

UNITED STATES DEPARTMENT OF THE INTERIOR

RAY LYMAN WILBUR, Secretary

OFFICE OF EDUCATION

WILLIAM JOHN COOPER, Commissioner

BULLETIN, 1930, No. 23

BIBLIOGRAPHY OF RESEARCH
STUDIES IN EDUCATION
1928-1929

PREPARED IN THE LIBRARY DIVISION
OFFICE OF EDUCATION

By

EDITH A. WRIGHT



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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., July, 1930.

SIR: Year by year the field of educational research becomes more important and the literature on the subject more voluminous. As the number of educational investigators increases there comes a corresponding demand for bibliographic aids to guide them to the literature and research studies in their specialized fields. The need for a service such as the accompanying bibliography aims to give has been apparent for some time. Professor Monroe helped to meet it through his bibliographies of masters' and doctors' theses in education, covering the period from 1917 to 1927, which were issued by the Bureau of Educational Research of the University of Illinois. Leaders in specialized fields of education have also endeavored to meet the need through such helps as the summaries of arithmetic and reading investigations, which have been published from time to time and have been of great service to persons engaged in studies in these special fields. In the Bibliography of Research Studies in Education here presented the aim has been to cover the entire field of educational research and to serve as an aid to persons interested in any phase of educational investigation. It is the third list to be printed and it covers research studies in education completed during the school year 1928-29.

I recommend its publication as a bulletin of the Office of Education.

Respectfully submitted.

WM. JOHN COOPER,
Commissioner.

The SECRETARY OF THE INTERIOR.

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FOREWORD

The Bibliography of Research Studies in Education presented herewith is the third attempt to bring together in one volume information concerning investigations in the field of education. The first volume, covering the year 1926-27 was issued as Bulletin (1928) No. 22; the second for the year 1927-28, as Bulletin (1929) No. 36. The accompanying list covers the year 1928-29 and lists 3,065 investigations undertaken by 317 research agencies. It continues the project of listing the titles of masters' and doctors' theses in education formerly carried on by the Bureau of Educational Research at the University of Illinois, under the direction of Dr. Walter S. Monroe.

In order to obtain the material for this volume, letters of inquiry were sent to all agencies known to us to be engaged in educational research, including colleges and universities, city and State research bureaus, and educational organizations. This bibliography lists the masters' and doctors' theses and other research investigations reported in reply to these letters. It has been the intention to include only those studies completed from July, 1928, to June, 1929, but as definite information concerning the exact date of completion was not always available, some studies have perhaps been included which do not fall within that period. Studies completed after June, 1929, will, in general, be listed in the bibliography for 1929-30. An effort was made to obtain complete information from the various institutions and organizations cooperating. If some studies which rightfully belong in this list have been omitted, they have doubtless not been reported to us. In addition to the studies reported, we have listed research articles which have appeared in various educational periodicals during the period covered.

The annotations for many of the investigations were furnished by the author or the institution reporting the study; annotations for other studies and for the periodical articles have been made in this office. Both published and unpublished studies are included in the list, with complete bibliographic data for each whenever the information was available. The unpublished studies are for the most part masters' and doctors' theses. When the number of pages is followed by the abbreviation "ms." it is an indication that the study has not been printed but is in typewritten or mimeographed form, and is obtainable only through the agency under whose auspices it was made.

The material has been collected, classified, and indexed in the library division of the Office of Education. The scheme of classification used is a modified form of that used by the Library of Congress. The author and subject index immediately following the list, together with the cross-references at the end of most sections, should make the material on any subject readily accessible. A list of the institutions and agencies mentioned in the bibliography is to be found at the end of the volume.

The Office of Education can not supply the publications listed herein, other than those expressly designated as publications of this office. Printed material here mentioned may ordinarily be obtained from the respective publishers. Many of the studies are available for consultation in various public and institutional libraries. For information concerning masters' and doctors' theses, address the institution under whose supervision the study was made.

An examination of the material will reveal some studies which are perhaps not research, but since they have been reported to us as such we have used a broad interpretation of the term and included them in the list. Obviously, at the rate research in education is growing in the colleges and universities to-day, some limitations must necessarily be placed upon the material to be included in future bibliographies. Our purpose in issuing these lists of research studies in education is to assist students of education in becoming acquainted with investigations which are being made in various parts of the country in certain specialized fields. We wish to make the lists as helpful and inclusive as possible, and at the same time keep them within reasonable bounds. In order to ascertain the kinds of material desired to meet the needs of workers in the field, we have, during the past year, sought the advice of a number of representatives of different research agencies concerning the type of material to be included in our bibliographies of research studies in education. In the future, these bibliographies will be somewhat more restricted in content, following the recommendations received from contributing agencies.

BIBLIOGRAPHY OF RESEARCH STUDIES IN EDUCATION

EDUCATIONAL HISTORY

1. **Anderson, Hugh Edgar.** A history of public secondary education in West Virginia. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 58 p. ms.

2. **Anderson, Justin V. G.** The decline of the academy in Texas. Master's thesis, 1928. Southern Methodist university, Dallas, Texas. 91 p. ms.

A sketch of the academy movement; secondary education in Texas before 1890; comparison of the academy and the high school in Texas since 1890. Findings: Disappearance of private academy; increase in number of sectarian schools; field practically dominated by public high school; development of high schools for rural children expected to result in further decline of the academy.

3. **Anselm, George.** Measurements of results in an undergraduate course in history of education. Master's thesis, 1928. State university of Iowa, Iowa City. 158 p. ms.

4. **Bacon, Mabel.** The theory of guidance in Rousseau's *Emile*. 1928-29. University of North Carolina, Chapel Hill. ms.

5. **Bailey, Robert Smith.** A history of education in Beaufort county up to the Civil war. Master's thesis, 1929. University of South Carolina, Columbia.

6. **Bibb, Thomas William.** History of early common school education in Washington. Doctor's thesis, 1928. University of Washington, Seattle. Seattle, Wash., University of Washington press, 1929. 154 p. (University of Washington publications in social sciences, vol. 6, no. 1, June 1929.)

7. **Bishop, Eugene Alfred.** The development of a state school system: New Hampshire. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

This study revolves around the problem of discovering what influences and forces have operated, and with what results, in causing the evolution from local control to a relatively high centralized state public school system in New Hampshire.

8. **California teachers association.** Department of research. The California teachers association 1863 to 1928. Sixty-five years of professional organization. Sierra educational news, 25: 28-31, March; 25-29, April 1929.

9. **Canon, C. T.** History of education in Logan county, Ky. Master's thesis, 1929. University of Kentucky, Lexington.

10. **Case, —.** A history of education in Washington county, Ky. Master's thesis, 1929. University of Kentucky, Lexington.

11. **Conmy, Peter Thomas.** History of the entrance requirements of the liberal arts colleges of the University of California. 1860-1927. Master's thesis, 1928. University of California, Berkeley. Berkeley, Calif.; University of California press, 1928. p. 251-337. (University of California publications in education, vol. 2, no. 4, December 29, 1928.)

The investigation was limited to the University of California, but the evolution delineated is undoubtedly characteristic of the typical state university.

12. **Corbett, Evelyn.** History of Akron public schools. Master's thesis, 1929. University of Akron, Akron, Ohio. 85 p. ms.
13. **Dunbar, Arabella.** A history of the development of education in Beech Island, S. C. Master's thesis, May 1929. University of South Carolina, Columbia.
14. **Eidson, G. Clyde.** The development of the public high school in Georgia. Master's thesis, 1929. University of Chicago, Chicago, Ill.
An account of the early county academies, showing results of War of Secession, later developments and present status.
15. **Ellis, Martena.** History of public schools of St. Helena parish up to 1860. Master's thesis, 1929. Tulane university, New Orleans, La. 150 p. ms.
Intensive study of local public documents and court records for light upon *ante bellum* life and school conditions. In this study parish documents from 1820 to 1860 made possible the construction of a clear and interesting account of early schools.
16. **Erbacher, Rev. Sebastian.** Catholic colleges for boys in the United States, 1850-1866. Master's thesis, 1929. Catholic university of America, Washington, D. C. 96 p. ms.
A short history of these colleges to serve as the background for a study of their chief characteristics. Findings: In 1850, 37 Catholic colleges for boys existed in the United States, 25 of which continued through 1866. Adding to this number the 37 founded after 1850 and still operating after the Civil war, it was found that there were 62 Catholic colleges in the United States in 1866.
17. **Fitzelle, Albert E.** Origin and development of normal school system of New York. Doctor's thesis, 1928. New York university, New York, N. Y. 200 p. ms.
A study of the beginnings of teacher training in New York in Lancasterian schools and academies; influence of DeWitt Clinton on teacher training; relation of Horace Mann and Massachusetts on the inception of normal schools in New York; David Page and the first New York normal school; Sheldon and Oswego normal school; influence of Pestalozzi, Herbart and Froebel on normal schools of New York; factors operating in selection of sites for New York normal schools; study of admission requirements, degrees held by teachers, curricula, etc., of New York normal schools; statistical study of attendance, drawing power, appropriations and salaries of teachers.
18. **Fraser, Hugh Gunn.** Erasmus' position in Renaissance education. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.
19. **Free, Lousarah Belle.** Education in Union county, S. C., prior to 1860. Master's thesis, July 1929. University of South Carolina, Columbia.
20. **Gordon, Oliver Brown.** The history of religious education in Virginia from 1607 to 1785. Master's thesis, 1928-1929. Boston university, Boston, Mass.
21. **Graham, Hugh.** The history of secondary education in Minnesota. Doctor's thesis, June 1929. University of Minnesota, Minneapolis.
22. **Green, Charles Edwin.** A history of the development of the entrance requirements of the South Carolina college and the University of South Carolina. Master's thesis, May 1929. University of South Carolina, Columbia.
23. **Greenberg, Gertrude I.** Mathematics among the ancient Hebrews. Master's thesis, 1929. College of the city of New York, New York, N. Y. 28 p. ms.
A survey of mathematical information as indicated by references in the ancient holy writings. Miscellaneous specific conclusions are presented.
24. **Hassell, Thomas Carroll.** The academy in Texas up to the Civil war. Master's thesis, 1928. Southern Methodist university, Dallas, Texas. 99 p. ms.
A survey of educational needs of Texas colonists; efforts to establish academies before 1836; the academies during the Republic; the academy from the Republic to the Civil war. Findings: Academies in this period were private, Masonic, or sectarian undertakings, sometimes with public allotments of land.

25. **Hermance, Helena E.** Economic and educational development in the South, 1900-1925: a comparison. Master's thesis [1929] University of North Carolina, Chapel Hill. X

This study compares the educational changes in the South with the economic advances. Growth of population, wealth, agriculture, and manufacturing were used as indices of economic advance in 11 southern states. Educational advance was measured by school enrollment and expenditures. It was found that increased school enrollment does not keep pace with economic advances as nearly as increased school expenditures. The highest relation is shown between percentage of increase per capita in wealth and expenditures for education. The study indicates a fair degree of commensurate advance in economic and educational development in the South from 1900 to 1925.

26. **Hertzler, Silas.** The earliest public high school law in Connecticut. *Journal of educational research*, 18: 378-80, December 1928.

27. **Hurt, A. B.** Development of education in Ashe county, North Carolina. Master's thesis, 1928-29. University of North Carolina, Chapel Hill. Ms.

This study deals with historical development, present conditions and recommendations for future growth, in Ashe county, N. C.

28. **Johnson, Mrs. Kate Miller.** Some pioneer women teachers in Texas before 1880. Master's thesis, 1929. University of Texas, Austin.

29. **Kasir, Daoud Suleiman.** The algebra of Omar Khayyam. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of this study was to translate into English as well as into modern symbolism an Arabic manuscript containing the work of Omar Khayyam; to trace back his sources, explain his method and to point out his contribution to the science of mathematics.

30. **Knauss, J. O.** History of Western state teachers college. 1929. Western state teachers college, Kalamazoo, Mich. 156 p.

31. **Knight, Edgar W.** Education in the United States. Boston, Ginn and company, 1929. 588 p.

A history of American education.

32. **Krabill, V. C.** A short history of education in Frederick county, Md. Master's thesis, 1929. University of Maryland, College Park. 79 p. ms.

A study of the history, geography, social conditions, etc., of the county; the academy movement; the primary schools before 1865; the county in the state school system; the high school movement; the education of colored people; and the financial support of education.

