the committee on character education of the Montana society for the study of education.* 1930. 5 p. ms.

Contains an annotated bibliography of new books on character education.

3527. Morris, Edna Anna. *Contemporary character training in the Boston public schools.* Master's, 1931. Boston Univ.

3528. Mulkin, Mildred. *A study of personality traits.* Master's, 1931. Penn. State. 162 p. ms.

A study of aggressiveness, submissiveness, and social intelligence in their interrelation and in relation to scholastic achievement. The correlation method was employed. Among the findings were: A remarkable increase in social intelligence and aggressiveness between sophomore year in high school and sophomore year in college; college women with high scholastic averages were more aggressive than those with low averages; high-school sophomores who have attended rural school were lower in social intelligence than town people; decided inter-correlations exist between intelligence, test scores, scholastic averages, and social intelligence.

3529. Murphy, Sister Saint Ann. *Developing by education dignity and firmness of character.* Master's, 1931. Marywood. 81 p. ms.

3530. O'Connor, John Joseph. *The development of character traits in the boy through competitive sport.* Master's, 1931. Notre Dame.

3531. Rucker, Kennie Holt. *Developing character ideals in junior high school through American history.* Master's, 1931. Colorado.

3532. Savage, Donald Hurlburt. *Character education in summer camps.* Master's, 1931. Boston Univ.

3533. Sherman, L. A. *What is education?* 1930. Henry C. Frick educational commission, Pittsburgh, Pa. (School betterment studies, Vol. 2, no. 3.)

Dr. Sherman has formulated for the use of Pittsburgh school authorities, a statement of some of the ideas which underlie the literary instruction he gives in his university

classes, to aid in arriving more closely at the fundamental principles underlying character training.

3534. **Shuttleworth, F. K.** Influence of motion pictures on children's attitudes. 1931. Yale university, New Haven, Conn.

Influence of motion pictures on attitudes and character of children in grades 5 to 9.

3535. **Thomas, Winnie M.** The achievements in character education of the Young citizens league of South Dakota. Master's, 1931. Colo. St. T. C.

3536. **Tinsley, Ruth Elizabeth.** Personality traits of high and low scholarship men of equal Thorndike intelligence. Master's, 1931. Stanford.

3537. **Walker, Fred A.** Case studies to determine the conduct controls of selected boys, nine, ten and eleven years of age, living in an "underprivileged" city environment. Master's, 1930. Presbyterian theological seminary, Chicago, Ill.

3538. **Washburn, Grace F.** The problem of teaching ethical character through literature. Master's, 1931. Syracuse.

3539. **Washington, D. C.** Public schools. Preliminary report on character education prepared by a Committee appointed by the Superintendent of schools. Washington, United States Government printing office, 1931. 19 p. (School document, no. 9:1931.)

Part 1 of this report deals with the general problem of character education, and summarizes the reports of Part 2, which were prepared by special committees, and which have not yet been published.

3540. **Whitney, F. L.** State legislative provision for character education. School and society, 23:306, February 28, 1931.

The legal background of character education curriculums in the public schools is reported.

3541. **Williams, Blanche C.** Conservatism and radicalism among high school students. Master's, 1931. Washington Univ.

3542. **Wright, Chatt G.** An analysis of honesty as a fundamental human trait. Master's, 1931. Colo. St. T. C.

This attempts to determine the situations in life that call for reactions of honesty in order that they may be used in forming a curriculum for the study of honesty in our schools as a part of a character education program.

3543. **Zyve, Claire.** Experiments in the teaching of integrity. Teachers college record, 32:359-74, January 1931.

From a study of the Fox Meadow school, Scarsdale, N. Y., it was found that there was no transfer in learning in integrity from one situation to another. The study recommends the teaching of desired procedure in each case.

See also 69, 4052, 4361; and under Tests of social adaptation.

RELIGIOUS AND CHURCH EDUCATION

3544. **Bear, Robert Murray.** Administration in university centers of religious work subsidized by the Board of Christian education of the Presbyterian Church in the United States of America. Doctor's, 1931. Ohio. (Abstracts, p. 1-12.)

The purposes of this study were: (1) To survey the work at university centers with which the Board of Christian education cooperated in 1928-29; and (2) to determine what policy it should pursue in relation to this work in the future.

*3545. **Bell, Sadie.** Church, State, and education in Virginia. Doctor's, 1930. Pennsylvania. New York, Science press, 1930. 796 p.

This study offers an explanation of present-day attitudes toward the problem of religion in education, the relation of Church and State to that problem, from the point of view of historical development in a State which has been under the influence of three important political philosophies—that of union, that of separation, and that of cooperation without legal alliance between Church and State.

3546. Boell, Margaret Alice. The history and use of the comparative method in the religious sciences. Doctor's, 1930. Chicago.

3547. Brand, Ascher Harlan. A study of the personality of the teacher in teaching religion to middle adolescents. Master's, 1930. Presbyterian theological seminary, Chicago, Ill.

3548. Campbell, Rev. John Edward. Catholic education in a democracy. Master's, 1931. Catholic Univ. 46 p. ms.

3549. Carmichael, P. H. The church's educational responsibility. 1930. New York university, New York, N. Y. 155 p. ms.

*3550. Confrey, Burton. Secularism in American education, its history. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university press, 1931. 153 p. (Catholic university of America. Educational research monographs, vol. 6, no. 1, January 15, 1931.)

Bibliography, p. 151-53.

This is a survey of the more important phases of the secularizing process extending over more than 150 years of our national life.

3551. Cowen, Georgia E. Relationship between intelligence and beliefs concerning God. Master's, 1931. Colorado. 63 p. ms.

A study was made of 500 college students by means of questionnaires and intelligence tests. Findings: Belief in a personal God decreases and belief in an impersonal God increases with intelligence, with age, and with scholastic maturity.

3552. Dillingham, John, jr. The present work of the churches in state colleges and universities. Master's, 1931. Yale.

*3553. Elbin, Paul Nowell. The function of worship (nonsectarian Protestant) in a college community: a study of present conditions with practical suggestions for improvement and with suitable source material. Doctor's, 1931. T. C., Col. Univ. c

The problem of this study is the improvement of college chapel services. Questionnaires were sent to 176 American colleges and universities to be answered by the person responsible for the chapel service. 61.3 per cent of the questionnaires were returned. This study indicates that the leaders of chapel services do not have very definite objectives in their work, and that many are skeptical of their results.

3554. Elder, Ralph S. The status of religious education in the Sunday church school in 15 Negro churches in Knoxville, Tenn. Master's, 1931. Northwestern.

*3555. Erbacher, Sebastian Anthony. Catholic higher education for men in the United States, 1850-1856. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university of America, 1931. 143 p.

Bibliography, p. 120-29.

This study considers all Catholic institutions of higher education for boys and young men in general, exclusive of strictly styled ecclesiastical seminaries and commonly called colleges. The first part of the study deals with colleges founded before 1850; the second part takes up the new foundations, made between 1850 and 1866; while the third discusses the administrative features of the colleges of this period.

3556. Fleckles, Elliott V. Role of religion in education in private secondary school. Master's, 1931. New York. 67 p. ms.

From an investigation of representative private schools in the eastern and western parts of the United States and a study of private-school surveys, it was concluded that the role of religion in the private secondary school lies in discovery and application, in and through experience.

3557. Foster, Robert A. The control and support of the educational program of the United Presbyterian denomination. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The United Presbyterian denomination has an interest in one theological seminary, six colleges, and 14 institutions of secondary and elementary education. The church has never endeavored to secure the material control of her collegiate institutions. In the

history of this denomination it is revealed that there are two phases of educational control. In one, the institution is controlled by the synods and the support of the denomination as a whole is very meagre; in the other, the denominational control is direct and the support is consequently more complete and effective.

3558. Gillis, Paul McBride. A study of courses of instruction for children in preparation for church membership in 13 Protestant denominations in Allegheny county, Pa. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

An analysis of manuals for instruction in church membership published by the outstanding Protestant denominations was made. A survey of pastors in the local churches by the questionnaire method revealed what methods they used and what concepts they believed to be important in training young church members. A survey of high school juniors and seniors by a similar questionnaire indicated what concepts they have concerning the church and religious beliefs and to what extent they agree and understand the concepts emphasized by the pastors. A study of the manuals disclosed that nearly all the courses are text centered and that many of them deal with situations which are not within the experience of the learner. The results of the questionnaire sent to the pastors reveals that nearly 80 per cent of the churches have classes of instruction. In the questionnaire sent to the students, it was found that the decision to become members of the church was made for the students, in many cases by their parents or Bible-school teachers.

3559. Golawski, Bernard. The organization and administration of religious education in the Protestant church Sunday schools of Monessen, Pa. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to determine the present status of the Protestant church Sunday school organization within the city of Monessen, Pa. The study was limited to the following phases of organization and administration: Governing boards and officials, staff of workers, training and supervision of workers, administrative management of pupils, the session records and reports, outside relationship, housing and equipment, and budget. Data were secured through personal interviews with pastors or superintendents.

3560. Grace, Mary Ehnore. Christian education as a means of social control in Southern Appalachian region. Master's, 1930. Denver.

*3561. Greth, Morris S. Leadership training through local church agencies. (A study of outcomes). Doctor's, 1930. Pennsylvania. Philadelphia, University of Pennsylvania, 1930. 164 p.

Part 1 of this study advances 19 major outcomes as essential for efficient volunteer workers in the Evangelical Protestant churches of America. Part 2 deals with the analyses of the major outcomes from the standpoint of instruction.

*3562. Harner, Nevin C. Factors related to Sunday school growth and decline in the Eastern Synod of the Reformed church in the United States. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 101 p. (Contributions to education, no. 479.)

A study was made to determine what factors can be distinguished as accompanying Sunday school growth and decline in the Eastern Synod of the Reformed church in the United States, comprising roughly the State of Pennsylvania east of the Susquehanna river and numbering about 600 Sunday schools with a membership of around 150,000. Data were secured concerning the schools of the synod for the years 1920-1928, and from intensive case-study analysis of four selected schools. Data indicate that there are differences in rate of Sunday school gain among localities, such as counties and ecclesiastical areas, which are not wholly traceable to type of community, rate of population growth, or any other factor included in this study.

3563. Harris, Gertrude G. Some elements in my philosophy of religious education as an outgoing missionary. Master's, 1931. T. C., Col. Univ. 17 p. ms.

Investigation of possible methods of religious education in the face of the current registration requirements in China. Findings: Schools should register, and comply with all regulations, depending on the challenge of vital Christian lives to maintain the proper school atmosphere.

3564. Heard, Sister Etheldreda. The character of the student population in the Central Catholic high school viewed from the standpoint of the social, economic and mental status. Master's, 1931. St. Louis. 154 p. ms.

3565. Heiser, *Brother Agatho*. A proposed registration procedure for Catholic high schools of moderate size based on the most efficient methods in use in 104 secondary Catholic schools. Master's, 1931. Notre Dame. 74 p. ms.
3566. Hibbs, *Ramona S.* An investigation of the influence of higher education on religious concepts. Master's, 1931. Colo. St. T. C.
3567. Hoerner, *Frank A.* A study of comprehension on the part of selected young people with regard to figurative forms of religious language. Master's, 1930. Presbyterian theological seminary, Chicago, Ill.
3568. Johnson, *Rev. Joseph Philip*. The pastor and his school. Master's, 1931. Catholic univ. 28 p. ms.
3569. Jordan, *Millard L.* Comparison of cooperative and non-cooperative students in Cleveland Y preparatory school. Master's, 1931. Western Reserve. 65 p. ms.
3570. Kauffman, *Milo Franklin*. The rise and development of the Sunday schools of the Mennonite church of Indiana. Master's, 1930. Presbyterian theological seminary, Chicago, Ill.
3571. Kelly, *Robert L. and Anderson, Ruth E.* Christian education handbook for 1931. New York, N. Y., Council of Church boards of education in the United States of America, 1931. 590 p. (Christian education, vol. 14, no. 4, January 1931.)
3572. Krebs, *Clarence William*. The psychological approach to the curriculum for adolescent religious education. Master's, 1931. Boston Univ.
3573. Lang, *Rabbi Leon S.* A curriculum of a high school of a Jewish religious school. Master's, 1931. T. C., Col. Univ. 80 p. ms.
A complete course of study, including outlines of subjects, units of study, projects, and illustrative syllabi. The curriculum has been in successful operation for nearly four years at the Oheb Shalom religious school, Newark, N. J.
3574. McDonald, *Margery*. The development of Friends' colleges in the United States; their present status and trends. Master's, 1931. Southern California. 104 p.
An investigation based on a study of the publications of Friends' colleges, church journals, proceedings of church conferences, and related published materials in order to secure historical and statistical data, and on visits to several of the colleges, and on interviews with a large number of trustees, professors, and leaders in the Friend's church in order to discover present trends.
3575. McGibony, *John W.* The administration of religious education for public school children. Master's, 1931. Oklahoma. 182 p. ms.
A questionnaire was addressed to the Attorney General of the United States and the attorneys general of each of the 48 States. From the answers to this questionnaire the legal status of Bible reading in the public schools was ascertained. Plans, which were the result of the experiences of 184 of the places offering religious education, were studied and evaluated. A separate Bible study curriculum for each of the 12 grades was constructed.
- *3576. MacLean, *Angus Hector*. The idea of God in Protestant religious education. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 151 p. (Contributions to education, no. 410.)
A questionnaire study was made of 575 children in the elementary grades to gain a knowledge of the ideas to which the Protestant churches are subjecting their children and the methods by which they are presented.
- *3577. Maguire, *Rev. William Aloysius*. Origin, development, and present status of Catholic secondary education in the Diocese of Brooklyn. Doctor's, 1931. Catholic Univ. Washington, D. C., Catholic university of America, 1932. 62 p.
Part 1 deals with the rise and development of Catholic secondary education in the Diocese of Brooklyn; part 2 is statistical.

3578. Maurer, Charles L. Early Lutheran education. Doctor's, 1931. Temple.
3579. Mayo, Sister Joan of Arc. The doctrine of original sin in education. Master's, 1931. Catholic Univ. 36 p. ms.
3580. Miller, John W. The religious interests and activities of Ohio State university students. Master's, 1930. Northwestern.
3581. Miller, Joseph Quinter. Community organization in religious education. Doctor's, 1931. Yale.
3582. Mitchell, Edward C. A study of the religious status of students at Payne university. Master's, 1930. Northwestern.
3583. Morgan, Clarence. The evaluation of the HI-Y in Indiana. Master's, 1931. Ind. St. T. C. 89 p. ms.
Shows the value of HI-Y to a community by answering 12 problems. Findings: The movement is worth while. Five means of improvement are noted; suggestions are made for further research.
3584. Mursell, George Rex. A study of religious training as a psychological factor in delinquency. Doctor's, 1931. Ohio. 70 p. ms. (Abstract, 16 p.)
A battery of tests was given to 1,011 cases, delinquents and nondelinquents. Findings: It seems safe to conclude that there is no significant relation between religious training and delinquent or nondelinquent behavior, and that whatever it is that causes one to be delinquent or nondelinquent, it is not religious training, knowledge, attitudes, or background.
3585. Napaha, Shraga. The contribution of the European and American educational systems to Zionist education. Master's, 1931. Yale.
3586. Notre Dame. University. Religious survey, 1930-1931. Notre Dame, Ind., University press, 1931. 174 p. (Bulletin of the University of Notre Dame, vol. 26, no. 1.)
Results of the ninth religious survey of the spiritual problems of the students of Notre Dame, conducted during the month of March, 1930.
3587. Poole, Edna. A guide to creative teaching in the junior church school. Master's, 1931. Yale.
3588. Ragsdale, Elsie Juanita. Aspects of Indian culture as material for missionary study. Master's, 1931. Peabody. 186 p. ms.
Data were secured from authoritative sources. Findings: A course was devised which will enrich the program of religious education for the southern Baptist. A factual presentation of some of the major contributions of the Indian race will, by widening and broadening the adolescent's appreciation of brotherhood, tend to forestall misconceptions and develop a more fruitful and intelligent and Christian missionary point of view.
3589. Rixlis, L. I. Hebrew school assemblies in New York, N. Y. Master's, 1931. T. C., Col. Univ. 21 p. ms.
A study of the conditions in Hebrew schools in New York City.
3590. Rogers, Bessie Louise. The origin, development, and contributions of the Westminster curriculum of religious education. Master's, 1931. Boston Univ.
3591. Rooney, Rev. John R. Curricular offerings of Catholic secondary schools: an examination of 283 institutions. Washington, D. C., Catholic education press, 1931. 48 p. (Catholic university of America, Educational research monographs, vol. 6, no. 4, May 15, 1931.)
The questionnaire method, supplemented by actual investigation, was used in this study. Sixty-three different communities are engaged in the work of teaching in the 283 schools concerned. The greater part of the educational program centers upon the subjects generally referred to as cultural or disciplinary. The curricular situation in the Catholic schools bears a remarkably close resemblance to the other systems.

3592. Shedd, Clarence P. History of voluntary religious societies in American colleges. Doctor's, 1931. Yale. 545 p.

An attempt to reveal the essential historical facts regarding the development of voluntary religious societies in American colleges from early colonial days to 1900 in order to discover the contributions that these societies have made both to education and to religion.

3593. Shire, Sister Mary Louise. An evaluation of the religious content of 10 series of Catholic primary readers. Master's, 1930. Notre Dame.

*3594. Soper, Merritt A. The actual place of the Bible in the Christian colleges of liberal arts in the United States. Master's, 1931. New York. 87 p. ms.

This survey proposes to inquire if the Bible departments in the Protestant Christian colleges are actually making a worth-while contribution to the training of Christian youth. Data were secured on 319 colleges from their catalogues and other data were obtained by questionnaires from 255 Bible instructors.

3595. Sparling, Jewel. An abridgment of the Bible for junior and senior high school pupils. Master's, 1931. Boston Univ.

3596. Stevick, Paul E. A study of religious types in the Northwest gateway to the Ozarks. Doctor's, 1931. Iowa.

A study of 187 adults in order to find the relation between feeling of distance from the majority of people to matters of religious belief and other factors. Findings: Correlations of age, sex, and church affiliation were very low. Educational status influenced "majoritism."

3597. Terry, Edward. An analysis of the theological concepts found in the intermediate and senior courses of the New international graded lesson. Master's, 1931. Northwestern.

*3598. Waller, Eugene Clinton. A survey of the church and independent schools and colleges of the southern Appalachians. Master's, 1931. Tennessee. 98 p. ms.

Sixty-seven schools in Alabama, Georgia, Kentucky, North Carolina, Tennessee, Virginia, and West Virginia answered a questionnaire. The schools under boards controlled by, or affiliated with, some denomination, number 58. Data indicate that 85 to 90 per cent of the schools and colleges have reasonably good prospects, financially and otherwise, for the continued operation of their plants. The future of the secondary school is more secure than that of the elementary schools, but less assured than that of the colleges.

3599. White, C. C. Psychology in religious education. Master's, 1931. T. C. Col. Univ. 28 p. ms.

Treatise on general aspects of relationship. Findings: Psychology is an essential study for the proper education of the religious educator.

3600. Whitney, Fern. Relation of religion and religious education. Master's, 1931. Temple.

3601. Winchel, Verna Beard. A study of the week-day school of religions in Salina, Kans. [Master's], 1930. Kans. St. Coll.

See also 15, 23, 35, 90, 93, 193, 198, 207, 232, 248, 257, 263, 268, 658, 671, 676, 1598, 2021, 2029, 2452, 2848, 3007, 3488, 3501, 3615, 4002, 4092, 4167.

MANUAL AND VOCATIONAL TRAINING

3602. Adolph, Jacob. A survey of the prevocational, vocational, and industrial arts fields in the junior and senior high schools of Arizona. Master's, 1931. Colo. St. T. C.

This survey attempts to discover whether the industrial work of the junior high schools in Arizona is definitely related to the industries of the particular community.

3603. Alberty, Luman Harvey. Analytical selection and evaluation of auto related subject matter for auto trade classes. Master's, 1931. Wisconsin.

3604. Anderson, Algot B. Effectiveness of written individual instruction as compared with oral group instruction in woodwork. Master's, 1931. Rutgers.

3605. **Applegate, Herschel C.** What should school administrators know about industrial arts. Master's, 1931. Ohio. 92 p. ms.

A study of leaders in industrial arts in all parts of the United States and school administrators (superintendents and principals) in Ohio. Findings: The "average" school administrator knows about 75 per cent of what leaders in industrial arts think he should know about this special subject.

3606. **Arundel, John Francis.** An analysis of pupil costs in vocational education in the Cincinnati public schools for the year 1929-1930. Master's, 1931. Cincinnati.

3607. **Axthelm, Edward E.** Practices in teaching manual arts in Iowa high schools. Master's, 1930. Iowa St. Coll. 76 p. ms.

3608. **Baechele, Edna M.** A study of Philadelphia teacher difficulties in industrial arts, grades 5 and 6. Master's, 1931. Temple.

3609. **Baxter, W. T.** Status of industrial arts in Virginia. Master's [1931] Peabody. 81 p. ms. 6

A study was made of accredited junior and senior high schools of the State to find what subjects were offered, and how many schools offered industrial arts work. Findings: Thirty-three junior and senior high schools offer industrial arts in Virginia. Bench woodwork is the leading subject in the seventh and eighth grades, while mechanical drawing leads in senior high-school grades.

3610. **Billingham, G. Harold.** The general shop in industrial arts with particular reference to New England and New Jersey. Master's, 1931. New York. 60 p. ms.

From this study it was found that the "general shop" is being accorded a favorable reception.

3611. **Bollinger, Elroy W.** A contemporary study of professional terms in industrial arts and vocational education. Master's, 1931. Ohio. 160 p. ms.

The use and misuse of professional terms and the establishment of a technique for evaluation and clarification of terms. Findings: 388 terms were established as professional terms needing clarification, although the major part of existent confusion is restricted to a small group of terms. The technique set up in the study, while valuable, needs to be supplemented by other evidence to validate final definitions.

3612. **Borofka, Philip J.** An experiment with written instructional materials in industrial arts teaching. Master's, 1931. Ohio. 267 p. ms.

A controlled experiment with two equivalent groups of students to determine the effectiveness of teacher's written instruction sheets in the subject of foundry work on an industrial arts basis. Findings: Instruction sheets are an aid to the student in acquiring informational content, an aid in developing job-planning ability and an aid to the teacher as they contain directions and information necessary to an understanding of the job. The group using the instruction sheets scored higher on tests of information and planning ability than the group not using the sheets. Their greatest use seemed to be in imparting information.

3613. **Bottenslog, Fred G.** Home mechanics based on home repairs in Asheville, N. C. Master's [1931]. Peabody. 61 p. ms.

Survey of repairs made in the homes of Asheville, N. C., and of the field relative to home mechanics courses and content. Findings: Electrical jobs, plumbing, metal or sheet metal work and woodworking are of about the same frequency. Jobs dealing with concrete are relatively infrequent.

3614. **Bruner, Carl G.** A study of the possible and achieved values in printing instruction in the public schools. Master's, 1931. Wichita. 145 p. ms.

3615. **Brunner, Edmund De S.** Industrial village churches. New York, Institute of social and religious research, 1930.

Chapter V deals with the school situation in industrial villages, including school attendance, high school enrollment, vocational training, etc.

3616. **Carlile, Olyn C.** A survey of the industrial arts program and teacher qualifications in the State of Arizona. Master's [1931]. Iowa St. Coll. 123 p. ms.

3617. **Coxe, Warren W.** Vocational aspects of secondary education. Albany, N. Y., State education department. *New York State education*, 18: 879-80, 914-15, May 1931.

3618. **Coxen, James R.** A treatise on the problem of industrial education in the small community. Washington, D. C., Federal board for vocational education, 1931.

3619. **Davison, Harold J.** State integration of practical arts and vocational education. Doctor's, 1931. Ohio. 214 p. ms.

A study of the Federal subsidy acts, survey of State plans for vocational education, a consideration of the comparable elements in practical arts and vocational education as concerns state administration and supervision, and the reactions of 40 State departments of education and 34 State universities based upon the above items. Findings: Practical arts and vocational education have much in common; from both an administrative and educational point of view, state integration of these two fields seems desirable; there is nothing in Federal laws to prevent such integration.

3620. **DeFord, Alice Rosalie.** Thirty years of industrial arts. Master's, 1931. Temple.

3621. **Dill, L. P.** Industrial survey of Bessemer. Montgomery, Ala., State department of education, 1930.

During September 1930 the survey committee visited every industry and many of the stores and offices in Bessemer to secure information on employment and types of training needed. The results secured indicated training needs for specific types of industry and for office and store employees.

3622. **Dorsey, Glen E.** The status of manual arts and industrial vocational education in Nebraska. Master's, 1931. Wisconsin.

3623. **Douglass, Harvey James.** Instruction sheets as aids in teaching handwork in wood. Master's, 1931. Iowa St. Coll. 74 p. ms.

A study of classes of five instructors of woodwork located in Kansas and Missouri, covering a period of 18 weeks and including 389 students. Findings: The study showed that the classes using the instruction sheets made an average gain of 38 per cent more than the classes not using the sheets.

3624. **Durner, H. F.** Industrial educational survey of Zerbe township public schools, Treverton, Pa. Pennsylvania State college, State College. 74 p. ms.

*3625. **Eisenhard, Charles W.** The practical arts courses in the junior high schools and in the commercial night schools of Allentown, Pa., in relation to the industrial needs of the city. Master's, 1931. New York. 86 p. ms.

A study was made of the junior high schools, the commercial night school of Allentown, and of the needs of industry in the city. Conclusions: (1) The industries of Allentown are many and varied, requiring a definite service from and training of its employees; (2) very few industries do any specific training for their particular fields; (3) the commercial activities engage about as many people as the industrial. The type of training required by the commercial activities is fairly well taken care of by the two schools studied; (4) the work in the shops is extensive enough, but not intensive enough; and (5) industry must concern itself more about the schools. It is important that its requirements are presented to the schools. The two must work out a harmonious educational program that will meet the needs of the individual, of the community, and of society.

3626. **Fales, Roy G.** Present status of industrial arts in New York State. Master's, 1931. [New York.] 55 p. ms.

From a study of 96 per cent of the industrial arts shops in New York State, information was obtained regarding the kinds of shops, enrollment, subject matter, licenses, and salaries. The study included 585 teachers and 635 shops; one-third, general shops, one-third-unit shops of all kinds; and one-third, wood shops (unit). Findings: The average number of periods devoted to industrial arts weekly is, in the seventh grade, two; eighth grade, three; ninth grade, five. The median class enrollment in the seventh grade was 18; eighth grade, 17; and ninth grade, 14.5. Methods found most helpful were: Demonstration and instruction sheets; models and shop library rank at the top of a list of 15 methods. More than one-half of the teachers agree that 20 to 30 per cent allotment of time should be made for related subject matter. Salaries of industrial arts teachers

range from \$1,200 to \$3,800. The state median is \$2,386; the median for college graduates is above \$3,000.

3627. **Fields, L. B.** Results of a study on the need for a broadening and finding course on the automobile. Houston, Tex., Independent school district, 1931. 6 p. ms. (Research bulletin, no. 8211.)

3628. **Franklin, M. E.** A survey of industrial arts in the State of Oklahoma as a basis for a teacher training program. Master's, 1931. Northeastern teachers college, Tahlequah, Okla. 69 p. ms.

Covers all the industrial-art work offered in the secondary schools in Oklahoma, the teachers, and their preparation. Findings: Many high schools are offering courses which the teacher training institutions are not including in their training program.

3629. **Freeman, Philip Quillman.** Vocational survey for Sloan industrial school, Bellefontaine, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

After making a detailed study of existing educational facilities and industries, the conclusion was reached that the Sloan school should be operated as part of the public-school system and under its control.

3630. **Furia, John J.** The plant school as a form of vocational education. Doctor's, 1930. T. C., Col. Univ.

A report of the training and follow-up of war veterans in the shoe manufacturing and repairing industry.

3631. **Genther, William L.** The psychology of shop work. Master's, 1931. Rutgers.

3632. **Giles, N. B.** A revision of Federal board bulletin no. 99, incorporating new material in a directory of trade schools. Washington, D. C., Federal board for vocational education, 1930.

3633. **Glass, Ora Francis.** History of industrial arts education in California. Master's, 1931. Southern California. 108 p.

Based on records in the office of the California State department of education, articles in the various school journals published in California, and on records and reports of local school districts.

3634. **Grawl, Ethel Birch.** Study in motor power in relation to mechanical achievement of boys from 10 to 16 years of age. Master's, 1931. Temple.

3635. **Grove, William R.** An experimental study of the Kent-Shakow industrial form board series. Master's, 1931. Pittsburgh.

3636. **Gunderson, Howard B.** Experimental determination of the effectiveness of demonstrations in woodwork in terms of problem solving. Master's, 1931. Wisconsin.

*3637. **Gunther, Theresa Charlotte.** Manipulative participation in the study of elementary industrial arts. Doctor's, 1931. T. C. Col. Univ. New York City, Teachers college, Columbia university, 1931. 58 p. (Contributions to education, no. 490.)

In order to determine whether manipulative participation by the children in the study of industrial arts in the elementary grades results in the learning and retention of a greater number of facts than the conventional method of studying the facts from books, objective tests were constructed which served to check the total number of facts being tested which were learned and retained, and the three ways in which they might have been learned, and test results from 148 pairs of pupils equated on the basis of educational quotient. Pupils were members of classes from grades 3 to 6 inclusive, distributed in five schools of different educational opportunities. Findings: On the whole, there was a marked difference in the retentiveness of the two groups. The manipulative method seems to enable the children to recall a greater number of facts previously learned than the textbook method.

3638. **Hardin, Robert.** Prediction of school success in woodwork. Master's, 1931. Nebraska. 50 p. ms.

Gives the results of a study of 200 pupils in the beginning classes in woodwork in junior high school.

*3639. Harney, Laura B. The history and development of aeronautics. Master's, 1931. New York. 123 p. ms.

The author has attempted to collect from reliable sources the significant achievements that have marked the milestones in the spectacular development of air transportation. She links up the influence of aviation with the various branches of education in the schools and colleges.

3640. Harrison, Paul E. A survey of industrial work in the schools of northern Illinois. Master's, 1931. Colo. St. T. C.

The purpose of the study was to determine what the general trend of industrial education in northern Illinois is, so that the curriculum in the Department of industrial education in the Northern Illinois State teachers college may be adapted more adequately to meet the needs of the schools which it serves.

3641. Hartman, Harry V. Organization and content of courses in auto mechanics for junior and senior high schools. Master's, 1931. Iowa St. Coll. 73 p. ms.

A study, by means of a questionnaire, of the schools throughout the Middle West that are offering auto mechanics. The most important units of instruction in auto mechanics for the junior and senior high schools were established.

3642. Hawke, Jerry B. Three years of vocational industrial education in Haiti. Master's, 1930. Penn. State. (For abstract see no. 714.)

This thesis briefly portrays the background racially, politically, and industrially, preceding September 15, 1915, when the United States entered into a treaty for the purpose of developing the resources of Haiti and organizing an educational program. It describes in detail the development of industrial education for the years 1925-1928.

3643. Hay, Dorothy. The modern technical high school. New Orleans, La., Orleans Parish school board, 1931. 19 p.

"The purpose of this study is to present information regarding technical high schools in the United States and, by an analysis of the functions which such high schools perform, to determine to what extent such a school might meet the educational needs of the city of New Orleans."