33. **Lapidus, Hyman Lee.** The history of co-education in secondary education in the United States. Master's thesis, 1929. College of the city of New York, New York, N. Y. 49 p. ms.

The historical material was gathered from secondary sources. Statistical investigations were made of college marks of graduates of coeducational and noncoeducational high schools. As measured by college grades earned by graduates, coeducation was found to be superior to segregation.

34. **McAfoos, Roy Earl.** Historical development of the methods of teaching biology in the secondary schools of the United States. Master's thesis, 1928. University of Illinois, Urbana.

35. **McConnell, Robert Ervie.** A history of the development of the department of public instruction. Master's thesis, 1928. State university of Iowa, Iowa City. 181 p. ms.

36. **McKenzie, Pearle.** A history of Summerland college. Master's thesis, May 1929. University of South Carolina, Columbia.

37. **Maddox, Maude.** Pageantry materials in the history of education in Texas. Master's thesis, June 1929. University of Texas, Austin.

38. **Mangun, Vernon Lamar.** The American normal school; its rise and development in Massachusetts. Baltimore, Warwick & York, inc., 1928. xvi, 442 p. (University research monographs, no. 3)

This volume contains a brief perspective of a century of state normal school development in Massachusetts as related to the evolution of a State department of education; chapters on the period of experiment and historic controversy; and concludes with administrative aspects of the subject.

39. **Maria Alma, Sister.** Standard bearers. The place of the Catholic sisterhoods in the early history of education and schools within the present territory of the United States. 1928. Immaculata college, Immaculata, Pa. New York, P. J. Kenedy and sons, 1928. 236 p.
Work of Catholic sisterhoods in what is now the territory of United States from earliest times until 1850.
40. **Miller, Margaret Elizabeth.** The educational work of the Society of Jesus in the first hundred years of its existence. Master's thesis, 1928-29. Boston university, Boston, Mass.
41. **Mitchell, Bernice Ilene.** Attitude of the Roman people toward peace as found in the Latin literature during the Golden Age. Master's thesis, 1929. Indiana university, Bloomington. 74 p. ms.
75,000 lines of Latin were covered to secure the references to peace.
42. **Mizell, Mrs. Phoebe Goode.** Education in American literature of the 1830's. Master's thesis, 1928. Southern Methodist university, Dallas, Tex. 144 p. ms.
A study of the educational ideas in writings of leading men of letters and minor writers of the period; ideas revealed through literature of later periods reminiscent of the thirties. Information summarized concerning kinds of schools, materials, and equipment, educational practice and popular tendencies.
43. **Morris, Mary E.** Development of secondary education in Hawaii. Master's thesis, 1929. University of Hawaii, Honolulu. 53 p. ms.
Historical study of the development of secondary education from earliest records to 1929.
44. **Nason, John Marshall.** A history of public high-school development in Virginia and North Carolina. University of Chicago, Chicago, Ill. (Abstract published by University of Chicago press)
45. **O'Reilly, Edmund Paul.** A history of Santa Barbara state teachers college. Master's thesis, 1928. Stanford university, Stanford University, Calif.
46. **Pennsylvania. State teachers college, California.** Organization and history of education in Pennsylvania. Prepared by the class of 1928, summer session. 1928. 180 p. ms.
47. **Powers, Kathleen E.** The treatment of adolescence by certain educational writers from the 17th to the 20th century. Master's thesis, June 1929. Johns Hopkins university, Baltimore, Md.
48. **Rensch, Hero Eugene.** Educational activities of Protestant churches in California, 1849-1860. Master's thesis, 1929. Stanford university, Stanford University, Calif.
49. **Sazania, James.** A history of the development of the public high schools in Wisconsin. Master's thesis, 1929. University of Chicago, Chicago, Ill. 182 p. ms.
50. **Sherer, Palmer Grier.** A partial history of some of the early schools and educational movements of York county. Master's thesis, May 1929. University of South Carolina, Columbia.
51. **Sherrill, Lewis J.** Parochial schools in the old school Presbyterian church, 1846-1870. Doctor's thesis, 1929. Yale university, New Haven, Conn. 809 p. ms.
The officially sanctioned movement for a system of parochial schools in the old school Presbyterian church, United States of America, 1846-1870. Reasons for origin, rise, decline, reasons for failure; study of some 250 such schools that actually existed.
52. **Smith, Lewis Ingrahm.** A survey of the history and growth of the East Texas state teachers college. Master's thesis, 1928. Southern Methodist university, Dallas, Tex. 86 p. ms.
A study of the beginning and development of the college as a private normal school; the transfer from private ownership to state control; the development of the East Texas state teachers college under state control. Shows the progress of the college under the administrations of President R. B. Binnion and President S. H. Whitley.

53. Steers, Julia. The woman athlete: a chronological account of the women in athletic sports from the days of ancient Egypt to 1900. Master's thesis, March 1929. Colorado state teachers college, Greeley. 131 p. ms.

Study of woman athlete of myth and legend, ancient Egypt and Western Asia, ancient Greece, ancient Rome, middle ages, Renaissance, and of modern times from 1600-1900. Conclusions: There is no conclusion. The thesis is a narrative of the woman athlete from mythology time to 1900, tracing her development, her interests in sports, her change from one sport to another. "Nor in expressions of gratitude to the generation who has just gone before must we forget the woman of all the centuries of recorded history. Interest and enthusiasm, for athletic activities, may have fallen off somewhat during the seventeenth, eighteenth, and early nineteenth centuries; of certain other periods our knowledge is fragmentary, but be all that as it may, it is she of all the ages past who has given the twentieth century woman the opportunity to come into her own in the field of sports."

54. Strevig, Jennie M. History of the missionary education movement. Doctor's thesis, 1929. New York university, New York, N. Y. 157 p. ms.

Twenty-seven years of history, from the beginning of the movement in 1902, including personnel, conferences, and publications.

55. Sun, Howard Fang Shih. Twentieth century tendencies in American education. Master's thesis, 1929. State college of Washington, Pullman. 89 p. ms.

A study of the historical background in the 1890's; the new conception of education; the new psychology of learning and tendencies in curriculum making. The study shows that the whole tendency of the twentieth century education has been in the direction of working out an adequate philosophy of education for a changing industrial and democratic society. The writer predicts that in the near future schools in the United States will be made social agencies to promote peace, safeguard democracy, and above all, improve humanity.

56. Webster, R. B. History of education in Somerset county, Md. Master's thesis, 1929. University of Maryland, College Park. 50 p. ms.

A study of the history, geography, social conditions, etc., of the county; the academy movement; the primary schools before 1865; the county in the state school system; the high school movement; the education of colored people; and the financial support of education.

57. White, Robert Hiram. Development of the Tennessee state educational organization, 1796-1929. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 289 p. (Contributions to education, no. 62)

The present study of the development of the state school system of Tennessee from its inception to the present (1929) is a portrayal not derived from descriptions of the system but based upon critical examination of original sources.

See also 58, 132, 137, 147, 150, 485, 495, 694, 979, 1093, 1618, 1762, 2294, 2411, 2418, 2513, 2537, 2631, 2747, 2892, 2894, 2897, 3052.

EDUCATIONAL BIOGRAPHY

58. Carr, William G. Life and work of John Swett. Doctor's thesis, 1929. Stanford university, Stanford University, Calif. (about 100 pages)

Biography showing life and educational contribution of John Swett. Covers the history of education in California from 1860 to the date of the second constitution.

59. Davis, Marinita. A study of Tolstoi and H. G. Wells as educators. Master's thesis, 1929. Stanford university, Stanford University, Calif.

60. Doty, Florence Hayden. William Knox Tate: educator. Master's thesis, July 1929. University of South Carolina, Columbia.

61. Foor, Forrest LeRoy. Thomas Jefferson's contribution to education. Master's thesis, 1928. University of Montana, Missoula.

62. Glynn, Rev. John J. A. The educational theory of Rt. Rev. John L. Spalding, D. D. Master's thesis, 1929. Catholic university of America, Washington, D. C. 41 p. ms.

An outline of the work of Bishop Spalding (1840-1918) as an educator; an account of his writings, his views on education and his influence in the founding of the Catholic university of America.

63. **Lonsdale, Carrie Fox.** Henry Van Dyke, man of letters. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.
64. **Noble, Stuart Grayson.** Governor Claiborne and the public school system of the territorial government of Louisiana. Reprinted from Louisiana historical quarterly, vol. 11, no. 4, October 1928. p. 535-52.
65. **Smith, Marion Lofton.** Atticus Greene Haygood: Christian education. Doctor's thesis, 1929. Yale university, New Haven, Conn. 393 p. ms.
A study of the contribution to religious education and race relations of Atticus Greene Haygood, first agent of the Slater Fund and Bishop of the Methodist Episcopal church, South.
66. **Tuthill, Hazelle Beard.** Mildred Lewis Rutherford. Master's thesis, July 1929. University of South Carolina, Columbia.
67. **Udick, Bernice.** Gabriela Mistral: a study of one of the great women of today. Master's thesis, June 1929. Colorado state teachers college, Greeley. 95 p. ms.
Study of the life of Gabriela Mistral, a Chilean writer and educator, who is known for her work in cooperation with the Department of education of Mexico, in establishing schools for the Indians throughout Mexico.
68. **Urnauer, Sister Maria Francesca.** Holderlin, the educator. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.
See also 18, 172-173.

CURRENT EDUCATIONAL CONDITIONS

GENERAL AND UNITED STATES -

69. **Abel, James F., and Bond, Norman J.** Illiteracy in the several countries of the world. Washington, United States Government printing office, 1929. 68 p. (U. S. Bureau of education Bulletin, 1929, no. 44.)
70. **Adams, Jesse E.** A study in the equalization of educational opportunities in Kentucky. Lexington, Ky., University of Kentucky, 1928. (Bulletin.)
71. **Alger, Hugh Wesley.** A social and educational survey of Richmond township including Mansfield borough, Tioga county, Pa. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.
72. **Ayer, Fred C., and others.** Preliminary survey of the Loreda public schools. Austin, University of Texas, 1929. 84 p. (University of Texas bulletin, no. 2912, March 22, 1929)
Findings: The system is in need of housing facilities; the teaching staff is below the standard in training and salary; administration and supervision is inadequate; pupil progress is slow and attendance much below the standard.
73. **Baltimore, Md. Board of school commissioners.** Special studies. In its Ninety-ninth annual report, June 1928. p. 78-96.
This report contains the following studies: Relationship of I. Q., arithmetic achievement and arithmetic failures in grades 3A and 4B; relationship of I. Q., reading achievement and reading failure in grades 3A and 4B; progress of pupils—proportion normal, accelerated, and retarded; amount of forgetting during summer vacation (far less than generally assumed to be); trends of arithmetic failure by grades; standardized tests in home economics; follow-up of senior high school graduates.
74. **Blair, Horace Horton.** A study of the growth of population and its relation to increase in school enrollment in the city of San Diego. Master's thesis, 1929. University of California, Berkeley. 70 p. ms.
A study to help solve the problem of providing for a rapidly increasing school population by determining the future needs of the school system relative to school enrollment and its probable location. Conclusions: United States government census for San Diego has shown that the population more than doubled during 1900-10 and that it almost doubled again in the next decade. Estimate of the population up to and including 1936 indicates that the population will again more than double. This presents the problem of increased school enrollment. The direction of growth of population is toward the east section of the city. Sites should be secured in this section of the city for another high school, at least three new junior high schools, and additional elementary schools to care for an enrollment equal to that of the present. These sites should be secured before the prices of real estate advance and also before the new section is so built up as to make it difficult to secure suitable sites of sufficient size to best serve real educational institutions.

75. **Blakeslee, K. B.** General survey of school district 29, Yamhill county, Oregon. Master's thesis, 1928. University of Oregon, Eugene. 72 p. ms.

A survey of schools in district 29, Yamhill county, Oregon, in order to evaluate the adequacy of its school policies. The study includes recommendations as to accounting systems, building programs, curriculum revisions, etc.

76. **Bowling, Harry M.** A survey of Spray graded school, Spray, N. C. 1929. University of Virginia, Charlottesville.

77. **Burr, Samuel Engle.** Recommendations for cooperation between the Lynn chamber of commerce and the Lynn public schools. Research department, Public schools, Lynn, Mass., 1929. 19 p. ms.

Summarizes results of a letter of inquiry sent to 15 chambers of commerce, as to the extent to which these organizations recognize that a progressive school system is an economic factor of importance. Makes recommendations as to types of publicity concerning the school system which might be used by the Lynn chamber of commerce.

78. **Carreon, Manuel L.** The second survey of central, academic, and normal classes. January 1929. Bureau of education, Manila, P. I.

The relative standing of central schools, academic high and normal schools in arithmetic, reading, language, and dictation (spelling) as compared with 1926 and 1927.

79. **Caswell, Hollis Leland.** City school surveys: an interpretation and appraisal. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of this study was to discover the part that surveys have played in the development of city school systems. Shows the development of the survey movement, the results of surveys in local school systems, etc.

80. **Clark, W. W.** Elementary school surveys with standardized tests, 1928-1929. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 9-22.

81. **Cowles, LeRoy E.** A survey of the Murray city schools, Murray, Utah. 1929. University of Utah, Salt Lake City. (Mimeographed by the extension division of the University of Utah, Salt Lake City)

82. **Feig, Chester A.** Recent educational progress in Allegany county, N. Y. 1928-29. Syracuse university, Syracuse, N. Y.

83. **Foote, Jno. M., and Griffith, P. H.** The schools of La Salle parish educational survey report. Baton Rouge, La., Louisiana state department of education, 1929. 97 p. (Bulletin no. 155, May 1929)

84. **Garlin, R. E.** Factors conditioning the success of school surveys. School and society, 28: 337-40, September 15, 1928.

Sets forth both the factors contributing to the success of school surveys and those presenting obstacles to success, as shown by data collected by inquiry forms from 21 states and 48 cities concerning their survey publicity experiences.

85. **Grimm, L. R.** Public school catechism for State of Illinois. Rev. Nov. 30, 1928. Springfield, Ill., Department of research, Illinois State teachers association, 1928. 16 p.

Sixty questions with answers on subject of common school education in Illinois.

86. **Indiana.** Department of public instruction, Indianapolis. Statistical abstract of the school cities of Indiana. January 15, 1929. 17 p. ms.

87. **Indiana university, Bloomington.** Bureau of cooperative research. Topical analysis of 234 school surveys. Bloomington, Indiana university, 1927. 111 p. (Indiana university. School of education. Bulletin, vol. III, no. 4, March 1927)

Although this study is dated March 1927, much of the material has been collected since that time, hence its inclusion in this list.

88. **Jacobson, Conrad.** The exploitation of the public schools by outside organizations. Educational research record (University of Nebraska), 1: 91-98, February 1929.

The purpose of this study was to discover to what extent outside organizations are using the public schools in Nebraska and to formulate a plan which might serve as a guide for superintendents in dealing with these organizations.

89. **Johnson, C. W.** A survey of the Norwood public schools. Master's thesis, 1929. Ohio state university, Columbus. 161 p. ms.

90. **Keyworth, M. B.** Answering the questionnaire; a digest of the important facts about the Hamtramck public schools. Hamtramck, Mich., Public schools, 1929. 19 p.

Statistics on personnel and finances; courses of study; information about city; and special features of school organization.

91. **Kluckhohn, Harvey Nelson.** Newspaper publicity for the public schools of Iowa. Master's thesis, 1928. State university of Iowa, Iowa City. 295 p. ms.

92. **Knox, Paul.** The development of education in Abbeville, S. C. Master's thesis, July 1929. University of South Carolina, Columbia.

93. **McDade, James E.** School facts, bulletins nos. 1 and 2, March and April 1929. Public schools, Chicago, Ill. 14 p. ms.

Bulletins furnished to school newspapers in Chicago, giving information on the school system. Gives data on such topics as cost of good schools, growth of school enrollment, and comparison of Illinois school system with other states.

94. **Maryland. State department of education, Baltimore.** Sixty-second annual report. . . . 1928. Baltimore, Md., 1929. 356 p.

Among other subjects handled, the report contains results of standard tests in reading and history, a study of teacher turnover in 23 Maryland counties, studies of attendance, non-promotion, failures, etc.

95. **Melton, Walter Marvin.** Blackstock affiliated school district. Master's thesis, July 1929. University of South Carolina, Columbia.

96. **Mousaw, C. J.** A study of educational need and opportunity in the town of Crown Point, Essex county, N. Y. Albany, N. Y., University of the state of New York, 1928. 29 p. (University of the State of New York bulletin, no. 907, September 1, 1928)

This study was undertaken in order to determine the educational efficiency of the schools in the light of the best modern educational theory and practice; to show the relative merits of the one-teacher rural school and the central school; and to suggest a school system for the town superior to the present plan.

97. **National education association.** Report of committee on propaganda in the schools. Washington, D. C., National education association, 1929. 47 p.

Gives information on extent of use of outside material for classroom use; recommends principles of action in dealing with requests to accept outside materials for schools.

98. **Noffsinger, Forest Ruby.** School publicity in certain newspapers of Indiana. Master's thesis, 1929. Indiana university, Bloomington. 162 p. ms.

A survey of the literature in the field of school publicity was made; also a column inch measurement of school and certain other types of newspaper space over a period of one year in five daily newspapers in as many cities in Indiana. Findings: A program of continuous publicity is necessary for the successful administration of any school system; there is an enormous amount of literature on the subject of educational publicity, the majority of which has appeared in current educational magazines since 1920; the distribution of school news over the range of possible news subjects is very uneven; school news is not competing successfully with tobacco ads, moving picture ads, and comic strips in the use of newspaper space; etc.

99. **Nuttall, L. John, and Cowles, LeRoy E.** A survey of the schools of Provo City, Utah. 1929. University of Utah, Salt Lake City. (Published by the Provo, Utah, Board of education)

100. **O'Connor, J. Michael.** The treatment of educational news in "The New York Times." Master's thesis, 1929. College of the city of New York, New York, N. Y. 176 p. ms.

A study of space given to various types of educational news as determined by three months survey of "The New York Times." Conclusions: (1) College news is given almost five times the amount of space which the lower schools receive; (2) the space given to general educational news is about half that allotted to sports (educational); (3) news of a half dozen great universities seems to occupy the major portion of space allotted to education; and (4) constructive news is more often located inside the paper rather than on the front page.

101. **Phillips, Frank M.** Prosperity, population, and public education. American school board journal, 77: 47-48, October 1928.

A statistical study of the number of motor vehicles, and average daily school attendance in the United States since 1895, by years. The number of passenger cars increased from 4 to 20,230,429 between 1895 and 1927; average daily attendance from 9,548,722 to 19,355,881 between 1893 and 1926. Gives population data.

102. **Pittsburgh, Pa.** Board of public education. A study of the educational department of the Pittsburgh public schools. By a special commission appointed by the Board of public education on the request of the Superintendent of schools. Pittsburgh, Pa., 1928. 281 p.

This study has been largely confined to the educational organization, administration, and supervision of the Pittsburgh schools. Contains detailed information concerning the teaching and supervisory staff, teacher load, special classes, etc. The commission thinks that perhaps the greatest present need of the system is that of making adequate provision under present conditions for the efficient supervision of instruction.

103. **Pullen, John Stanley.** Educational inequalities in Kentucky. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 80 p. ms.

104. **Raleigh, N. C.** Public schools. Survey of Raleigh and Wake county schools. 1928-29. Shaw university, Raleigh, N. C. 50 p. ms.

This is a study worked out by committees dealing with historical background, current statistics, programs of schools, vocational work, extracurricular activities in the high schools of Raleigh and Wake county.

105. **Rhode Island.** State board of education. Survey commission. Survey of public schools of North Kingstown, Rhode Island . . . Report of the Survey commission. Public education service, State of Rhode Island, 1929. 13 p. (Rhode Island education circulars)

106. **Rochester, N. Y.** Public schools. The work of the public schools. 1928. 612 p.

Contents: The fundamental studies; health and natural science; social and civic studies; fine and practical arts; elective subjects in secondary schools; specialized activities; child accounting and teacher training.

107. **San Diego, Calif.** Public schools. Research department. Graphic glimpses of San Diego city schools. A brief survey of the growth, organization and financial features of the local schools reported in graphic form. 1929. 14 p. ms.

Prepared from local records and official reports of the California State board of education.

108. **Schmidt, Arthur W.** The development of a state's minimum educational program. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

This is a study of the educational undertakings which a state should furnish the children in every locality and the educational undertakings which the state should make universal by mandatory legislation. In conclusion the study presents a list of items which a state may consider in developing its minimum educational program and illustrates the principle that such a mandatory program should be adequately financed by the minimum finance program.

109. **Sears, Jesse B., and others.** Sacramento school survey. Sacramento, Calif., Board of education, October 1928. 2 vols.

A general survey of the schools of Sacramento. Pt. I deals with the administrative and physical aspects of the system; Pt. II with the internal administration and management; and Pt. III with the product of the schools, including measurements of the progress the children are making through the schools, and their achievement in school studies.

110. **Sharlip, Lou N.** A non-instructional survey of a public school. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

111. **Smith, Harry P.** A survey of certain aspects of the public school system of Syracuse, N. Y. Pt. 1, 1928-29. Public schools, Syracuse, N. Y. [237] p. ms.
112. **Sohl, C. E.** Survey of the schools of Rockledge borough, Montgomery county, Pa. Master's thesis, 1929. University of Pennsylvania, Philadelphia.
113. **Strayer, George D.** Official report of the educational survey commission, State of Florida, to the Senate and House of Representatives, Florida state legislature, April 2, 1929. Institute of educational research, Teachers college, Columbia university, New York, N. Y. Tallahassee, Florida educational survey commission, 1929. 378 p.
A thorough survey of the entire educational system in the State of Florida with suggestions for its improvement.
114. ——— Report of the survey of the schools of Newburgh, N. Y. Institute of educational research, Teachers college, Columbia university New York N. Y. New York city, Teachers college, Columbia university, 1929. 312 p.
A thorough survey of the entire school system of Newburgh, N. Y.
115. ——— and **Engelhardt, N. L.** Report of the survey of certain aspects of the school system of Chattanooga and Hamilton county, with special reference to administration and school building program. New York city, Teachers college, Columbia university, 1929. 103 p.
116. ——— Report of the survey of the schools of Maple Heights, Ohio. Made by the Institute of educational research, Division of field studies, Teachers college, Columbia university. New York city, Teachers college, Columbia university, 1929. xiii, 226 p.
117. ——— Report of the survey of the schools of Perth Amboy, N. J. Made by the Institute of educational research, Division of field studies, Teachers college, Columbia university. New York city, Teachers college, Columbia university, 1929. 305 p.
118. **Strohecker, Henry Oswell.** Present-day public education in the county and city of Charleston. Master's thesis, July 1929. University of South Carolina, Columbia.
119. **United States. Bureau of education.** Biennial survey of education, 1924-1926. Washington, United States Government printing office, 1928. 1204 p. (Bulletin, 1928, no. 25)
120. ——— Record of current educational publications, comprising publications received by the Bureau of education, October-December 1927, with Index for the year 1927. Compiled in the Library division, John D. Wolcott, chief. Washington, United States Government printing office, 1929. 116 p. (Bulletin, 1928, no. 23)
121. ——— Results of educational surveys conducted by the U. S. Bureau of education. Washington, D. C., September 1928. 9 p. ms.
122. **Vaught, Ira B.** A study of the Narrows school, Virginia. 1929. University of Virginia, Charlottesville.
123. **Virgin Islands. Survey commission.** Report of the educational survey of the Virgin Islands. The survey was authorized by the Secretary of the Navy and conducted under the auspices of Hampton and Tuskegee institutes. Hampton, Va., Hampton normal and agricultural institute, 1929. 69 p.
Thomas H. Dickinson, chairman.
124. **Virginia. State board of education.** Gloucester County, Va. Educational survey report. Richmond, Va., State board of education, 1928. (Bulletin, vol. XI, no. 1, August 1928)

125. **Ward, David A.** Annual report of the superintendent, Wilmington public schools, 1924-25. Wilmington, Del., Superintendent of schools, 1928. 119 p.

Contains results of studies in progress of pupils through the grades, and a comparison of the Wilmington public schools with the average of group of 15 cities, on 76 counts. Gives fiscal information as to schools in Wilmington, giving totals and comparing various types of schools on instruction, maintenance, and operation. Summarizes results of an inquiry relating to fiscal independence of school boards.

126. **Warren, Jule B.** Interpreting the schools to the public. Raleigh, N. C., North Carolina education association, 1928-29. 60 p.