3644. Horning, Arnold Oliver. The construction of achievement tests for ninth and tenth grade woodwork. Master's, 1931. Southern California. 97 p.

The development of four unstandardized tests of 80 questions each to fit the course in Pasadena.

3645. Hunt, DeWitt. A study of the term "Consumers' knowledge" and its use as an industrial arts objective. Master's, 1931. Ohio. 150 p. ms.

A study of objectives of general education and of objectives of industrial arts was made to determine the extent of the use of this concept as an objective. The economic problems and the importance of consumption as contrasted with production, was developed. Research agencies working for the benefit of the consumer were classified. "Consumers' knowledge" in industrial arts was defined and a study of 4,000 pages of advertising material was made to list industrial arts terms used in describing the articles advertised. Almost 1,000 terms were listed together with the frequency of appearance. This indicated the importance of this objective, and recommendations were made as to special methods of instruction desirable for use in achieving this objective.

3646. Hutchinson, Herbert Howard. An etymological study of certain professional and scientific terms in the vocabulary of industrial arts and vocational education. Master's, 1930. Ohio. (For abstract see no. 712.)

The purposes of this study were: (1) To set up a master list of professional and scientific terms in these fields; (2) to prepare an etymological glossary of these terms; and (3) to set up criteria for the selection of a suitable term.

3647. Johnston, Albert E. A study of the reliability of certain industrial arts tests. Master's, 1931. Iowa St. Coll. 200 p. ms.

Three forms of tests in woodwork and mechanical drawing were given to 700 or 800 students. Findings:—Yes-no test ranked highest in reliability, followed in order by completion and multiple choice.

3648. Kameny, Samuel B. A study of legislation pertaining to vocational education enacted in the State of New York from 1917 through 1929. Master's, 1931. Coll. of the City of N. Y. 172 p. ms.

The study gives a brief account of legislation up to 1917; a summary of legislation and court decisions clarifying the legislation from 1917-1929; and a brief criticism of the continuation school law. The author criticizes the present continuation-school law and suggests the introduction of elective cultural courses, the substitution of evening high school attendance, segregation of dissatisfied students, unit organizations of theoretical work, and dismissal before the age of 17, if the student has completed a prescribed course.

3649. **Keenan, Claude Overstreet.** Home shops of junior high school boys. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Data were obtained from 1,112 questionnaires filled out by boys enrolled in industrial arts in the four junior high schools of Oklahoma City, Okla. The first division of the study deals with the comparison of the jobs boys do in their home shops with those they want to learn to do, and with the jobs they do in the school shop. The second division is composed of case studies of home shops.

3650. **Lacy, Frederick J.** An objective curriculum in industrial arts education for West Virginia State college. Master's, 1931. Wisconsin.

*3651. **Land, S. Lewis.** Trade associations—their services to education. Doctor's, 1931. New York. New York, N. Y., Heating and piping contractors national association, 1931. 160 p.

Information and data for the study were drawn from experience in the teaching and administration of vocational work and in the promotion of trade association educational work, the literature in the field, and data collected from various sources in the field. Part 1 deals with a statement of the problem; part 2 presents the present status of educational services of trade associations; part 3 analyzes joint responsibilities of school and industry; part 4 summarizes present tendencies and practices; and part 5 presents a series of conclusions and recommendations.

3652. **Lane, James F.** Vocational education. 1930. Agricultural and technical college, Greensboro, N. C.

A survey of the social, economic and industrial conditions underlying the vocational education idea; what is being done in this field at the present time; and a suggested program for the Agricultural and technical college.

3653. **Leavitt, Frank M. and others.** High school course of study in general metal shop, junior division, for experimentation. Pittsburgh, Pa., Public schools, 1931. 18 p. ms.

3654. ——— High school course of study in machine shop practice. For experimentation, senior division. Pittsburgh, Pa., Public schools, 1931. 27 p. ms.

3655. **Lineback, Hardin.** An objective test for junior high school wood-working courses. Master's, 1931. Kans. St. T. C., Pittsburg.

3656. **McIntyre, Harold J.** A study of the possibilities of photography as a unit in the laboratory of industries. Master's, 1931. Ohio. 60 p. ms.

Findings: The study was not a survey as no such unit is known to exist. It was more of an analysis of possibilities of such a unit at the junior high school level.

3657. **Mangum, Cary Peter.** Industrial development and the industrial educational program of the South. Master's, 1931. Peabody. 96 p. ms.

The study covers the industrial development of the South and the present practice in the industrial arts with special emphasis placed upon the relation of typical industries to the industrial arts. Findings: The industrial development of the South and the growth of the industrial arts program have been progressive. Woodwork has been over-emphasized in the industrial arts program. Other materials representing typical industries have received minor attention in interpreting industry to the students.

3658. **Martin, August.** The United States Veterans bureau as a factor in education. Master's, 1931. Penn. State. 50 p. ms.

Study shows distribution of trainees according to pre-service occupation, preservice-education, occupational choices, present occupation, nature of injuries, duration of period of training, etc. Seventy-three per cent of the trainees replying to the questionnaire declared themselves satisfied with their training. Seventy-one and one-tenth per cent of all trainees were officially declared rehabilitated.

3659. Minnesota. Department of education. The secondary school curriculum and syllabi of subjects . . . Industrial arts . . . St. Paul, 1930. 216 p. (Bulletin, no. C-5.)

3660. Morris, Elizabeth T. A correlation of general intelligence and ability in manual arts. Master's, 1931. Washington Univ.

3661. Nelson, John B. Analysis of prevocational woodwork with type instruction sheets and records for Honolulu high schools. Master's, 1931. Hawaii. 81 p. ms.

3662. Newell, Grace. Manual for the study of industrial education through magazine articles. Master's [1931]. Peabody. 194 p. ms.

Annotated bibliography of articles in five magazines over a 10-year period.

*3663. Newkirk, Louis Vest. Validating and testing home mechanics content. Doctor's, 1931. Iowa. Iowa City, University of Iowa, 1931. 39 p. (University of Iowa studies, vol. 6, no. 4, April 15, 1931.)

This study is designed to select the outstanding projects which are suitable for home mechanics content, and to develop a testing technique which can be used for the diagnosis of individual difficulties and the measurement of achievement in home mechanics classes. Seventy-two home mechanics jobs were selected for study.

3664. Nichols, Homer Woodard. A study in special education. The rehabilitation problem in Kentucky. Master's, 1931. Peabody. 117 p. ms. (Abstract, 9 p. ms.)

The problem was to determine the number of persons needing and accepting the services of the division of vocational rehabilitation in Kentucky annually, and to classify them according to rural and city, male and female, white and colored, and nature and origin of disabilities. Findings: There are annually approximately 600 new cases and 100 old cases of people 19 to 50 years old ready for rehabilitation in Kentucky.

3665. Norfolk, Va. City schools. Industrial arts in a unified elementary school curriculum. 1931. 42 p. ms.

The purpose of this course of study is general, and involves the use of constructive activities for general educative purposes, and the study of the nature, use, and production of materials for the values which touch one's everyday life.

3666. Oakland, Calif. Public schools. General electrical work for evening classes. 1930. 15 p. ms. (Superintendent's bulletin. Course of study series, no. 38.)

A course of study designed for use in general electric work for evening classes of the public schools of Oakland, Calif.

3667. Osburn, Burl Neff. Constructive avocational interests of secondary school boys. Master's, 1931. Ohio. 92 p. ms.

A survey of avocational activities in making things of wood, metal, etc.; age interest and motives of 759 boys. Findings: Age levels of interest are shown in different types of activities as expressed in things made.

3668. Parent, Charles William. Some elements involved in the organization and administration of secondary school industrial arts. Master's, 1931. Wisconsin.

3669. Parker, Ralph Walton. A survey of certain industrial and agricultural activities of the State of Oregon with particular reference to the possible influence on the practical arts program of Oregon public schools. Master's, 1931. Oreg. St. Agr. Coll. 42 p. ms.

3670. Patlow, John R. Jobs for a car owner repair course. Master's, 1931. Nebraska. 74 p. ms.

An analysis of 148 jobs evaluated by 358 car owners, and of jobs described in 16 manuals of instruction for car owners.

3671. Patterson, Arthur K. How the school can better help the individual wage earner in Williamsport, Pa. Master's, 1931. Penn. State. 84 p. ms.

Survey of present vocational educational opportunities in Williamsport, survey of job-knowledge requirements, and of leisure-time activities of wage earners, and recommendations of educational programs that would better meet these needs.

3672. **Persons, Alice Ellen.** A philosophy of vocational education. Master's, 1931. Southern California. 89 p.

This study is presented largely from the psychological point of view with less emphasis on the historical, industrial, and sociological aspects.

3673. **Poe, D. F.** A study of the industrial schools of the United States. Master's, 1931. Ohio. 91 p. ms.

3674. **Proffitt, Maris M.** Industrial education section of the survey of the Buffalo public schools. Washington, D. C., United States Government printing office, 1931. 34 p. (U. S. Office of education. Pamphlet no. 17.)

It was found that vocational-industrial education in Buffalo was built and is maintained upon the sound principle of furnishing specific types of training that will function in a definite way for employment purposes.

3675. **Rakestraw, C. E.** A study on labor's responsibility in cooperation with employers and the public schools, in the field of vocational education. Washington, D. C., Federal board for vocational education, 1930.

3676. **Resides, George H.** Organization and administration of shop courses for trade and industrial teachers. Master's, 1931. Penn. State. 43 p. ms.

A description of the shop curricula in Pennsylvania State college and account of the principles involved in the set-up of these.

3677. **St. Louis, Mo. Public schools.** Manual arts. Revision of curriculum bulletin no. 20—manual arts for grades 7, 8, and 9. Public school messenger, 28: no. 5, September 5, 1930. 95 p. (Curriculum series.)

3678. **Schneider, Perry L.** The construction and validation of an objective test in shopwork as a prognostic index of the student's ability in woodworking in elementary schools. Master's, 1931. Coll. of the City of N. Y. 115 p. ms.

A measurometer was devised by the author for marking the construction of a tic-tac-toe board which was the standard problem. Conclusions: (1) Test showed high reliability, 0.961 average correlation of ratings made by five examiners using the measurometer; (2) validity of test was also high, 0.82 correlation between test mark and mark for term's work.

3679. **Schulz, George J.** Vocational education in the United States. The program of cooperation of the federal government with the States in vocational education and vocational rehabilitation of the disabled. Washington, United States Government printing office, 1931. 30 p. (71st Congress, 3d session. Senate document no. 309.)

This study is based on researches of the Federal board for vocational education and the President's employment commission. The objective of the Federal board for vocational education has been in part to assure to every boy and girl, every adult worker, and every disabled person in America an opportunity to acquire or to improve his or her vocational efficiency in some selected field of human endeavor, and this upon the theory that educating for work is as truly the responsibility of our free public school system as is educating for college, for the professions, for citizenship, or for leisure.

3680. **Sharp, Ralph W.** A study of certain agencies in Columbus, Ohio, offering vocational training of less than college grade. Master's, 1931. Ohio. 65 p. ms.

A study was made of 19 private schools in the corporate limits of Columbus, giving vocational training of less than college grade.

3681. **Smith, L. T.** Industrial arts in the rural community high school. Master's, 1931. West. Ky. T. C.

A study of shop organization, planning, and equipment.

3682. **Stultz, Fred W.** Manual training compared with standards of living, age at graduation, attendance, intelligence, and seven grade school subjects in Indianapolis. Master's, 1930. Indiana. 101 p. ms.

From the alphabetized files in the school offices 167 records were selected. Each record chosen was that of a white graduate from the grades giving the dates of his birth and graduation, the building graduating him, his intelligence rating, and a complete account of marks in the 6B to 8A inclusive, in manual training and the other six sub-

jects listed. Data indicate that marks in the other subjects have very low coefficients of correlation with the marks in manual training.

3683. **Tearney, Orville A.** Physical equipment and courses of study in wood-working in the junior high school. Master's, 1931. Colo. St. T. C.

The purpose of this study was to reach some definite conclusions that may help administrators to secure the proper equipment necessary to teach woodwork effectively in the junior high school.

3684. **Thompson, Charles Jasper.** Survey of domestic needs in electricity. Master's, 1930. Kans. St. T. C., Pittsburg.

3685. **Turner, F. H.** Illinois industrial university. Doctor's, 1931. Illinois.

3686. **U. S. Federal board for vocational education.** Trade preparatory training for small cities and rural communities. A discussion of practical lines of development which have been found effective in meeting the training needs of such communities. Washington, D. C., 1931. 81 p. (Bulletin no. 157. Trade and industrial series, no. 45.)

3687. **Walker, Robert.** Theory and practice in industrial arts. Master's, 1931. Rutgers. 80 p. ms.

3688. **Wallace, Archie M.** Objective examinations in manual training. Master's, 1931. Oklahoma. 131 p. ms.

The study presents two sets of objective examinations: First, published forms used in manual training but with different content and subject-matter material, and published forms used in other school subjects but with content and subject-matter material from the field of manual training; and second, a number of entirely new objective forms not published in manual training tests nor common to other high-school subjects. Under the first division are presented a number of tests covering the following types: True-false, multiple choice, matching, word completion, identification, line completion, drawing completion, etc. Under the second division are presented forms which take advantage of outlining systems but control the method of scoring by a simple set of rules making scoring objective; tests that make use of identification of photographs of period furniture, tools, machines, and drawing instruments; tests in recognizing finishes of wood, and the identification of wood from sections of the trees and unfinished panels of lumber; and a performance test in woodwork with a method of objectively scoring the finished product.

3689. **Washington (State) Department of education.** Industrial arts in secondary school, 1930. Olympia, 1930. 50 p.

3690. **Weinstock, Clarence.** Status of instruction in electricity in the secondary schools of California. Master's, 1931. Southern California. 191 p.

Based on questionnaire replies from 116 institutions, supplemented by data from courses of study, textbooks, and the professional literature of the subject.

3691. **Welty, Henry D.** A study of the industrial arts in Akron central high school. Master's, 1931. Ohio. 79 p. ms.

A study of interests, vocational choices, individual follow-up cases, qualifications for industrial employment, and how training in industrial arts affects these. The findings reveal that employers and the follow-up group place much value upon personality traits of those entering industry.

3692. **Williamson, Biley S.** Williamson industrial arts tests for diversified shop in woodwork, form A and B; sheet metal, form A and B; electricity, form A and B. Baltimore, Md., Department of education, 1931. 44 p. ms. (3 pts.)

3693. **Wood, Lewis Hungerford.** Status of practical arts and vocational education in public school systems. Master's, 1931. Wisconsin.

3694. **Wunderlich, A. W.** Testing program for vocational machine shop trade theory classes. Master's, 1930. Penn. State. (For abstract see no. 714.)

The purpose of the study was to develop and standardize a set of knowledge tests which may be used during a course of study in machine-shop practice in trade or industrial schools or classes, to serve as a check on pupil progress and parallel the trade theory that is taught.

See also 127 (4), 210, 519, 628, 904, 948, 1216, 1236, 1287, 1358, 1422, 1703, 1779, 2042, 2050, 2072, 2163, 2216, 2219, 2241, 2248, 2250, 2331, 2349, 2759, 2882, 2940, 3698, 3701-3702, 3706-3707 3819, 4203, 4222.

AGRICULTURAL EDUCATION

3695. **Adams, Wayne W.** A proposed program for launching boys into supervised farm practice work. Master's, 1931. Cornell.
A program is suggested based upon a study of 95 departments.
3696. **Angier, Edwin Baldwin.** The construction of a landscape gardening course for home-owners. Master's, 1931. Southern California. 110 p.
A questionnaire investigation of the kinds of information and training desired by an evening class in landscape gardening, followed by an organized course designed to fulfill their needs.
3697. **Beers, Howard Wayland.** The money income of farm boys in a southern New York dairy region. Ithaca, N. Y., Cornell university agricultural experiment station, 1930. 55 p. (Bulletin 512, September 1930.)
"The purpose of this study is to record and analyze the money income of farm boys with regard to the possible effects of junior-extension work, economic status of farms, amounts of farm work done by boys, parental experience, and some items of family structure."
3698. **Berryman, Carl Wilbur.** Status of vocational agriculture in the secondary schools of Idaho. Master's, 1931. Washington. 97 p. ms.
Surveys the need for agricultural teachers in the State, and the qualifications of good teachers in this field.
3699. **Brown, J. Colvin.** The development of agricultural education in the State of Florida from 1918-1928, and needs for future growth. Master's, 1931. Florida.
3700. **Craddock, Guy E.** Basing the teaching of the tobacco enterprise on scientific findings. Master's [1931]. Peabody. 166 p. ms.
A study of 41 experiment station bulletins, publications, and circulars. Experimental data are evaluated and rearranged in more comprehensive form.
3701. **Dennison, Raymond Lewis.** Means and methods of securing home practice work in vocational agriculture in addition to the major enterprise. Master's, 1930. Ohio. (For abstract see no. 712.)
The purpose of this study was to set forth some means and methods of securing more supervised home practice work in courses in vocational agriculture than is usually done by average students. Data were secured from answers to a questionnaire received from 130 teachers representing 42 States and Hawaii.
3702. **Fleenor, Beatty Hope.** Adult education in agriculture through evening schools conducted by departments of vocational agriculture. Doctor's, 1931. Missouri. 243 p. ms.
The study covered the evening-school programs of 518 vocational agriculture teachers of 22 States.
3703. **Greenleaf, Walter J.** Federal laws and rulings affecting land-grant colleges and universities. Washington, United States Government printing office, 1930. 13 p. (U. S. Office of education. Pamphlet, 1930, no. 15.)
This pamphlet contains the act of July 2, 1862 (First Morrill Act); act of 1866; second Morrill Act of August 30, 1890; Nelson amendment of March 4, 1907; land-grant colleges depositories for public documents; military training; acts under the supervision of the Department of Agriculture; acts under the supervision of the Federal board for vocational education; and acts under the supervision of the War Department.
3704. ——— Land-grant colleges and universities, year ended June 30, 1929. Washington, United States Government printing office, 1930. 87 p. (U. S. Office of education. Bulletin, 1930, no. 28.)
3705. **Hale, Ralph I.** Occupational interests in relation to the organization of agriculture in the junior high school program at Trumansburg, N. Y. Doctor's, 1931. Cornell.
A study of school work of boys, vocational intentions and attitudes, etc.
3706. **Hoge, J. O.** Vocational agriculture in South West Virginia. Master's, 1931. Va. Poly. Inst. 160 p. ma.

A survey of southwestern Virginia to determine: (1) Future location of departments; (2) areas of service and location for different kinds of work; and (3) public funds necessary for a full program.

3707. Howard, Carl G. An efficiency survey of specific courses as offered in the vocational agricultural departments in the State of Wyoming. Master's, 1931. Wyoming. 112 p. ms.

A study was made of all day, evening and part-time courses in the State. Findings: Variations were found in conditions, and recommendations made for improvement.

3708. ——— Master teacher study. Cheyenne, Wyo., State department of education, 1930. 3 p. ms. (Vocational agriculture service letter. New series no. 4.)

A study was made of master teachers of vocational agriculture in 32 States. Findings: Of the 11 States who select a master teacher all who express opinions are favorable. Seven of the 32 who do not select a master teacher think it is a good practice.

3709. Irons, Henry E. Characteristics of pupils in general agriculture courses in certain Iowa high schools. Master's, 1930. Iowa St. Coll. 82 p. ms.

3710. Jerdeman, Casper Marion. The status of general agriculture in Iowa public schools. Master's, 1930. Iowa St. Coll. 67 p. ms.

3711. Kahle, Esther Victoria. Legislative bases for agriculture and home economics education through the land-grant college system. Master's, 1931. Southern California. 261 p.

An analysis of State and Federal laws relating to the educational work of the Federal Department of agriculture, the land-grant colleges, agricultural experiment stations, agricultural extension work, and similar agencies.

3712. Klein, Arthur J. Survey of land-grant colleges and universities. 1930. Washington, United States Government printing office, 1930. 2 vols. 998, 921 p. (U. S. Office of education. Bulletin 1930, no. 9.)

3713. Lancelot, W. H. and others. A course of study in general agriculture for Iowa high schools. Des Moines, Iowa, State department of public instruction, 1931.

3714. Lewark, A. T. A course of study in farm management. Master's, 1931. Va. Poly. Inst. 136 p. ms.

Lesson forms are given for teaching certain job units and managerial problems in managing a farm business including such as purchasing a farm; securing credit; purchasing equipment; keeping records and the like.

3715. McCalley, Carl B. A study of the college records of persons who have studied vocational agriculture in high school. Master's, 1930. Iowa St. Coll. 55 p. ms.

3716. McMillin, C. D. Supplement to high school agriculture. Master's, 1931. Ohio. 281 p. ms.

3717. Martin, Earl Harrison. A study of the place and use of supplementary farm practice in teaching vocational agriculture. Master's, 1931. Kans. St. Coll. 46 p. ms.

Findings: Supplementary farm practice is given a high rating as a teaching device.

3718. Martin, Francis O'Leary. The relationship between reading ability and success in junior high school agriculture and mechanical drawing. Master's, 1931. Southern California. 69 p.

A statistical study of correlations between teachers' marks of 186 junior high-school pupils in agriculture, in mechanical drawing, and in a reading-ability test.

3719. Mathison, Alfon D. Vocational interests as a factor in predicting agricultural success of freshmen in the University of Wisconsin. Master's, 1931. Wisconsin.

3720. Miller, Albert William. The field trip as a teaching device in vocational agriculture. Master's, 1930. Kans. St. Coll.

3721. National committee of the American vocational association. Training objectives in vocational education in agriculture, with suggestions as to ways and means of attaining these objectives. Washington, D. C., Federal board for vocational education, 1931. 31 p. (Bulletin no. 153. Agricultural series, no. 39.)

3722. Overall, Preston Vaughn. Objectives and problem service for a college course in dairy husbandry at Tennessee polytechnic institute. Master's, 1930. Iowa St. Coll. 68 p. ms.

3723. Parkinson, H. G. Teaching procedures of the agricultural faculty. 1931. Pennsylvania State college, State College. 46 p. ms.

Teaching methods used by faculty over 10-year period were studied. Findings: More attention is given to the use of good method and less lecture; there is more discussion, more individual attention; and more use of objective tests.

3724. Pennington, J. B. Data study, cotton and corn projects, State senior high school. Master's, 1931. Peabody. 168 p. ms.

Data were collected for four grades covering five years under same teacher and in same school; also cost data and labor data, applicable to farm practices. Findings: Valuable correlation was shown.

3725. Ruggles, George E. The construction of an objective test in general agriculture for high schools. Master's, 1931. Kans. St. T. C., Pittsburg.

3726. Sacay, Francisco M. A survey and evaluation of agricultural education in the Philippines. Doctor's, 1931. Cornell. 450 p. ms.

Survey of development and present status of agricultural education below the college level. Gives critique and suggestions for improvement. Findings: Greatest need is for adult education of extension order. Further development of work in intermediate grades is recommended.

3727. Sanders, H. W. What abilities are needed in efficient farming? 1931. Virginia polytechnic institute, Blacksburg, Va. 6 p. ms. (Department mimeograph, no 19.)

Findings: The abilities needed in proficient farming will vary for each type of farming and for each individual training for a specific type of farming.

*3728. Stewart, Wilbur F. Records and reports for state supervisors of agricultural education. Doctor's, 1931. T. C., Col. Univ. New Concord, Ohio; Enterprise cooperative co., 1931. 160 p.

Among the forms of education now being conducted in the States of the Union is that of the so-called Smith-Hughes agricultural schools as developed since the passage of the vocational education act in 1917. In the administration of these schools federal supervision plays a part and state supervision a more extensive part. A study was made of all of the records and reports which, however, possess little uniformity among the different States. Twelve years of experience in developing these records gives now, it is believed, ample foundation for a scientific study of the effectiveness of the content of these reports and of proposals for their further improvement.

3729. U. S. Federal board for vocational education. Analyses of special jobs in quality milk production operative training content, interpretive science, and related information for the enterprise of quality milk production. Washington, D. C., 1931. 17 p. (Bulletin no. 154. Agricultural series no. 40.)

The aim of this bulletin is to provide teachers of vocational agriculture with current, reliable subject matter organized in teaching form, which will enable them to offer systematic instruction on certain quality milk jobs occurring in dairy enterprises. The manuscript for this bulletin was prepared under the direction of C. H. Lane, by A. P. Williams and W. A. Ross, in cooperation with Ernest Kelly and C. J. Babeock.

3730. ———— Organization and teaching procedure to be followed in evening agricultural schools on the marketing of cotton. Washington, D. C., 1931. 19 p. (Monograph, no. 13.)

3731. ———— Organization and teaching procedure to be followed in evening agricultural schools on the marketing of cotton. Washington, D. C., 1931. (Monograph, no. 11.)

The original material in this monograph was prepared in mimeographed form for use in evening classes during the winter of 1930-31, under the direction of C. H. Lane, by James H. Pearson, in cooperation with E. J. Bell, jr.

3732. ——— Organization and teaching procedure to be followed in evening agricultural schools on the marketing of livestock. Washington, D. C., 1931. 16 p. (Monograph, no. 10.)

The original material in this monograph was prepared in mimeographed form for use in evening classes during the winter of 1930-31, under the direction of C. H. Lane, by James H. Pearson in cooperation with L. B. Mann.

See also 127 (7), 242, 2072, 2077, 2180, 2204, 2360, 3795, 4029, 4082, 4094-4095, 4105.

HOME ECONOMICS

3733. Albert, Iris Helena. An experiment with individual assignments in improving sewing ability. Master's, 1931. Southern California. 80 p.

Comparison of results of sewing tests: (a) After individual instruction; and (b) after class presentation.

3734. Anders, Ida. A college course in clothing selection. Master's, 1930. Iowa St. Coll. 84 p. ms.

The writer made a survey of the clothing-buying habits of all women enrolled in the University of Tennessee. Based upon the information given in the study, the writer planned and taught an elective course in clothing selection. Fifty-three students were enrolled in the course.

3735. Baxter, Laura. A study of subject matter information in home economics with a number of groups of high school and college pupils. Master's, 1930. Kans. St. Coll.

3736. Benore, Vera Pauline. An evaluation of the content of clothing courses in terms of pupils' needs. Master's, 1931. Southern California. 152 p. ms.

3737. Blanks, Titia Belle. A textile study for high schools organized on the problem basis. Master's, 1930. Iowa St. Coll. 71 p. ms.

Based upon a survey of the needs of the girls in the tenth grade of the Ames, Iowa, high school, a textile unit was planned and taught. Findings: The pupils were given an informal objective judgment test before beginning the work. The mean of the class was 58.52. At the completion of the unit the same test was given. The mean for the course was 68.3.

3738. Blodgett, Hazel. College course in beginning textiles based on the problem method. Master's, 1930. Iowa St. Coll. 82 p. ms.

College course in textiles was planned to develop ability to select textiles. This course was taught to 109 college freshmen. Findings: The students were given an informal judgment test before beginning the textile work. The mean was 75.5; S. D. 31.45. At the completion of the unit the same test was given to the group. The mean was 125.65; S. D. 25.55.

3739. Bolton, Lucille Marie. Home economics as an avocation. Master's, 1931. Stanford.

3740. Bolton, Ruth. Study of home economics in 14 Negro land-grant colleges. Master's, 1931. Peabody. 159 p. ms.

Findings: Only 7 of the 14 colleges studied list their purposes. The number of courses offered in the 14 colleges ranges from 8 to 29, the median falling at 19. There is a total of 159 titles for courses in these colleges. The textbooks most frequently occurring are: Art in everyday life, by Goldstein (seven times) and Clothing for women, by Baldt (10 times). Others are used less than five times. The credit range is from zero to nine hours. There are eight teachers with the Master of Arts degree, 28 with the Bachelor's degree, 1 with a registered nursing degree, and 10 with no degree. Range in salary is from \$600 to \$2,400.

*3741. Bomar, Willie Melmoth. The education of home makers for community activities. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers College, Columbia university, 1931. 135 p. (Contributions to education, no. 477.)

The purpose of this study was to find out the community interests and activities of home makers of varying economic and educational levels, for the purpose of revealing certain needs to which home economics education should contribute. Four hundred and eighty-three answers were received to questionnaires listing 21 community activities from five cities in five areas of the United States. Findings: Home makers who have had courses in home management did not participate to as great a degree as the home makers taken collectively in 10 of the 21 constructive community activities listed in this study.

3742. **Brewster, Hester Mae.** Home projects in the vocational homemaking schools of Iowa from 1927 to 1930. Master's, 1930. Iowa St. Coll. 86 p. ms.

The writer made a rating scale and rated all projects reported to the state supervisor of home economics from 1927 to 1930. The projects completed in 1929 and 1930 were given the highest ratings.

3743. **Browder, Margaret.** A two-year course of study in home economics for the county high schools of Tennessee. Master's, 1931. Tennessee. Nashville, State department of education, 1931. 160 p. (Bulletin, no. 19, July 1931.)

3744. **California.** State department of education. Federal and state aided instruction in home making for girls and women. The California plan for vocational education, by Maude I. Murchie. Sacramento, 1930. 28 p. (Bulletin no. C-2, rev. November 1930.)

3745. **Churchill, Estella Louisa.** An investigation to determine the feasibility of placing girls as mothers' helpers. Master's, 1931. Southern California. 190 p.

A questionnaire study of the attitudes of 100 mothers, 100 girls, and 100 employing housewives toward the occupations of junior assistants in the home.

3746. **Connor, Ruth.** The scholastic behavior of a selected group of undergraduate home economics students. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 71 p. (Contributions to education, no. 497.)

The purpose of this study was to determine possible differences between attainment in home-economics subjects and attainment in background subjects. Data used in the study consist of: Distributions of intelligence test scores of seven freshman classes, 9,663 students in four state universities; gross intelligence test scores for 2,135 freshman women from five of these seven classes; intelligence test scores and grades in all subjects for students majoring in home economics in two of the freshman classes of the first group. Findings: Of the selected groups of 182 home economics undergraduates, 29.66 per cent had intelligence test scores as high as the mean of the freshman class to which they belonged. When students majoring in home economics at three educational levels—high school, college, and graduate school—were compared in regard to performance on intelligence tests, the pattern of behavior was found to be essentially the same.

3747. **Crawford, Alberta.** Scholastic records and subsequent vocations of girls enrolled in Ames high school in home economics courses from 1918 to 1929. Master's, 1930. Iowa St. Coll.

A study was made of the scholastic records of all girls enrolled in home economics courses in the Ames, Iowa, high school between the years 1918 to 1929. The home-economics grades corresponded with the general scholastic average. The scholastic average for the group who attended college was two points higher than the group who entered wage-earning occupations. The largest number of girls became stenographers. The scholastic average for this group was 85. The next largest group worked in stores. The scholastic average of this group was 82.

3748. **Crow, Ura V.** The relation between personality ratings, the student teaching grades and the scholastic averages of 450 students of home economics of Iowa State college. Master's, 1930. Iowa St. Coll. 70 p. ms.

Computes median and quartile deviation for personality ratings by supervisors and composite ratings by 6 college instructors, for student teaching grade and for the scholastic average of 450 student teachers.

3749. **Degling, Helen M.** A study of courses in family relationships in junior and senior high schools. Master's, 1931. Pennsylvania. 83 p. ms.