This is a handbook for use of school officials in getting the public to understand and appreciate the modern school.

127. **West Virginia. Bureau of investigation and statistics. Survey staff.** Survey of education in West Virginia. Charleston, W. Va., State department of education, 1928-1929. 4 vols.

L. V. Cavins, director.

A study covering elementary, secondary, and higher education. Vol. 1 deals with organization, administration and finance; vol. 2, with educational achievement; vol. 3, with school buildings; and vol. 4, with institutions of higher education.

128. **Wildman, James R.** A school survey of Wytheville and Wytheville school district, Va. 1928. University of Virginia, Charlottesville.

See also 55.

FOREIGN COUNTRIES

129. **Abel, J.-F.** The programs of study of the Hungarian secondary schools and complete list of the secondary schools in Hungary whose graduates are admitted without examination to Hungarian institutions of university rank. Washington, D. C., U. S. Bureau of education, 1928. 37 p. ms. (Foreign education circular, no. 12, November 30, 1928)

130. **Alexander, Thomas, and Parker, Beryl.** New education in the German Republic. New York, John Day company, 1929. 387 p.

This book deals particularly with secondary schools and the research in secondary education since the war.

131. **Bollig, Richard J.** The German Catholic schools in southern Russia. Master's thesis, 1929. Catholic university of America, Washington, D. C. 37 p. ms.

A study of the development and organization of the Catholic educational system in the German colonies of southeastern Russia up to the time of the Revolution in 1917.

132. **Cassileth, Fay H.** Adult labor education in England. Master's thesis, 1929. College of the city of New York, New York, N. Y. 125 p. ms.

Historical account since 1796, based on survey of primary and secondary sources and visits to workers' schools and organizations in England. Findings: Significant features of the movement are: (1) a diversified curriculum; (2) tutorial instruction; (3) government subsidies; (4) cooperation of voluntary bodies, particularly the universities.

133. **Conrow, Marion Lane.** A program for the teaching of English in the Ewha woman's college, Seoul, Korea. Master's thesis, 1928-29. Boston university, Boston, Mass.

134. **Dempsey, Rev. Arthur Francis.** Elementary education in Japan. Master's thesis, 1929. Catholic university of America, Washington, D. C.

A descriptive study of the development of elementary education in Japan since the accession of the Emperor Meiji in 1867. The organization, administration and scope of public and Catholic elementary education at the present time is treated.

135. **Elliott, Arthur E.** Paraguay—A case study in missionary education. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. (To be printed)

This study attempts to discover if there is a need for a school such as Colegio Internacional in Paraguay, to formulate the objective of missionary education, and to determine in the light of conditions found, what a school such as Colegio Internacional can do to attain the desired objective.

136. **Halkin, Simon L.** Lazurski's investigation of personality. 1928. New York university, New York, N. Y. 209 p.
Deals with experimental schools in Russia.
137. **Hengehold, Rev. Roger.** Early Franciscans at Paris. Master's thesis, 1929. Catholic university of America, Washington, D. C. 48 p. ms.
The development of the early Franciscan educational movement at the University of Paris in the first half of the thirteenth century. Topics treated include: Leaders of the movement, students who received academic degrees, influence of the school at Paris on other schools of the Order, methods of the Friars as teachers and their contribution to education.
138. **Hoh, Daisy Law.** A practical course of parental education for Chinese mothers. Master's thesis, 1929. Stanford university, Stanford University, Calif.
139. **Hoh, Yam Tong.** A proposed system of public education for the city of Chung Shan, a hypothetical Chinese city. Master's thesis, 1929. Stanford university, Stanford University, Calif.
140. **Hsiao, Hsiao Hung.** The mentality of the Chinese and Japanese. *Journal of applied psychology*, 13: 9-31, February 1929.
A review of all the psychological studies that have been made of the Chinese and Japanese.
141. **Jacob, Thottungal N.** Reconstruction of the curriculum of the elementary schools of Travancore, India. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.
142. **Jensen, A. S.** The rural schools of Norway. Doctor's thesis, 1928. University of Washington, Seattle. Boston, Stratford company, 1928. 280 p.
The organization, administration, rural problems and achievements of rural schools of Norway. Conclusions: The schools are progressive in organization and administration, fair in teacher training, salaries, and pensions. Method of teaching is rather formal.
143. **Kamber, Florence Rebecca.** A study of the movement for the education of girls in France from Fenelon to Rousseau. Master's thesis, 1928-29. Ohio state university, Columbus.
144. **Kemal, Ali.** The education and social conditions in Turkey. Master's thesis, 1929. New York university, New York, N. Y. 52 p.
A study of the old system of education under the old regime and the introduction of the modern systems of secularization and education of all classes with the rapid and numerous social changes.
145. **Kuno, Yoshi S.** Educational institutions in the Orient with special reference to colleges and universities in the United States. Pt. II. Chinese educational institutions. A preliminary statement issued by the University of California, Berkeley, Calif., August 1928. 100 p. ms.
Pt. I, issued in 1926, deals with the educational institutions in Japan.
146. **McMurry, Ruth E.** The training of modern foreign language teachers for French secondary schools. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y.
Training of modern foreign language teachers for French secondary schools; comparison of their training with that of teachers in German secondary schools; evaluation of this training in the light of present American practice.
147. **Manikam, Bajah Bhushanam.** Missionary collegiate education in the presidency of Madras, India. A study of the historic development, the contributions and the religious educational program of mission colleges in the Presidency. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.
A survey of 20 mission colleges from the viewpoint of their religious education program.
148. **Myers, Walter F.** Religious education in the Near East. Master's thesis, 1929. Yale university, New Haven, Conn. 146 p. ms.
A study of religious education in the eastern Christian churches since the schism of 1054, emphasizing present problems and the significance for their solution and for relations between the American and eastern churches of recent experiments with modifications of American practice.

149. **Narain, Anugrah Hari.** Curriculum revision in American schools with special application to the schools of India. Master's thesis, 1929. Smith college, Northampton, Mass. 79 p.

150. **Oktavec, Frank L.** Professional education of special men teachers of physical education in Prussia. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The field study for this problem consisted of visits to and investigations of the various institutions of Prussia offering state or state recognized courses of study for men teachers of physical education. Findings: (1) All phases of school physical education in Prussia have been unified; (2) physical education as a means of character training is a fundamental assumption; (3) physical education is considered not a subject, but a fundamental principle, an educational means; (4) physical education is deliberately placed in the school curriculum, has a high standing and is under complete control of school men; (5) all teachers of physical education are professionally trained teachers, etc.

151. **Prescott, Daniel A.** Social forces determining educational policies in Europe. 1929. Harvard university, Cambridge, Mass.

This study involved two years of research and study in European schools under a grant from the Bureau of international research established at Harvard university by the Spelman-Rockefeller foundation. The social forces having the greatest influence in shaping educational policies that have to do with international problems were found to be the following: tradition, national consciousness, class consciousness, organized teacher opinion, new pedagogical and psychological theories and experiments, organizations external to official education, and The League of Nations.

152. **Siegl, Mrs. May H.** The reform of elementary education in Austria. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

Schools in Vienna and the other provinces of Austria were visited; laws, regulations and ministerial decrees were consulted; the literature of the theory and practice of the *Arbeitsschule* were studied. An account is given of the social, political, and economic conflicts out of which grew the conflicts centering about the school.

153. **Sinclair, Robert D.** Education in Soviet Armenia. (A) Administration. 1928. Huron college, Huron, S. D. *Journal of educational sociology*, 2: 221-31, December 1928.

154. **Szabo, Stephen.** The presentation of English to college youth in Hungary using the mediation of Latin. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

155. **Tait, Marion J.** A survey of the education of women in Assam, India. Master's thesis, 1929. University of Chicago, Chicago, Ill. 114 p. ms.

A survey of educational work that is being done in the province of Assam, India, for women. Only a start has been made in providing educational facilities for the girls of the province.

156. **Walther, Léon.** Technopsychology in a Swiss industry. *Personnel journal*, 8: 1-18, June 1929.

This paper describes the difficulties, aims, methods, and results of applying psychological principles and techniques in a century-old factory in Switzerland. The problems were those of personnel classification and placement, simplification of work through time and motion studies, reduction of fatigue, and increase of output without speeding up the workers. The fact was brought out that age has an unfavorable influence upon success in dexterity tests.

157. **Wilcox, George M.** Education in Soviet Armenia: (A) The complex method. (B) Near East Relief schools. 1928. Huron college, Huron, S. D. *Journal of educational sociology*, 2: 310-18, January 1929.

See also 837, 1126, 1466, 1545, 2117.

INTERNATIONAL ASPECTS OF EDUCATION

158. **Hills, E. C.** Foreign students in the United States. *School and society*, 28: 23-24, July 7, 1928.

An analysis of the eighth annual report of the director of the Institute of international education, New York, December 31, 1927.

159. **Jacobs, Hattie Hendal.** The extra curricular phase of international education. Master's thesis, 1929. University of California, Berkeley. 62 p. ms.

An attempt to determine the present status of "international clubs" in the secondary schools of California. Findings: (1) Most of the international clubs have been formed within the last six years; (2) to-day international clubs are established institutions in 56 of the secondary schools of California; (3) although meeting on an average of only twice a week they have put forth a varied program and enrolled large numbers of pupils; (4) in the light of their aims and purposes, these clubs seem to be accomplishing their purposes—promoting an interest in foreign affairs, and forming international friendships; (5) in order to make this international education movement a greater factor in the state, the two groups, the California state federation of world friendship clubs, and the California branch of the World league of international education associations should unite for greater strength; (6) only time can judge the effectiveness of the work of the international clubs.

160. **Lovell, Katharine, and Hewlett, Theodosia.** Fellowships and scholarships open to American students in foreign countries. New York city, Institute of international education, 1929. 64 p. (Bulletin, no. 1, tenth series)

161. **Moscip, Ruth A.** A study of literary readers to determine to what extent they foster a spirit of internationalism. Master's thesis, 1929. State university of Iowa, Iowa City. 125 p. ms.

162. **Smith, Henry Lester, and Chamberlain, Leo Martin.** An analysis of the attitudes of American educators and others toward a program of education for world friendship and understanding. Bloomington, Bureau of cooperative research, Indiana university, 1929. 109 p. (Indiana university, School of education, Bulletin, vol. V, no. 4, March 1929)

163. ——— and **Crayton, Sherman Gideon.** Tentative program for teaching world friendship and understanding in teacher training institutions and in public schools for children who range from six to fourteen years of age. Bloomington, Bureau of cooperative research, Indiana university, 1929. 54 p. (Indiana university, School of education, Bulletin, vol. V, no. 5, March 1929)

164. **Stidham, Kathryn Healey.** The foreign student in an American metropolis. Master's thesis, 1929. University of Chicago, Chicago, Ill. 126 p. ms.

Questionnaire study of foreign students, their life, interests, schools, etc., Chicago, 1929. Findings: United States has more foreign students than any other country and consequently is making an effort in some localities to meet her foreign guests hospitably, and intelligently, but it is evident that she still has far to go.

See also 41.

EDUCATIONAL THEORY AND PRACTICE

165. **Barton, William A., jr.** Outlining as a study procedure. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. 115 p. (Contributions to education, no. 411)

The question to be answered was "Does a pupil learn more facts if he systematically and thoughtfully outlines the subject-matter assigned for study?" 94 pupils were paired with an equal number of control pupils. The results of the experiment seem to indicate that outlining, in reality the analysis and organization of content, is one of the most fundamental processes in the study of content subjects.

166. **Bates, Ralph S.** The development of educational philosophy; a comparative study. Master's thesis, June 1928. University of Rochester, Rochester, N. Y.

167. **Betts, George H.** Teachers' remedies for classroom difficulties. Elementary school journal, 29: 54-62, September 1928.

The results of returns received from 395 teachers are given, showing the number of problems in each problem group and the average number of solutions per problem offered by the teachers.

168. **Haggerty, M. E.** Instructional problems treated in America in last 50 years. 1929. University of Minnesota, Minneapolis. In International congress of psychology, 1929.

This is an analysis of literature dealing with any phase of the instructional or learning process in American journals since 1880. This study has merged into that of the Psychology of learning.

169. **Koch, Helen L.** The relation between some modes of presenting material and efficiency in memorizing. 1929. University of Texas, Austin.