A national survey of leaders' judgments and practices. Of 147, 35 per cent reported courses in junior high schools; 68 per cent in senior high schools. All except two reported the courses as being offered by the home economics department. The minimum length of course was 1½ weeks, the maximum length of course was 40 weeks. The course was required in 42 per cent of the reports. Ninety-four per cent report credit toward graduation; 32 per cent used as a textbook; 86 per cent would include family relationships as a unit in home management.

3750. Engle, Edna M. Objective tests in home economics based upon the Baltimore course of study—Form B, June, 1930. Baltimore, Md., Public schools, 1930. 12 p.

The Engle home-economics tests here reported are Form B and consist of three parts: Foods and cookery for grades 5 to 10, inclusive; household management for grades 7, 8, and 9; clothing and textiles for grades 5 to 10, inclusive. These tests are the result of experimental work extending over a number of years, during which time they have been given on a city-wide basis as part of the regular Baltimore testing program.

3751. Ennie, Margaret. Major difficulties in supervising student teachers in home economics at Iowa State college. Master's, 1930. Iowa St. Coll. 56 p. ms.

Difficulties of student teachers were obtained from observing 105 classes and attending 95 conferences between supervisors and 40 student teachers. Problems handed in by 225 student teachers were analyzed also. Findings: Leading class discussion, planning work for the day and the unit, and questioning were the three most common difficulties found.

3752. Estrop, Eliza. The attitude of high school girls toward home economics courses. Master's, 1931. Southern California. 65 p.

A questionnaire investigation of girls' preferences with respect to courses and curricula in home economics, with the reasons for the preferences stated.

3753. Forney, Katherine. A plan for evaluating the efficiency of home economics programs in Alabama based on the Wright and Allen method. Master's, 1930. Iowa St. Coll.

A revised form of the Wright-Allen plan for evaluating vocational programs was formulated and used in evaluating the vocational home economics program of four high schools in the State of Alabama. Findings: The high and low supervisory points for the four schools were found.

3754. Gee, Essie Louise. Distribution of the food dollar in some Mississippi practice houses. Master's, 1931. Peabody. 60 p. ms.

A study of percentage distribution of the food dollar in four practice houses of Mississippi for the school year 1929-30. The average percentage distribution of the food dollar among the principal classes of foods in the four Mississippi practice houses was: Fruits and vegetables, 27.22 per cent; milk, cream, and cheese, 15.93 per cent; meat, fish and eggs, 21.49 per cent; bread and cereals, 11.42 per cent; and fats, sweets, and miscellaneous, 24.09 per cent. The average food cost per person per day in the four practice houses was 42 cents. The range was from 36 to 50 cents per person per day.

3755. Gentry, Lois Welch. Home economics in junior high schools of 13 Southern States. Master's, 1931. Peabody. 98 p.

Findings: 81 per cent of the schools studied offer home economics in one or more years, either as a required or as an elective subject. The enrollment in the home-economics classes is 32.7 per cent of the total enrollment in the junior high schools reporting. The majority of schools offer home economics as a required subject in the sixth, seventh, and eighth grades, and as an elective in the ninth grade. The amount of credit offered for home-economics work in the junior high schools varies from one-half to four credits. Only one credit is given in most of the schools. Forty-two out of 91 schools reporting the units of instruction in the home-economics course offer only food or cooking, clothing or sewing, or both; the remaining 49 schools offer from one to 14 units in addition to food and clothing. The idea as to what constitutes a course of subject related to home economics is, far from uniform. There were 38 different textbooks mentioned by 102 schools reporting, and 92 different reference books were used by 112 schools reporting.

3756. Griggs, Ethel Mae. A curriculum in home economics planned for the Negro land-grant college based on a study of the situation in Florida. Master's, 1930. Kans. St. Coll. 108 p. ms.

3757. **Gustavson, George W.** A course in home making for boys. Master's, 1931. Denver. 74 p. ms.

A questionnaire, consisting of 264 items, was sent to different classes of people in different walks of life, in different parts of the country. The items included were those suggested by 25 homes in two cities as being the most important items that should be in a course of study in home making for boys. The results from the questionnaire show that the practical subjects were considered more important for the boy to know than the theoretical; people were very much in favor of a course which would teach the boy to be practical around the home. The general opinion was that the school should have a course in home making for boys which would teach the topics that were listed as being important.

3758. **Hall, Mabel M.** Objectives of home relationships in high school course in home economics. Master's, 1930. Iowa St. Coll. 88 p. ms.

Three hundred and two objectives in home relationships found in 31 State and 15 local courses of study in home economics were reduced, by eliminating duplications, to 108. Findings: List of 108 objectives scored by six supervisors and teacher trainers were reduced to 22. These were restated, scored by 11 supervisors and teacher trainers and set up as list of proposed objectives for public school courses in home relationships.

3759. **Hess, Adah H.** Home economics education organization and administration in Illinois. Springfield, Ill., Department of public instruction, 1930. 59 p. (Illinois Board for vocational education. Bulletin, no. 49.)

3760. ——— Home project suggestions for Illinois high schools. Springfield, Ill., Department of public instruction, 1930. 31 p. ms. (Memoranda on home economics, no. 11, March 1930.)

3761. **Hunter, Mary E. V.** Some effects of home economics training upon the home practices of Negro families in Texas. Master's, 1931. Iowa St. Coll. 95 p. ms.

An experimental investigation of 2,332 Negro families was made to determine the changes in home practices due to home-economics training. Findings: The group receiving special training improved their home practices to an appreciably greater extent in foods, clothing, and home management and as a result had more time for school and cultural activities.

3762. **Innis, Florence M.** Suggested changes in the clothing and textile course at Albright college as determined by a social survey of Reading, Pa. Master's, 1931. Penn. State. 86 p. ms.

This study is based on questionnaire to pupils and to parents, home visitation, and analysis of occupational and nationality statistics. Curriculum recommendations are based upon what it was learned the students would be likely to be called upon to do in their homes throughout life as revealed by present activities in the homes.

3763. **Johnson, Marada Lucy.** A course of study in home economics planned for the Ithaca junior high school. Master's, 1931. Cornell.

3764. **Hidder, Esther.** A course for girls in the eighth and ninth grades of the Ames junior high school. Master's, 1930. Iowa St. Coll. 132 p. ms.

The study included a survey of home activities of the girls in the public schools of Ames, Iowa, in sixth to twelfth grades, inclusive, and a plan for a course of study in foods for eighth and ninth grades making use of the findings of the survey. Findings: (1) Ames girls are provided with adequate diet; (2) majority select and purchase food; and (3) they enjoy household tasks combining judgment and manipulative skills best.

3765. **Landis, Louise E.** An outline for teaching textiles. Master's, 1930. T. C., Col. Univ. 31 p. ms.

Survey of textile courses given in home economics departments of universities.

3766. **Latham, Nettie.** Type of questions used in lesson plans and in the classroom by student teachers of home economics at Iowa State college. Master's, 1930. Iowa St. Coll. 55 p. ms.

Questions from the lesson plans and classroom of 21 student teachers, totaling 2,304, were collected and classified. Findings: There was an increase of 3.2 per cent in the number of thought questions used in the classroom when the first and second halves of the period were compared. Lesson plans showed an improvement of 7.4 per cent. Little help was needed on mechanics of questioning.

3767. McClary, Helen. Rayon, a flower of the sciences. Master's, 1930. Colo. St. T. C.

It is the purpose of this investigation to prove that rayon is one of the outstanding examples of man's control over a material universe; and to prove that the increasing economic importance of rayon merits it a place of greater emphasis in courses of textile study.

3768. McDermott, Irene E. The development of home economics in the United States. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study takes up the development of home economics from the standpoint of its social and economic influence; the formal introduction of home economics into the public schools; the influence of the leaders of home economics and other educational leaders; and the recent development and expansion of home economics.

3769. McVey, Jessie Mary. Report on work done with the National retail dry goods association. Master's, 1930. T. C., Col. Univ. 28 p. ms.

Report covers digest of lectures, demonstrations, and practical work connected with three-weeks' course offered for costume artists. Findings: Since the course was planned primarily for commercial people, there was much of practical value for a teacher of textiles and clothing since it gave an insight into that field.

3770. Mallory, Bernice. The advantages and disadvantages of the cottage plan of housing the home economics departments of the high schools of Texas. Master's, 1930. Iowa St. Coll. 108 p. ms.

Comparison was made of activity records, reports by pupils, teachers, and superintendents, and official records for 75 schools. Three types of schools were included—those with home-economics departments housed in separate cottages, those with home-economics units in high-school building, those with one laboratory and dining room in the regular high school. Findings: Pupils, teachers and superintendents preferred home-economics department housed in separate buildings. Activity records showed that separate cottages were most often used for outside activities.

3771. Manning, Mrs. Juanita (Chaney). A syllabus for the teaching of child care and training in the junior high school. Master's, 1931. Oreg. St. Agr. Coll. 72 p. ms.

3772. Mayne, Ruth Dissinger. A localized study of homemaking education. Master's, 1931. Ohio. (For abstract see no. 712.)

This study consists of a historical, descriptive, and analytical treatment of a localized problem of adult education in home making.

3773. Moore, Cora. A study of home economics in Southern junior colleges. Master's, 1931. Peabody. 95 p. ms.

A study of junior colleges for white people in the Southern States which are members of the American association of junior colleges. Findings: The number of courses in home economics in 60 junior colleges varies from 1 to 27, the median being 6. Courses in home economics are listed under 188 different titles. The courses offered the greatest number of times are clothing, costume design, textiles, textiles and clothing, home nursing, interior decoration, home management, dietetics, foods, and foods and cookery. The credit given for courses in home economics varies from one-half semester hour to nine semester hours per course. In the majority of cases each course has a credit of three semester hours. There is no uniformity regarding prerequisites for home-economics courses and the requirements for graduation of home-economics majors. The study reveals the need for greater uniformity in the teaching of home economics so that home-economics work may have a definite purpose wherever taken.

3774. Nelson, Irene. Some factors that affect the ability of high school girls to judge food products. Master's, 1930. Iowa St. Coll. 61 p. ms.

Fifty-two high-school pupils prepared and judged five different food products. The number of products to be judged and the time interval between judgments varied. Findings: The evidence indicated that with the group included in this study, the number of errors made in judging a series of food products decreased with practice but increased when a period of two weeks lapsed between judgments. The number of errors decreased in an initial judgment of products which followed the judgments of a series of similar products.

3775. Newton, Mitylene Lossing. Methods of utilizing commercial advertising materials in the teaching of home economics. Master's, 1931. Southern California. 115 p.

A study of the materials distributed by 87 companies, classified under 63 topics, each item being graded according to the educational level for which it is best suited; the nature of the aims and sources of such materials; and the uses to which teachers put these materials.

3776. Nielson, Elsie. A clothing course for eighth and ninth grades organized on the problem basis. Master's, 1930. Iowa St. Coll. 109 p. ms.

A study was made to determine the part the eighth and ninth grade girl had in selecting, caring for, and constructing clothing. Using the information secured from this study and that secured from other sources, the writer planned a sequence of units for teaching clothing to eighth and ninth grade girls.

3777. Nowlin, Genevieve Alice. A study in method and plan of developing personality in college home economics students. Master's, 1930. Kans. St. Coll. 93 p. ms.

3778. Patton, Ruth Aline. A study of home economics in some Negro high schools. Master's, 1931. Peabody. 60 p. ms.

A study to find the present status of home economics in the Negro public schools of 10 Southern States, and to compare this study with similar studies of white high schools. Findings: The greatest development of home economics in the Negro high schools came between the years 1919 and 1930; home economics is required in 85 per cent of the Negro high schools studied; two types of schools maintain home-economics departments, city and county training high schools, etc. Less than half of the teachers of the schools studied hold the bachelor's degree and none hold the master's degree. The teaching experience ranges from 1 to 24 years. When compared with home economics in the white schools, these schools compare favorably with regard to organization, curriculum, and teaching experience; the greatest difference is found in laboratory equipment and teacher preparation.

3779. Pearson, Thelma. Placement test for students in the beginning course in clothing construction at Iowa State college. Iowa State College, Ames. 68 p. ms.

Placement test was given to 75 students enrolled in beginning clothing and textile classes. Ratings on past experience, aptitude test grades, and scholastic averages were secured. Findings: While the placement test had the highest predictive value of any of the factors considered, the results of this study showed that with a knowledge of the students' aptitude-test grades, college scholarship, ratings on previous clothing experience, and the placement test, one would be better able to predict the students' ability in the beginning clothing work at Iowa State College than with any one factor considered alone.

3780. Powell, Mayme L. The reorganization of the clothing curriculum at Langston university in Oklahoma. Master's, 1931. Cornell.

A discovery of the present status of the clothing phase of the home-economics curriculum in Langston as ascertained from the present staff and students; and the reorganization of this curriculum based on the findings obtained and on present educational trends.

3781. Rhodes, Opal T. A study of foods, dietetics, and nutrition texts of college level for the purpose of determining the chemistry requirements. Master's, 1931. Illinois.

3782. St. Louis, Mo. Public schools. Home economics. Revision of curriculum bulletin no. 19—home economics for grades 7, 8, and 9. Public school messenger, 28: no. 4, September 4, 1930. 83 p. (Curriculum series.)

3783. Shirley, Florence Keller. Methods of making the school lunch educative. Master's, 1931. Southern California. 123 p.

Concrete plans and procedures for using the school lunch as an agency for instruction in foods and related subjects derived from interviews with teachers and from a study of the literature.

3784. Smallwood, Gertrude. Budget allowance for home economics in the senior high schools of Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Data were secured from superintendents of schools attending the University of Oklahoma in the summer of 1929 (a total of 35 gave replies on budget allowances for teaching home economics in high school and the resultant effects); and from questionnaires

sent to State departments of education of Arizona, Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, and Texas. The most important problems confronting communities attempting to carry on this work are: Lack of adequate finances, inadequate equipment for teaching of all phases of the work of the department, poorly trained teachers, and inadequate curricula.

3785. Sneed, Martha Elizabeth. Study of home economics in elementary grades in certain cities. Master's, 1931. Peabody. 72 p. ms.

A study of cities with a population of 50,000 and over. Conclusions: (1) No standardization of equipment, titles of home economics, and certification of teachers was found; (2) highest per cent of the cities raise the salary of teachers in accordance with tenure of service; (3) most home-economics textbooks and reference books are not designed for use in the grades; (4) 3.6 per cent of schools have home-economics rooms located in basement; and (5) comparison of data with previous studies shows little progress within the last 10 years, except a tendency to introduce other home-economics subjects than cooking and sewing.

3786. Stewart, Elvessa A. and Carreon, Manuel L. Home economics survey, 1930. Manila, P. I., Bureau of education, 1930. 6 p. ms.

In representative schools of 49 divisions, 4,277 seventh-grade girls were tested with the Philippine educational achievement tests, series F, test 1—Food selection and diet, Form II. Findings: Assuming that the test involves a perfect knowledge of the subject, the median achievement of the pupils is 68 per cent of the 75 items in the test.

3787. ——— Survey of first-year home-economics classes with the food and health test. Manila, P. I., Bureau of education, 1931.

Twenty-five schools offering home-economics courses were tested with the food and health test, Form II. Findings: Excepting in four schools the median scores for 1931 of the schools tested exceeded the median scores for 1930.

3788. Stormzand, M. J. and others. A course of study in home economics for junior high school. Santa Monica, Calif., City schools, 1931.

3789. Sutherland, Eula Ward. A determination of the art appreciation of eighth grade girls in Story county, Iowa, as a basis for courses in art related to homemaking. Master's, 1931. Iowa St. Coll. 32 p. ms.

Two hundred and thirty-three girls were given Meier-Seashore art-judgment test. Information was secured on amount of time spent, training of teachers, and nature of work given. Findings: No significant differences in amount of art appreciation were found except when the group was divided on the basis of nature of work given. A significant advantage was found for design principles as contrasted with all other types of work.

3790. Swope, Edna L. A comparison of home economics departments of certain state universities. Master's [1931]. Peabody. 69 p. ms.

Southern and North Central State universities were studied for the regular scholastic year of 1930-31. Findings: Two regions similar in many points were compared; Southern universities excelled in certain points of comparison; and North Central universities excelled in certain other points of comparison.

3791. Tomlinson, Lela A. A methods course in home economics education organized on the problem basis. Master's, 1930. Iowa St. Coll.

The writer made a study of 1,657 actual problems met by student teachers and the teaching problems of 118 experienced teachers. Findings: Based upon the findings of this study and information secured from other sources, the writer planned a special methods course which was designed to aid the prospective teachers in avoiding difficulties reported.

3792. Trilling, Mabel B., Williams, Florence M., and Reeves, Grace G. Girls' problems in home economics; clothing, home, food, family. Philadelphia, Pa., J. B. Lippincott company, 1931. 666 p. (Lippincott's home economics texts.)

3793. U. S. Federal board for vocational education. The teaching of art related to the home. Suggestions for content and method in related art instruction in the vocational program in home economics. Washington, United States Government printing office, 1931. 89 p. (Bulletin no. 156, Home economics series, no. 13.)

This bulletin is intended as a help to teachers of related art courses, to art instructors and teacher trainers in colleges, and to supervisors of home economics.

3794. ——— The teaching of science related to the home. Suggestions for content and method in related science instruction in the vocational program in home economics. Washington, United States Government printing office, 1931. 127 p. (Bulletin no. 158, Home economics series, no. 14.)

It is the purpose of the bulletin to help both the home-making and the science teachers to see the extent to which science may be applied to the solution of home-making problems; to help the home-making teacher in leading her pupils to base the solution of home-making problems upon the scientific background which they have acquired or are getting in their science courses.

3795. **Weddell, Charles Virgil.** Effectiveness of instruction in home economics and agriculture in township high schools of Jackson county, Ind., as measured by the attitudes of parents, students, principals, and teachers. Master's, 1931. Indiana. 90 p. ms.

3796. **Wilson, Lytle Murray.** An investigation to derive the content of a course in practical home problems for the eighth grade. Master's, 1931. Pittsburgh. 133 p. (For abstract see no. 735.)

The choice of material for this study was based on the responses of the home makers of the community to a questionnaire listing 315 home problems, duties, and items of useful information. The questionnaire was sent to 525 homes in Allquippa, Pa., and 444 were checked and returned. Of the 315 items submitted to the home makers, 185 were checked as being of sufficient importance to be taught in the schools.

3797. **Wisconsin state board of vocational education.** Short unit course in child development. Teacher's plans. Madison, Wis., 1930. 33 p. (Home economics education series.)

*3798. **Yackey, L. Milhcent.** Contributions of women's magazines to home-making problems on food. Doctor's, 1931. T. C. Col. Univ. New York, 1930. 68 p.

This study was undertaken to assist students of home making in evaluating the usefulness of women's magazines in the solution of home-making problems on foods. Data were secured from 3,724 pages of 4 of the 6 magazines published in the United States, leading in circulation. Four issues of each magazine for 1929 were used. Findings: Each of the leading women's magazines treats different aspects of the problem on foods featured by it, so that only a personal survey can determine which are best suited for given needs. Women's magazines offer more information in editorial articles regarding advertised nonperishable foods than regarding unadvertised perishable ones.

3799. **Yarbrough, Lorraine.** Reliability of Iowa State college food placement test. Master's, 1930. Iowa St. Coll. 120 p. ms.

Manipulative, managerial, and judgment tests were given to 63 college girls in beginning foods classes in an attempt to determine the reliability of judge's grades.

See also 127 (6). 1671, 2184, 2207, 2263, 2409, 3128, 3134, 3157, 3711, 4270, 4363.

COMMERCIAL EDUCATION

3800. **Armagost, Thelma E.** The duties and status of heads or chairmen of commercial departments of high schools in leading cities of Ohio. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study represents 41 high schools in 31 cities with a population of more than 15,000 inhabitants. Two questionnaires were used to obtain the necessary information, one to the heads of the commercial departments, and the other to the principals of the schools.

3801. **Bailey, Florence Dorothy.** Weighting of speed and accuracy factors in typewriting. Master's, 1930. Iowa.

3802. **Barnett, Clyde E.** Some technical and non-technical words found in Baker's twentieth century bookkeeping and not within reading comprehension range of 200 tenth-grade pupils in Flint central high school. Master's, 1931. Michigan.

3803. Bennett, Louise. An evaluation of the content material pertaining to clothing for a course in retail selling. Master's, 1931. Colo. St. T. C.

The purpose of this study was to furnish content material appropriate for a salesmanship course in secondary schools, and to furnish information that will be of value to salespeople as well as consumers.

*3804. Benway, Harold F. A comparative study of the educational efficiency of the two-year commercial curriculum and guidance program in Lincoln high school, Jersey City, N. J., with that of other curricula in the same school. Master's, 1931. New York. 59 p. ms.

Eighty-seven cases were studied in follow-up at Lincoln high school, Jersey City, N. J. Findings: There is a great amount of waste in drop-outs and subject failures in the curriculum. Two-year graduates are more successful in securing and holding commercial positions than 2-year drop-outs of other curricula.

3805. Berg, Matilda. An inventory analysis of commercial arithmetic textbooks. Master's, 1931. Colo. St. T. C.

This study compares the content of present-day business arithmetic texts with that of earlier texts, and attempts to determine if the content of business arithmetic texts is traditional and in need of reconstruction in the light of the demands of business.

3806. Blough, William Herbert. A vocabulary test in negotiable instruments. 1930. Ohio State university, Columbus. 16 p. ms.

The purpose of the study was to construct a vocabulary test on the difficult technical business words found in the American institute of banking textbook on negotiable instruments. Data are presented to show that the test is a valid and reliable one. The scores of those taking the course range from 94 to 20, with a total possible score of 112, thus indicating a wide divergence of vocabulary.

3807. Booth, Olive Coffman. The semestral achievement of typewriting pupils in California four-year and senior high schools. Master's, 1931. Southern California. 139 p.

A tabulation of the records of 31,437 students in the state-wide typewriting test of May 1930, with classifications by semesters and by lengths of daily periods.

3808. Bradford, Lilah Clark. A study of the changes in speed and accuracy made by students in typewriting classes in the public schools of Fresno, September 1929. Master's, 1930. Stanford.

3809. Carlson, Paul A. The measurement of high school instruction in bookkeeping. Master's, 1931. Wisconsin.

3810. Carmichael, Geoffrey Loren. Methods, practices, and opinions of instructors in certain phases of elementary accounting in universities, colleges, and normal schools. Master's, 1931. Indiana.

3811. Cassin, Kathryn. Percentage of commercial drop-outs who entered senior high school from Woodrow Wilson junior high. San Jose, Calif., City schools, 1931.

3812. ——— Training of retail sales employees in the City of San Jose. San Jose, Calif., City schools, 1931.

3813. Chicago, Ill. Board of education. A course of study in bookkeeping for senior high schools. 1931. 41 p. (Bulletin, no. C-b.)

3814. Clark, Mildred. A comparison of the results obtained from the teaching of shorthand by the word-unit method and the sentence-unit method. Master's, 1930. Nebraska. 89 p. ms.

Two methods of presenting instruction in shorthand were tried out—the conventional method and the sentence-unit method. Ten schools participated in the study. In every respect the sentence-unit method was shown to be superior.

3815. Clem, Jane Ethel. A standard test for measuring stroking rate in typewriting. Master's, 1931. Chicago. 68 p. ms.

Standardizes two forms of a test in typewriting. Scores of 2,760 pupils in 174 Wisconsin high schools were used as a sample from a general survey. Findings: Norms were established: first-year typewriting, Form A-155.65, Form B-159.8; second-year typewriting, Form A-214.9, Form B-219.5.

3816. Cooper, Frances Etherington. An analysis of a merchandising department (women's dresses) with organized material for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The first part of this study was undertaken in order to discover means of more efficient and profitable operation of the women's dress department; the second part was developed to provide the new sales person with material which would aid her on the job of selling women's dresses effectively.

3817. Cornell, Kearns Bryan. Standardization of commercial education in secondary schools. Master's, 1930. Oklahoma. (For abstract see no. 713.)

This study analyzes the present status of business education in the American secondary school for the purpose of discovering trends and needs for improvement, such as method, administration, organization, curriculum, measurements, subject matter, and standards, together with correlated problems. Emphasis is given to the organization of commercial education toward higher standards of achievement and greater efficiency of operation, rather than toward increasing the scope.

3818. Corus, Mamie. Types and persistencies of characteristic errors of 185 pupils in elementary bookkeeping. Master's, 1931. Nebraska. 92 p. ms.
A study of the class of exercises of 185 pupils, submitted during a three-month period in a beginning course in bookkeeping.

3819. Croasdale, Dorothy. Methods for evaluating the vocational content of the commercial courses of secondary schools. Master's, 1931. Yale.

3820. DelaHunt, Walter K. A history and growth of commercial education in the American secondary schools. Master's, 1931. North Dakota.

3821. Dick, Dorothy. Basic business information and skills needed by every individual based on an investigation among retail business men. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to aid in determining the content of a course in business training which consists of those facts and skills needed by every individual in business contacts.

3822. Edgeworth, Clyde B. Courses of study in commercial subjects. Stenography, tenth year; bookkeeping, 9B grade. Baltimore, Md., Department of education, 1931. 26 p. ms.

Alms, subject matter, and classroom procedures for instruction in stenography of the tenth year and bookkeeping for the 9B grade.

3823. Eyster, Elvin S. An analysis of the duties of bookkeepers. Master's, 1931. Indiana. 194 p. ms.

3824. Fehr, Alice Paul. An analysis of a merchandise department (electrical appliances) with organized material for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The first section of the training program gives suggestions for planning and for holding meetings; the second and third sections give methods, sources of material, and devices for training and follow-up of selling and nonselling workers.

3825. Fink, E. L. Commercial teachers and commercial education in Kansas high schools. Master's, 1931. Kansas.

Survey and analysis based on principals' annual report for 1930-31, giving qualifications of teachers of commerce and enrollment of students in their courses. Comparison was made with standard requirements.

3826. Fisher, John Edwin. Community needs as the basis for a high school commercial course. 1931. University of Chicago, Chicago, Ill. 91 p. ms.

A study undertaken to ascertain if the school effectively serves the community, the graduates, and the industries. Findings: Lack of up-to-date equipment in schools; too far behind actual business practice; and administrative viewpoint is wrong towards business.

3827. Folger, Degnall Frank. A comparison of two methods for training secretaries of the Young men's Christian association. Doctor's, 1931. Yale.

3828. Fowler, Irma Deane. Texas high schools. The teaching of commercial subjects. Austin, Texas, State department of education, 1930. 74 p. (Bulletin, no. 277.)

"This bulletin includes information gathered from courses of study of other States, contributions of experts in scientific research, opinions of business and professional employers, ideas gathered from conferences of commercial teachers, supervisory experience, and results of exhibits submitted for affiliation on the standards of the past several years."

3829. Fratchey, Beatrice H. Basic business information and skills needed by everyone as shown by an investigation among governmental agencies and public service companies. Master's, 1931. Colo. St. T. C.

3830. Gaffin, Myrtle E. A statistical study of shorthand students with special reference to degree of mastery of subject and to securing stenographic employment. Master's, 1930. Iowa.

3831. Gilpin, Sara Ruth. Ways of maintaining employee morale. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study presents procedures by which executives can maintain morale in their organizations, and increase their employees' happiness and efficiency. It shows the value of including morale in a training program.

3832. Glover, John G. Fundamental principles of internal business control. Master's, 1930. New York. 189 p. ms.

A general diagnosis of the typical requirements for managerial positions with suggestions for means of improvement in training.

3833. Graf, Ruth M. An analysis of a merchandise department (electrical appliances) with suggestions for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Specific material for training salespeople in the electrical-appliance department has been compiled.

3834. Haas, Kenneth, B. A survey of clerical occupations in Monmouth county, N. J., to determine curriculum revision. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A questionnaire was set up for the employees, of whom there were 622 office workers in the 20 firms investigated. An interview check list for the employers was made, in which each group was asked for information as to the relative importance of the duties performed, the part office machines play in business offices, the physical and personal traits necessary, the needs in secondary training, and the status of commercial education in the county. The office managers and the workers regarded the teaching of penmanship, arithmetic, and English as important, but they believed these should be modified to suit existing business requirements. Clerical workers should have the maturity and education of high-school graduates. There was little difference between the success of those who had studied bookkeeping and stenography and those who had not studied these subjects. In the training of general clerks, high-school students should be given composite courses in which training would be given for several different kinds of office work.

3835. Hemmerly, Kenneth. An experimental study to determine the value of a note-book in the teaching of commercial arithmetic. Master's, 1931. Rutgers.

3836. Herr, E. B. The development of commercial education in Pennsylvania. Master's, 1931. Bucknell.

3837. Higgins, William Thomas Robert. The history and development of secondary commercial education in the United States. Master's, 1931. Boston Coll. 36 p. ms.

3838. Holmdahl, Ruth Plimpton. The teaching of office practice in the public secondary schools of the United States. Master's, 1931. Southern California. 142 p.

Based on questionnaire responses from 105 high schools reporting detailed information concerning aims and objectives, course organization and course content, textbooks and supplementary materials, methods of teaching, equipment, teacher qualifications, and local studies or surveys of employment in this field.

3839. Jennings, B. H. A survey of commercial education in public high schools of northwest Texas. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to discover desirable objectives for the reorganization of commercial education teacher-training offerings in the West Texas State teachers college.

3840. Johnson, Margaret. An analysis of a merchandise department (foundation garments) with organized material for training. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Organized training material for salespeople is included as well as a guide for training the nonselling employees who have contact with the department.

3841. Johnson, Maude Milligan. The analysis of a merchandise department (women's dresses) with organized material for training. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Data were collected by personal interviews with store people and by observation and actual contact as a salesperson with one department.

*3842. Johnson, Mildred B. A comparative analysis of the "Gregg shorthand manual" and the "Gregg speed studies," anniversary editions. Master's, 1931. New York. 139 p. ms.

The purpose of the study was to determine the extent to which the connected matter of the "Gregg manual" and "Gregg speed studies" embody the theory principles, word lists, brief forms, and phrases, as presented in the manual. Findings: The connected matter does not sufficiently embody the theory principle, words, brief forms, or phrases for the reason that the student must carry his learning of shorthand to the place where it will function in connected matter.

3843. Kansas. State department of education. Course of study for high schools. Part 8—Commercial subjects. Topeka, 1930. 30 p.

3844. Kinne, Frances I. The relationship of intelligence and the relationship of the knowledge of English minimum essentials to the student's ability to transcribe shorthand. Master's, 1931. New York. 97 p. ms.

This study is based on tests given in four high schools in New Jersey—Elizabeth, Westfield, Plainfield, and North Plainfield. One hundred and twenty cases were studied: Findings: The coefficient of correlation (in each comparison) is so very low that the only conclusion which can be drawn is that there is apparently practically no relationship between intelligence and the ability to transcribe shorthand, or between the knowledge of English minimum essentials and the ability to transcribe shorthand as determined by the study.

*3845. Lackas, John C. To what extent is the subject matter of business law textbooks in agreement with the subject-matter of litigated cases. Master's, 1931. New York. 60 p. ms.

An analysis and tabulation of the contents of five business-law textbooks and a comparison of the data so assembled with an analysis and tabulation of the litigation reported in the Atlantic reporter. It was found that the contents of business-law textbooks are uniform and largely confined to an exposition of the law of contracts whereas the analysis of the litigation revealed a variety of topics not discussed in the textbooks and in many instances the topics which were not treated in the textbooks or given negligible consideration were those most frequently involved in litigation.

3846. Lane, Esther Louise. An analysis of a merchandise department (women's dresses) with suggestions for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Part of the study consists of suggestions for training both selling and nonselling employees in the women's dress department. The training suggestions were written primarily for the buyer.

3847. Lawrence, R. A. and Judd, D. L. Fitting the high school commercial curriculum to the needs of the community. Greenfield, Mass., Greenfield high school, 1930.

A survey of the commercial occupations in Greenfield has been made to determine what subjects should be offered in the high-school commercial course and also to determine the opportunities in the community for graduates of this course.

3848. Lewis, Edith O. Value of high school training in attitudes and habits for success in business. Master's, 1931. Kansas.

A study of the opinions of 100 girls who graduated from one of four Kansas City, Mo., high schools as to the relative value of certain high school subjects with reference to various commercial occupations, based on personal interviews.

3849. Lynch, Helen Eleanore. The possibility of justifying the teaching of typewriting in the seventh grade. Master's, 1931. Southern California. 91 p.

A statistical analysis of typewriting scores in grade 7 compared with results in higher grades, including correlations of scores with IQ and various scholastic measures.

8850. Lyon, Leverett S. Education for business. 3d ed. (An extensive revision of the second edition.) Chicago, Ill., University of Chicago press, 1931. 586 p.

Contains an extensive analysis of data indicating the purposes of business education; an extended study of each of the many types of educational institutions made with a view to determining the part which each can play best in achieving the purposes of all; and constructive suggestions for curriculum reform.

3851. McAndrew, Lorinda Adelaide. An analysis of a merchandise department (foundation garments) with suggested material for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Two weeks of selling in foundation garment departments supplemented by interviews with department and store executives is the basis for the training program developed for regular salespeople and contingents.

3852. McCoppin, Grace Kerns. Gregg shorthand practice cards. Kansas State college of agriculture and applied science, Manhattan.

3853. McDowell, C. L. A study of the duties performed by school administrators in connection with high-school commercial departments. Master's, 1931. Iowa. 116 p. ms.

3854. Maguire, William J. A comparison of eight bookkeeping textbooks in terms of certain suggested principles of textbook selection. Master's, 1931. New York. 103 p. ms.

The study includes functions of textbook; principles of textbook selection; purposes; approach; sequence of topics; spatial allotment; terminology; exercises; illustrations; aids to pupils. Findings: Emphasis is placed on bookkeeping as an educational instrument; balance-sheet approach; terminology is uniform; there is wide variation in spatial allotment; plenty of exercise material; simple language. Eight textbooks that are used in the New York city school system were studied. An attempt was made to set up some principles that should guide one in selecting textbooks. The next step consisted of an attempt to illustrate a technique of applying these principles in a specific instance. The third step consisted of a presentation of the data in tabular and graphical form so as to facilitate comparisons.

3855. Manning, Suzan Katherine. An analysis of a merchandise department (foundation garments) with organized material for a training program. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

One division of the study contains material for training salespeople in a foundation-garment department. It presents methods designed to minimize the learning period of a new salesperson in order to increase department efficiency.

*3856. Merrill, Frances Elizabeth. The formulation of criteria for the evaluation of typewriting textbooks and a comparison of current typewriting texts according to the criteria. Master's, 1931. New York. 118 p. ms.

A study was made of the collection of typewriting texts in the office of the Department of business education, New York university. All the texts published since the beginning of the year 1926 were examined to see that they fulfilled the following qualifications: Texts designed for use in the senior high school; those that have as their objective the training of typists in the fundamentals of accurate typing; those that try to familiarize the student with common business forms and practices; and those that allow a maximum of two years as the training period.

3857. Milley, Harriet M. Business information and skills needed by everyone as determined by a survey of recent magazines and newspapers. Master's, 1930. Colo. St. T. C.

The general purpose of this study was to find out some of the business information and skills needed by everyone as determined by the reading of recent magazines and newspapers.

3858. Moore, Wert E. Course of study in office training, typing section, senior high school. Oakland, Calif., Public schools, 1931.

A list of traits and activities of office workers of secondary-school level checked by business offices, teachers of office training in Oakland, and 15 other cities is correlated with the findings of similar surveys conducted in Cleveland and Philadelphia. Each activity is set up as a problem and the sources of instructional and practice materials are provided.

3859. Morrison, Noble Brewer. An evaluation of errors in typewriting. Master's, 1930. Iowa.

*3860. Murphy, Henry Martin. What uses are made of typewriting by persons who drop typewriting after completing one year of it in junior high school in Elizabeth, N. J.? Master's, 1931. New York. 95 p. ms.

A study was made of 100 cases of persons who dropped typewriting after one year of it in junior high school during the three school years from September, 1926, up to and including June, 1929, in Elizabeth, N. J. Findings: A total disuse of typewriting was reported by 58 per cent of the 100 respondents to the questionnaire. A much higher percentage of commercial course students made use of their typewriting knowledge after only one year of the subject than did practical-arts course students who elected the same course in junior high school. Not many persons make vocational use of the typewriting skill learned in one year of typewriting in junior high school.

3861. New York (State) Education department. Introduction to business. A tentative syllabus to replace Elementary business training. Albany, University of the State of New York press, 1931. 86 p.

The syllabus outline is based on the familiar business transactions of the home, the school, and the community. The major aim of the course is the development of a realization that business and successful living are closely allied.

3862. ———— Syllabus in commercial subjects, business writing, book-keeping 1 and 2, commercial law. Rev. ed. Albany, University of the State of New York, 1931. 50 p.

3863. ———— Syllabus in commercial subjects, commercial arithmetic, economic geography 1 and 2. Rev. ed. Albany, University of the State of New York, 1931. 34 p.

3864. ———— Syllabus in commercial subjects, typewriting 1 and 2, shorthand 1 and 2, business English. Albany, University of the State of New York, 1931. 69 p. rev. ed.

3865. Oakland, Calif. Public schools. Salesmanship for grades 11 and 12. 1930. 45 p. ms. (Superintendent's bulletin. Course of study series, no. 112.)

A course of study designed for use in the eleventh and twelfth grades in the public schools of Oakland, Calif.

3866. Oberman, S. E. Validity and reliability of the Blackstone-McLaughlin stenographic proficiency test. Master's, 1931. Iowa. 61 p. ms.

3867. Oklahoma. State department of education. High school course of study in commercial subjects. Oklahoma City, 1930. 40 p. (Bulletin, no. 126.)

The purpose of this course of study is to: Raise the level of commercial education above the narrow scope of vocational training; establish an appreciation of business; discover and encourage the development of such qualities as resourcefulness, enterprise, imagination, and ability to bear responsibility; encourage the development of the spirit of cooperation between the school and business; equip the student with a marketable skill; and prepare for more technical business training in institutions of higher learning.

*3868. Olenbush, Mercy. Standards for elementary shorthand for a small city high school. Master's, 1931. New York. 239 p. ms.

A study was made of a battery of tests and results for each of four quarters of the school year.

3869. Philadelphia, Pa. Board of public education. Division of commercial education. Report for the year ended June 30, 1930. 65 p.

This report contains the results of tests given to shorthand classes in Philadelphia schools. The kinds of errors were classified under six headings: punctuation, omission of words, substitution of words, typographical errors, erasures, and misspellings. The percentages for punctuation, misspellings, and typographical errors were not chargeable against shorthand. Some of the difficulty involved in omitted and substituted words was due to a lack of vocabulary control.

3870. Pittsburgh, Pa. Public schools. A course of study in junior business practice. 1930. ms.

3871. Pixley, Lucile. The mental and educational abilities of commercial students in high school. Master's, 1931. South Dakota.

3872. Pollock, Sara T. An experiment in a unit method of instruction in stenography, typewriting, and transcription in the eleventh year. Master's, 1931. Rutgers.

3873. Porter, Randolph. An application of the unit plan of instruction to general business science. Master's, 1931. Ohio. 135 p. ms.

A study of the unit plan of instruction as developed by H. C. Morrison, the late H. L. Miller, and V. T. Thayer for the purpose of formulating a procedure for unit instruction, and a unit course of study for general business science. Findings: The trend of commercial education in the junior high school is away from the technical commercial subjects—stenography and bookkeeping; it is a course which provides a general training for business, suitable for every individual, regardless of his occupation or life work; and also provides some training in junior clerical positions. Our present idea of unit instruction is the result of the development of plans of individual instruction, which were first formulated by Preston Search, during the period of 1888-1894, for the purpose of getting away from the inadequate instruction of the class "lock-step" system. The underlying principles and procedures of the Morrison, Miller, and Thayer plan of unit instruction are applied in the formulation of a procedure in unit instruction, and a unit course of study for general business science.

3874. Proffitt, Maris M. Statistics of private commercial and business schools, 1928-1929. Washington, United States Government printing office, 1930. 31 p. (U. S. Office of education. Bulletin, 1930, no. 25.)

3875. Pulver, Isadore Louis. The place of business arithmetic in the bookkeeping curriculum of a senior high school. Master's, 1930. New York. 71 p. ms.

A determination of what arithmetic is used in bookkeeping as a basis for determining whether business arithmetic students know this arithmetic better than non-business arithmetic students. Findings: Students who have had no business arithmetic seem as capable in the arithmetic of bookkeeping as students who did have business arithmetic.

3876. Quinn, Eveline Mary. History and development of commercial education in Cambridge, Mass. Master's, 1931. Boston Univ.

3877. Reller, Lucille S. An analysis of a merchandise department (foundation garments) with organized material for training. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A manual, Selling foundation garments, and a coach's guide were prepared for use in the training of salespeople.

3878. Richmond, Alfred B. A comparative study of the unit method and recitation method of teaching commercial law in high school. Master's, 1931. Colorado.

3879. Ross, Frances L. Basic business facts and skills everyone should know as determined by a survey of business men's organizations. Master's, 1931. Colo. St. T. C.

The purpose of the study is to determine approximately what should be the content of a general business-training course with the recommendation that it be made a part of public education.

3880. **Schoenberg, Samuel.** A study of commercial pupils in a general continuation school. Master's, 1931. New York. 50 p. ms.

Analysis of intelligence, previous education, experience, and interest in further study of pupils in commercial classes for purpose of devising a program in commercial education that will meet their needs. Findings: Pupils in commercial classes are of normal intelligence. The usual commercial subjects of bookkeeping, stenography, etc., do not adequately meet their needs.

3881. **Schroeter, Elizabeth Arlene.** A comparative study of 14 bookkeeping textbooks. Master's, 1931. Colorado.

3882. **Sipe, J. Marvin.** Results of bookkeeping instruction in Indiana high schools as revealed by objective tests given at the district and State contests in 1928 and 1929. Master's, 1931. Indiana. 218 p. ms.

3883. **Smith, James H.** Salary cost of instruction in commercial subjects in Chicago high schools. Master's, 1931. Chicago. 75 p. ms.

Cost of instruction in commercial subjects by semesters and cost of failures in Chicago high schools.

*3884. **Soisson, Magdalen E.** Secretarial curricula in colleges and universities. Master's, 1931. New York. 170 p. ms.

The purpose of this study was to make an investigation of the status of secretarial curricula in colleges, universities, and technological institutions, and to make a critical analysis of the secretarial curriculum at Notre Dame college of John Carroll university, Cleveland, Ohio, in the light of these data.

3885. **Spencer, Blake W.** Tests in elementary shorthand for the Oakland public schools. Oakland, Calif., Public schools, 1930. 78 p. ms.

3886. **Sublette, Minnie.** Business information and skill needed by everyone as shown by an investigation among bankers, real-estate men, and insurance agents. Master's, 1931. Colo. St. T. C.

It is the purpose of this study to find by investigation among financial institutions and real-estate companies basic information and skill needed by everyone, with a view to finding what should be taught in our public schools in a general business course.

3887. **Swanson, Ruth Evangeline.** An analysis of a merchandising department (electrical appliances) with organized material for the training department. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

3888. **Traxler, Bina Mae.** A follow-up study of commercial graduates with respect to shorthand, office training, bookkeeping, and salesmanship. Master's, 1930. Northwestern.

3889. **Tupper, Clyde Warner.** The influence of certain factors upon success in a bookkeeping class. Master's, 1931. Stanford.

3890. **U'Ben, Alan W.** A comparison of two methods of teaching bookkeeping in the high school. Master's, 1931. Wisconsin.

3891. **Vonderhaar, M. Constance.** Construction of test in commercial English. Master's, 1931. Iowa. 37 p. ms.

3892. **Walters, R. G. and others.** Survey of commercial education in northwestern Pennsylvania, 1931. Pennsylvania State education association. (Bulletin of Western Pennsylvania commercial education association.)

Status of commercial courses of study, commercial teachers, and commercial textbooks and equipment.

3893. **West, Winifred G.** Survey of machines and appliances other than typewriters, used in Indianapolis business offices, with recommendations for the training of prospective operators. Master's, 1930. Indiana. 56 p. ms.

Findings: The operation of the 12 office appliances, other than typewriters, used in Indianapolis business offices should be taught in the commercial curriculum in the Indian-

apolls high schools. The job-sheet method supplemented with demonstrations and class supervision is the best method to use in teaching the operation of office appliances. The time required to learn the operation of the different appliances depends to a great extent on the ability of the pupil.

3894. White, J. E. What commercial curriculum of Pomeroy high school will best fit the needs of the business community of Pomeroy, Ohio? Master's, 1930. New York.

A study was made of business firms in Pomeroy, Ohio, and Pomeroy High School graduates for the last five years.

3895. Woina, Jennie Marie. Survey of functions and organization of commercial clubs in high schools of New Jersey. Master's, 1931. Rutgers.

3896. Woodring, Maxie Nave and Harold, Gilbert. Enriched teaching of commercial subjects in the high school. A source book for teachers of book-keeping, shorthand, typewriting, commercial geography, and other commercial subjects, listing chiefly free and low-cost illustrative and supplementary materials. New York City, Teachers college, Columbia university, 1930. 339 p. (Enriched teaching series, no. 4.)

3897. Worley, Raymond J. Relative value of the IQ and marks for predicting success in shorthand. Master's, 1931. Harvard. 170 p.

3898. Wunsch, Lillian C. A typewriting investigation. Master's, 1931. Temple.

See also 127 (5), 519, 838, 968, 1170, 1230, 1634, 2033, 2065, 2746, 2991, 3625, 4065.

PROFESSIONAL EDUCATION

3899. American medical association. Existing and extinct medical colleges in the United States. Chicago, Ill., American medical association, 1931. 9 p.

This study shows year when organized; when each college had graduates; when institution became extinct or when name was changed; when higher entrance requirements were put into effect; and ratings given by the Council on medical education and hospitals of the American medical association. Statistics up to November 1, 1928, appear in the reprint proper. Changes since 1928 appear in the addendum.

3900. ——— Council on medical education and hospitals. Statistics of state board examinations for the year ending December 31, 1930. Annual presentation of statistics. Chicago, Ill., American medical association, 1931. (Reprinted from the State board number of the Journal of the American medical association, p. 1387-1402.)

3901. Bayer, Rev. Jerome. The course of study in the Catholic preparatory seminary; a survey of 55 institutions. Master's, 1931. Catholic Univ. 108 p. ms.

3902. Biddle, Harry C. The chemistry course. What the student should remember. American journal of nursing, 30: 1297-1311, October 1930.

This study was prepared in connection with research course in curriculum making. Two hundred items of chemistry were submitted to about 150 general duty nurses and 150 teachers of chemistry in schools of nursing, for evaluation.

3903. Committee on the grading of nursing schools. Results of the first grading study of nursing schools. New York City [1931].

Section 1, The student body, 60 p.; section 2, what students learn, 84 p.; section 3, who controls the schools, 89 p.

A total of 1,458 schools took part in this study. Section 1 is divided into two parts: Part 1 deals with grading results and discussion based upon them; part 2 tells how the study was planned and carried out and some of the difficulties encountered. Section 2 is divided into two parts: Part 1 presents the findings of the grading committee, based upon sheets B, C, D, E, and F dealing with the course of study, theoretical and practical, the practice field, the organization of the faculty, and the actual records of experience in classroom instruction and practice of the members of the 1928 graduating class; part 2 is a special study of the nursing curriculum by Stella Goestray. Section 3 is

divided into three parts: Part 1 deals with the faculty, part 2 deals with the hospital and the board, and part 3 gives the summaries of findings.

3904. Cutler, James Elbert and Davie, Maurice Bea. A study in professional education at Western Reserve university. The school of applied social sciences, 1916-1930. Cleveland, Ohio, Western Reserve university press, 1930. 208 p.

This is a history of the school of applied social sciences at Western Reserve university from its establishment in 1916 to date.

3905. Gault, Alma E. Standards for a tuberculosis sanatorium which would be a satisfactory laboratory for instruction of student nurses in tuberculosis nursing. Illinois league of nursing education, 1931.

3906. Holcomb, Glenn Willis. A study of the measurement of engineering aptitude. Master's, 1931. Oreg. St. Agr. Coll. 88 p. ms.

3907. Huntly, Mabel F. Report of a League study of cooperative arrangements between schools of nursing and academic institutions. In National league of nursing education. Proceedings, 1931. p. 129-45.

A study was made of 83 of the 184 schools of nursing replying to a questionnaire. Data indicate that there is a strong tendency for schools of nursing to seek connection with an academic institution other than a hospital, and such connections are being established more frequently in the west and middle western States than in the States on the Atlantic border; many of the affiliations between schools of nursing and universities and junior colleges are casual in their inception and unstable in organization; most of the schools are inadequately financed.

3908. Hurd, Archer W. A study of achievement in various engineering and pre-engineering courses. Journal of educational research, 23: 25-30, January 1931.

This study shows that inconsistency as a variable trait is possessed by college students, and as a rule, in a greater degree by the better students. Grades in preengineering physics correlated most highly with grades in engineering courses.

3909. James, Ida Cleo. Instructional procedure in hospital schools. Master's, 1931. Southern California. 123 p.

An organized summary of practices and procedures used in bedside instruction, based on observation and interviews made in representative institutions.

3910. Joslin, Hope Lillibridge. The extent and effectiveness of the use of intelligence tests in hospital training schools of nursing. Master's, 1931. Brown. 81 p. ms.

A survey of the present situation in training schools for nurses with respect to the extent of use made of intelligence tests. Also a detailed account of the administering and results of a testing program in one training school. Pertinent literature on the subject is summarized. Findings: There is an increasing use of intelligence tests in training schools for nurses. The results indicate that nurses in training differ very little, if at all, from high-school senior girls in intelligence. The tests in several hospitals have been found to correlate from .35 to .65 with the theoretical and practical work done by nurses in training.

3911. Keeler, L. W. An investigation of the effect of subject deficiencies upon accomplishment of students entering the college of engineering of the University of Michigan during the academic years 1927-1928, 1928-1929, and 1929-1930. Ann Arbor, Mich., University of Michigan, 1931. 68 p. (Bureau of educational reference and research, Bulletin no. 138, March 30, 1931.)

Complete transcripts were made of the records of students matriculating in the College of engineering in 1927, 1928, and 1929 to determine in what way the amount of deficiency varies for the different subjects prescribed for entrance; whether the amount of deficiency is higher for students entering from Michigan schools than for those entering from outside the State; the effect that entrance with deficiencies has upon the subsequent attainment of the students. Data indicate that the percentage of those with subject deficiencies entering the College of Engineering from the State of Michigan is decreasing; the investigation of deficiency by subjects shows an increased percentage of deficiency; from the study of attainment of deficient and nondeficient students, it was found there is but slight variation in total values from year to year.

3912. Leland, E. G. The cost of medical education; students' expenditures. Chicago, Ill., American medical association, 1931. 23 p. Journal of the American medical association, 96: 682-90, February 28, 1931.

Data from reports of 1,161 students attending widely separated and various types of medical schools during 1929-30 show that the cost of medical education averages slightly more than \$1,100. Costs seem to be highest in the schools of New England and the Middle Atlantic States.

3913. Morgan, Clellan L. An appraisal of vocational material concerning law, medicine, and engineering. Master's, 1930. Iowa.

3914. Reed, Alfred Z. Review of legal education in the United States and Canada for the year 1930. New York City, Carnegie foundation for the advancement of teaching, 1931. 67 p.

Includes discussion of "Legislation affecting admission to the practice of the law"; comparative table of requirements for admission to the bars of the 60 American States and Canadian Provinces; list of law schools within the same territory, showing tuition fees, attendance and principal educational features; comparative statistics of law schools and law-school attendance since 1890, with particular reference to the growth of part-time schools, and the lengthened period of preparation.

3915. Schmitthener, John W. An evaluation of the curricula of theological seminaries in the field of practical theology, as determined by a job analysis of the ministry. Master's, 1931. New York. 134 p. ms.

The study included an analysis of the offerings in practical theology in 100 theological seminaries, and a job analysis based on returns from 450 ministers and 200 time charts of activities. Findings: While courses given in seminaries cover the whole field of practical theology in the work of ministers, there is little if any clinical training and experience given or required. The job analysis reveals that there are 75 specific duties of ministers based on: Preaching duties, educational activities, pastoral activities, administrative duties, social duties, community activities, and denominational responsibilities. They are given in the order of importance, as evaluated by the ministers themselves.

3916. Schnur, Sidney. A genetic study of medical education in the United States. Master's, 1931. Coll. of the City of N. Y. 82 p. ms.

The material for this study of the history of the development of medical education in the United States was obtained from books, pamphlets, bulletins, journals, reports, catalogues, etc. Findings: There has been a remarkable improvement in medical education in the last two decades.

3917. Settle, Edwin Theodore, jr. Classroom procedure in theological education. Doctor's, 1931. Yale.

3918. Society for the promotion of engineering education. Report of the investigation of engineering education, 1923-1929, accompanied by a supplemental report on technical institutes, 1928-1929. Vol. 1. Pittsburgh, Pa., University of Pittsburgh, 1930. 1,039 p.

This contains reports of investigations on the engineering students at the time of entrance to college, admissions and eliminations of engineering students, engineering graduates and nongraduates, engineering teaching personnel, graduate courses, organized research, extension courses in engineering colleges, costs of engineering education, engineering curricula, placement examinations, engineering education in the United States and Europe, etc.

3919. ———. A study of technical institutes. Lancaster, Pa., Lancaster press, 1931. 281 p. (Summary report, 89 p.)

A collateral project to the investigation of engineering education.

The study deals with an area rather than a specific type of technical education. No formal type of school or course was used as a norm, because of the wide range of needs to be covered in the study. Findings: There is a need for a large number of technical schools giving a more intensive and practical training than that now provided by the engineering colleges. They should train principally for supervisory and technical positions in particular industries, and to a less extent for engineering work of a general character. The need should be met by day schools, working on a full-time or a half-time schedule; evening schools should be widely provided; and correspondence instruction should be provided to fill the remaining gaps.

3920. Soule, Elizabeth Sterling. Organization and administration of a school of nursing in a university. 1931. University of Washington, Seattle. 85 p. ms.

Works out plan for academic course in nursing in the university in cooperation with the hospital. Brings together previous plans on the subject. Findings: Plan was usable and was adopted by the University of Washington and Harborview hospital in Seattle and subsidized by the Rockefeller foundation.

3921. Steggert, B. J. Evaluation of work in professional schools for college credit. In American association of collegiate registrars. Bulletin, 5: 188-91, October 1930.

Data were secured from 171 replies to a questionnaire on the range of credit allowed for various types of professional work on different degrees.

3922. Thompson, May E. An aid to teaching patients and nurses. Master's, 1931. T. C., Col. Univ. 100 p. ms.

Gives principles of normal instruction and modifications for diet in disease, with charts and illustrative material for the teaching of patients and nurses.

3923. Waite, Frederick C. The medical education of women in Cleveland (1850-1930). In Western Reserve studies, a miscellany. Cleveland, Ohio, 1930. p. 17-63. (Western Reserve university bulletin, vol. 33, no. 16, September 15, 1930.)

3924. Wooster, Lawrence Fisher. The evolution of the philosophy of engineering education. Master's, 1931. Oreg. St. Agr. Coll. 53 p. ms.

See also 605, 4088.

EDUCATIONAL AND VOCATIONAL GUIDANCE

3925. Alabama. State department of education. Occupational studies for junior high school boys. Rev. ed. Montgomery, 1930. 75 p.

3926. Alabama polytechnic institute, Auburn. Staff of the school of education. Studies in education. Exploratory occupational studies. 1931. 62 p. (Bureau of educational service, vol. 1, no. 1, January 1931.)

3927. Andrews, L. O. A study of textbooks on occupations and vocations. Master's, 1930. Michigan.

3928. Andrews, William C. Factors determining vocational choices of secondary school students. Master's, 1931. Claremont.

3929. Ashby, Genevieve M. The development of guidance in secondary schools. Master's [1931.] Arizona. 82 p. ms.

An historical study of the development and present status of the guidance movement. Findings: Complexity of industry and of society is causing a greatly diversified and broadened curriculum in high schools. This has necessitated more and better guidance. The idea has broadened from vocational guidance to educational and vocational guidance. It is now attempted to provide guidance in accordance with the seven objectives of secondary education. The danger is that because of its very width and importance the movement may become general guidance, which will become the function of all and be exercised by none, efficiently. In other words, the movement may dissipate itself in general education.

3930. Boehmer, Florence. Continuity of vocational interest of college women. Doctor's, 1931. T. C. Col. Univ.

The data for this investigation of the continuity of vocational interest of 6,466 women who matriculated in 42 land-grant colleges between the years 1889 and 1922 were secured from questionnaires prepared by the United States Bureau of education in 1928. Findings: Single women are more persistent in their vocational interests than married women; women of the later decades have greater continuity of vocational interest than do those of the earlier decades; women with degrees have more continuous vocational interests than those without degrees; the women most likely to persist in their original vocational interests are those who selected an occupation before entering college, majored in a field of study which offered preparation for that occupation, remained within that field of study, and took their degrees in the college in which they first matriculated.

3931. Branson, Ernest P. The evaluation of training and other requirements for guidance officials. Long Beach, Calif., City schools, 1931.

3932. Breckenridge, Zella M. An analysis of the administration of personnel problems of high-school girls. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

Data for this study were obtained from advisers to girls and deans of girls from 10 States besides Pennsylvania and from 6 men principals in Pennsylvania. A study was made of 11 basic personnel problems: developing character; creating a consciousness of proper social relations; orienting freshmen girls; developing thrift; developing a broad health program; making wise choices of vocation and avocation; making wise choices of extracurricular activities; budgeting school time; harmonizing pupil-teacher relationship; harmonizing home-school relationship; and creating a consciousness of the need of attractive personal traits.

3933. Breitwieser, Thomas John. Occupational stability of the graduates of Pennsylvania State teachers colleges, 1910 to 1930. Doctor's, 1931. Indiana. 202 p. ms.

3934. Brindley, Marion Eldon. An occupational survey of the former students of the consolidated high schools of Jefferson county, Ind., as a base for curricular reorganization. Master's, 1931. Indiana. 60 p. ms.

3935. Buchanan, Martha Know. The possible relation between academic subjects, other school activities, and vocational guidance. Master's, 1931. Rutgers. 62 p. ms.

3936. Buchwald, Leona C. Follow-up of withdrawals, junior and senior high schools, September 10, 1929, to June 25, 1930, white and colored. Baltimore, Md., Department of education, 1930. 18 p. ms. (2 pts.).

Post-card survey of present occupational or educational status of withdrawals.

3937. Caldwell, Mary Jane H. Materials for teachers to use in giving vocational guidance through the study of biography. Master's, 1931. T. C., Col. Univ. 46 p. ms.

Bibliography covered all available biographies that are suitable for the study of workers in vocations of to-day.

3938. Chalaron, Claire. The registered nurse in New Orleans [New Orleans, La.] Herbert B. Holmes company, inc., 1930. 16 p. (Orleans parish school board. Vocational information series, no. 1.)

The study deals with the opportunities for registered nurses in New Orleans, for the information of the children in the New Orleans public schools.

3939. Chesnut, Inez. Vocational guidance through reading in the junior college library. Master's, 1931. Creighton.

3940. Clark, Charles W. An investigation into the use and value of vocational tests for aptitude in the program of vocational school. Master's, 1931. N. Y. St. Coll. for Teach. 23 p. graphs.

Scores from certain selected portions of a widely used vocational test were correlated with grades obtained by children in a city vocational school. Low positive correlations were found for the most part, though scores on the vocabulary test and IQ's showed a coefficient of correlation of 0.46 and scores on the same test and grades in English showed a coefficient of correlation of 0.53.

3941. Clark, Harold F. Economic theory and correct occupational distribution. New York City, Teachers college, Columbia university, 1931. 175 p.

This study shows the number of people there should be in each occupation in the United States and the duty and obligation of public education to so plan its program that the correct number will be trained. Some attention is given to the effect that such a policy would have in stabilizing employment, increasing wages and adding to the total economic welfare of the country.

3942. Clark, Willis W. Counselor activities in elementary schools. Los Angeles, Calif., City schools, 1930. Los Angeles educational research bulletin. 10: 6-13, September 1930.

This report gives descriptive data concerning the status of elementary schools in the field of counselor activities, secured during June 1930 from principals and counselors.

3943. ———— Elementary school counselor procedures. Los Angeles, Calif., City schools, 1931.

A detailed analysis of the objectives and methods of elementary counselors.

3944. Clinton, Margaret; Brown, Lydia; and Bartholomew, Elizabeth. A study of the deanship in Colorado high schools. Colorado school journal, 46:8-9, May 1931.

Data from a study of the deanship in junior and senior high schools in Colorado indicate that the movement in favor of employing an adviser or a dean is growing, and that the possibilities of the office are unlimited. There seems to be no very clear conception of the job of dean.

3945. Coberly, Edgar Holmes. A study of educational and vocational guidance in the senior high schools of West Virginia. Master's, 1930. Ohio. (For abstract see no. 712.)

This study is an attempt to ascertain the principal facts in regard to the organization and administration of guidance programs in the senior high schools of West Virginia. Data were obtained from questionnaires filled out and returned by 87 high school principals.

3946. Collins, Katherine Kennedy. A critical survey of occupational exploratory courses in the junior high schools of Los Angeles. Master's, 1931. Southern California. 184 p.

3947. Cooperrider, Luke K. An analysis of guidance plans in operation in 11 large cities of the United States with a suggested plan for a city of 300,000 population. Master's, 1931. Ohio. 230 p.

3948. Coxe, Warren W. How the high school prepares for occupations. New York State education department, Albany. New York State education, 18:964-65, 1018-19, June 1931.

Analysis of 10,000 questionnaires.

3949. ———— Reliability of vocational choices of high school students. Albany, New York State education department, 1930. School and society, 32:816-18, December 13, 1930.

Analysis of 10,000 questionnaires. Findings: A marked similarity exists between the proportions of present and former high school students choosing each occupation.

3950. Cunningham, Clark Marvin. The administration of vocational guidance in a junior high school. Master's, 1930. Oklahoma. (For abstract see no. 713.)

Questionnaires were answered by 1,000 pupils of Webster junior high school, Oklahoma City. Enrollment information was used to determine their permanency of choice over a 2-year period. The IQ and mental level of the pupils were compared with the level of occupational choice. Findings: The pupils are largely choosing their vocations regardless of the occupations of their parents or other relatives, and many of them are apparently choosing unwisely.

3951. Daniel, Mrs. Irene Butler. Student personnel work in Georgia. Master's, 1931. T. C., Col. Univ. 88 p. ms.

The study covers the placement of college graduates by the Georgia college placement office; other types of placement; loan funds; and personnel work in four institutions in Georgia.