Attack on 14 modes of presenting material as well as seven subsidiary variables. Theoretical question of what happens when various modes of presenting material are combined is a major issue.

170. **Mitchell, Benjamin Foster.** A study of a systematic method of teaching. Doctor's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. x, 105 p.

171. **North Carolina.** State department of public instruction, Raleigh. Larger unit studies. (Educational publication no. 123, Division of elementary instruction, no. 26)

172. **O'Hara, James H.** The limitations of the educational theory of John Dewey. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C., 1929. 112 p.

A comparison of Dewey's philosophy of education with the scholastic philosophy.

173. **Paul, George Case.** A comparison of the educational philosophy of Plato and John Dewey. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

174. **Risk, Thomas Marion.** An investigation of factors that make teaching activity successful and the compilation of a handbook for teachers and supervisors. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

175. **Russell, B. D.** A comparison of two methods of learning. Journal of educational research, 18: 235-38, October, 1928.

Objective tests given to 690 pupils in the fifth, seventh and ninth grades showed that the teacher's oral reading of a passage was superior to the pupils' silent reading of it themselves in the fifth grade; that the two methods were practically equal in effectiveness in the seventh grade; and that in the ninth grade learning by pupils' reading was slightly superior.

176. **Smith, Clarence A.** An analysis of the educational philosophy of a selected group of educators. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

177. **Valentine, Ada.** Activity to create interest for dull children. 1928-29. Public schools, Spring Hope, N. C.

A study aiming to interest children in regular school subjects.

178. **Wood, Cary C.** Whole and part method in learning as affected by practice. Doctor's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

See also 283, 1312, 1449, 1465, 1468, 1472, 1532, 1570, 1782, 2738.

EDUCATIONAL PSYCHOLOGY

179. **Allen, Mildred M.** Trends in educational psychology. Master's thesis, 1929. New York university, New York, N. Y. 67 p. ms.

180. **Allison, Loy.** Effects of visual exposure on rate and reliability of stylus-maze learning. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 34 p. ms.

181. **Alm, Oscar William.** The effect of habit interference upon performance in maze learning. Doctor's thesis, June 1929. University of Minnesota, Minneapolis.

182. **Atkinson, W. B.** The relation of intelligence and of mechanical speeds to the various stages of learning. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Journal of experimental psychology, 12: 89-112, April 1929.

Correlation of achievement in each of 21 to 25 practices in three learning tests with scores made on intelligence tests and measures of mechanical speeds. Findings: Intelligence tests predict better than mechanical speed tests how well the subjects do on the first two or three practices. Mechanical speed tests predict much better than intelligence tests how well the subjects will do in the intermediate and final stages of learning.

183. **Bott, E. A., Blatz, W. E., Chant, Nellie, and Bott, Helen.** Observation and training of fundamental habits in young children. Worcester, Mass., Clark university, 1928. 161 p. (Genetic psychology monographs, vol. IV, no. 1, July 1928)

The studies reported in this monograph deal respectively with the habits of sleep, play, eating, bladder control, and regularity of attendance, as found in children at a nursery school, with occasional reference to certain of these functions in older children at home or school.

184. **Bowers, Henry.** The constancy of imaginal content. *Journal of educational psychology*, 20: 295-98, April 1929.

An investigation of the student's visual or auditory image of the object or sound denoted by the word. Conclusions: (1) In a given group there is a highly marked tendency to establish a constant order of precedence in clarity of visual and auditory images; or, there is a marked tendency for the object or sound represented by a particular word to have a constant imaginal content in a particular group of reagents; (2) there is little or no sex-difference in the order in which visual and auditory images are arranged on the basis of clarity.

185. **Bray, Charles William.** Transfer of learning. Doctor's thesis, 1928. Princeton university, Princeton, N. J. (Offprinted from *Journal of experimental psychology*, 11: 443-67, December 1928)

186. **Browne, Robert Bell.** The present status of Herbartianism in the United States. Master's thesis, 1929. University of Illinois, Urbana.

187. **Bryson, Margaret E.** The educational implications of Watson's behaviorism. Master's thesis, August 1928. Colorado state teachers college, Greeley. 45 p. ms.

Behaviorism according to Watson; educational implications; and criticisms of Watsonian behaviorism are all discussed. Findings: "The purposive interpretation of behaviorism as developed by Bode, Dewey, and others gives us a much better theory upon which to build our educational practices than the mechanistic interpretation of Watson. It enables us to develop a real technique of thinking, to utilize purposeful activity in the teaching process, and to develop an educational philosophy which emphasizes growth as the aim of education."

188. **Campbell, Joy E.** Meaning: an experimental study. Wells college, Aurora, N. Y. (To be published in *Proceedings of International congress of psychology*, 1929)

Conclusions: "In the making meaningful of new material mind tends where possible to immediately rely upon perceptual organization and where this must at first be assisted by associative material gradually the associated material either drops out in favor of a perceptual organization or it becomes fused with this perceptual organization. The factors of sensory and perceptual organization should then in the presentation of material to be learned be more carefully regarded than has usually been the case."

189. **Casanova, Teobaldo.** Effort a factor of success. Master's thesis, 1929. New York university, New York, N. Y. 145 p. ms.

190. **Chaney, Ruth M., and Lauer, Alvah B.** The influence of affective tone on learning and retention. *Journal of educational psychology*, 20: 287-90, April 1929.

191. **Clark, Bernice E.** The effect upon retention of varying lengths of study periods and rest intervals in distributed learning time. *Journal of educational psychology*, 19: 552-59, November 1928.

From a study of 32 senior high school students the author concludes that the duration of the learning periods has more influence on retention than the duration of the rest periods; study periods with lengths decreasing in a geometric progression, when compared with study periods of equal length, reduce considerably the rate of forgetting.

192. **Commings, W. D.** Maturity and education. Washington, D. C., Catholic education press, 1928. 36 p. (Catholic university of America. Educational research bulletins, vol. III, no. 7, September 1928)

193. **Dunn, Dorothy, and others.** A study of the learning process. 1928-29. Institute of child welfare, University of California, Berkeley.

In this study 80 kindergarten children were given learning tests, the results to be treated with reference to the frequency of identical as compared with relational responses in different age groups.

194. **Estabrooks, G. H.** Experimental studies in suggestion. Pedagogical seminary and Journal of genetic psychology, 36: 120-30, March 1929.

Purpose of study was to find some quick and easy means of measuring suggestibility. None of the tests used were found to measure this quality.

195. **Etzel, Harriette Shirley.** Tendencies in statistics in psychology and education. Master's thesis, 1929. University of California, Berkeley. 30 p. ms.

From a study of the number of statistical and non-statistical articles appearing in eight of the leading educational and psychological magazines from 1910 to 1928, a gradual but persistent increase was found in the number of statistical articles published between 1910 and 1928. 28 per cent of all articles used statistical procedure; correlation coefficients, probable error of correlation and multiple correlation have risen steadily in frequency of use; Pearson coefficient of correlation is used to the practical exclusion of the rank correlation coefficient.

196. **Garrison, S. C., and Garrison, K. C.** Psychology of the elementary school subjects. 1928-29. North Carolina state college, Raleigh. Richmond, Va., Johnson publishing company, 1929. 569 p.

This study is an analysis of the learning processes and psychological laws pertaining to the elementary school subjects.

197. **Griffin, H. D.** Charts and tables for prediction in psychology and education. Doctor's thesis, 1928-29. University of Missouri, Columbia.

198. **Hoke, Rex L.** Factors conditioning efficiency in a motor skill. Doctor's thesis, June 1929. University of Cincinnati, Cincinnati, Ohio.

199. **Humphrey, George.** The conditioned reflex and the laws of learning. Journal of educational psychology, 19: 424-30, September 1928.

The writer points out that the facts concerning the conditioned reflex as discovered in the laboratory can not be applied, necessarily, to general human activities.

200. **Husband, Richard Wellington.** Analysis of methods in human maze learning. Doctor's thesis, 1929. Stanford university, Stanford University, Calif.

The subjects for the study were university students, for the most part drawn from elementary psychology classes. Three qualitatively different methods of learning were used: (1) verbal, abstract, or counting; (2) kinesthetic or motor; and (3) visualizing. It was found through this study that the type and quality of the learning act depend much more on the method used in learning than upon the ability of the individual, and that certain methods are not necessarily characteristic of the learner, but that one's learning procedure can be changed. The method found to be by far the most efficient was that variously termed verbal, abstract, or counting. For the type of act such as is demanded by the maze this would be the one for which learners would be coached.

201. **Johnson, Buford.** Habits of the child. Charlottesville, University of Virginia, 1929. 42 p. (University of Virginia record extension series, vol. XIII, no. 10, April 1929)

Questions of habits of the daily routine, motor skills, and language and emotions are investigated from the scientific point of view.

202. **Jones, Harold Ellis.** Homogamy in intellectual abilities. 1929. Institute of child welfare, University of California, Berkeley. 14 p. (Preprinted from American journal of sociology, vol. 35, no. 2, September 1929)

"A review of prior research shows a tendency to a slight marital resemblance in physical traits, with husband-wife correlations for stature, eye-color, etc., averaging about .25. Early studies of resemblance in mental traits give, for the most part, similar coefficients, but these are probably attenuated to a marked degree by the unreliability of the rating methods used. A series of recent surveys, making use of more adequate mental test methods, place the marital coefficient in intelligence at approximately .5. Similar values are found in widely different social samplings. This is approximately the same degree of intellectual resemblance as that found for parents and children, and for brothers and sisters in comparable groups."

203. ——— and **Jones, Mary O.** Studies of fear in young children. 1928-29. Institute of child welfare, University of California, Berkeley.

Two studies were published with data concerning the influence of intrinsic maturation in the development of emotional tendencies. Four types of individual differences in the emotional processes as measured by galvanometric methods, were shown.

204. **Kalin, Eddy Stephen.** An annotated bibliography of the experimental studies of transfer of training. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 58 p. ms.

205. **Koch, Helen L.** The relation between the emotional content of an experience and its retention. 1929. University of Texas, Austin. Limited to memory of school grades.
206. ——— and **Granger, Jean.** Some factors determining the nature and frequency of anger and fear outbreaks in the play of preschool children. Master's thesis, 1929. University of Texas, Austin. 58 p. ms.
The children at the University of Texas nursery school were observed during indoor and outdoor play. The cause and manifestation of the emotional attack, resolving influences, and subsequent behavior were noted. Findings: Consistently more anger and fear outbreaks occurred in indoor play; more resistant behavior was observed indoors; more retaliative, out of doors. The episodes resolved more readily without adult interference out of doors and the mood subsequent to the outbreaks was also more satisfactory.
207. **Loder, J. E.** The biological content in educational psychology textbooks. Educational research record (University of Nebraska), 1: 64-65, 68-70, December 1928.
208. **Mathews, C. O.** The effect of the order of printed response words on an interest questionnaire. Ohio Wesleyan university, Delaware. Journal of educational psychology, 20: 128-34, February 1929.
209. **Newhall, S. M., and Heim, M. H.** Memory value of absolute size in magazine advertising. Journal of applied psychology, 13: 62-75, February 1929.
Within the limitations of this experiment, the results seem to indicate that the retention value of magazine advertisements is independent of their absolute magnitude.
210. **Newkirk, B. H., and Gundlach, R. H.** Transfer of training in the cancellation experiment. Journal of educational psychology, 20: 291-94, April 1929.
The authors conclude from this experiment that practice in the cancellation of one item aids in the speed of cancelling another.
211. **Newland, T. Ernest.** An experimental comparison of a group discussion method with a lecture-discussion method in educational psychology. 1929. Ohio state university, Columbus.
An experiment carried on in connection with classes taught. Some 80 students were utilized and sex and ability controlled. Findings: Experimental findings are in favor of the group-discussion procedure. This procedure consisted of the class meeting without the instructor on Mondays and Fridays, using Tuesdays and Wednesdays, for meetings in small groups of from five to seven students, one of whom acted as leader for a period of three days. Thursdays were used for class discussion of any questions unsatisfactorily discussed in the small groups. Weekly tests over the material were given.
212. **Peterson, Hans Jordan.** Technical vocabulary and background information in educational psychology. Doctor's thesis, 1928-29. Ohio state university, Columbus.
The data for this study were secured through a careful checking of psychological and educational journals, equally divided between the years 1921 and 1927 to find possible vocabulary and content differences (and hence trends) in regard to both time and source.
213. **Poffenberger, A. T.** The effects of continuous work upon output and feelings. Journal of applied psychology, 12: 459-67, October 1928.
In this experiment four forms of mental work were used, each continued for approximately five and one-half hours. The results of the study show: (1) When the records of a number of subjects are averaged there appears to be no positive relationship between changes in output of work in a variety of activities and changes in the feelings; (2) when the individual cases are examined there is at least the suggestion that those who show the greatest falling off in output also show the greatest change in the feelings, and those who show the least falling off in output also show the least change in the feelings.
214. **Portland, Oreg.** School district no. 1. Department of research. A study of fatigue. January 22, 1929. 4 p. ms.
215. **Powers, Francis F.** A study of the content of courses in educational psychology. Doctor's thesis, 1929. University of Washington, Seattle. 170 p. ms.
A nation wide survey of the field of educational psychology as it is at present taught. Findings: The field is in a state of transition; not clearly defined; few authorities agree on topics included.