3952. Dowling, Mary C. Guidance in the junior high schools of Connecticut. Master's, 1931. New York. 88 p. ms.

A study of guidance and guidance directors in the Connecticut junior high school and comparison with those of New York and Washington. Findings: Connecticut compares favorably with other States.

3953. Dulohery, Alice Jane. Analysis of counseling work in senior high school. Master's, 1931. Southern California. 120 p.

3954. Eastman, Douglas N. The counselor as a research worker. Master's, 1931. Wisconsin.

3955. Elliott, Margaret, and Manson, Grace E. Earnings of women in business and the professions. Ann Arbor, Mich., University of Michigan, 1930. 215 p. (Michigan business studies, vol. 3, no. 1, September, 1930.)

This study analyzes the present occupational status of 14,073 women in business and the professions with special emphasis on earnings in the various occupations and types of work. Data indicate that women in business and the professions are not highly paid; about three-fourths of the women are employed in commercial, educational, and manufacturing organizations; earnings increase with experience for about the first 20 years of work, remain fairly constant for the next 10 years, and then decline; earnings increase with age up to 50 years, vary but little between 50 and 60, and then decline. The proportion of earnings which goes for living expenses and into savings remains fairly constant regardless of the size of the community.

3956. Elson, Thomas Hughes. The influences determining the vocational selections of children. Master's, 1930. Denver. 73 p. ms.

The objectives of this study were: (1) To discover what actually are the specific influences which determine choices of vocations on the part of the children in the public schools; and (2) whether they may be so located with respect to the education periods of their lives and are of such nature that they may be controlled to the advantage of the young people concerned. The first thousand graduates of the Roosevelt high school were selected for the study. Conclusions: (1) Guidance in the school has given too little consideration to the psychological factors involved. Its program should be greatly modified on this basis; (2) the program has failed to appreciate the tremendous pull of social traditions in determining what one is to do for a living; (3) high-school graduates do not know their communities nor the variety of vocational opportunity lying within them. This material should be presented in simple detail and methods discovered for getting much more of it before them; (4) placement is largely through other agencies and it should therefore be made incidental to the program; (5) finally while there seems to be a necessary field for guidance in situations such as the one here analyzed, there must remain with us a large question as to whether an elaborate system can under these conditions be justified.

3957. Evans, Howard Rector. Guidance practices in small secondary schools. Doctor's, 1931. Northwestern.

3958. Ewan, M. A. Evolution of the office of dean of women. Master's, 1931. Ohio. 88 p. ms.

3959. Field, Donald E. Educational guidance in the senior high schools in Wisconsin. Master's, 1931. North Dakota.

3960. Fitzgerald, Bridget E. A study of the occupations of the graduates (1920-1930 inclusive) of the Holyoke high school. Master's, 1931. Smith.

3961. Fordyce, Charles. Guiding youth into a life career. 1930. University of Nebraska, Lincoln. The National altruist, vol. 7, no. 10. 2 p.

A study of the place of ambitions and aptitudes as criteria for guidance. Findings: A careful self-analysis as well as vocational analysis is essential to the finding of one's life career.

3962. ——— Psychological tests of telephone operators. 1931. University of Nebraska, Lincoln. American telephone journal, vol. 99, no. 6. 2 p. (More recently reported in December issue of the University alumnus.)

A detailed study of the operators in the Lincoln telephone and telegraph company to discover the essential qualities of a skillful operator, and to devise such measuring instruments as may discover these qualities. Findings: A high correlation exists between the results of the tests used and the efficiency of the operators as estimated by the officers of the telephone company.

3963. Gerberich, J. B. College entrance of Arkansas high school graduates who participated in the 1930 Arkansas educational guidance survey. [1931]. University of Arkansas, Fayetteville. 17 p. ms.

Follow-up of survey students entering college and comparisons between various groups.

3964. ——— Prediction of scholastic success by the 1930 Arkansas educational guidance survey of students entering Arkansas institutions of higher education in September 1930. 1931. University of Arkansas, Fayetteville. 8 p. ms.

Follow-up of Arkansas educational guidance survey participants to collegiate institutions of Arkansas to determine general and specific predictive power of the survey tests.

3965. ——— The second annual Arkansas educational guidance survey, spring 1931. University of Arkansas, Fayetteville. 6 p. ms.

Report of state-wide advisory and testing program for high school seniors.

3966. Graff, George E. A scale for rating guidance programs. Master's, 1931. N. Y. St. Coll. for Teach. 19 p.

A tentative list of items for use in a scale for rating the guidance activities in small school systems was obtained from literature on the subject. This tentative list, with a value assigned to each item, was twice revised after submission for criticism to workers in the field. The result is a numerical rating scale which may be used in such a way as to get a "score," thus making it possible to compare the efficiency of different schools.

3967. Greenleaf, Walter J. Guidance for careers. Washington, United States Government printing office, 1931. 10 pamphlets. (U. S. Office of education. Leaflets no. 5-16.)

No. 5, Law, 13 p.; no. 6, Medicine, 14 p.; no. 7, Dentistry, 10 p.; no. 8, Journalism, 6 p.; no. 9, Librarianship, 9 p.; no. 10, Architecture, 7 p.; no. 11, Civil engineering, 9 p.; no. 12, Electrical engineering, 11 p.; no. 13, Mechanical engineering, 11 p.; no. 14, Pharmacy, 15 p.

3968. Gridley, Beryl. The place of the high school girls' advisor in a teller society. 1931. University of Washington, Seattle. 222 p. ms.

Findings: Changing society makes girls' advisor more necessary for personal guidance. Type of training necessary calls for a course in sociology and psychology.

3969. Hamlin, Pearl Irene. Methods of giving curriculum guidance in the senior high schools of Southern California. Master's, 1931. Southern California. 111 p.

Based on an analysis of the professional literature, on interviews with 15 administrators and counselors, and on questionnaire replies from 64 schools.

3970. Hay, Dorothy. An evaluation of the subjects taught in the public high schools of New Orleans with relation to occupations included in U. S. census report for 1920. New Orleans, La., Orleans Parish school board, 1931. 22 p.

3971. Herman, Abbott Philip. Motivating factors in the choice of the vocation of the ministry by ministerial students. Doctor's, 1930. Chicago.

3972. Hodgins, Lucille. The vocational adjustment of the 1934 class of McKinley high school, Honolulu. Master's, 1931. Hawaii. 75 p. ms.

3973. Holmes, Ernest R. The organization of a system of guidance in the small high school. Master's, 1931. Rutgers.

3974. Hout, Lawrence Henry. The status of educational guidance in the medium-sized high schools in Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

This study finds the status of educational guidance such that it prevents educational guidance from contributing to the fullest efficiency of instruction in the medium sized high schools of Ohio.

3975. Hutcherson, George E. Vocational and educational guidance. Albany, N. Y., University of the State of New York press, 1930. 70 p. (University of the State of New York bulletin, no. 963.)

The purpose of this bulletin is to state the nature, purpose, and organization of educational and vocational guidance in junior and senior high schools. It contains an interpretation of the provisions of article 22 of the State education law and the rules and regulations of the Regents of the University that pertain to the administration of vocational and educational guidance and the certification of guidance counselors.

3976. Hutchison, Wilda J. A study of guidance toward college in the secondary schools of Washington and Westmoreland counties. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was to determine how, when, and by whom the educational guidance was given and to ascertain the nature of such guidance. A check list was sent

to the principals of 46 high schools that had 100 or more students, of whom 36 filled out and returned the check list. The results of the study show that there is no uniformity in the manner of giving educational guidance nor in the nature of the guidance given.

3977. Jeffers, Glenn B. A department of guidance and research for Preble county, Ohio. Master's, 1931. Ohio. 235 p. ms.

A study of the guidance possibilities in the schools of Preble county, Ohio. Findings: The schools of Preble county, Ohio, have a well established basis for the organization of a guidance program.

3978. Jensen, Theodore Joel. The relation of educational and vocational choices to the problem of high school guidance. Master's, 1931. Wisconsin.

3979. Johnson, Palmer O. An inquiry into farming as a professional career. 1931. University of Minnesota, Minneapolis. 125 p. ms.

An analysis of the factors effecting the selection of farming as a career by 630 alumni of seven land-grant institutions and their progress in their chosen field. Findings: Special interest, family connection, urge of family, and special ability, are the chief reasons advanced for the selection of farming. A total of 191 positions were held by 139 graduates and 45 by 39 nongraduates before returning to the farm after leaving college. Of the 630 alumni, 452 returned directly from college to the farm. Statistics are given concerning the type of farming engaged in, the capital investment, and the income by years over a 30-year period.

3980. Karnes, Edward Patrick. Vocational guidance in a boys' club. Master's, 1931. Notre Dame.

3981. Kiefer, George Lewis. Case studies in guidance of secondary pupils. Master's, 1931. St. Louis. 116 p. ms.

3982. King, Lulu. Employment and promotional conditions in Denver industries for young men ages 17 to 23 inclusive. Master's, 1931. Denver.

Managers of the 150 largest Denver industries were interviewed to learn the kinds of work, necessary qualifications, salary, possibilities of promotion, turnover, etc., in the industries studied.

3983. Kitson, Harry Dexter. An analysis of the work of painting with the spray brush. New York City, Employment center for the handicapped, 1931. 25 p. ms.

The research involved an investigation of 160 establishments where painting was done by means of the spray brush. Job analyses were made, showing the kinds of work performed with this technique, the number of workers engaged, wages, and other conditions of work.

3984. Lang, Bernard Anthony. The problem of vocational guidance for the boy who has left school. Master's, 1930. Notre Dame.

3985. Lee, Charles Ernest. A study of voluntary vocational counseling. Master's, 1931. Cincinnati.

3986. LeSeur, Margaret. Opportunities in the bookbinding trade. 1931. University of California, Berkeley. 80 p. ms.

This study is the result of a survey in San Francisco of the bookbinding trade as found in specialized as well as general bookbinding plants. It includes a special study of numbers of women employed and wages.

3987. Liff, Abraham Benjamin. Factors which lead ninth grade junior high school pupils to make their occupational choices. Master's, 1931. Southern California. 112 p.

Based on questionnaire responses from some 1,000 pupils, supplemented by school records and intelligence scores.

3988. Loder, Irving P. A guidance program in secondary schools. Master's, 1930. Syracuse. 125 p. ms.

The study covers the philosophy, aims, and methods of guidance in small city high schools.

3989. Loetzer, Louis Christian. Survey of the garage industry in Wilmington, Delaware. Master's, 1931. Rutgers. 31 p. ms.

3990. **McAlmon, Victoria May.** The development of occupational courses in the Los Angeles junior college. Master's, 1931. Southern California. 88 p.

An account of the detailed investigations which were made by the writer as a basis for each of a score or more of proposed terminal courses such as those for civil service occupations, playground directors, landscape gardeners, physicians' and dentists' assistants, etc., including the demand, as well as desirable qualifications, for each occupation.

3991. **McCray, Estelle.** A study in guidance: comparison of traits of high school seniors who say they are going to college with those who say they are not. Master's, 1931. Ohio. 78 p. ms.

The literature having to do with guidance was studied; 48 seniors in North high school who were expecting to graduate in February were interviewed; junior deans were interviewed; application forms from State universities were examined. Findings: The greatest selective factor in college attendance is financial opportunity; those students who are planning to go to college are nearly a random grouping so far as ability is concerned.

3992. **McKee, Frank John.** The educational and occupational history of a group of male high school graduates. Master's, 1931. Yale.

3993. **McVeigh, Wilma.** A study of deanship in small Ohio high schools. Master's, 1931. Cincinnati.

3994. **Manson, Grace E.** Occupational interests and personality requirements of women in business and the professions. Ann Arbor, Mich., University of Michigan, 1931. p. 281-409. (Michigan business studies, vol. 3, no. 3.)

A study was made of the interests and opinions of 13,752 mature, experienced women at the higher occupational levels throughout the country in an effort to contribute to the general fund of factual material on women's occupational interests and on the personality attributes necessary for success in occupations open to women, and in an effort to develop a reliable technique for analyzing and measuring occupational interests and personality requirements.

3995. **Martin, Paul E.** Occupational ambitions of students. Compton union district, Calif., Public schools [1930].

The occupational ambitions of students and the occupations of their parents were assigned index numbers by means of Barr's Rating scale of occupations. The ambitions of different age groups and ability groups were compared. Findings: Occupational choices become less ambitious with increasing age, and are more ambitious among the higher ability groups.

3996. **Mathews, Chester O.** A study of the counselor's interview. 1931. Ohio Wesleyan university, Delaware.

3997. **Miller, Mrs. Fern.** Vocational guidance in public high schools. Master's, 1931. Colo. St. T. C.

This study was undertaken in an effort to determine the present status of vocational guidance in representative high schools, and to form a judgment on desirable types of organization.

3998. **Miller, Nora.** Personal problems of the girls of Pender county, North Carolina. Master's, 1931. Cornell.

3999. **Moore, Gladys E.** Counseling and training for counseling with particular reference to the R. J. Reynolds high school, Winston-Salem, S. C. Master's, 1931. Harvard. 150 p.

4000. **Mosier, Willis Shipman.** A comparative study of the educational and vocational plans of eighth grade boys from the different types of schools of Ohio. Master's, 1931. Ohio. 103 p.

*4001. **Mussina, Malcolm V.** The origin and history of the National vocational guidance association. Master's, 1931. New York. 60 p. ms.

The vocational guidance movement developed from industry and from social workers who found that youth had little preparation for life. This study describes the first national conference on vocational guidance and the development of the National vocational guidance association.

*4002. Nelson, Elsie Redman. Guidance activities in Protestant churches. Master's, 1931. New York. 69 p. ms.

The purpose of this study was to determine to what extent the Protestant churches are participating in the growing enthusiasm for guidance activities which dominates the educational world. Data were secured from nine boards of religious education whose offices are in New York city, from books and magazine articles, and 57 checked questionnaires from clergymen of seven different denominations in seven States. Data indicate that there is a decided interest in guidance in its various phases.

4003. Pittman, Clara. Traits of Y. W. C. A. secretaries and measuring device for them. Master's, 1931. Nebraska. 61 p. ms.

A study of the staff of Y. W. C. A. in the Y. W. C. A. of Kansas and Nebraska.

4004. Pointer, P. D. Persistence of vocational choice. Master's, 1931. Iowa. 224 p. ms.

4005. Price, Myrtle V. Research and experimentation in developing guidance services. Master's, 1931. Wisconsin.

4006. Proctor, William Martin. Evaluating guidance activities. Vocational guidance magazine, 9: 58-66, November 1930.

4007. ——— Guidance program of a rural high school in California. Junior-senior high school clearing house, 5: 14-16, September 1930.

4008. ——— Wren, C. G. and Benfield, G. E. Workbook in vocations. Boston, Mass., Houghton Mifflin company, 1931. 135 p.

4009. Reinking, Lillian Antoinette. Prediction of college success; a study in educational guidance. Master's, 1931. Stanford.

*4010. Rosengarten, William. The size and trends of occupations in the United States. Master's, 1931. New York. 157 p. ms. (including 95 full-page graphs.)

A study and graphic presentation of the size and trends of 87 of the most important occupations from 1880 to 1930, and a consideration of their significance for education. Findings: Rising, declining, and intermediate occupations are determined. Most occupations are rising. For the most part, educational facilities are keeping pace with changing occupational demands. Insufficient provision for semiskilled occupations was found.

4011. Royer, Elmer B. A unique code number. Master's, 1931. Ohio. 35 p. ms.

The purpose of the study was to develop a code number for identification of individuals in follow-up studies. Findings: Seven or more digits are required for such a code number.

4012. Salisch, Lydia. Analysis of the waitress trade, with suggestions for training. Master's, 1930. California. 130 p. ms.

The author, through employment herself and through a survey in the East Bay region, made an analysis of the duties of the waitress in luncheonettes and lunch counters, in tea rooms, coffee houses, etc. Skills the waitress must gain and the knowledge she must acquire are outlined in detail. A training program especially adapted for evening schools is proposed.

4013. Santa Monica, Calif. City schools. Mechanical aptitude survey. 1930. 4 p. ms. (Report, no. 16.) (For abstract see no. 717b.)

The tests used were Stenquist mechanical aptitude test 1, which is regularly in use for annual survey purposes; Detroit mechanical aptitude test for boys; Detroit mechanical aptitude test for girls. The two latter tests were used for the first time in the Santa Monica schools.

4014. Schlichting, Minnie. Pre-college guidance of high school students. Master's, 1931. Nebraska. 76 p. ms.

An investigation of efforts to help college-bound pupils in 317 high schools in cities of 30,000 or more population in the United States to anticipate their college problems, and to adjust themselves to them. Investigation is based upon the assumption that it is educationally and financially economical to orient potential college freshmen in so far as it is feasible to do so.

4015. **Schreiber, Herman.** The validity of testing in vocational guidance. Master's, 1931. Coll. of the City of N. Y. 95 p. ms.

Evaluation of studies reported in current literature in the light of the degree of validity which the tests in use have reached. Conclusions: (1) No single test has proven a completely reliable or valid measure in forecasting an individual's chance of success in a vocation; (2) interest tests are unreliable, especially in the ages from 8 to 17 since interests change; (3) every possible factor influencing the individual must be considered and therefore the ultimate hope of successful guidance lies in the use of batteries of tests.

4016. **Scully, Eleanor.** Vocational guidance for girls in a suburban junior high school. Master's, 1931. Boston Coll. 106 p. ms.

4017. **Segel, David.** The development of certain guidance techniques in the junior college using Thurstone and Iowa test results and number of recommending units made in high school. Long Beach, Calif., City schools, 1930. 3 p. ms. (Junior college research study, no. 3.)

4018. ——— Occupations of part-time pupils. Long Beach, Calif., Public schools [1930].

This study classified the occupations of continuation pupils and analyzed all placements made through the junior employment office. It was shown that the boys' jobs centered around the automobile; the girls' jobs around salesmanship.

4019. **Sheppard, Aubrey Brownlee.** A program of guidance in junior high school. Master's, 1930. Tennessee. ms.

4020. **Smith, Lester Carl.** A point scale for evaluating personnel work. Master's, 1931. Chicago. 100 p. ms.

Questionnaire and scale were sent to over 60 institutions well distributed over the United States. A well-developed usable scale approved by 34 experts in personnel work was made.

4021. **Smothers, Homer Irel.** A comparison of the occupational careers of graduates of the vocational and nonvocational courses of the Newton, Iowa, high school. Master's, 1931. Iowa St. Coll. 60 p. ms.

4022. **Snitz, Reuben Herman.** An analysis of the sheet-metal worker's trade and a curriculum for the training of teachers of sheet-metal work in industrial arts courses. Doctor's, 1931. Indiana. 251 p. ms.

4023. **Spencer, F. E.** A survey of the extent to which occupational studies are being used in both counseling and occupations classes in secondary schools. Master's, 1931. Minnesota. 213 p. ms.

This study included data received from 669 guidance workers located in 28 States. Findings: Specific occupational studies should be adapted to the interest and capacity of ninth-grade pupils. These studies are used to a greater extent in occupations classes than in counseling. Most studies used pertain to certain groups of occupations especially to the professional group. At present the schools are facing the problem of producing their own specific occupational studies if they are to have up-to-date material for counseling and occupations classes.

4024. **Stephenson, John L.** Vocational survey of Greenwood, Ind. Master's, 1930. Indiana. 124 p. ms.

Findings: There are no occupations in Greenwood employing a very great number of workers; the building trades employ several workers where rather common knowledge and skills are required; a general shop would serve the needs of the community better than the woodworking course now being given; the great number of persons employed in the Greenwood factories require no skill where previous training is needed; the commercial course given in the schools is adequate.

4025. **Stone, Lovana E.** Trends in vocational and educational guidance. Master's, 1931. Colorado.

4026. **Strang, Ruth.** Who performs personnel duties? School review, 39: 33-41, January 1931.

An investigation of the high schools in New York State having no deans showed the various patterns of people who perform specific personnel duties in these institutions. In some schools these duties are "everybody's business"; in other schools, particular duties are delegated to certain teachers. In smaller schools the principal has the major responsibility; in the larger schools, the home-room teachers.

4027. Sturtevant, Sarah M. and Hayes, Harriet. Deans at work: discussions by eight women deans of various phases of their work. New York City, Harper and brothers, 1930. 295 p.

4028. Symonds, Percival M. Tests and interest questionnaires in the guidance of high-school boys. New York City, Teachers college, Columbia university, 1930. 61 p.

4029. Virginia. State board of education. Agricultural engineering as a profession. An occupational study for use in junior and senior high school. [Richmond, 1930.] 7 p. (Occupational studies, no. 6.)

4030. ——— Journalism as a vocation. An occupational study for use in junior and senior high schools. [Richmond, 1930.] 8 p. (Occupational studies, no. 10.)

4031. ——— Law as a vocation. An occupational study for use in junior and senior high schools. [Richmond, 1930.] 7 p. (Occupational studies, no. 4.)

4032. ——— Nursing as a vocation. An occupational study for use in junior and senior high schools. [Richmond, 1930.] 8 p. (Occupational studies, no. 1.)

4033. ——— Teaching as a vocation. An occupational study for use in junior and senior high schools. [Richmond, 1930.] 7 p. (Occupational studies, no. 9.)

4034. Wampler, Noah Frederick. A survey of the educational and vocational interests, purposes and plans of high-school students in seven high schools of the State of Washington. Master's, 1931. Washington. 97 p. ms.

Findings: High-school students recognize worthy objectives in school program but fail to make those objectives contribute to the attainment of the educational and vocational ends selected.

4035. Wanous, Samuel J. A program of vocational guidance in junior business training. Master's, 1930. Iowa.

4036. Webb, Cecil Stanley. Influence of courses in occupations upon the vocational choices of the pupils of Jefferson high school, Lafayette, Ind. Master's, 1931. Indiana.

*4037. Werner, E. Carl. An employment history of unskilled male office workers of continuation school age in Philadelphia for a period of five years. Doctor's, 1931. Pennsylvania. Philadelphia. University of Pennsylvania, 1931. 199 p.

This study of 805 boys who left school in 1925 shows that 75 per cent of the unskilled male office workers were over-age; they are chiefly American born; there was no significant difference between public and parochial school children with respect to any of the characteristics studied; boys who were older when leaving school had a higher income and earning power than the younger boys, this was maintained throughout the 5-year period; there was a general tendency for children leaving the higher grades to earn more than the children from the lower grades; the boys who were over-age and the boys who were accelerated seemed to earn more than the intermediate and more normal group of boys; there was little unemployment among these workers; more unemployment occurred during the second and the fifth year than during other years; 64 per cent of the cases studied did not change their employer during the first year; 17 per cent did not change during the five years; the boys had on the average, 2.1 changes of occupation; 53 different occupations were represented; an average of 1.3 weeks was lost without pay during the 5-year period of employment due to sickness and slackness; over 50 per cent of the cases sought additional education after leaving regular day school, by enrolling in

evening schools; the school group averaged only slightly superior to the others with respect to grade last attended in regular school and school progress; no relationship was found between the average final weekly salary and the number of semesters of attendance in schools subsequent to obtaining employment; 10 per cent of the workers had married before the end of the 5-year period studied.

4038. Wickham, Hal. The status of the dean of girls in Oklahoma. Master's, 1931. Oklahoma. 101 p. ms.

4039. Williamson, Oscar B. The effect of life career choice on the school work of the high school boy. Master's, 1931. Stanford.

4040. Winders, Harlan E. A study of the vocational choices of the high school students of Gibson county, Ind. Master's, 1931. Indiana. 128 p. ms.

4041. Wood, John W. An analytical study of vocations for which Alabama polytechnic institute gives specific training; a manual for the vocational guidance of high school students. Master's, 1931. Ala. Poly. Inst. 130 p. ms.

A series of chapters, each concerning a major vocation as to the general description, working conditions, advantages and disadvantages, qualifications, possibilities, income, preparation, and place where more complete information may be found. The vocations covered are in the fields of engineering, agriculture, home economics, education, and the sciences. The data were obtained from the most recent sources available.

4042. Wright, Alice E. Specific guidance problems of adolescent girls in public schools, business firms and industries, and women's and girls' organizations. Master's, 1930. Colo. St. T. C.

This study attempts to reach some definite conclusions as to the needs and demands of our adolescent girls for guidance advisers, and the qualifications needed by directors and counselors.

4043. Young, Earl Estel. Methods of imparting occupational information in Indiana high schools. Master's, 1931. Indiana. 95 p. ms.

See also 998, 1056, 1661, 1928-1929, 1965, 2007, 2178, 2250, 2437, 2471, 2552, 3475, 3747, 3804, 4077, 4219, 4346; and under Home-rooms; Student personnel problems.

EDUCATION OF RACIAL GROUPS

4044. Denver, Colo. Public schools. Spanish-American enrollment in the Denver schools from 1925-1926 to 1930-1931 inclusive. 1931. ms.

Data from annual reports were used to show the growth of enrollment of Spanish-Americans in elementary, junior high, senior high, opportunity, and evening vocational high schools.

*4045. Dunlap, Jack W. Race differences in the organization of numerical and verbal abilities. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1931. 71 p. (Archives of psychology, no. 124.)

A study was made of differences in numerical ability and verbal ability shown by the racial groups between the ages 10 years and 13-11 years of Japanese, Chinese, Portuguese, Hawaiian, part-Hawaiian, Korean, and Filipino children in the public schools of Honolulu, Hawaii, in the spring of 1927. All groups were tested on the Stanford achievement test, Form A. Two arithmetic and three reading subtests were used. Findings: The Hawaiians consistently ranked lower than any of the other groups in number and verbal material. The only sex difference consistent for all groups was that the males in every case exceeded the females in mean score in arithmetic reasoning. Differences were found between stocks in numerical and verbal material, and although small they were reliable.

4046. Dutton, Dewey Alva. A study of the application of intelligence tests to the Indians of the Southwest. Master's, 1931. Denver. 105 p. ms.

The National intelligence test, Form A, Scale 1, was given in the spring of 1924 by the writer to 457 mixed and full-blood Indians at the United States Indian schools of Albuquerque and Santa Fe, New Mexico. With the exception of 121 Navahos, practically all the Indians tested were Pueblos. Primary problems of the study were: (1) What effect does age have upon the intelligence quotient of full-blood Indians, with the effect of grade held constant? (2) What effect does grade have upon the intelligence quotient of full-blood Indians, with the effect of age held constant? (3) What effect does age have

upon the grade of full-blood Indians, with the effect of intelligence quotient held constant? (4) A comparison of the average, standard deviation, median, quartile, and percentage of overlapping of the score, intelligence quotient, and chronological age of the Southwest full-blood Indians, as shown by the National intelligence test in this work, with the same measures of other groups of full-blood Indians tested elsewhere by the same test. (5) Are we justified in forming any conclusions from these comparisons, relative to the efficacy of the National intelligence test in determining the general intelligence of Indians? (6) Are we justified, from the present available data, in setting up a race norm for full-blood Indians?

4047. Grace, Cyril Winfield. Internal and external factors affecting the social status of the Sioux Indians. 1931. University of Wichita, Wichita, Kans. 142 p. ms.

4048. Hanson, Edith Josephine. A study of intelligence tests for Mexican children based on English and Mexican test forms. Master's, 1931. Southern California. 78 p.

This study is based on the use of Mexican translations of the Detroit first-grade intelligence test and the Pintner-Cunningham primary mental test with some 140 children, including measures of reliability, etc., in each case.

4049. House, Hazelle L. A study of the Japanese in Pasadena, Calif., to determine the extent of their Americanization. Master's, 1930. Colo. St. T. C.

The purpose of the study is to reach some definite conclusions of the extent to which the Japanese accept our customs, and to make recommendations for improvement of Americanization programs in schools.

4050. Howard, Donald Stevenson. A study of the Mexicans and Spanish-Americans in Pueblo, Colo. Master's, 1930. Denver.

4051. Lighton, Edward William. Language difficulty and its measurement among Spanish-American junior high school students. Master's, 1931. Stanford.

*4052. Nichols, Claude Andrew. Moral education among the North American Indians. Doctor's, 1930. T. C., Col. Univ. New York City, Teachers college, Columbia university, 1930. 104 p. (Contributions to education, no. 427.) Bibliography, p. 101-104.

"This study presents concrete material concerning primitive education as revealed in the more recent anthropological literature." The author takes up the use of the story in Indian education, family and village education, the ideals presented in the sun dance and in military societies, and the moral teachings through religious ceremonies.

4053. Peak, George J. Relative achievement of English-speaking and Spanish-speaking children. Master's, [1931]. Arizona.

The new Stanford achievement test was administered to pupils in Tucson city schools. By means of mean squared contingency, the relation between nationality and attainment was investigated. Definite racial differences were found to exist.

4054. Fredmore, Royal L. Bi-lingualism and the first year of school. Master's, 1931. Rutgers.

4055. Rose, Winifred. A study of achievement of Indians. Master's [1931]. Denver. 220 p. ms.

Four hundred and fifty-one Indians (from 12 different tribes), children in the United States Government school at Albuquerque, New Mexico, from the fourth through the eighth grades, ages ranging from 10 to 21, were given four achievement tests for language usage, geography, arithmetic, and reading. To make a comparison of the native capacity and achievement, a fifth test was given, the Pintner non-language mental test. The purpose of the work was to narrow the field of achievement and to select a few specific fields of school training for investigation. Summary: (1) The IQ is inclined to rise with grade, but in an irregular fashion; (2) progress in the four lines of achievement, language, geography, arithmetic, and reading, is irregular but continuous. This holds true when measurement is done in terms of overlapping as well as in comparison of the medians; (3) the correlations for intelligence and achievement are too small to be taken into account in any grade except the fourth, etc.

4056. **Ross, Verne R.** The relations between intelligence, scholastic achievement, and musical talent of three racial groups. Doctor's, 1931. Southern California. 285 p.

A comparison was made of scores on the Seashore test received by 427 Indian, 365 Japanese, and 1,541 white children in grades 4 to 12, with related studies of correlation between musical ability, intelligence, and various scholastic measures. The thesis in general confirms the findings of the maker of the test.

4057. **Schneider, Virginia.** A comparative study of the abilities of white and Mexican children as shown by the rational learning test. Master's, 1931. Southern California. 93 p.

4058. **Sinclair, Crawford Clark.** Bi-lingual influence of school progress. Master's, 1931. Rutgers. 99 p. ms.

4059. **Smith, James Otis.** Racial differences in certain attitudes and personality traits. Master's, 1930. Northwestern.

4060. **Soong, Ruth Joan.** A survey of the education of Chinese children in Chicago. Master's [1931]. Chicago. 121 p. ms.

One hundred two children of the On-Leong Chinese school, "Chinatown," Chicago, Ill., were studied. Findings: Both the primary and intermediate social factors which condition the children's education are not favorable; various activities of the children show their cultural conflicts.

4061. **Watts, Mildred Wyly.** Indian children's interests revealed by literary preferences and creative writings. Master's, 1931. Peabody. 96 p. ms.

Analysis of favorite stories and poems, library preferences, and original writings of 178 Indian children in the primary grades to determine types of literature and interest factor preferred by these children. Findings: Types of literature preferred are: Nature, fairy, realistic, myths, and legends, Bible, fables. Interest factors preferred: Interesting characters, story-telling, familiar experience, childlike, dramatic action, fancifulness, animals, moral plot, surprise, narration, interesting information, dramatic possibilities, unusual experience, interesting repetition, humor.

4062. **Webb, Rebecca Frances.** The relative achievement of Mexican and American children in the elementary school. Master's, 1931. Stanford.

4063. **Williams, Maud Smith.** Growing straight. New York, N. Y., A. S. Barnes and Co., 1930. 137 p.

A new system of physical education with mental control, as practiced by the North American Indian. Gives the result of extended intimate acquaintance with the Indians.

4064. **Wolf, Key.** Federal aid for the education of Indian children in the public schools of Oklahoma. Master's, 1931. Oklahoma. 99 p. ms.

The Federal Government has a policy of paying tuition to public schools in which Indian children are enrolled in Oklahoma. The amount of the Federal aid was determined and compared with the total cost of Indian education in nine selected counties among the Five Civilized Tribes of eastern Oklahoma; also among five other tribes of western Oklahoma. A study of the history of the payment was made. A detailed study was made of the attendance of Indian children in all these counties. The data assembled show that the Government pays a small per cent of the cost of Indian education in these counties, and that the attendance of Indian children is far from satisfactory. The present method of payment is inadequate and it is failing to attain the desired result.

See also 127 (17), 1707, 4354.

NEGROES

4065. **Barry, Evelyn B.** The Negro girl in commercial life in New York City. Master's, 1931. New York. 56 p. ms.

A study of the sociological status and outlook, comparison with white girl in ability, scholarship and opportunity; contributions from leaders in Negro race. Findings: Field is opening up through big Negro business enterprise and white tolerance. Difference in ability and scholastic achievement between Negro and white groups on junior high school, senior high school, and business school levels, is negligible. Placement has been doubled in past year. Qualifications demanded by employers are becoming steadily higher. Scores in aptitude tests are much higher in white group than in Negro.

4066. Bassett, Mary Gladys. Reading interests of Negro children in two Southern counties. Master's, 1931. Peabody.

Study of communities themselves by author through personal visits and questionnaires. Findings: Sixty-three per cent of all children read; where there is library service, 89 per cent read. Negro children in all grades studied like Bible, animal, fairy stories, and books of everyday life better than other kinds.

4067. Blom, E. C. Partial report on a study of Negro education in Louisville, Ky. Louisville, Ky., Board of education, 1931. 31 p. ms.

A study of probable careers and vocational desires of pupils in junior and senior high schools; adult occupations; employment situation; Negro education in cities comparable with Louisville; and program for the education of Negroes in Louisville.

4068. Blose, David T. Statistics of the Negro race, 1927-1928. Washington, D. C., United States Government printing office, 1931. 16 p. (U. S. Office of education. Pamphlet no. 14.)

This report gives in a brief form statistics of the various institutions that have to do with the education of the Negro race in the United States.

4069. Bond, J. Max. The Rosenwald Y. M. C. A. development for Negroes. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The investigation was carried on by means of questionnaires, interviews, and the examination of records. An attempt was made to discover the aims, objectives, and types of programs which are carried out by the various associations in Negro communities. This study shows that the Y. M. C. A. movement among Negroes is the direct result of the combined activities of white and Negro citizens. The Rosenwald association provides a program of religious education, health and physical education, and of housing for its members. The physical program of the public schools and the municipal community centers provide a type of competition that the Y. M. C. A. is unable to meet. The housing program appears to be filling a real need in the community as its program is not being duplicated by any other agency.

4070. Bousfield, Mrs. Maudelle B. A study of the intelligence and achievement of Negro children. Master's 1931. Chicago. 102 p. ms.

Study of a group of 222 Negro children from grades 5 to 8, inclusive. Findings: They were below normal when measured by mental tests involving language; normal on non-verbal tests; slightly below normal in achievement; boys being higher than girls. Home conditions were extremely poor. Thesis suggests more refined study of the extent to which environment affects mentality and achievement.

4071. Brothers, Lionel Raymon. A study of the teaching personnel in Negro schools. Master's, 1931. Peabody. 32 p. ms.

Covers rural Negro teachers in four counties (Davidson, Williamson, Maury, Wilson) in Tennessee. Findings: The factors of age, preparation, and intelligence tend to increase salary of Negro rural teachers. Experience seems to decrease salary.

4072. Bullock, B. F. The preparation of Negro teachers for rural schools. Master's, 1931. T. C., Col. Univ.

A study of the 27 public normal schools and state colleges for Negroes in the 17 Southern States. Findings: 79 per cent of the Negro teachers in the United States are in rural schools. The emphasis is being put on the training of high-school and consolidated-school teachers in nearly all of these teacher-training institutions. Only one, Maryland normal school, Bowie, is making a specialty of training teachers for the elementary rural schools.

4073. Burr, John H., jr. A survey of physical education in Negro colleges and universities. Master's, 1931. Int. Y. M. C. A. Coll. ms.

4074. Cain, Emma M. Environmental factors in the lives of 100 problem Negro boys of Junior high school 139, Manhattan. Master's, 1931. New York. 80 p. ms.

Two groups of boys were studied—experimental group composed of 100 boys who had been adjudged delinquent by the courts, who were truants, or who were considered by principal to be chronic behavior problems of such a nature as to be of interest in this study; control group of 100 nonproblem boys. Findings: Broken home was an important factor; loss of father was more important than that of mother. Problem boy puts less effort into school work, and it seems that behavior difficulties may affect school work. Remedial physical defects may be responsible for some of conduct difficulties of experimental group.

4075. Cameron, Vivian Knowles. Folk beliefs pertaining to health of Southern Negro. Master's, 1930. Northwestern.

4076. Canal Zone. Division of schools. Colored testing results. Balboa Heights, 1931. 7 p. ma. (School bulletin, vol. 1, nos. 10 and 11, July and August 1931.)

Data indicate that in spelling, language, and arithmetic computation the Canal Zone colored schools do consistently better work than do the average United States white schools.

4077. Cherry, David K. Vocational activities of educated Negroes. Master's, 1931. Chicago. 48 p. ma.

Seven hundred and thirty-eight cases of graduates between the years 1922 and 1924 were studied. Findings: Educated Negroes find vocational opportunities mostly in the professions of teaching, the ministry, and medicine.

4078. Clement, Vera Mae. A study of retardation in seven selected Negro junior and senior high schools. Master's, 1931. Cincinnati.

4079. Cooley, Rossa B. School areas. An adventure in rural education. New Haven, Yale university press; London, Oxford university press, 1930. 166 p.

An experiment in Negro rural education developed after the general plan of the American farm school in Saloniki, Greece. This is the story of Penn school, St. Helena Island, S. C.

*4080. Crowley, Mary Agnes Roberts. A comparative study of Cincinnati Negroes in segregated and mixed schools. Doctor's, 1931. Cincinnati. 191 p. ma. (For abstract see no. 698.)

The problem involves the measurement of the influence of the segregated school with its Negro teachers and Negro associates, in comparison with that of the mixed school with its white teachers and pupils of both races, in terms of pupil achievement. The investigation was carried on in Cincinnati during the school year 1929-30. Findings: The segregated schools of Cincinnati are as effective as the mixed schools in their academic training of Negro children.

4081. Dawson, Earl E. The Negro teacher in the South. Master's, 1931. Iowa. 89 p. ma.

4082. Dean, Clarence Eravior. A survey of the agricultural instruction offered in evening schools for Negro farmers in North Carolina and Virginia. Master's, 1930. Iowa St. Coll. 74 p. ma.

*4083. Garner, Joseph. The education of the Negro pulpit for the changing Negro pew. Master's, 1931. New York. 67 p. ma.

This study covers a period of more than five years. During this time, a large number of Negro leaders in religion and education were interviewed. The opinions of perhaps 200,000 Negroes are represented. The changed attitude of the American Negro toward the "problem," demands of Negro ministers a training that will meet the new requirements of this new Negro.

4084. Goforth, Preston Cleveland. Financial aid to Negro education in South Carolina received from outside sources from 1917-1918 to 1927-1928, inclusive. Master's, 1931. South Carolina. 176 p. ma. (For abstract see no. 717.)

Summary of the participation of well-known foundations in Negro education in South Carolina.

4085. Griffin, Aaron Logan. A proposed program for a teacher of education for Negro teacher-training schools. Master's, 1931. Ohio. 80 p. ma.

By taking into account the present urgent needs of the Negro educationally, and the direction given by a modern point of view in education, the writer has attempted to propose a program for the preparation of the college teacher of education.

4086. Griffith, Theodore E. A study of Negro biography for high schools. Master's, 1931. Iowa.

A study of available biographical material on Negroes judged to be most important by white and Negro groups of students and leaders. Findings: Correlation between judging of white and Negro groups shows that whites consider Negro artists important and Negroes consider statesmen important.

4087. Hale, Morris Smith. The vocabulary of Negro high school pupils. Master's [1931]. Peabody. 11 p.

Vocabulary of pupils in Negro high school was studied. Findings: Total vocabulary found in study, 4,177 words.

4088. Haley, Simon Alexander. Determining the factors affecting curriculum construction for instructing adult Negro farmers in Oklahoma. Master's, 1931. Cornell.

4089. Hall, Frederick. Plan for development of music for Negro in rural South. Master's, 1930. T. C., Col. Univ. 67 p. ms.

Study included experimental music classes in Georgia and Mississippi and a survey of the music departments in the schools of higher learning and the county training schools in Mississippi. Study was designed to determine status of music and extent of its service to the rural community. It was found that the schools exist in the community but are not a part of it. Experimental classes carried on by advanced students at Jackson college proved the service that the school could render to the rural community, and according to these findings a plan is suggested for the carrying on the work on a large scale.

4090. Hudson, Alva B. Reading achievements, interests and habits of Negro women. Master's, 1931. Chicago. 71 p. ms.

The study included the testing of 125 Negro women in Chicago. Findings: The achievement in oral reading is fairly high. The achievement in silent reading is distinctly low. Magazines and newspapers are read universally by the group.

4091. John, Walton C. A report to the board of trustees of Howard university and to the Congress of the United States on a program of development of Howard University from 1931-1932 to 1940-1941. Washington, United States Office of education, 1931. 67 p. ms.

This report purposes presenting the essential features of an educational, financial, and building program covering a period of years and stating the bases of the cooperative educational and financial relations that should exist between the University and the Federal Government during the time in which the program is being carried out.

4092. Knox, Ellis Oneal. The trend of progress in the light of new educational concepts in a group of American colleges dominated by religious influences. Doctor's, 1931. Southern California. 290 p.

A critical analysis of the 1925-1927 surveys by the U. S. Office of education of conditions in Negro colleges, recent publications relating to Negro education, and opinions of administrative officials in such institutions; followed by an evaluation of these educational programs in terms of American accrediting standards.

4093. Long, Hollis M. Public secondary education for Negroes in North Carolina. Doctor's, 1931. T. C., Col. Univ.

4094. Marshall, Lonnie A. The present function of vocational agriculture, schools, and other agencies in the rural improvement of Negroes in Leon county, Florida. Master's, 1930. Iowa St. Coll. 135 p. ms.

4095. Mitchell, Fred Tom. Proposed plan for training Negro teachers of vocational agriculture. Doctor's, 1931. Cornell.

A study to determine the constants and probable variables in a teacher-training course of study designed to meet the needs of graduates of the Agricultural, mechanical and normal college at Pine Bluff, Ark.

4096. Norris, Ernest Michael. Survival and age-grade status of boys in rural public schools for Negroes in 14 Kentucky counties. Master's [1931] Cornell.

A study of survival, elimination, and age-grade status, with conclusions and recommendations.

4097. Patterson, John E. Growth of Rosenwald schools in North Carolina since 1915. Master's, 1931. Kansas.

A historical survey of the development of a special system of financial aid in the State beginning with one school in 1915 and including 736 school buildings in which 102,150 pupils were enrolled in 1929. Tables compare attendance, costs, and teacher preparation with white schools in the same territory.

4098. Phillips, Myrtle R. The development of education for Negroes in Kentucky. Master's, 1931. Chicago. 239 p.

Development of education for Negroes in Kentucky from 1776 to 1930.

4099. Pitt, Florida L. The portrayal of Negro character in contemporary fiction and drama. Master's, 1931. Colo. St. T. C.

In this study the writer attempts to determine the attitudes of Negro and white authors in their portrayal of Negro characters in contemporary fiction and drama, and to make a collection of Negro fiction and drama which is of value for Negro secondary schools.

4100. Reid, Orleans, jr. A determination of the educational needs of Negroes in Allendale county, S. C. Master's, 1931. Cornell.

4101. Richards, Eugene Scott. A study of materials dealing with race educational problems. Master's, 1931. Southern California. 79 p.

A series of adverse criticisms of the Negro's position in American schools, his industrial, political, and educational life, drawn from 13 textbooks in sociology.

4102. Sherard, Catherine. The development of the secondary, industrial, and higher education of the Negro in Georgia. Master's, 1931. North Carolina. (For abstract see no. 710.)

This study attempts to present the need in the State of Georgia for a state-wide tax supported system of public schools for Negroes in the secondary, industrial, and higher fields of education.

4103. Smith, Isabel. The prognostic value of the Stanford achievement test for first-year high school Negro pupils. Richmond, Va., Public schools, 1931. 8 p. ms.

4104. Telford, C. W. and Peterson, Joseph. Results of group and of individual tests applied to the practically pure-blood Negro children on St. Helena Island. *Journal of comparative psychology*, 9: 115-44, 1930.

4105. Thomas, James Rector. A program for practice teaching in vocational agriculture at Virginia State college for Negroes, Petersburg, Va. Master's, 1931. Cornell.

The following questions were studied: (1) What methods are used by State institutions in conducting practice teaching? (2) What activities do the trainees participate in and upon which do these institutions seem to agree? (3) What activities do the trainees observe and upon which do these institutions seem to agree; (4) What methods of supervision are used by State institutions in conducting practice teaching?

4106. Tippit, J. Talmadge. Achievement of Southern Negro. Master's, 1931. Denver. 167 p. ms.

A study of 484 Negro children in the schools of Nashville, Tenn., in grades ranging from the fourth through the eighth, ages ranging from 7 to 19, who were given achievement tests in language usage, nature study and science, arithmetic, and reading of the Stanford achievement test, Form A. Findings: (1) The IQ is inclined to rise with grade (range is from 80 in the fourth grade to 92 in the eighth grade with an average IQ for the group of 85.4); (2) progress in the four lines of achievement, language, nature study and science, arithmetic, and reading is continuous (greatest progress is made in reading and the least in language usage); (3) the correlations for intelligence and achievement are too small to be taken into account except in the fourth and eighth grades; (4) the correlations for age and achievement are very low (age appears to be a negligible factor); and (5) both language and reading ability have a greater influence on achievement in nature study and science where careful reading is necessary than on achievement in arithmetic.

4107. Walden, V. O. A teacher training program for elementary Negro teachers in North Carolina. Master's, 1931. Ohio.

4108. Whitaker, Hazel Gottschalk. A study of gifted Negro children in the Los Angeles city schools. Master's, 1931. Southern California. 86 p.

A study of the literature relating to the abilities of Negro and white children compared, followed by a comparative study of a group of gifted Negro children compared with a control group of Negro children in school achievement, in scores on a test of musical talent, and in ability in art.

4109. **Work, John Wesley.** The folk songs of the American Negro. Master's, 1930. T. C., Col. Univ. 40 p. ms.

A discussion of the origin, growth, and nature of the folk songs of the American Negro (spirituals, blues, work songs, and social and miscellaneous songs). Findings: Although many of the songs show traces of African influence, and a few of them, the influence of prevailing American songs, nevertheless they are essentially original creations. These songs also reflect the life and thoughts of the American Negro of the period in which they developed. So far as the singer of these songs is concerned, the rhythmic figures of the music are of far greater importance than the meaning of the words.

See also 176, 545, 625, 641, 8420, 8554, 8740, 8756, 8761, 8778, 4360, 4363.

EXCEPTIONAL CHILDREN

4110. **Chalaron, Claire.** Study of 100 cases recommended to opportunity classes. New Orleans, La., Orleans parish school board, 1931. 12 p.

4111. **Davis, Robert A.** Mentality of orphans. Boston, Richard G. Badger, The Gorham press, 1930. 182 p.

The present investigation attempts to arrive at a tentative conclusion as to the mental status of orphanage children and to determine some of the factors which influence that status.

4112. **Forsythe, Hazel Lees.** Education for mentally and physically defective children. Master's, 1931. Chicago. 202 p. ms.

A study of the education provided for mentally and physically defective children as revealed in educational surveys of city systems. Gives a summary of special instruction for various grades of mental defectives, and for anaemic and tubercular, blind, partially blind, deaf, partially deaf, crippled children, and those with defective speech.

4113. **Halverson, Henrietta E.** The State and special types of children in Maryland. Master's, 1931. Maryland.

Traces the development of state provision in Maryland for orphans, the deaf, the blind, the feeble-minded, the juvenile delinquents, and crippled children. Findings: During the nineteenth century the State of Maryland began to make provision for the education and care of special types of children but it failed to develop a clearly defined policy. Gradually, however, the State subsidised private institutions and established State institutions for these children. In 1930 the State maintained four institutions and assisted in the support of 39 private agencies for the care and education of special types of children. A small amount of State supervision of these institutions and agencies has been established.

4114. **Heminger, Sara Elizabeth.** The care of dependent children in California, 1850-1879. Master's, 1931. Mills.

4115. **Iowa.** State department of public instruction. The status of state programs of special education. [Des Moines, 1930.] 6 p. ms. (Research bulletin, no. 3, September 1930.)

4116. **Martens, Elise H.** An annotated bibliography on the education and psychology of exceptional children. Washington, United States Government printing office, 1931. 48 p. (U. S. Office of education. Pamphlet no. 23, July 1931.)

The bibliography was limited to those books and printed bulletins and pamphlets, published in the English language and issued since 1920, which deal exclusively or primarily with problems of exceptional children. All of the books included have been examined personally by the author. The bibliography has been divided into 12 sections.

4117. **Parks, James Edward.** The efficiency of orphanage and public school pupils. Master's, 1931. Colorado.

4118. **Ritter, Martha D.** A study of the Albany orphan asylum. Master's, 1931. N. Y. St. Coll. for Teach. 25 p.

This is a survey of the intelligence and the achievement of the children in the institution named in the title. Results are made the basis of recommendations. These have to do especially with further testing of the children, the filing of records, and the organization of activities in such a way as to furnish better advantages for study.

4119. **Spless, Henry Richard.** The organization and administration of an exceptional school unit. Master's, 1931. Stanford.

4120. **Warner, Roger B.** The number of students in need of special education and plans for a central school in Delaware county, Ohio. Master's, 1931. Ohio.

A survey of physically, mentally, and socially handicapped children in Delaware county rural schools made by a personal visit into each district and interviewing principals and teachers of each district. Findings: Among 3,843 students in county system, there were 1 blind, 17 with defective vision, 2 deaf, 15 hard of hearing, 16 cripples, 23 anaemics, 72 feeble-minded, 44 with defective speech, and 27 socially handicapped or delinquent.

4121. **Worcester, Mass. Public schools.** Worcester public schools—special classes. Worcester, Mass., School department, 1930. 23 p. (Reprint from annual school report for 1929.)

History, aims, and work of the special classes.

See also 127 (11), 2071.

GIFTED CHILDREN

4122. **Hall, John J.** How does your school rate in providing for gifted children? A score card. Journal of educational research, 22: 81-88, September 1930.

A questionnaire was submitted to a group of graduate students and professors at Stanford university. Since the study is a self-rating score card there are no conclusions.

4123. **Hennessy, William Daviss.** An evaluation of an adjustment school for exceptionally bright pupils. Master's, 1930. Indiana. 95 p. ms.

The study describes the founding, organization, and methods of instruction of the Columbus adjustment school, compares it with other comparable schools, and measures the outcomes of its instruction for exceptionally bright pupils. Findings: Pupils from the adjustment school did better work in high school with less social maladjustment than did pupils of the same range of IQ who had not had adjustment school experience. The adjustment school pupils studied have gained 18 months in their school career. A great amount of freedom given to the child of high IQ seems to stimulate him to greater and more sustained effort rather than to encourage him to indolence and misdirected effort.

4124. **Holland, Carol M.** A study of gifted students in two normal schools including a survey of some of the literature dealing with the gifted. Master's, 1931. New York. 81 p. ms.

4125. **Hollingworth, Leta S.** Do intellectually gifted children grow toward mediocrity in stature? Pedagogical seminary and Journal of genetic psychology, 37: 345-60, September 1930.

The study follows 47 gifted children (IQ's above 135 S-B) for seven years in measurements of stature. Findings: Gifted children (above 135 IQ) maintain constantly, as a group, a mean stature between 5 per cent and 6 per cent above that of the generality.

4126. ——— and **Gray, Howard A.** The achievement of gifted children enrolled and not enrolled in special classes. 1931. Teachers college, Columbia university, New York, N. Y. 10 p. ms.

A 3-year study of a comparison between two groups of children testing above 130 IQ (S-B), the one segregated for instruction, the other heterogeneously grouped. Findings: Segregation makes no difference in educational achievement of the gifted.

4127. ——— ——— Birth months of intellectually exceptional children. [1930] 8 p. ms.

Shows the distribution of birth months for 193 children testing above 130 IQ (S-B) as compared with 207 children testing below 70 IQ (S-B) all of New York City. The distribution is similar for both groups.

4128. ——— ——— Juvenile achievement as related to size. Teachers college record, 32: 236-44, December 1930.

Fifty gifted children, in competition with one another for two years, were studied to see whether Adler's theory of "inferiority" would hold. Findings: Scholastic achievement is no greater for small children than for large children, IQ being equal.

4129. Lazarus, Isabel. Similarities of bright and dull children. Baltimore, Md., Department of education, 1930. Baltimore bulletin of education, 9:7-11, September 1930.

A comparison of X, Y, and Z pupils in the primary grades in test results, age, and progress through the grades.

4130. Lewin, Lillie. Success of superior under-age pupils in the low first grade, spring term—1931. San Francisco, Calif., Public schools, 1931. 3 p. ms. (Bulletin no. 32.)

4131. McMurry, Vera Lucille. An investigation of a group of children of superior mental ability in a six-year high school of Los Angeles. Master's, 1931. Southern California. 92 p.

A study of attitudes, interests, personality traits, personal histories, and educational background of a group of high school pupils with IQ's over 130, compared with a control group selected at random.

4132. Remmers, H. H. Distinguished students—what they are and why. Lafayette, Ind., Purdue university, 1930. 36 p. (Purdue university, Division of educational reference. Studies in higher education, 15.)

The general problem of the present study consisted in obtaining an answer to the question, "In what measurable ways do distinguished students differ from their non-distinguished fellow-students?" As much material as possible was brought together for all students who had appeared one or more times on the list of distinguished students for the years 1926-27 to 1929-30, inclusive. This total of 531 students was contrasted with approximately 300 students who had failed to achieve distinction.

4133. Stone, Violet Gooch. A study of the organization and administration of a class for gifted children. Master's, 1931. Southern California. 64 p.

4134. Terman, Lewis M., Burks, Barbara S., and Jensen, Dortha W. The promise of youth, follow-up studies of 1,000 gifted children. Stanford University, Calif., Stanford university press, 1930. 508 p. (Genetic studies of genius, vol. 3.)

See also 734, 1278, 1288, 1616, 2464-2465, 4108.

SUBNORMAL CHILDREN

4135. Abts, Dorothy Mary. A study of personality traits in a group of feeble-minded boys. Master's, 1931. Catholic Univ. 19 p. ms.

4136. Aldrich, Cecelia Gorsuch. Incentive as a factor in problem solving among idiots. Vineland, N. J., Training school, 1930. 6 p. (Reprint from the Training school bulletin.)

The subjects of this study were eight boys of the Training school, whose mental ages ranged from 19 to 38 months, and whose life ages were between 8.6 and 11.9 years. Data indicate that there is only a relatively slight relationship between mental age and the value of incentive.

4137. ——— and Doll, Edgar A. Comparative intelligence of idiots and normal infants. Pedagogical seminary and Journal of genetic psychology, 39: 227-57, June 1931. (Reprint.)

The idiot subjects of the investigation included 12 boys at the Training school at Vineland, classed as of idiot grade. These subjects are high-grade idiots, and nearly half of them are at the borderline of low-grade imbecility. According to Kuhlmann-Binet mental-age scores, their mental development will not exceed 3.5 years. The control group of normal infants consisted of 12 children from private families in Vineland, selected on the basis of life age as compared with the Kuhlmann-Binet mental ages of the idiot subjects. Three genetic scales, Kuhlmann-Binet, Gesell, and Stutsman, were administered to each child of both groups. All three scales were administered in one examination period. The complete examination required from 30 to 60 minutes, depending on the ability of the child and his attitude toward the examination. Findings: Idiot chil-

dren displayed inferiority on the Kuhlmann-Binet scale. The gross scores on the Gesell normative summaries were equal, but there was a greater spread of abilities among idiots than among normal infants. Idiot children were superior to the normal infants on the performance tests of the Sturzman series, revealing greater manual dexterity. Language fails to develop among idiot children in relation to their other abilities. The manual superiority of idiot children leads to the expectation of training possibilities which have been demonstrated in the training of children of this grade of disability.

4138. ——— Problem solving among idiots. *Journal of comparative psychology*, 12:137-69, August 1931. (Reprinted.)

The subjects of this study were eight feeble-minded boys of idiot level, ranging in life age from 8 to 12 years and in mental age from 19 to 38 months. The purpose of the study was to compare the behavior of anthropoids and idiot children in the same situations and to point out similarities and dissimilarities between them as groups, in the hope that such comparison would throw light on the theoretical aspects of idiocy.

4139. Balthaser, William A. Administrative provisions for mentally handicapped pupils. Master's, 1930. Pennsylvania. 105 p. ms.

4140. Bennett, Annette. A comparative study of subnormal children in the elementary schools. Doctor's, 1931. T. C., Col. Univ.

A comparative study was made of a group of subnormal children in the regular elementary grades matched in chronological age, mental age, and intelligence quotient with children who had profited by one year or more of instruction in special classes for mentally retarded children to determine if there were any important factors in educational history, school achievement, physique, personality make-up, or adjustment to the social régime which differentiated the one group from the other. Fifty children in the special classes of the Baltimore city school system were matched in chronological age, mental age, and intelligence quotient with 50 children from the elementary schools. The children were all given a Binet test. Findings: There are more than twice as many boys in the special classes as girls. The special class group was markedly inferior to the grade group in vision. The grade group excelled those of the special group in reading, arithmetic computation, arithmetic reasoning, and in spelling. Children from the two groups came from homes of approximately the same economic status. In average number of physical defects reported by the school physicians there was a difference of only 0.5 of a defect.

4141. Beumer, Oliver Chester. The significance of scattering in the psychometric test of scores of abnormals. Master's, 1930. Iowa.

4142. Bryant, Samuel Milton. A study of teratology and its relation to mental defect. Master's, 1931. Temple.

4143. Doll, Edgar A. Department of research. Annual report 1929-1930. Vineland, N. J., Training school, October 1930. 7 p. (Department of research series 1930, no. 7.) (Reprint from the Training school bulletin.)

4144. Gillam, Dorothy. Temperamental differences of 30 subnormal children. Master's, 1931. Cincinnati.

4145. Kilmer, Elmer Kinsey. A survey of children and adolescents who are patients in certain state hospitals for the insane. Doctor's, 1931. New York. 187 p. ms.

Case records of 754 children and adolescents of school age, committed to four mental hospitals in greater metropolitan district of New York City, were studied. Findings: The most frequent mental diseases occurring in children and adolescents are dementia praecox and manic-depressive psychoses.

4146. Kuenzel, Myra W. The hemoglobin indexes of 200 feeble-minded "children." 1931. 5 p. (Reprint from the Training school bulletin, Vineland, N. J., March 1931.)

The hemoglobin indexes of 150 boys and 50 girls ranging in age from 5 to 49 years were tabulated from the medical reports on file at the Training School at Vineland, N. J., in order to compare them with normal persons. The hemoglobin indexes of feeble-minded "children" range from 50 to 100 which is below the standard accepted as normal. Correlations between hemoglobin index and life age or intellectual status do not appear to be significant.

*4147. Kunzig, Robert W. Public school education of atypical children. Doctor's, 1931. Pennsylvania. Washington, United States Government printing office, 1931. 160 p. (U. S. Office of education. Bulletin, 1931, no. 10.)

The scope of this study embraces the legal basis, the cost, and the extent of development of special educational facilities for atypical children under local school board control in the 68 cities of more than 100,000 population (1920 census).

4148. Martin, M. F. Newspaper reading of subnormal children. Los Angeles, Calif., City schools, 1931.

A study to ascertain whether or not subnormal children can profit by newspaper reading.

4149. Massachusetts. Department of education. Survey of special education for atypical children, January 1, 1931. Boston, 1931. 27 p.

4150. Norris, T. Ethel. A study of a group of 25 cases at Roselle, N. J., that were promoted on a chronological basis rather than on achievement records. Master's, 1931. New York. 34 p. ms.

Findings: For abnormal cases chronological promotion tends to create markedly superior attitudes in comparison to those created by promotion on achievement records.

4151. Unger, Edna W. and Burr, Emily T. Minimum mental age levels of accomplishment. A study of employed girls of low-grade intelligence. Albany, University of the State of New York, 1931. 108 p.

The material forming the basis of this study, including the mental age, chronological age, type of job and length of time on the job, was collected from 2,649 cases. Findings: Work can be found for girls measuring as low mentally as 5 years.

4152. Weller, Warren O. Legal provisions and common practices for the education of mentally deficient children. Master's, 1931. Temple.

4153. White, Dorothy. Supplement to a survey of classes for atypical children. Louisville, Ky., Board of education, 1931. 15 p. ms.

See also 538, 557, 734, 1604.

PROBLEM AND DELINQUENT CHILDREN

4154. Armstrong, Caroline. Behavior trends of educationally mal-adjusted pupils. Los Angeles, Calif., City schools, 1931. (Fourth yearbook. School publication, no. 211.)

A study of social and personal factors of educationally maladjusted pupils in remedial rooms for average pupils of normal intelligence.

*4155. Armstrong, Clairette P. Why boys desert their homes. Doctor's, 1931. New York. 236 p. ms.

This is a case study of conditions in the lives of boys in New York City who desert their homes, to discover whether there are any characteristics which differentiate run-away boys from other types of delinquents or from unselected boys. Findings: Data indicate that family maladjustment is the general cause of a boy leaving his home and the school has an important part in stimulating this reaction.

4156. Baker, Harry J. The analysis of behavior problems. In Ohio State educational conference. Proceedings, 1921. p. 125-32.

This paper purposes presenting the newer techniques for the diagnosis and analysis of behavior problems. A study was made of 67 pairs of behavior and nonbehavior cases in "Behavior analysis" and "Telling what I do" tests of 66 items.

4157. ——— The study of educational disability. In Ohio State educational conference. Proceedings, 1931. p. 158-66.

The purpose of this report is to present the methods and results of a study of educational disability conducted in the Detroit public schools. The pupils were selected from seven Detroit elementary schools. The pupils studied were all 9 years old. A special study was made of 60 pupils who had received final marks falling in the two lowest groups in a scale of five fundamental school subjects. It was found that 53 of the 60 cases had some unusual social difficulties or physical disabilities which were serious obstacles to the progress of the program of educational restoration.

*4158. **Berger, Ross.** The identification and treatment of problem children in P. S. 208, Brooklyn. Master's, 1931. New York. 122 p. ms.

Findings: Home conditions and recreational life are important factors in understanding the "whole child."

4159. **Buckner, William Pascal.** The intellectual and emotional status of State reformatory boys. Master's, 1931. Colorado.