216. **Reynolds, Helen M.** The outline of standards for evaluating conditions favorable to learning. Seattle, Wash., Public schools, 1929. (Prepared for the Superintendents' and supervisors' league, May 1929)

217. **Bothman, Harry I.** Intonation in modern teaching. Master's thesis, 1929. College of the city of New York, New York, N. Y. 76 p. ms.

Definition, classification, recording, and treatment of intonation based on the conclusions of authorities in the field. Miscellaneous specific conclusions are cited.

218. **Schmitt, Clara.** The psychological clinic. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 199-211.

219. **Sherman, Mandel, and Sherman, Irene C.** The process of human behavior. Washington, D. C., Washington child research center, 1929. New York, W. W. Norton and company, 1929. 227 p.

This study shows direct correlation made between training and the development of adequacy in sensori-motor responses and the development of emotions in infants and children.

220. **Spence, Ralph B.** Lecture and class discussion in teaching educational psychology. Journal of educational psychology, 19: 454-62, October 1928.

From a comparison of the lecture method with class discussion in two classes in educational psychology, the author concludes that for two large sections of graduate students in educational psychology, meeting once a week for two hours, with little previous experience or feeling in favor of the discussion method, the lecture method is superior to the discussion method in producing improvement in things measured by the test.

221. **Sun, Kuo-Hua.** A study of visual and auditory reactions in infants. Doctor's thesis, 1928-29. Ohio state university, Columbus.

222. **Verwoerd, H. F.** Effects of fatigue on the distribution of attention. Journal of applied psychology, 12: 595-601, December 1928.

223. **Watson, Goodwin B.** Do groups think more effectively than individuals. Journal of abnormal and social psychology, 23: 328-36, October-December 1928.

224. **Weber, C. Oliver.** Determination of emotional age in children. 1929. Wells college, Aurora, N. Y. 12 p. ms.

Experimental construction of a scale for measuring level of emotional development; subjects from Auburn, N. Y., public schools. Findings: The fact of levels of emotional maturity was established; also the fact that emotional age correlates with physical development, intelligence score, and grade location.

225. **Whisler, Ralph G.** Present day theories of the act of thinking. Master's thesis, 1929. Ohio state university, Columbus. 48 p.

See also 140, 156, 168, 445, 469, 497, 1395, 2813.

CHILD STUDY

226. **Anderson, Floyd E.** Correlation of mental traits. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 300 p. ms.

Summary of available studies of the measurement of mental traits with their correlation with physical traits. Findings: Intercorrelation of traits shows extremely varied coefficients of correlation.

227. **Bacon, Ruth S.** A study of the social behavior of two siblings. Master's thesis, 1929. Ohio state university, Columbus.

Two siblings (age 3-7 and 2-0) were studied in the presence of 6 other children and 6 adults in order to observe distinct differences in behavior when alone and when with others.

228. **Bagwell, Theo Leola.** A study in measuring taste in Peabody demonstration school. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 46 p. ms.

229. **Baker, Mrs. Bess M.** Correlation of physical and mental traits. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 110 p. ms.

240 ninth grade children were used for the study. Four measures were procured for each child: Intelligence quotient, scholastic rating, deviation of height and weight, and age of onslaught of pubescence. Findings: Low correlation between physical and mental traits.

230. **Baldwin, Bird T.** Breathing capacity according to height and age of American born boys and girls of school age: Iowa child welfare research station, State university of Iowa, Iowa City. American journal of physical anthropology, 12: 257-67, October-December 1928.

A series of correlations showing a significant relationship between growth in height and breathing capacity is given in this article.

231. ——— Heredity and environment—or capacity and training. Iowa child welfare research station, State university of Iowa, Iowa City. Journal of educational psychology, 19: 405-409, September 1928.

In this article Dr. Baldwin discussed the Twenty-seventh yearbook of the National society for the study of education on Nature and nurture.

232. **Breckenridge, Marian.** Factors contributing to involuntary urination in young children. 1929. Merrill-Palmer school, Detroit, Mich.

The study considers such factors as sex, physical and mental development, nutrition and general health, thyroid, local irritations, disease, colds, urinary changes, sleep, liquid intake, feeding history, personality traits, habit, and training.

233. **Brintle, Shirley Lanny.** A study of a set of twelve-year-old quadruplets in the light of the nature and nurture hypotheses. Master's thesis, 1929. Stanford university, Stanford University, Calif.

234. **Detroit, Mich. Society for the scientific study of character.** How children choose friends. First annual report of the Society for the scientific study of character, 1928-29. Detroit, Mich., Detroit teachers college, 1929. 52 p.

From the material collected for this study it is believed that children tend to choose their friends without particular regard for their physical characteristics or for their mental acumen; they do not tend to put much value upon achievement, or emotional stability; social position and its concomitant represent a crucial value approximately 25 per cent of the time.

235. **Estabrooks, G. H.** The relation between cranial capacity, relative cranial capacity and intelligence in school children. Journal of applied psychology, 12: 524-29, October 1928.

This study shows that the correlations between gross cranial capacity and intelligence are always positive and while low are sometimes significant. On the other hand, when the relative cranial capacity is considered the correlations appear to be absolutely without significance.

236. **Fenton, Norman.** The only child. Pedagogical seminary and Journal of genetic psychology, 35: 546-56, December 1928.

Author concludes that the only child has been misjudged. "Only children seem to be, if at all, but slightly more liable than other children to become peculiar and nervous."

237. **Foulke, Katharine, and Stinchfield, Sara M.** The speech development of four infants under two years of age. Pedagogical seminary and Journal of genetic psychology, 36: 140-71, March 1929.

238. **Furfey, Paul Hanly.** A selected bibliography on child development. Washington, D. C., Catholic university of America, 1929. 51 p. (Educational research bulletin, vol. IV, no. 4, April 1929)

A selected and annotated bibliography of 265 titles dealing with the physical, mental, and social development of children.

239. **Gesell, Arnold.** Infancy and human growth. Yale psycho-clinic, Yale university, New Haven, Conn. New York, The Macmillan company, 1928. 418 p.

An investigation of methods of developmental observation, genetic studies, and clinical studies of infant behavior.

240. ——— and **Thompson, Helen.** Learning and growth in identical infant twins. An experimental study by the method of co-twin control. Yale psycho-clinic, Yale university, New Haven, Conn. Worcester, Mass., Clark university, 1929. 124 p. (Genetic psychology monographs, Clark university press, 1929)

The study deals with the conditions of learning with special reference to age and growth. Findings: Special training limited to one twin in stair climbing, cube behavior (prehension and manipulation of 1-inch cubes) had comparatively little influence on the behavior patterns. Findings demonstrated the importance of maturational factors in learning.

241. **Goldberg, Bronett, and Pressey, Luella C.** How do children spend their time? *Elementary school journal*, 29: 273-76, December 1928.

From an investigation of 309 children, the following conclusions are drawn: The average child gets enough sleep; he spends approximately seven and one-half hours a day in becoming educated; his evening meal is decidedly unbalanced, and he is just as likely to work for money as not.

242. **Goodenough, Florence L.** Measuring behavior traits by means of repeated short samples. *Journal of juvenile research*, 12: 230-35, September-December 1928.

243. **Haefner, R. H.** The relation between hand and foot tendencies of children. 1929. Eastern Illinois State teachers college, Charleston.

244. **Hallett, Mrs. Blanche Mc Nerney.** Case study of Ralph. Master's thesis, 1928-29. Rutgers university, New Brunswick, N. J.

245. **Haven, Seth Edson.** Relative effort of children of native versus foreign-born parents. Master's thesis, 1928-29. Ohio state university, Columbus.

246. **Heidbreder, E. F.** Problem solving in children and adults. *Pedagogical seminary and Journal of genetic psychology*, 35: 522-45, December 1928.

The general plan of this study was to place adults and children of different ages in problematical situations objectively as similar as possible and to note differences and similarities in their behavior. Conclusions: (1) The general ability to solve problems increased with age; (2) responsiveness to problems as such also increased with age; (3) there was a gradual emergence of a general form, pattern, or mode of procedure, which became more definite, but never rigidly set, as age increased; (4) there were age differences both in the frequency with which reasons occurred and in the kinds of reasons employed; and (5) there was a gradual change, through the age groups, from a more subjective to a more objective attitude toward the problem as a whole.

247. **Heinlein, Julia Heil.** A study of dextrality in children. *Pedagogical seminary and Journal of genetic psychology*, 36: 91-119, March 1929.

A study of preferential handedness in children as evidenced in superior right- or left-hand scores in simple coordination tests involving visual-motor coordination. The tests were the dynamometer, steadiness, tapping, and target.

248. **Hicks, J. Allan.** Acquisition of motor skill in young children: an experimental study of practice in throwing at a moving target. Doctor's thesis, 1929. State university of Iowa, Iowa City.

249. **Hoefler, Carolyn, and Hardy, Mattie Crumpton.** The later physical and mental development of breast fed and artificially fed infants. Elizabeth McCormick memorial fund, Chicago, Ill. *Journal of the American medical association*, 92: 615-19, February 23, 1929.

A report of the results of tested measurements made on 383 children ranging in ages from 7 to 13 years and grouped according to the length of period of excessive breast feeding. Findings: (1) The children who were artificially fed were on the whole inferior physically and mentally to the breast-fed group; (2) children who were breast-fed 4-9 months were definitely superior physically and mentally to all the other groups; (3) children who were fed exclusively on breast milk longer than 9 months, although apparently developing physically at a normal rate, were mentally the poorest of all groups. As the length of the nursing period increased beyond nine months, there was a progressive decrease in intelligence ratings.

250. **Holzinger, Karl J.** The relative effect of nature and nurture influences on twin differences. *Journal of educational psychology*, 20: 241-48, April 1929.

From the data for this study the author concludes that for intelligence, nature is about equally effective with nurture in producing mean twin differences, but is somewhat more effective than nurture in determining variability in such differences.

251. **Hudson, Mrs. Grace Powers.** A college course in child care and training based on the problem method of teaching. Master's thesis, 1928. Iowa State college, Ames. 82 p. ms.

This investigation was confined to an experiment conducted with the child care and training class of Union college. Objectives for the course and problems to develop these objectives are given. Conclusions: The problem method of teaching seems especially applicable to a course in child care and training since the students through observation and contact with the preschool child can study the daily activities and problems arising in child care and training.

252. **Iowa child welfare research station, State university of Iowa, Iowa City.** Physical traits of young children. Report of measurements of 150 boys and 167 girls from three to six years of age. *American journal of diseases of children*, 38: 541-46, 1929.

Tables have been prepared of the means, standard deviations, probable errors, and coefficients of variation, in metric units, of 150 boys and 167 girls from three to six years of age.

253. **Jenkins, Gladys Gardner.** Factors involved in children's friendships. Master's thesis, 1929. University of Chicago, Chicago, Ill. 48 p. ms.

A study of the friendships of 280 boys and girls in the junior high school of Riverside, Calif. Conclusions: Social-economic status of the parents is the most important factor in the child's selection of a friend; the second factor of importance is chronological age; mental factors are of definite but less significant importance; mental age is of more importance than I. Q.

254. **Jennings, Edward E.** A psychological study of pre-adolescent boys in literature. Master's thesis, 1929. University of Chicago, Chicago, Ill. 96 p. ms.