The purpose of this study was to determine the intellectual and emotional status of 150 reformatory boys in the Texas State training school for boys, at Gatesville, Texas.

4160. **Chapman, Harold B.** Parental school inquiry. Baltimore, Md., Department of education, 1930. 7 p. ms.

The study reports the results of an inquiry sent to cities of 100,000 and over to discover their practice in the handling of extreme cases of truancy and the administration of parental schools where such schools are maintained.

4161. **Cole, Edith Moore.** A study of problem cases reported by high school teachers. Master's, 1930. Oklahoma. (For abstract see no. 713.)

A study was made of 251 cases of adolescent maladjustment furnished by 94 teachers, mainly in Oklahoma schools. The maladjustments fall into these general groups: excessive self-assertion; tantrums and sulking; stealing and lying; social maladjustments; and indifference to school.

4162. **Conklin, Paul Stanley.** Training school commitment for boys under seventeen. Master's, 1931. Wisconsin.

4163. **Delmet, Frances Casey.** Educational achievement of correctional school boys under the contract plan. Master's, 1931. Southern California. 73 p.

A study of the progress of 80 boys as measured by gains on the Stanford achievement test after one calendar year during which they had been taught by the contract plan.

4164. **Dolan, Alice H.** Identification and treatment of problem children in Public school 219, Brooklyn. Master's, 1931. New York. 119 p. ms.

A study of the basis upon which children are identified as problems by their teachers and the measures taken by the school in dealing with them. Findings: (1) Teachers identify as problems those children whose behavior violates their standard of morals and those who disturb the orderly classroom routine; (2) a comparison of the intelligence and educational achievement of problem children with unselected children revealed that problem children are inferior in both respects; (3) a careful study of the behavior of the problem and unselected groups revealed that the problem children were recognized because of the disturbing factor while the personality deviations of the unselected group were not recognized as problems; (4) a comparison of problem children's social background with that of unselected children showed the economic status of the problem group to be slightly inferior. Stronger affectional home ties were reported by the unselected group.

4165. **Dyck, John Paul.** A study of normal junior high school problem boys. Master's, 1931. Southern California. 222 p.

Results of detailed case-studies based on data secured by questionnaires, interviews, and analysis of school records of 70 boys, half of whom were in regular school and half in special schools.

4166. **Eccles, August K.** Development and use of the adjustment score card. Master's, 1931. Rutgers. 62 p. ms.

4167. **Embree, Royal Burdick.** A comparison of delinquent boys and non-delinquent boys with reference to Biblical knowledge, religious training, economic and social status. Master's, 1930. Ohio. (For abstract see no. 712.)

A test battery covering Biblical knowledge, religious training, economic and social status, and an intelligence scale, was prepared and administered to a group of delinquent boys from the Boys' Industrial school in Lancaster, Ohio, and to a group of nondelinquents secured from various public-school systems throughout the State and in North Manchester and Manchester, Ind. Conclusion: The nondelinquent group was intellectually superior to the delinquent group; the delinquent group was superior in economic status, but inferior in social status; the nondelinquent group showed a definite superiority with reference to moral and social attitudes; there is little difference between the groups as far as religious attitudes are concerned; the nondelinquent group proved superior with regard to Biblical knowledge; the delinquents had partaken of more experiences of a religious nature than had the nondelinquents.

4168. Folsom, Tephia Irene. An analysis of the population of the training schools for juvenile delinquents in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The study shows that about three-fourths of the delinquents were products of broken homes. Other factors were: Poor environmental conditions, poverty, employment of the mother outside of the home, and frequent change of residence. The reformatory population tended to rank lower in various achievement tests than public school children in general. Regular curricular subjects and projects were given in the various schools; vocational courses were offered the children.

4169. Frank, Jeannette. Study of first offenders who appear in juvenile court. Master's, 1931. Ohio. 62 p. ms.

*4170. French, Cora V. One hundred discipline cases. Master's, 1930. New York. 228 p. ms.

A careful analysis of psychological examination, physical condition, social development, behavior problem, treatment, and result of the 100 discipline cases to discover the contributing factors; to emphasize the necessity for understanding the causes underlying truancy, stealing, sex misconduct and other forms of disorderly conduct in school; to stress the importance of the public schools as the first relay station where potential defectives of all descriptions, physical, mental, educational, and social, may be recognized and where treatment may be begun. Findings: The IQ's of 27 per cent of cases ranged between 90 and 99; 50 of the cases had IQ's less than 90; 74 per cent were suffering from physical defects; four-fifths of the children could plead no history among their kindred of any definable crime; 77 per cent of the cases were behavior problems and did unsatisfactory school work; 50 per cent of the cases were from broken homes.

4171. Gage, Olive Josephine. An objective scale for measuring problem behavior. Master's, 1931. Catholic Univ. 49 p. ms.

4172. Gesell, Arnold L. Is he a problem? Yale clinic of child development, Yale university, New Haven, Conn. McCall's, 18: 38, 134, 1931.

*4173. Grosscup, Ethel A. Juvenile delinquency fluctuations in areas with and without playgrounds. Master's, 1931. New York. 52 p. ms. Appendix: 17 p. ms.

This is a study of the types, extent, and fluctuations of juvenile delinquency in certain areas in Manhattan with and without playgrounds from 1920 through 1928. Findings: The mere presence of a playground has no close bearing on the amount, types, and fluctuations of juvenile delinquency in its immediate neighborhood.

*4174. Guerrieri, Anthony. Study of behavior problem cases in relation to school achievement. Master's, 1931. New York. 61 p. ms.

A study to find if there exists any correlation between problem children and their educational achievement. One hundred and thirteen children were the subjects of the study. Conclusions: Considering the problem children in a group, their achievement record stands on a very low level.

4175. Guinan, Sister Mary Angelica. Critical analysis and remedial treatment of typical maladjusted high school girls. Master's, 1931. Notre Dame.

4176. Hagerty, Richard Harcourt. Problem boys in American private schools. Master's, 1930. Virginia.

4177. Jackson, Creasia L. The behavior problems of the University high school boys and girls. Master's, 1931. Oklahoma. 60 p. ms.

*4178. Klein, Alexander. Study of sixty-five disciplinary problems in an elementary school. Master's, 1931. New York. 64 p. ms. + tests.

A study of disciplinary cases referring specifically to intelligence, achievement, and attitude testing supplemented by case studies. Gives some causes of disturbances and suggestions for remedial programs.

*4179. Lamkin, Irene E. Parental resistances. A study of parental resistances encountered in the treatment of problem children. Master's, 1931. New York. 180 p. ms.

Data were secured from 108 cases intensely handled over a period of six months to three years from the files of a child-guidance clinic. Problems of overcoming parental

resistances is one of helping parents to resolve their underlying conflicts out of which the most superficial resistances have arisen. The study illustrates that ultimately the problem has its nexus in the marital relationship between the parents and leads from there down into the emotional patterns of each parent and back through the parental life history, which has fashioned those patterns. Parental resistances encountered in 75 of the 100 cases indicate need for a practical social program.

4180. **Lun, George.** Analysis of the Yepsen adjustment score card as a measure of social adjustment in a summer camp for delinquents. Master's, 1931. Coll. of the City of N. Y. 50 p. ms.

Yepsen score card was analyzed in terms of author's statements. 112 delinquents who had spent three weeks at the camp were the subjects. Findings: (1) Yepsen adjustment score card is satisfactory for use in the environment studied; (2) It affords adequate differentiation of the various degrees of adjustment; (3) some minor items may well be eliminated without impairing the reliability of the Yepsen score card; (4) the most reliable correlation between intelligence and Yepsen score was $+0.09 \pm 0.08$, thus confirming the low relationship ($+0.15 \pm 0.09$) found by Yepsen. However, the author does not agree that this proves the scale to be "independent of intelligence."

4181. **Martens, Elise H.** A study of the overt problem behavior of school children exposed to clinical adjustment. Doctor's, 1931. Stanford. 202 p. ms.

The study covered children from kindergarten to senior year in high school, inclusive. Findings: Undesirable behavior among school children has been changed to better behavior through the clinical treatment of psychiatrists, physicians, psychologists, and a staff of social workers. The study sets up a statistical technique whereby the changes in behavior can be evaluated from time to time. Clinical treatment such as carried on in this research is clearly a means for better school adjustment of children and a means for reduction of antisocial and criminal tendencies.

4182. **Mellen, Rev. Francis Edward.** The Catholic institutional program for delinquent boys. Master's, 1931. Catholic Univ. 33 p. ms.

4183. **Mills, Ernest M.** The ecology of juvenile delinquency. Master's, 1931. Colorado.

4184. **Orcutt, Wilbur Edward.** Pupil adjustment. Master's, 1930. Ohio. (For abstract see no. 712.)

The study included the following four types of maladjustment: (1) Social maladjustment; (2) maladjustment because of a lack of incentive and interest; (3) normal and abnormal intelligence and low scholastic achievement; (4) low intelligence level and low scholastic achievement.

4185. **Sankey, Charles Origen.** Male juvenile delinquency in Cincinnati with special reference to Glenview school. Master's, 1931. Cincinnati.

4186. **Schutzman, Lillian Canter.** Analytical study of the records of the delinquents in the juvenile court of Allegheny county, Pa., for the year 1930. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

This study comprises 578 cases selected by random sampling from the 1,705 juvenile delinquents appearing in the juvenile court of Allegheny county for the year ending December, 1930. Findings: The median age is 14 years, 8 months; boys commit 87 per cent of the crimes; there is relationship between sex and delinquency and between sex and the type of delinquency; the median intelligence quotient for the total group of 23 nationalities is 87, with the median IQ for the boys slightly higher than that for the girls. Of all the delinquents, 36.6 per cent are failing in their school work; 59.08 per cent of all the delinquents are native-born of foreign parentage.

4187. **Shaw, Clifford E. and Moore, Maurice E.** The natural history of a delinquent career. Chicago, Ill., University of Chicago press, 1931. 280 p. (Behavior research fund monographs.)

The primary purpose of this study of the case history of a young male recidivist who was sentenced to a state penal institution a few months before his seventeenth birthday, is to show that the habits, attitudes and philosophy of life underlying his criminal acts were built up gradually through the successive social experiences of the offender over a period of years, the emotional reaction of the public to the crimes of violence, as well as the legal process involved in the final disposition of the case.

4188. **Sollins, Irving V.** Juvenile delinquency: a historical study. Master's 1931. New York. 190 p. ms.

An examination of literature on juvenile delinquency from the beginning of its recognition to the present day, in order to present, in consolidated form, the various points of view towards juvenile delinquency as expressed in both practice and theory, and to point out that juvenile delinquency is an educational as well as social problem.

4189. Voshell, Cecil Mae. A study of juvenile delinquency in the city of Wichita. Master's, 1931. Wichita. 111 p. ms.

4190. Wardle, Ethelwyn. Criminals in the making. Master's, 1931. N. Y. St. Coll. for Teach. 46 p.

The author of this study brings together facts from the literature on juvenile delinquency and crime, from city court records and county court records in New York State, and from 2,787 replies to a questionnaire. The facts thus gathered are interpreted in the light of their significance for education. Suggestions and recommendations for meeting present situations are given.

4191. Webster, Laura Marie. Case studies of 100 juvenile delinquents. Master's, 1930. Oklahoma. (For abstract see no. 713.)

In a study of juvenile delinquents appearing before the Oklahoma county juvenile court during the years 1925 to 1927, it was found that over half of them lived in close proximity to the business section of Oklahoma City. Their ages ranged from 11 to 16 years. Negro children had a slightly higher delinquent rate than white children. Males were nine times more delinquent than females. Boys employed in street trades had the highest delinquent rate. 78 per cent of the juvenile delinquents were paroled to their parents, 12.8 per cent were paroled to responsible individuals, while 9.2 per cent, because of repeated offenses, were committed to correctional institutions.

4192. Wei, Frances E. Dejen. A study of 200 boys of the Kentucky houses of reform. Master's, 1931. Kentucky. 80 p. ms.

A personal interview and questionnaire study of 200 boys of the Kentucky houses of reform with a view to discovering reasons for their delinquency.

4193. Whitcomb, Ward A. Multiple-choice analytical interview blank for the study and recording of cases of juvenile delinquency. Master's, 1931. Ohio. 98 p. ms.

A formulation of a nontheoretical technique for the study and recording of cases of juvenile delinquency. This technique, which is of the multiple-choice response type, results in a fairly comprehensive statement of actually existing conditions of the delinquent, completely unprejudiced and unbiased by personality characteristics of investigators.

See also 1521, 1744, 1851, 2828, 3417, 3584, 4355, 4357, 4364.

PHYSICALLY HANDICAPPED CHILDREN

4194. Abraham, Richard I. Survey of Gough school (school for the deaf and deafened). San Francisco, Calif., Public schools [1930].

The objective in this study was the reorganization of the school for deaf and deafened children. Current practice in 25 cities relative to the organization of education for the deaf and deafened was investigated. One of the important results of the study was the establishment of a class in a new junior high school for deaf and hard-of-hearing children who have completed the work of grades one-six, inclusive.

4195. Ballard, Elizabeth Irene. The influence of stammering upon the achievement of school children. Master's, 1931. Boston Univ.

4196. Cassidy, Lorena Elanor. The problem of the cripple in society and the work for cripples in the State of Kansas. Master's, 1931. Wichita. 119 p. ms.

4197. Coleman, Earl H. Survey of hearing. Fresno, Calif., Public schools, 1931. (For abstract see no. 717a.)

The 4A type of audiometer was used in the examination of 6,127 pupils in grades 1 to 12. Over 7 per cent were found to have a loss of hearing of 12 per cent or more.

4198. Conrad, Charles W. Physically handicapped child and his relation to the public schools. Crippled child, 8: 88-90, October 1930.

4199. **Davies, Mrs. Rachel D., Fusefeld, Irving S. and Reiter, Frank H.** A survey. Trenton, N. J., New Jersey school for the deaf, 1931.

A complete survey of the New Jersey State school for the deaf.

4200. **Flannagan, Editha.** A comparison of the "auditory" and "kinesthetic" methods in the education of oral inaccuracy cases. Master's, 1930. Iowa.

4201. **Heck, Arch O.** Education of crippled children. Washington, United States Government printing office, 1930. 57 p. (U. S. Office of education. Bulletin 1930, no. 11.)

4202. **Hollister, Frances Marie.** The part practical arts play in the education of handicapped children. Master's, 1931. Southern California. 104 p.

4203. **Jamison, Fern Willard Baer.** An analysis of Binet performance of a group of stutterers. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

All of the stutterers in 10 North-side schools, Pittsburgh, 72 in all, were given the Stanford revision of the Binet-Simon intelligence test. They were of normal intelligence, having a median intelligence quotient of 97 with a range of from 60 to 148. The failures in the tests seem to indicate as characteristic of stutterers, maladjusted personalities; arrest of visual imagery; mental confusion; lack of integrity of the associative processes or defect in the associative area of the brain; poor linguistic ability; and the quite evident halting, stumbling, time-consuming speech.

4204. **Kinder, Mary Lett.** A qualitative study of crippled children using the Woodworth-Mathews questionnaire. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of this study was the measurement of emotional stability in 50 crippled children. The subjects of the study reside in the industrial home for crippled children in Pittsburgh. Their ages range from 7 to 22 years. There were 23 boys and 27 girls in the experimental group. The Otis group intelligence scale, the Woodworth-Mathews personal-data sheet, and an emotional balance rating scale were used in the study. Findings: The common belief that crippled children are more unstable emotionally than unselected children is not substantiated by this study. Crippled children think that they are not liked so well as other people; they tend to have more abnormal dream states; stuttering and stammering are more prevalent with crippled children.

4205. **Lewellen, Ethel Irene.** Educational opportunities in the Arkansas school for the deaf. Master's, 1931. Mississippi.

A survey was made of the plant, equipment, curriculum, administrative reorganization, and teaching staff. The results indicate the institution as being progressive, and as having a well-qualified faculty.

4206. **Lincoln, Cornelia A.** The emotional factor in speech disorders. Master's, 1930. Smith. ms.

4207. **Lommen, Olga L.** Educating the crippled child in New York City. Master's, 1930. T. C., Col. Univ. 21 p. ms.

The study is a summary of information obtained through interviews with leaders in various phases of the work in New York City, and the result of observation of classroom work made in visiting representative schools, special classes, hospitals, and other centers active in the work of educating and rehabilitating cripples. Findings: (1) New York City adopts special class organization in preference to special school; (2) there is need of closer academic supervision; (3) there is need of provision for vocational training in the schools; (4) provisions for physical care in the schools is still provided for by philanthropy; (5) vocational training and placement is provided through Institute for crippled and disabled; (6) special course for teachers is provided through director of special classes.

4208. **Long, John A.** Motor abilities of deaf children. Doctor's, 1931. T. C. Col. Univ. New York City, Teachers college, Columbia university, 1932. 67 p. (Contributions to education, no. 514.)

Motor abilities of deaf children were investigated by comparing performances on seven selected motor tests of deaf and hearing children equated for age, sex, and race. Each group consisted of 51 boys and 36 girls ranging in age from 8 to 17 years. The children were all Jewish; the experimental group was drawn from the Institution for the im-

proved instruction of deaf mutes and the control group from the Hebrew asylum of the city of New York. Findings: In the tests used, deaf boys were, in general, superior to hearing boys, while the reverse was true for the girls. There is an apparent exaggerated sex difference in the motor abilities of deaf children. The deaf do not appear to be inferior in motor abilities in general.

4209. McAnulty, E. A. and Chaplin, Alice. The problem of stuttering in the Los Angeles public schools. Los Angeles, Calif., City schools, 1931.

Review of theories of stuttering and experimental evidence as to 900 stutterers.

4210. McDonald, Jane Regina. A comparative study of deaf children by means of the Kohs block designs and Porteus maze. Master's, 1931. Ohio. 39 p. ms. (For abstract see no. 712.)

A study was made of children ranging in age from 9 years and 2 months to 20 years and 5 months at the Ohio State school for the deaf at Columbus, Ohio. One hundred and thirty-nine children were tested on Kohs block design tests and the Porteus maze. The low correlation found showed that the tests do not measure the same qualities.

*4211. Madden, Richard. The school status of the hard of hearing child. Doctor's, 1931. T. C., Col. Univ. New York City, Teachers College, Columbia university, 1931. 114 p. (Contributions to education, no. 499.)

The purpose of the study was to ascertain the intelligence, school achievement, and certain personality traits of school children who have aural defects. An experimental group of 46 children who were found to be hard of hearing on three different examinations with three different types of audiometers were paired with children of normal hearing and of the same sex, age, race, and parental occupational status. Two smaller groups in a second school were used as a check on the results. Findings: The difference in average IQ's for the two groups of 46 matched pairs is 6.42 points in favor of the normal in hearing. Within the hard of hearing group, lower achievement does not accompany greater degrees of auditory deficiency, when the accomplishment ratios are compared.

4212. Murray, Elwood. Dysintegration of breathing and eye movements in stutterers during silent reading and reasoning. Doctor's, 1931. Iowa.

4213. Pintner, Rudolf. A group intelligence test suitable for younger deaf children. Journal of educational psychology, 22:360-63, May 1931.

Reports the results of the Pintner-nonlanguage primary mental test tried out in two schools for the deaf.

4214. Rogers, James Frederick. Schools and classes for delicate children. Washington, United States Government printing office, 1930. 66 p. (U. S. Office of education. Bulletin, 1930, no. 22.)

4215. ——— The speech-defective school child, what our schools are doing for him. Washington, United States Government printing office, 1931. 31 p. (U. S. Office of education. Bulletin, 1931, no. 7.)

Findings: Speech defects are at least twice as common among boys as girls; about twice as frequent in the colored as in the white race. Lispering tends to cure itself or is overcome in a considerable percentage of school children as they grow older. Eighty-four cities in 22 States and the District of Columbia report the employment of special teachers for speech-defective pupils.

4216. Bomaker, Charles Chester. A study of schools and classes under the control of boards of education which are for the education of blind and partially sighted children in the United States. Master's, 1930. Ohio. (For abstract see no. 712.)

After reviewing the available studies and reports on the subject, it was desired to obtain additional information concerning the organization and administration of classes for blind and partially sighted children in the United States. Data were secured from 39 cities and 95 classes in those cities.

4217. Rudiger, Carl Ernst. Scientific hearing aids for the deaf. Master's, 1931. Cornell.

4218. Smith, Murial Belle. A study of the intellectual status of the crippled child. Master's, 1931. Northwestern.

4219. **Wilber, Louise.** Vocations of the visually handicapped: a study of the need of vocational guidance in residential schools for the blind. Doctor's, 1931. California. 398 p. ms.

A study to determine the need of vocational counseling in schools for the visually handicapped, through the use of a combination of historical method with that of investigation by direct questioning. Findings: The inadequacy of schools for the visually handicapped to prepare pupils for vocations and for higher institutions where further vocational training is necessary in the case of the more gifted, is recognized. Aid in the solution of the problem has been given by various national organizations (American foundation for the blind, etc.). The students of the blind schools do not choose their vocations at an early age because effective vocational information is not available to the pupils. The problem of vocational counseling of the blind is an individual one and must be undertaken by experts. Every step in proper guidance which will lead to ultimate employment will be a true measure of the greatness of the vocational counselor in a residential school for the blind.

4220. **Williams, E. C.** Census of handicapped children in Iowa. Des Moines, Iowa, Department of public instruction, 1930. 15 p.

State census of physically and mentally handicapped population of school age (5 to 21 years).

EDUCATION EXTENSION

4221. **Alderman, L. R.** College and university extension helps in adult education, 1928-1929. Washington, United States Government printing office, 1930. 64 p. (U. S. Office of education. Bulletin, 1930, no. 10.)

4222. **Barry, Richard Vincent.** Methods of teaching in evening industrial schools. Master's, 1931. Boston Coll. 87 p. ms.

4223. **Bloom, Walter Sax.** State provisions for adult education in the United States in the light of their history. Doctor's, 1931. California. 576 p. ms.

Shows what has been done and is being done by our various States to meet the need and desire for adult education. This is limited to State provisions. Findings: A historical treatise giving: (1) A description of the rise and growth of the adult education movement and the developments which have taken place in this field in certain European countries and in the United States. This description is followed by an account of the development of the provisions which each State has made; (2) the nine major classes into which all adult education falls: the establishment of evening schools; the admission of adults to the regular public schools; the establishment of vocational training classes; free lectures in the public schools for the working classes; instructions for adult blind; immigrant education and Americanization; efforts to reduce illiteracy; rehabilitation service; and establishment of State departments of adult education.

4224. **Burton, Alden James.** Summer school status in Iowa. Des Moines, Iowa, East high school, 1931. 12 p. ms.

This study prepared for the secondary school principals' section of the State teachers association, includes a study of class size.

4225. **Cleveland, Ohio.** Board of education. The mental ability of adults as related to adult interests, needs, and activities. Eightieth annual report. 213 p. ms. (Bulletin, 1930, Series 4, no. 2.)

The objectives of this study were: (1) To prove that the educational system must base its program on quality in the educational process rather than mass production; (2) to show that adults have needs, interests, and activities that should be consulted in promulgating educational programs; and (3) to discover the abilities of adults in order to develop a program to meet individual differences, etc.

4226. **Cox, Omar C.** Evening school instruction in Virginia. Master's, 1930. Va. Poly. Inst. 160 p. ms.

Study of evening school procedure with adult farmers in Virginia. Recommendations are set up for evening-school procedure.

4227. Coxwell, Laura. The interrelation of capacities in adults. Master's, 1930. Fla. St. Coll. for Women. 75 p.

A number of the leading tests of intelligence as well as those for special abilities were administered to college women.

4228. Davidson, Paul. The problem of continuation education in rural high school districts. Master's, 1931. Claremont.

4229. Dunshee, T. E. Age levels of adults in evening high school. Fremo, Calif., Public schools, 1931. (For abstract see no 717b.)

4230. Dyck, Henry Otto. The organization of the Los Angeles continuation high school under the 15-hour law. Master's, 1931. Southern California. 81 p.

A study of continuation education in Los Angeles with special reference to the problems raised by the new law.

4231. Frick, Mary Elizabeth. Histories of the Metropolitan high school and the Huntington Park opportunity school. Master's, 1931. Southern California. 116 p.

A study of progress of continuation education in a large and in a small school district from early beginnings under the California part-time law of 1919 to recent modifications by the law of 1930, based on reports, attendance records, and personal inquiries.

4232. Gore, W. A. Student activities in summer schools of higher educational institutions. Doctor's, 1930. New York. 107 p. ms.

From a study of 112 institutions, it was found that student activities hold a position of growing importance in summer-school programs. A well-conceived, generally accepted philosophy and criteria for their supervision and administration is lacking. In the light of existing conditions it is safer to assume that such activities in these institutions are the result of chance and custom than to assume that they are the creations of administrative attempts to meet the needs of summer-school students.

4233. Gray, William S. Manual for teachers of adult illiterates. Washington, D. C., National advisory committee on illiteracy, 1930. 239 p. (Bulletin no. 2, October 1930.)

Prepared for subcommittee on techniques.

Part I is concerned with the organization and administration of illiteracy classes; Part II gives content and methods to be used with native-born illiterates; Part III gives content and methods for foreign-born illiterates.

4234. Hanson, Maurice Miller. Development and status of the apprenticeship system in Wisconsin. Master's, 1931. Wisconsin.

4235. Hawley, Jesse M. Survey of adult education classes in California high schools. Master's, 1931. Oregon. 62 p. ms.

Results show that experiences and practices are varied, unstable, and with slight indication of uniformity.

4236. Jacobsen, Einar W. Educational opportunities provided for post-graduate students in public high schools. Doctor's, 1931. T. O., Col. Univ.

Findings: There were 29,225 post-graduates in the United States during the school year 1929-30. Institutions other than high schools such as continuation and part-time schools and junior colleges provide educational opportunities for postgraduate students. In the 525 high schools studied, only 8 per cent definitely discourage their graduates from returning for additional work. Practically all postgraduate students are enrolled in the college preparatory or commercial curricula. Postgraduate enrollment increases in the spring because the high-school graduate feels that his college opportunities are limited by spring matriculation. The larger number of schools studied are making little or no attempt to meet the needs of the postgraduate students.

4237. Kienholz, William Sims. A partial study of apprenticeship in the United States. Master's, 1931. Southern California. 115 p.

The progress of apprenticeship from its earliest form in colonial times to the present, with illustrations of present methods of vocational training in the East, in the Middle West, and in California, concluding with an outline for a unified program in Los Angeles.

4238. Klassen, Anne Helen. The development of evening schools and classes in Kansas high schools. Master's, 1931. Kans. St. Coll. 36 p. ms.

4239. Klein, Paul. The adult education program in relation to the education of minors in the San Diego city schools. San Diego, Calif., City schools, 1931. 6 p. ms.

A summary and analysis of results of a questionnaire circulated to young evening-high-school students, concerning reasons for returning to school, etc.

4240. Krug, George H. Certain problems in the organization and administration of a summer high school in New York State. Master's, 1931. N. Y. St. Coll. for Teach.

After giving a brief history of the development of summer high schools in New York State, this study deals with problems of cost, teacher preparation, personnel of pupils, achievement of pupils, etc., in a particular school of this type. Special attention is given to financial and pedagogical problems arising in connection with nonresident pupils and to the problem of the determination of a reasonable tuition charge.

4241. Lee, Burlington Vincent. The adult education movement in the public schools of California. Master's, 1931. Southern California. 148 p.

A library and documentary study of a historical nature which shows the development and extent of the movement, including general nature, aims, administration, teacher personnel, etc., of adult education.

4242. Los Angeles, Calif. City schools. Evening high schools in the Los Angeles city high school district, December 1930. 16 p. (School publication, no. 209.)

Abstracts of a report on a study of evening high schools in the Los Angeles city high school district with reference to organization, educational staff, student body, costs, revenue, etc.

4243. Lurie, Jacques A. Standard evening high school. Master's, 1931. Temple.

4244. McClintic, Stanley Charles. The administration of special day and evening classes for adults in the public schools of California. Master's, 1931. Southern California. 117 p.

A questionnaire investigation of the practices of principals with reference to subjects offered, sources of revenue, salaries of teachers, fees charged, and other matters of administration, including a comparison with results of previous investigations to determine tendencies.

4245. MacCormick, Austin H. Education of adult prisoners; a survey and a program. New York City, National society of penal information, inc., 1931. 456 p.

State prisons and adult reformatories of the entire country were studied.

4246. MacDonald, Michael Joseph. The university extension movement and its place in Catholic universities. Master's, 1931. Catholic Univ. 57 p. ms.

4247. Maurer, Harold R. The status of the summer school in the secondary schools of the Commonwealth of Pennsylvania. Master's, 1931. Ohio. 116 p. ms.

Findings: The summer high school in Pennsylvania has advanced little beyond the stage of being a school for "funkers." The median school had conducted sessions for seven years or more and was under the direct supervision of the regular high-school principal. Subjects taught were determined by canvassing the students and then offering the subjects in which many students had failed. The total amount of time spent in classes was 83.3 per cent less than the requirements of the Mid-West and Maryland association of secondary schools and the State department of public instruction. Over one-half of the pupils attending the summer sessions had failed work during the regular session of the high school.

4248. Mitchell, Ira. The administration of cultural adult education under public school auspices in small cities. Master's, 1931. Nebraska. 65 p. ms.

A study of the procedure to be used in planning, organizing, and conducting non-vocational, non-Americanisation adult education in smaller school systems. Recommendations are based on present best practice.

4249. Murtha, Lucille. A study of the Saint Louis public evening schools. Master's, 1931. St. Louis. 64 p. ms.

4250. Nebraska. State department of public instruction. Adult immigration education in Nebraska. A report of progress and activities, prepared by Division of adult immigration education. Lincoln, 1931. 23 p.

4251. New York State teachers college, Buffalo, N. Y. Report of the director of extension, 1930-1931. 84 p. ms.

Contains a section on the quality of instruction, showing the distribution of marks, etc.

4252. Orman, Clarence. Significant phases of high schools in Houston. Master's, 1931. Oklahoma. 74 p. ms.

From the data compiled from over 6,000 night-school enrollment cards, significant facts as to the age, sex, nativity, and grade status of the night-school students of Houston, Tex., were determined. A comparison was made of the relations between groups of people of given occupations and the subjects studied by them. The findings of the study reveal that Houston is justified in maintaining its night schools, because the students benefit from the courses taken in the night school by adding to their efficiency, by making better social adjustments, and in personal satisfactions; and the city receives the benefits made available through the development of latent human powers, the awakening of "civic consciousness," and the Americanization of the foreigners.

4253. Paschen, Albert John. A study of the scholastic achievement of undergraduate students enrolled in summer sessions at Indiana university. Master's, 1930. Indiana. 37 p. ms.

Findings: The undergraduate summer student on an average is about equal scholastically to the winter term student; on the average, the undergraduate students who attend summer sessions do a better grade of work in summer than they did in winter.

4254. Phelps, Winnie Alden. Scope, aims, and curriculum organization of adult education in the public schools of the United States. Master's, 1931. Southern California. 105 p.

Based on an analysis of the literature and of 66 courses of study from representative cities in 48 States.

4255. Piggott, Virginia Ruth. Adult immigrant education in southern New England. Master's, 1931. Brown. 123 p. ms.

A study of the provisions made in the States of southern New England for adult immigrant education. Findings: Connecticut, Massachusetts, and Rhode Island have each by legislation created a division of adult immigrant education in the State department of education. Training courses for teachers of adult immigrant classes are provided. The tendency to avoid the term "Americanization" and to incorporate the activity under the comprehensive term "Adult education" shows a growing appreciation of the fact that the problem of educating the adult immigrant is not essentially different in its purpose from the education of other adults or children for that matter.

4256. Reeves, Luella S. The activities of teachers college extension departments. Master's, 1931. Colo. St. T. C.

This investigation proposes to get a general view of the prevailing administration, organization, and support of teachers college extension departments; to become acquainted with the activities within their scope, to make careful study of correspondence study, extension classes, and teacher placement; and to make a short study of the miscellaneous activities that may indicate trends in this field.

4257. Sanderson, Robert. Adult education in North Dakota by educational agencies within the State receiving state or federal aid. Master's, 1931. N. D. Agr. Coll. 98 p. ms.

Gives information on what helps in adult education may be secured through correspondence courses, night schools, lectures, extension methods and miscellaneous work given by the various educational institutions within the State of North Dakota receiving state or federal aid.

4258. Schwatka, John Herdman. A study of the student personnel in the Baltimore white senior-high summer-schools, session of 1930. Master's, 1931. Johns Hopkins.

4259. Thomas, Lawrence Gregg. Motives influencing selection of summer schools—a comparative study of administrative and student appraisals of ad-

vantages offered by summer sessions of California teachers colleges. Master's, 1931. Stanford.

4260. Tibbitts, Fred Lyman. A study of the effectiveness of two types of coordination service in part-time education. Doctor's, 1931. Stanford. (For abstract see no. 717a.)

This study purposes evaluating the work done by coordinators working under the organization wherein the regular teachers do all of the contacting of the home, the community, and the shop, and of the organization wherein the coordination work is carried on by individuals who are specially trained for the work and who devote full time to this service.

4261. Turner, Winnifred Thraves. An analysis of the population of the public evening high schools in Los Angeles. Master's, 1931. Southern California. 95 p.

A study of the types of persons taking advantage of the evening-high-school opportunities; based on an analysis of the number of students enrolled, their sex, age, occupation, plans for graduation from high school, and choice of subjects.

4262. Warne, Joseph Everett. The organization and administration of adult education in public schools of California. Master's, 1931. Southern California.

4263. Weiss, Benjamin S. A personnel study of continuation students in Los Angeles, Calif. Master's, 1931. Southern California. 84 p.

An analysis of personal, family, school, and occupational histories of a wide sampling of students, based on questionnaire replies and on school records.

4264. Wentz, Curvin A. A study of the organization and management of cooperative part-time education. 1931. University of Pennsylvania, Philadelphia, Pa. 50 p. ms.

4265. Whytock, N. B. and Fritch, C. L. Report on summer school organization, summer 1930. Glendale, Calif., City schools, 1931. (For abstract see no. 717b.)

A study was made of the student enrollment, cause of summer-school attendance, extent of "dropping out", teacher-load, and instructional costs of pupils in grades 1-8 attending summer school in 1930.

4266. Wilcox, Jack Henry. An expression of adult education. Master's, [1931]. Vanderbilt.

4267. Wolfe, Eugene. Organization and administration of summer high schools. Master's, 1931. Southern California. 175 p.

A study based on questionnaire replies from 81 superintendents of schools in cities of over 30,000 population.

*4268. Workman, Frederick L. The purpose of the continuation school in education. Master's, 1931. New York. 64 p. ms.

4269. Young, Franklin M. A study of seven Ohio night high schools. Master's, 1931. Ohio. 114 p. ms.

A comprehensive study of the night high schools in seven Ohio cities (Chillicothe, Columbus, Dayton, Lakewood, Piqua, Springfield, and Youngstown).

See also 242, 2261, 3625, 3666, 3702, 3880, 4018.

LIBRARIES AND READING

4270. Alabama. State department of education. Library list for home economics, 1930. Montgomery, 1930. 8 p.

4271. ——— Teachers' professional reading courses, 1930-1931. Montgomery, 1930. 4 p.

4272. Alexander, Carter. Professional library for a city superintendent of schools, a minimum list, February 1931. Teachers college record, 32: 724-29, May 1931.

A list of 38 references to be secured at a cost of from \$90 to \$100. Many of the choices were made by the use of a special score card with ratings by competent scorers.

4273. American library association. Children's library yearbook no. 3. Chicago, Ill., American library association, 1931. 80 p.

Evaluation of what a child's book should be, new trends, and the future of library work with children.

4274. ——— College and reference library yearbook no. 3. Chicago, Ill., American library association, 1931. 114 p.

Covers progress in various aspects of college and library work; contains a bibliography of American college library administration, university, college, and reference library statistics, fundamentals in planning a college library building, etc.

4275. ——— A handbook for teacher librarians. Chicago, Ill., American library association, 1931. 52 p.

Includes a list of 500 books for first purchase, the function of the librarian, and outlines the technical work and requirements in the way of furniture, equipment, and supplies.

4276. ——— Recreational reading for young people. Chicago, Ill., American library association, 1931. 59 p.

Suggested recreational reading list of 500 books for young people of high-school age.

4277. ——— School library yearbook no. 4. Chicago, Ill., American library association, 1931. 278 p.

Contains school library standards, circulation of school libraries, school library progress, school library laws, and directory of school librarians.

4278. Anderson, Earl W. High school librarians of Ohio for 1929-1930. Library journal, 56: 183-84, February 15, 1931.

Determines the extent of general and library training which those people in charge of libraries in schools of enrollments of 250 and above have. General findings were that a substantial number of librarians in Ohio high schools had little or no library training.

4279. Baldrige, Chloe Christina. The status of the library in the rural schools of Nebraska. Master's, 1931. Nebraska. 126 p. ms.

A study based on 28 counties, 1,363 districts, 25,545 pupils, and 37,672 books. The study includes an analysis of official reports, district, county, and State, for a period of 10 years for the purpose of ascertaining the amount of money spent on rural-school libraries and reference books.

4280. Bartley, Clara Elizabeth. Modern standards for children's literature. Master's, 1930. T. C., Col. Univ. 16 p. ms.

The study begins with the first children's books from Caxton's press, a short review of the earlier English juveniles; then gives a more detailed study of modern children's literature. Findings: The earlier books, while admirable in purpose, failed to take into account the true nature of the child. Our first task to-day is to produce interest, to produce in the child a love for good books. Second, the ideal story to-day causes the child to form sound moral judgments without the author's adding one word of obvious moralizing. Third, certain types of supposedly "harmless" books are cited and the conclusion reached that there is no such thing as a "harmless" children's book. Fourth, the true-to-life quality in plot, characterization, and subject matter is one of the greatest contributions of our time. Fifth, artistic perfection is also an important ideal. Sixth, our children's literature as a whole still has certain faults which need to be remedied.

4281. Benson, Albert Niles. Organization and administration of the elementary school libraries in Oakland. Master's, 1931. Stanford.

4282. Bogle, Sarah C. N. Brief study of and recommendations on school library conditions in California. Chicago, Ill., American library association, 1930. 25 p. ms.

A brief survey of school library conditions in California with special attention to requirements for professional preparation, State credentials, and existing training agencies with functions of each.

4283. ——— Study of library school situation in the Southern States (survey of 13 States). American library association, 1930. 64 p. ms.

Includes a survey of all courses offered in librarianship in these States together with the demands shown throughout the region by public, local, and county libraries, university and college libraries, and school libraries for trained service, with recommendations as to how the needs may be met.

4284. Bousfield, ———. The need of library instruction in teacher-training institutions. Master's, 1930. New York. 104 p. ms.

Survey of 27 teacher-training institutions in regard to library instruction.

4285. Bray, Eula. Survey of reading material in Lawrence homes. Master's, 1931, Peabody. 100 p. ms.

From a study of 231 homes, slight correlation was found between incomes, magazines, and books. As education increased, amount spent for current reading material increased.

4286. Brewton, John Edmund. Animal themes in poetry for children. Master's [1931]. Peabody. 250 p. ms.

An investigation of all poems for children on animal themes written by 13 poets. Findings: 326 poems were written for children on animal themes by the 13 poets. These are classified and analyzed in the study.

4287. Broening, Angela M. Analysis of the curricula offerings in the secondary schools which furnish reading interests. Baltimore, Md., Department of education, 1931.

A tabular analysis of the situations in each course in the three curricula which stimulate reading of fiction and nonfiction.

4288. Brotherton, Nina Caroline. The status of the public school library with especial reference to Massachusetts. Master's, 1931. Boston Univ.

4289. Bruner, Herbert B., Bonser, Frederick G. and others. Reading interests of children. Boston, Mass., Ginn and company, 1931. 120 p.

A study was made of pupil's interests as indicated by their selection of questions they would like to have answered. Questions were sent to 50,000 children in all parts of the United States.

4290. Butler, Gladys B. The nature of magazine reading done by high school pupils and its possible effect upon their social attitudes. Master's, 1931. Colo. St. T. C.

4291. Calkins, May Agnes. Nature and distribution of materials found in children's encyclopaedias. Master's, 1931. Peabody. 162 p. ms.

Analysis of the World book and Compton's pictured encyclopaedia. Findings: The two encyclopaedias contain much of the same kind of materials but the World book has a greater amount of material.

4292. Callahan, Doris T. Free reading preferences of senior high school students. Master's, 1930. T. C., Col. Univ. 124 p. ms.

Survey, and summary of the reading preferences of nearly 5,000 senior high-school students as compiled from their own statements made without signature or supervision. Findings include relation between age, class, retardation, acceleration, and reading taste; relation between recent reading and preferences as stated; proportion of types of reading; comparison of quality of reading done by schools of different social backgrounds; contrast of reading preference by boys as opposed to that selected by girls; and study of age and grade when reading approaches ordinary adult standards. The whole study may serve as a guide toward the direction and supervision of reading for senior high-school students.

4293. Campbell, Doak S. Libraries in the accredited high schools of the Association of colleges and secondary schools of the Southern States. A report of the status of high-school libraries with respect to the new library standards of the association. Nashville, Tenn., George Peabody college for teachers, 1930. 71 p.

The purpose of this investigation was to determine the status of the libraries that are accredited by the Association of colleges and secondary schools of the Southern States, with specific reference to the new library standards; and to point out for further investigation and study such problems as are revealed by this study. The study is based on replies to a library information blank returned by 922 accredited high schools. Data indicate that none of the schools meet the requirements of all six standards set up. The greatest deficiency is found with respect to the training of the librarian and the time devoted to library duties.

4294. Centre, Charles, comp. French books for American libraries. Chicago, Ill., American library association, 1931. 33 p.

A general suggestive list of French books of the twentieth century for American libraries.

4295. Clark, Georgiana. A list of books for teachers of the first four grades. 1931. Platteville State teachers college, Platteville, Wis. 30 p. Bibliography for teachers of primary grades.

4296. Clevenger, Arthur W. and Odell, Charles W. High school libraries in Illinois. Urbana, University of Illinois, 1931. 41 p. (University of Illinois bulletin, vol. 28, no. 42, June 16, 1931. Bureau of educational research bulletin, no. 57.)

The purpose of this study is to report a number of items of information concerning high-school libraries in the State of Illinois and to offer some suggestions as to standards and the improvement of libraries.

4297. Colburn, Evangeline. A library for the intermediate grades. An account of the methods employed to stimulate and to guide the voluntary reading of pupils of grades 4, 5, and 6 in the laboratory schools of the University of Chicago and an annotated list of books representing the most frequent choices of these pupils in the voluntary reading period. Chicago, Ill., University of Chicago, 1930. 150 p. (Publications of the laboratory schools of the University of Chicago, no. 1, November 1930.)

This study describes the working of the elementary school library run by the laboratory schools of the University of Chicago.

4298. Cook, Lois Margaret. A formulation of pedagogical and literary principles as applied to stories in church-school papers intended for children of primary age. Master's, 1931. Boston Univ.

4299. Cooper, Elizabeth Eathel. An investigation of the reading interests of 1,000 adult occupational workers. Doctor's, 1931. Pittsburgh. (For abstract see no. 715.)

The adults chosen for this survey may be divided into two groups: 1,000 adult men following 20 different occupations, and the intensive case studies of 20 different adults representing 20 different occupations. No man was interviewed who did not have a salary of at least \$2,000. Age and educational training were disregarded. Findings: Educational training is most significant in the reading habits of men. The more technical education a man has received, the more he reads for information. The size of salary and the amount of leisure do not necessarily determine reading habits of men. The group stressed the importance of the atmosphere of reading in the home, of associating with people who read, and of the pleasure received by being a prolific reader.

4300. Cress, Carl Chester. Training in the use of the junior high school library. Master's, 1931. Oklahoma. 74 p. ms.

4301. Cruikshank, Mary. Literary and historical allusions in the Atlantic monthly, 1857-58, 1892, 1927. Master's, 1930. Colorado.

A study in the changes of taste, interest, and education of a cultured reading public.

4302. Dotson, Katie Ella. The free reading of junior high school children. Master's, 1930. Oklahoma. (For abstract see no. 713.)

This investigation is limited to the reading of 125 pupils of the seventh, eighth, and ninth grade classes in the Okmulgee high school, Okmulgee, Okla., during the 1929 summer vacation. The reports show that 72 per cent of the children read books during the vacation period, each child averaging four and two-tenths books.

4303. Eurich, Alvin C. A study of library problems. 1931. University of Minnesota, Minneapolis. 180 p. ms.

Discovers the use that the students make of the University library. Data are presented on the use of the reserve room, periodical room, and general circulation. Sex differences and college group differences are also presented. The use of the library is related to the intelligence and scholarship of the group of students who took part in the investigation.

4304. Foster, Mary Elizabeth. A time analysis of a library teacher's activities in the platoon school libraries of Pittsburgh, Pa. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

A questionnaire of nine points based on the routine in use in the libraries was prepared and given out to 88 library-teachers, who were asked to keep time records in minutes.

for 20 school days for in-school and out-of-school time spent on the following points: Library house-keeping, exhibits, preparation of books and magazines for the shelves, duties other than library, circulation and collection of books, picture file, book reviewing, library meetings and conferences with principals and teachers, and lesson plans. A total of 78 of the questionnaires were returned.

4305. Gates, Arthur I. Reading for public school administrators. New York City, Teachers college, Columbia university, 1931. 126 p.

While this report does not contain detailed reports of investigations, it is a volume of recommendations based upon experimental studies, many of which are not yet published.

4306. ———^{*} Peardon, C. C. and Sartorius, I. C. Studies of children's interests in reading. *Elementary school journal*, 31: 656-70, May 1931.

A series of studies of preferences for various types of reading material was made. Subjects ranging in maturity from first-grade pupils to college students were used for purposes of comparison. The following results were obtained: Children prefer representative stories to representative factual selections. Among narrative types, both prose and verse, the unusual and thrilling experience, the humorous and grotesque, the fanciful or supernatural types rank high in interest compared to the familiar and sentimental family experiences and the rather moralistic type of heroism and service compositions. The most potent interest producing factors in literature proved to be surprise, liveliness, animalness, conversation, humor, plot, and suitability in difficulty. The values of teaching reading as a vital component of a broad program of artistic, dramatic, exploratory, and other enterprises were demonstrated.

4307. Greer, Margaret J. An investigation of rural school libraries. Master's, 1931. Iowa. 45 p. ms.

4308. Harbaugh, Leonard Earl. A study of the library facilities of the high schools of Fayette county, Pa. Master's, 1930. Pittsburgh.

4309. Henry C. Frick educational commission, Pittsburgh, Pa. What Pittsburgh high school seniors read. 1930. 83 p. (School betterment studies, Vol. 2, no. 1).

4310. Hester, Edna A. Books for junior colleges. Chicago, Ill., American library association, 1931. 194 p.

A general list of books in all fields for the junior college library.

4311. Hilton, Eugene. Junior college book list. Berkeley, Calif., University of California press, 1930. 84 p. (University of California publications in education, vol. 6, no. 1, p. 1-84.)

Represents some of the more practical aspects of the thesis: Determination of collateral reference books required in basic junior college courses. This study was made in the Department of education of the University of California as one of the requirements for the degree of doctor of education. It gives the results of the pooled judgments of junior college instructors. One thousand one hundred and ninety-three independent judgments were tabulated. They represent the opinions of 928 junior college instructors connected with 50 representative institutions, and 265 instructors connected with 12 institutions of university grade.

4312. Hood, Helen Vander Veer. Reading interests of a group of high school pupils. Alhambra, Calif., City high school, 1931. (For abstract see no. 717b.)

Findings: The study indicates that the lower the IQ, the less the tendency to reply definitely to the question as to reading material; the higher the IQ the greater the tendency to reply definitely to the question as to reading material. All groups of ability preferred stories of the adventure type.

4313. Houghton, Celia M. A service study of library skill of pupils entering senior high school. Master's, 1931. N. Y. St. Coll. for Teach. 50 p.

An analysis of the results of a test given at the time of entrance of a class to the senior high school shows what instruction the children should be given in order to make it possible for them to make the best use of the library during their high-school course. The facts obtained in the survey are being used in the organization of material for instruction in this school during the coming years.

4314. Hunt, Clara Whitehill. The first three hundred books for the children's library. Albany, University of the State of New York, 1931. 16 p. (University of the State of New York bulletin, no. 971, May 1, 1931.)

"This list is not graded, but suggestions are given as to the ages to which the books will generally appeal."

4315. Jamison, Emma VanNoy. A graded book list for primary children. Master's, 1931. Stanford.

4316. Jones, John William. A survey of the high school libraries of Franklin county, Ohio. Master's, 1930. Ohio. (For abstract see no. 712.)

The purpose of the study is: To show the importance of the high-school library; to determine whether or not the libraries of Franklin county measure up to the standards of the American library association; and to make recommendations that will bring about a more successful library administration in the county.

4317. La Mar, Rhoda Esther. Stories of Creek Indians adapted for elementary-school use. Master's, 1931. Peabody. 160 p. ms.

A collection of stories regarding Indian life in Oklahoma, especially of Creeks. Findings: Adaptation of such material to fourth-grade children is possible and advisable.

4318. Lamek, Rev. John Elmer. The administration and supervision of classroom libraries. Master's, 1931. Catholic Univ. 27 p. ms.

4319. Leary, Bernice. An analytical study of certain elements in the reading material of adult magazines. Master's, 1931. Chicago. 122 p. ms.

Analysis of 68,000 words and 13,600 sentences in 68 adult magazines whose circulation figures equal or exceed 125,000. Findings: Considerable variation was found among magazines with respect to the per cent of monosyllabic words in reading material. Less variation was found with respect to trisyllabic and polysyllabic words. Magazine reading material showed relatively close agreement when extent of vocabulary diversity was considered—the greatest amount of diversity occurring in magazines containing informational content.

4320. Leopold, William Lewis. A comparative study of the libraries of the Pittsburgh public high schools. Master's, 1931. Pittsburgh. (For abstract see no. 715.)

The purpose of the study was: To analyze the status of the libraries of 16 Pittsburgh public high schools, to evaluate each school by means of recognized and approved standards as criteria, and to suggest possible extension and needed improvements in library facilities. The study was limited to 16 high schools having a combined enrollment of 26,082 pupils. Data were collected by means of a questionnaire and interviews. Findings: All libraries are housed in separate library rooms; there are no conference rooms in any of the 16 high schools; seating capacity is inadequate; 12 libraries have complete standard equipment; the library service is fairly satisfactory in the light of present facilities; provision is made in the English courses for systematic library instruction; a low average daily attendance is evident; there is an inadequate supply of books in the libraries.

4321. Lewerenz, Alfred S. Children and the public library. Los Angeles, Calif., City schools, 1931. Library quarterly, 1: 152-74, April 1931.

A survey of the educational and mental status of children who patronize the public library in Los Angeles.

4322. Littell, Harold. Some aspects of the philosophical and psychological elements in contemporary literature. Master's, 1930. Indiana. 171 p. ms.

4323. Loe, Edwin. A survey of library needs and practices in the consolidated high schools of North Dakota. Master's, 1931. North Dakota.

4324. Long, Charles D. High school libraries of Bureau county, Ill. Master's [1931]. Chicago. 90 p. ms.

Status of libraries was studied and compared with standards of North central association, superintendent of public instruction, and American library association. Findings: (1) Standards are met fairly well; (2) librarians are decidedly lacking in training.

4325. Low, Mildred McNair. An investigation of the readings of the University junior high school. Master's, 1931. Oklahoma. 285 p. ms.

4326. McElroy, Rose Hampton. A study of the reading interests of the evening school pupil. Master's, 1931. Cincinnati.

*4327. Mackintosh, Helen K. A critical study of children's choices in poetry. Doctor's, 1931. Iowa. Iowa City, University of Iowa, 1932. 128 p.

4328. Montgomery, Mildred. Testing supplementary reading in high school. Master's, 1930. Illinois. 95 p. ms. (For abstract see no. 699.)

"Tests dealing with supplementary reading books found to be most frequently read in English classes of four Illinois high schools were constructed and administered in English classes of the University of Illinois high school. The six fiction tests and the three biography tests constructed in this study are included, as well as an account of their construction and a critical examination of the results from their administration. The author is of the opinion that objective tests, supplemented by conferences and discussions, are of considerable value for checking up on outside reading."

4329. Munson, W. B. Per capita expenditures for libraries in 10 California cities. Fresno, Calif., Public schools [1930].

Findings: In elementary schools the per capita cost ranged from \$0.811 to \$3.221. In secondary schools the cost per capita ranged from \$1.165 to \$3.257.

4330. Osburn, W. J. A study of state libraries. Columbus, Ohio, State department of education, 1931.

4331. Rinehart, Anne Campbell. What Pittsburgh junior high school pupils read. Pittsburgh, Pa., Henry Frick educational commission, 1931. 83 p. (School betterment studies, vol. 5, no. 1.)

This is a study of the reading interest of 5,510 junior-high-school pupils. A similar study was made of 2,236 seniors in high schools in 1929. The following 12 books were found among the outstanding books in both 1929 and 1930 lists: Treasure Island, Ivanhoe, Lady of the Lake, Oliver Twist, Julius Caesar, Ramona, Ben Hur, Three Musketeers, Jane Eyre, Wa, The Virginian, and Wings.

4332. Roller, Bert. Children in American poetry, 1610-1900. Doctor's, [1930]. Peabody. Nashville, Tenn., George Peabody college for teachers, 1930. 201 p. (Contribution to education, no. 72.)

The entire field of American verse to 1900 was examined to discover the ways in which childhood has been treated by American poets.

4333. Ross, J. Ray. The Columbus-Bartholomew county library: its origin, growth, functions, and possibilities. Master's, 1931. Ind. St. T. C. 126 p. ms.

Finds out how well the county library, especially the Columbus-Bartholomew county library, functions educationally and culturally, and its possibilities in the future. Findings: Need of rural districts brought about change to county library; increase in use since this change is very noticeable; Indiana is leader in county-library work.

4334. Hummel, Paul Zimmerman. A study to determine the training of eighth grade pupils in the use of reference books. Master's, 1931. Pittsburgh. (For abstract see no. 715).

A check list was constructed for measuring devices, containing 50 yes or no questions, and a factual information test containing 50 objective, multiple choice questions. The questions covered were: Ownership of books, knowledge about parts of books, classification of reference books, library facilities, ability to locate reference material, and attitude toward reference work. The check list and factual information test were administered to 826 eighth-grade pupils in three types of schools—the county school, the borough school, and the junior high school. Results from the check list showed that: The dictionary is the most universally owned reference book; the book index is the most frequently consulted part of a book; library instruction is not systematized on a par with the traditional subjects; approximately 60 per cent of the pupils enjoy informational reading. Results from the factual information test showed that: Factual information test is a reliable measure to determine the training of eighth-grade pupils in the use of reference books; sex has an effect on the pupils' knowledge of reference books, the female pupils leading the male; locality, or the type of school from which a pupil comes has an effect upon his training in the use of reference books.

4335. Russell, James Lester. The administration of high school libraries in Oklahoma. Master's, 1930. Oklahoma. (For abstract see no. 713.)

The problems of the administration of high-school libraries in Oklahoma are presented in two phases, the theoretical and the actual. The author has attempted to set

forth the advantages and disadvantages of present practices and make comparisons with the best known practices, based on actual contact with present methods of library administration in Oklahoma.

4336. Rutledge, R. E. Summary of data relative to elementary librarians. Oakland, Calif., Public schools, 1930. 6 p. ms.

4337. ——— Survey of sixth grade library use. Oakland, Calif., Public schools, 1930. 15 p. ms.

4338. Schickedantz, Mary. Short stories with mechanical and scientific themes and allusions; a high school reading test. Master's, 1931. Ohio. 47 p. ms.

A reading list of short stories found in anthologies and magazines which will appeal to the pupil interested in science and mechanics. The list contains approximately 200 stories by 61 authors.

4339. Sparks, Helen. Grade placement of children's reference books. Master's, 1931. Colo. St. T. C.

This investigation into grade placement of children's reference books is undertaken in line with the efforts to determine scientifically what the materials of the curriculum should be and where they should be placed.

4340. Stormzand, M. J. and others. A library course for junior high schools. Santa Monica, Calif., City schools, 1931.

4341. Strickler, Robert Burtner. A survey of the accredited high school libraries of the State of Virginia. Master's, 1930. Ohio. (For abstract see no. 712.)

This study of accredited high-school libraries of Virginia covers housing, equipment, librarians, sources of revenue, library content, and library instruction.

4342. Struckman, Emil G. The Montana high school library. Master's, [1931]. Montana.

4343. Swindler, Robert Earl. The high school library and reading problem in the social studies with particular reference to United States history. Doctor's, 1931. Virginia.

The purposes of the study were to find what library materials are actually to be found in the secondary schools of the United States; what progressive teachers throughout the country recommend for the American history libraries; to check these recommended lists by all the scientific criteria available at the present time, and on the basis of the composite findings, to make out final recommended lists for both junior and senior high school levels, and for each of five different sized high schools, ranging from those having 75 or less pupils, to those having above 1,000 enrollment.

4344. Thompson, M. Florence. A book collection in American history for a junior college library in California. Master's, 1930. Columbia.

4345. Thompson, Mary Winifred. The development of a small high school library which will meet the needs of a liberal program in the English studies. Master's, 1930. Ohio. (For abstract see no. 712.)

This study was made in the hope of providing practical suggestions for an adequate library for the small high school that presents a liberal program in the English studies.

*4346. Tree, Ethel M. A suggested annotated reading list for a high school dean of girls. Master's, 1931. New York. 40 p. ms.

The purpose of the study was to determine a basis upon which an annotated reading list for a high-school dean of girls might be constructed and to suggest such a list.

4347. Trueblood, K. High-school libraries in third-class cities of Kansas. 1931. Master's, 1931. Kansas.

A survey of high-school libraries in third-class cities based on annual reports. Librarians, their duties and qualifications, library facilities and practices were given attention.

4348. U. S. Office of education. Statistics of public, society, and school libraries, 1929. Washington, United States Government printing office, 1931. 365 p. (Bulletin, 1930, no. 37.)

4349. Waldrip, Cliff O. A study of the libraries of small high schools with a special reference to Indiana and Illinois. Master's, 1931. Ind. St. T. C. 130 p. ms.

Seventeen counties in western Indiana; 18 adjoining counties in eastern Illinois were considered. Findings: State high-school library lists should be made into groups according to enrollment and kind of high school; teachers should have library training; more rules and regulations are needed regarding libraries in both States.

4350. Waples, Douglas and Tyler, Ralph W. What people want to read about. American library association. Chicago, Ill., University of Chicago press, 1931. 308 p.

A study of group interests and a survey of problems in adult reading in an attempt to find out what adults want to read and the development of methods to determine the reading interests of adult groups.

4351. Washington. State department of education. Elementary school library and third annual suggested library list, issued by N. D. Showalter, superintendent of public instruction . . . 1930. Olympia, 1930. 30 p.

4352. Wesson, J. J. The status of high school libraries in Mississippi. Master's, 1931. Mississippi.

The survey showed that many high schools not only needed to increase the number of books, but to have a more favorable balance of books among the various departments.

See also 127 (19), 217, 690, 828, 1507, 1965, 2331, 2415, 3939, 4066, 4090, 4148; and under English literature.

ADDENDA

STUDIES RECEIVED TOO LATE FOR INCLUSION IN THE CLASSIFIED LIST

4353. **Buck, Phil Walter.** A study of the facts and conditions involved in the problem of orientation courses in teachers colleges. Master's, 1930. Kans. St. T. C., Emporia. 114 p. ms.

The problem of this study was: (1) To discover and interpret the facts and conditions relating to the orientation course in the 4-year teachers colleges of the United States; (2) to suggest principles to be taken into consideration by teachers colleges in constructing orientation courses, based upon the data of this study; and (3) to suggest problems for investigation arising out of the orientation course in teachers colleges.

4354. **Goddard, Geneva.** A study of the historical development and educational work of Haskell institute. Master's, 1930. Kans. St. T. C., Emporia. 82 p. ms.

The purpose of this study was to determine whether Haskell institute has fulfilled the obligations placed on it by the Federal Government.

4355. **Hacker, Dorothy B.** A study of juvenile delinquency cases in a small district of Indianapolis. Master's, 1930. Indiana.

4356. **Harris, Ruth Rickerd.** An experimental study dealing with the use of colored chalk in teaching plane geometry. Master's, 1930. Kans. St. T. C., Emporia. 94 p. ms.

4357. **Hoebel, E. Adamson.** Home conditions and delinquency in adolescent boys. Master's, 1930. New York.

4358. **Kimball, Lindsley F.** The social significance of the Boy Scout movement. Doctor's, 1930. New York.

The chief emphasis is upon character education.

4359. **Lanning, George B.** A study of the administrative practices of school superintendents in second-class Kansas cities. Master's, 1930. Kans. St. T. C., Emporia. 116 p. ms.

The purpose of this study was to learn the administrative practices of superintendents in second-class Kansas cities and to present these practices in such a way that they may be useful in acquainting administrators with the problems as they actually exist in the field of administration. To aid the college professor in building his administrative curriculum around the activities which the superintendent actually performs is another purpose which it is hoped the investigation will serve.

*4360. **Leavell, Ullin Whitney.** Philanthropy in Negro education. [Doctor's, 1930. Peabody.] Nashville, Tenn., George Peabody college for teachers, 1930. 188 p. (Contribution to education, no. 100.)

The study takes up the education of the Negro in slavery; religious effort in Negro education; origin and aims of the large educational foundations; the practice of the large philanthropic agencies; the extension of service, 1928-1929; and the trends of philanthropy in Negro education.

4361. **McCloy, C. H.** Character building through physical education. American physical education association research quarterly, 1: 41-61, October, 1930.

An attempt to outline a process of character building through physical education, laying down the foundations of the process upon our present-day knowledge of how man learns.

4362. **O'Connor, Susan.** A study of the comparison in the financial success of students who achieved scholastic honors with those who participated in many activities. Master's, 1930. Kans. St. T. C., Emporia.

Findings: Scholastic honors are a better index of financial success than are extra-curricular activities.

4363. Walden, Edmonia Louise. A study of clothing courses in Negro normal schools and colleges. Master's, 1930. Chicago.

4364. Young, Pauline V. Indices and factors making for success or failure of juvenile delinquents on probation. Published as "Urbanization as a factor in delinquency" in Proceedings of the American sociological society, No. 2, 1930.

4365. Land, Hattie B. Comparative study of health education in public schools of Oklahoma with other States of the North Central educational association. Master's, 1930. Okla. A. and M. Coll. 48 p. ms.

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