An analysis of dominant characteristics of Tom Brown, Phil the Fiddler, Tom Sawyer, Huck Finn, The Bishop's Shadow, and Penrod, and a comparison of their characteristics with those indicated by three psychologists, Hall, Kirkpatrick, and Hollingworth. Findings: Great variations among boys and psychologists.

255. **Jones, Harold Ellis, and others.** A survey of twins with reference to certain anatomical and functional traits. 1928-29. Institute of child welfare, University of California, Berkeley.

With the cooperation of the school departments of Alameda, Berkeley, Oakland, and Richmond, a census was made of twins of school age in these cities, totaling approximately 400 pairs. Development data were assembled on 220 pairs of same sex twins. Anthropometric and functional test data were collected on 45 pairs of pre-school twins, in this study.

256. ——— and **Neall, Harriet E.** A study of handedness. 1928-29. Institute of child welfare, University of California, Berkeley.

A preliminary study of handedness in 60 children between the ages of 18 months and 6 years in relation to a schedule of standardized experimental situations. The study involved the development of a reliable technique and its repeated application to the same children during a period of nine months, especial attention being given to inconsistency of reaction at the several age levels.

257. **Jones, Henry Lee.** Photographic recording of infantile reactions. Master's thesis, 1928-29. Ohio state university, Columbus.

258. **Jones, Mary C.** A study of food preferences shown by young children. 1928-29. Institute of child welfare, University of California, Berkeley.

This study contains data on certain food preferences displayed by 25 children between the ages of 18 and 42 months. It involved an analysis of over 1,000 choices obtained at the Institute by a multiple choice of procedure.

259. **Koch, Helen L., and Herring, Amanda.** A study of interest span in preschool children and some related variables. Master's thesis, 1929. University of Texas, Austin.

It was the purpose of the experiment to discover the relation between the interest span of preschool children in a play situation and the following variables: Age, sex, time of day, type of toy, length of occupation under a general situation, and intelligence as measured by a standard test. Findings: All of the above-mentioned variables proved to be conditioning factors. Boys exhibited more sustained interest than did the girls. The power of a toy to attract was not a perfect index of its ability to hold a child's attention. A correlational attack revealed no striking relationship between intellectual maturity and interest span.

260. **Kuebler, Ernest William.** The present problem of values for adolescence. Master's thesis, 1928-29. Boston university, Boston, Mass.

261. **Latham, Orval Ray.** Children's concepts concerning trespass as affected by training and environment. Doctor's thesis, 1928. State university of Iowa, Iowa City. 139 p. ms.

262. **Leal, Mary A.** Physiological maturity and certain traits in children. Doctor's thesis, 1929. University of Pennsylvania, Philadelphia.

A study of school children in New Britain, Conn., to determine physiological maturing and its effect on certain so-called "adolescent" traits.

263. **Pressey, Luella C.** How children spend their time. *Elementary school journal*, 29: 273-76, December 1928.

264. **Ramsperger, Barbara Burks.** Foster parent-foster child comparisons as evidence upon the nature-nurture problems. Doctor's thesis, 1929. Stanford university, Stanford University, Calif.

From this study it is concluded that nearly 70 per cent of school children probably have an actual I. Q. of within 6 to 9 points of that represented by their innate intelligence. Taking the best environment to be three standard deviations above the general mean, the maximum contribution of home environment to intelligence is apparently about 20 I. Q. points; and, conversely, the least cultured, least stimulating kind of American home environment may depress the I. Q. as much as 20 I. Q. points. But situations as extreme as these probably occur only once or twice in 1,000 times in American communities with school facilities.

265. **Van Alstyne, Dorothy.** Environmental factors related to intelligence and vocabulary tests of three-year-old children. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 108 p. (Contributions to education, no. 366)

A study undertaken to discover the relationships between various factors of the home environment of young children and their scores on intelligence and vocabulary tests. The correlations of the environmental factors with the vocabulary test show a consistently higher relationship than they do with the intelligence test. The average difference between the correlation is +.04.

266. **Washburn, Ruth W.** A study of the smiling and laughing of infants in the first year of life. Doctor's thesis, 1929. Yale psycho-clinic, Yale university, New Haven, Conn. (Genetic psychology monographs, vol. VI, nos. 5-6)

The study treats of the developmental differences in smiling and laughing behavior patterns, and of individual and personality differences as revealed by the study of this type of expressive behavior.

267. **Whitley, M. T.** Children's interest in collecting. Journal of educational psychology, 20: 249-61, April 1929.

From a detailed investigation the author concludes that there is a general interest among children in collecting. Interest is strongest at the ages of nine and thirteen.

268. **Wickman, E. K.** Children's behavior and teachers' attitudes. New York city, Commonwealth fund, 1928. 248 p.

In determining the effect of teachers' attitudes on children's behavior, the teaching staffs of two city grade schools were asked to designate types of undesirable behavior of pupils, which they later scored. Control ratings were secured from 16 additional representative groups of teachers. The teachers' different attitudes toward the various types of problems, or misbehavior, were measured in three ways.

269. **Wilson, P., and Holmes, S. J.** Intra-pair differences in twins. 1928-29. Institute of child welfare, University of California, Berkeley.

This is a report on 170 pairs of unselected like-sex twins. On the basis of standardized interviews with parents, intra-pair differences were computed for handedness, dentition, the development of walking and talking, disease susceptibility, and numerous other traits. Dissimilarities in objective physical characteristics, as well as in subjectively rated mental traits, were found to be more marked in fraternal than in identical twins.

270. **Wingfield, A. H., and Sandiford, Peter,** Twins and orphans. Journal of educational psychology, 19: 410-23, September 1928.

A study of 102 pairs of twins selected at random from the public schools of Toronto and Hamilton, and 29 orphans in a fraternal orphanage some miles north of Toronto. From this study it was found that there is no significant difference in the amount of resemblance in mental traits between younger and older twins; like-sex pairs of twins show a greater degree of resemblance in intelligence than unlike-sex pairs; orphan children who have been reared together for a considerable portion of their lives, are no more alike than unrelated children paired at random, either in general intelligence or other intellectual traits; twins as a group are slightly below the average of the population in general; orphan children are about seven per cent below the average intelligence of unselected children.

See also 47, 183, 201, 203, 206, 221, 224, 1265, 2381, 2459.

SEX DIFFERENCES

271. **Bassett, Sarah Janet.** Sex differences in history retention. School and society, 29: 397-98, March 23, 1929.

Presents data from a study of three groups of sixth and seventh grade pupils composed of equal numbers of boys and girls. They show boys slightly superior to girls in history retention, but that superiority varies according to type of subject matter. It is suggested that provision be made for such sex differences in history study.

272. **Broom, M. Eustace.** Sex differences in achievement in modern languages as measured by standardized tests. *California quarterly of secondary education*, 4: 125-28, January 1929.

Data on two skills—knowledge of word meanings in a Spanish-English vocabulary, and ability to isolate essential details and total meanings of paragraphs printed entirely in the foreign language. Findings indicate the necessity for a further and more inclusive study.

273. **Commins, W. D.** More about sex differences. *School and society*, 28: 599-600, November 10, 1928.

Presents data obtained from a survey of intelligence and achievement in the schools of a small city with a total enrollment of about 3,000 to discover variability according to sex.

274. **Fitzgerald, James A., and Ludeman, W. W.** Sex differences in history ability. *Peabody journal of education*, 6: 175-81, November 1928.

A study of 208 students in the sixth, seventh, and eighth grades in South Dakota. The author concludes that the boys in the sixth and seventh grades seem to know more history than girls, but in the eighth grade the girls are superior to the boys.

275. **Lehman, Harvey C., and Witty, Paul A.** Sex differences in vigorous bodily activity. *Journal of educational method*, 8: 322-30, March 1929.

Over 5,000 school children in Kansas were asked to select from a list of 200 play activities those in which they had participated voluntarily during the preceding week. It was found that 42 activities which require moderate or excessive energy expenditure were participated in by boys more frequently than girls, and only 16 such activities were engaged in more frequently by girls than boys.

276. ———— Some suggestive results regarding sex differences in attitude toward school work. *Education*, 49: 449-58, April 1929.

277. **Lentz, Theodore F., jr.** Sex differences in school marks with achievement test scores constant. *School and society*, 29: 65-68, January 12, 1929.

A comparative study of the semester marks in the several elementary subjects and scores on the Stanford achievement tests made by 390 pupils, 188 girls and 202 boys, to determine whether girls get more credit for the same work than boys and if teachers, in assigning marks, are subject to spurious social influences unrelated to academic achievement which girls are more capable of exerting than boys. The study shows, roughly, girls making higher school marks in 4 out of 5 classes but higher achievement scores in only 1 class out of 5. No conclusions are drawn but suggestions are made for further investigation along this line.

278. **Lewerenz, Alfred S.** Sex differences on ability tests in art. *Journal of educational psychology*, 19: 629-35, December 1928.

Tests were given to approximately 1,000 unselected students ranging from grade 3 through the senior year in high school. The data collected seem to indicate that: (1) Girls are superior in originality and in color recognition; (2) they manifest greater conservatism than do boys; (3) boys dare more and consequently do both better and worse than girls; and (4) boys have, in general, more ability to scrutinize and analyze than do girls, while the latter partly compensate for this lack by having a greater sense of rhythm and color.

279. **Perry, Winona M.** Are boys excelling girls in geometric learning? January 1929. University of Nebraska, Lincoln. *Journal of educational psychology*, 20: 270-79, April 1929.

Although as a group the boys were somewhat higher in general mental ability and in reasoning ability, the girls reached a higher degree of achievement in the solution of exercises in geometry.

See also 287, 639-640, 1296, 2225.

EDUCATIONAL SOCIOLOGY

280. **Campbell, Gertrude M.** Critical analysis of the course of study in educational sociology in the three municipal teacher-training schools of New York city. Master's thesis, 1929. College of the city of New York, New York, N. Y. 85 p. ms.

A questionnaire study to determine extent to which the sociology course meets the daily sociological needs of teachers in their classroom experience. Findings: (1) The courses, when offered, vary greatly in aims, purpose, scope and methods; (2) the courses do not meet the daily sociological needs of teachers in their classroom experiences.

281. **Hunt, George Ray.** A sociological study of church community. 1928-29. West Virginia university, Morgantown.

282. **Mais, H. George.** A case study of families and its significance. Master's thesis, 1928. New York university, New York, N. Y. 86 p.

The purpose of this study was to investigate the trend toward disintegration in modern family life. The study first takes up the opinions of leading students of the family, and then takes up a case study of 100 representative American families, and presents data which lead to the conclusion that there is a decided trend toward family disintegration in modern life.

283. **National society for the study of educational sociology.** Objectives of education. Prepared by Philip W. L. Cox, Charles C. Peters, David Snedden. Second yearbook of the National society for the study of educational sociology. New York city, Teachers college, Columbia university, 1929. 185 p.

A study of the social values basic to educational values, the objectives of education for worthy home membership, the relation of standardized tests to educational objectives, etc.

PSYCHOLOGICAL TESTS

284. **Atkins, Ruth Ellen.** The object fitting test: a strictly non-language intelligence test for preschool children. Doctor's thesis, June 1929. University of Minnesota, Minneapolis.

285. **Ball, Robert Jaudon.** An objective measurement of emotional instability. An experimental study of emotional reaction through motor learning by the use of a finger maze. Journal of applied psychology, 13: 226-56, June 1929.

The results show noticeable differences in the performance of individuals who are emotionally stable and those who are not, and the conclusion is drawn that the "finger maze can be used in most cases as a diagnostic aid in differentiating emotionally stable from emotionally unstable individuals."

286. **Black, H. J.** The constancy of the L. Q. as determined by the Dearborn group test of intelligence. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 44 p. ms.

A study of the correlation of L. Q.'s on test and retest (interval ranging from one to two years). Detailed study of increases, decreases and distribution of differences in 90 cases. Conclusions: $r = .75$. The results indicate the need of taking into account factors making for differences in L. Q., and desirability of having several measures.

287. **Boyer, Philip A., and Broome, Edwin C.** Report of mental ability of Philadelphia 12B pupils as measured by scores in Otis test of mental ability, higher examination. October 1928. Division of educational research, Public schools, Philadelphia, Pa. 21 p. ms. (Bulletin, no. 97)

This is part of a state-wide study of the relations of secondary and higher education. Tests were given in May 1928, to 2,450 pupils in 12 schools, showing that Philadelphia students are above the test norms. Median scores are given by sex, by curriculum groups, and by school. Gives figures as to per cent of high school failures in Philadelphia and 11 other cities.

288. **Broom, M. Eustace.** A note on the validity of a test of social intelligence. Journal of applied psychology, 12: 426-28, August 1928.

289. ——— The validity of four individual tests of mental ability. Educational research bulletin (Los Angeles, Calif.), 8: 9-10, March 1929.

The purpose of this investigation was to ascertain the correspondence between the ability or the abilities measured by the following tests: (1) The Kohs block design test; (2) the Porteus maze test; (3) the Herring revision of the Binet-Simon tests; and (4) the Stanford revision of the Binet-Simon tests. The data given indicate that to a marked degree the different tests considered are measuring the same thing in roughly the same amounts. The correlation, however, is low enough to warrant the conclusion that the tests are measuring either somewhat different things or else different amounts of the same thing.

290. **Brown, William M.** Validity of certain group intelligence tests. Master's thesis, 1928. State college of Washington, Pullman. 60 p. ms.

Five tests (Dearborn II, Pintner N. L., Otis S. A., multimental, mentimeter computations of scores) were given to two groups (55 pupils and 165 pupils, respectively), in grades IV-VII. Conclusions: Dearborn II (subtests 1, 3, 5, 7) appear slightly the best; Dearborn (all tests) and Pintner N. L., also, better than others; Dearborn is more readily administered and scored; Otis S. A. was found to rank with Dearborn II for classification within a school system.

291. **Cromwell, Alfred Bertrand.** Prediction of class grades from an intelligence test. Master's thesis, 1928. University of Idaho, Moscow.

292. **Curtis, Francis D., and Woods, Gerald G.** A study of a modified form of the multiple-response test. 1928. University of Michigan, Ann Arbor. *Journal of educational research*, 18: 211-19, October 1928.

The conventional and the modified forms of the multiple response test were administered to 208 pupils in six classes in the University of Michigan high school. The data were treated statistically. Findings: On the whole the modified form was found to be somewhat superior to the conventional form.

293. **Dawson, L. O.** A study of the development of the rate of articulation. *Elementary school journal*, 29: 610-15, April 1929.

Six articulation tests were administered to 200 pupils in grades I-XII in the public schools of Stronghurst, Ill. The investigation showed that development in articulation was greatest during the first three years. The fourth and ninth grades showed no development, but all other grades showed increases over the preceding grades.

294. **Dearborn, Walter F., and Long, Howard H.** On comparing I. Q.'s at different age levels on the same scale. *Journal of educational research*, 18: 265-74, November 1928.

In this study the question is raised whether or not on a given scale a child who maintains a constant position with reference to the average of his group will nevertheless secure different I. Q.'s because the scale means different things at different levels.

295. ——— and **Smith, C. Wilson.** The results of rescoring five hundred thirty Dearborn tests. *Journal of educational psychology*, 20: 177-83, March 1929.

Significant points disclosed by a review of 530 Dearborn A and C tests are: (1) Many errors in scoring were present; (2) there was enough constant error to affect the entire group, and to make conclusions based upon individual mental ages computed from unchecked test scores open to doubt; (3) there was persistent under-scoring; (4) objectivity of scoring is not sufficient insurance against error; (5) there is no sure way to prevent error in scoring, though frequent and careful instruction of scorers is very helpful and is probably essential to accuracy in scoring; (6) a check on scoring, preferably by someone other than the original scorer, is essential to accuracy in scoring.

296. **Dessotnekoff, Nathan.** The improvement of the Otis S. A. intelligence test and marks in high school English. Master's thesis, 1929. College of the city of New York, New York, N. Y. 19 p. ms.

Use of a scoring technique based on item analysis.

297. **Dodge, Arthur Farwell.** Psychological tests for executive ability. Master's thesis, 1929. University of Illinois, Urbana.

298. **Dorcus, Mildred Day.** Analysis of specific responses of children in the Healy pictorial completion test II. *Pedagogical seminary and Journal of genetic psychology*, 35: 574-86, December 1928.

The data for this study were obtained by the Bureau of educational experiments, New York City. 102 subjects were used. The present study was concerned primarily with the kind of response made to specific items rather than with the total score.

299. **Dougherty, Mary L.** What changes the I. Q.? *Elementary school journal*, 29: 114-21, October 1928.

A study of two cases on record at the Johns Hopkins university educational clinic. In 12 and 13 months, respectively, each boy gained approximately three years in mental age.

300. **Douglass, Harl B., and Huffaker, C. L.** Correlation between intelligence quotient and accomplishment quotient. *Journal of applied psychology*, 13: 76-80, February 1929.

301. **Educational records bureau, New York, N. Y.** Graphic comparisons of intelligence and achievement test scores of student groups in 87 independent schools. 1929. (Bulletin no. 4)

A series of charts presenting comparative reports on the results of intelligence and objective achievement tests.

302. **Freeman, Frank S.** Power and speed: their influence upon intelligence test scores. *Journal of applied psychology*, 12: 631-35, December 1928.

From the data assembled, it is concluded that the Dearborn group test is a measure primarily and largely of power rather than speed. If the influence of rate and power upon test scores is to be studied, the effect of a time limit must be removed, for it is only by so doing that we can arrive at unambiguous results.

303. **Gaines, Isaac A.** Value of the Pintner-Cunningham primary test of intelligence as a prediction of school progress. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

304. **Garrett, Henry E.** The relation of tests of memory and learning to each other and to general intelligence in a highly selected adult group. *Journal of educational psychology*, 19: 601-13, December 1928.

Eight tests of memory and learning were given to more than 200 Columbia college students enrolled in classes in beginning psychology. The tentative conclusion drawn from this study is that there is a small memory factor present within our tests.

305. **Garrison, K. C.** Correlation between intelligence test scores and success in certain rational organization problems. *Journal of applied psychology*, 12: 621-30, December 1928.

In summarizing the correlation findings between the learning problems and intelligence test scores, the following factors are revealed: (1) Rational learning and the analogy form test scores give reliable positive correlations with intelligence test scores. No relationship was found between the rational analysis test and the intelligence test scores; (2) positive correlations were found between all the test factors of each learning problem and grade points; (3) the rational learning and the analogy form tests are better than the intelligence test scores for predicting grade points in psychology classes.

306. **Goodenough, Florence L., and Shapiro, Gertrude.** The performance of preschool children of different social groups on the Kuhlmann-Binet tests. *Journal of educational research*, 18: 350-62; December 1928.

A study of 380 children from 18 to 54 months of age. A superiority was found on the part of the children from the higher social classes.

307. **Gordon, Hans C.** Mental ability survey of 12B pupils. October 31, 1928. Division of educational research, Public schools, Philadelphia, Pa. (Bulletin 97)

Scores of 2,450 pupils of grade 12B in Otis test of mental ability. Conclusions: Average mental age of Philadelphia 12B students was higher than test norms and the average for the state of Pennsylvania. Variation in average mental ability scores among 12 city high schools indicates the necessity for adjustments in administration and educational procedure.

308. **Greene, Charles E.** Reliability and difficulty of true-false and multiple choice tests with dull and bright groups. [1929] Department of research, Public schools, Denver, Colo.

309. **Grover, C. C.** Reports on results of primary group intelligence tests, spring semester, 1929. April 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif. 7 p. ms.

Tests of pupils entering low first grade, given in January. Results by schools, showing letter rating.

310. **Hagg, Joanna.** Measurement in some fundamental capacities as related to scholastic ability and intellectual level. Master's thesis, 1929. Florida state college for women, Tallahassee. 77 p. ms.

Tests in reaction time (visual and touch) dotting, steadiness, time of persistence of after image, were given. Each test was expressed in average and variability and these results were correlated with measures of intelligence and with college grades. It was found that there was low relation between level of test performance and criteria of intelligence and scholarship. The correlation between the variability of the performance expressed in terms of the coefficient of variation and scholastic and intellectual level is significant.

311. **Hallowell, Dorothy Kern.** Mental tests for preschool children. Doctor's thesis, 1928. University of Pennsylvania, Philadelphia. *Psychological clinic*, 16: 235-76, January-February 1928.

312. **Heitmeyer, Elza Alvin.** The intelligence quotient as a prognosis of success in taking different high school subjects. Master's thesis, 1928. University of Idaho, Moscow.

313. **Henry, Arthur G.** Binet testing and retesting of adult prisoners. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

314. **Henry, Mary Bess.** The Kuhlmann-Anderson test of intelligence—grade IX to maturity. Educational research bulletin (Los Angeles, Calif.), 8, 15, December 1928.

Includes 12 tests. Trials indicate that it is a good measure of the same sort of intelligence that is measured by the Terman group test.

315. **Huff, Louise.** To determine the learning effect of a true-false test. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

316. **Huffaker, C. L.** A mental survey of the intermediate grades of the public schools of Eugene, Oreg. Eugene, Oreg., University of Oregon, 1928, p. 221-38. (University of Oregon publication. Education series, vol. 1, no. 5, September 1928)

Findings: It appears from this study that there are no more students retarded in the system than should be retarded on the basis of their mental ability. In fact, it appears that certain students have been pushed ahead in the grade classification more than their mental ability would justify. The wide ranges of mental ability which are found in each half grade can not possibly be explained on the basis of unreliability of measurement. They must be explained on the basis that the requirements for promotion are considerably below what could reasonably be expected of the average student. This does not mean that slow students should be retarded, but more likely that they should be segregated according to ability, and the curriculum adapted to their levels.

317. **Hulse, M. L.** Relationships between intelligence test ranks and scholastic grades. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 67 p. ms.

Relationships were studied for each term of college course, numbers varying from 425 to 185. General scholastic average and individual subject averages were employed. Conclusions: Low coefficients of correlation were indicated. However, definite trends are indicated by a study of tables rather than correlations.

318. **Jaffa, Adele, and Conrad, H. S.** The development of intelligence. 1928-29. Institute of child welfare, University of California, Berkeley.

In this study the following data assembles in relation to the development of intelligence were completed: (1) A comparison of the relative prediction values of three preschool scales of intelligence (Minnesota, Merrill-Palmer, and Gesell). Substantially equal validities were found; (2) a study of the validity of ratings of preschool children, as compared with results from standard intelligence tests; (3) an analysis of the personal equation in ratings by different judges; (4) a study of the I. Q.'s as a function of a child's emotional adjustment in an intelligence test situation; (5) a study of fluctuation in test performance in preschool children, in relation to age, intelligence, order of testing, interval between tests, and previous fluctuation.

319. **Kefauver, Grayson N.** Necessity of equating intelligence quotients obtained from group tests. Journal of educational research, 19: 92-101, February 1929.

From a study of intelligence quotients from 12 tests, the writer finds that there is a great difference between the I. Q.'s for an individual as obtained from different tests. The variation in the means of the intelligence-quotients for a group of pupils was 23 points.

320. **Keller, Frances.** Results of group mental testing at Woodland Hills school, May 1928. September 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 3 p. ms. (Bulletin no. 28)

Gives the results of the Pressey test, grades 2A-2B; the National tests, grades 3B, 4B-6B; shown by grades.

321. ——— Results of group mental testing at Wooldridge school, March 1928. September 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 5 p. ms. (Bulletin no. 29)

Gives the results of Pintner-Cunningham test, grades 1B-1A; the Otis test, grades 2 B-3B; and the National tests, grades 3A-6B.

322. **Kirkwood, Julia A.** Tables of intelligence quotients of young children. Iowa City, Iowa child welfare research station, State university of Iowa, March 1929. 12 p.

In these tables intelligence quotients are given for chronological ages two, three, four, and five years, with mental age range of from one year to twice the respective chronological age.

323. **Kuhlmann, F.** The Kuhlmann-Anderson intelligence tests compared with seven others. *Journal of applied psychology*, 12: 545-94, December 1928.

A study of the relative merits of tests used, including seven well-known group test scales and the Kuhlmann-Anderson test. Findings: Inadequacy of Pearson correlation formula; in nearly all comparisons the Kuhlmann-Anderson test shows up best.

324. ——— The Pearson formula, and a further note on the Kuhlmann-Anderson tests. *Journal of applied psychology*, 13: 31-45, February 1929.

This study compares another method of computing correlation with the Pearson method, and shows that it brings out true relations where the Pearson formula does not.

325. **Langlie, T. A.** A comparison of "aptitude" and "training" tests for prognosis. *Journal of educational psychology*, 19: 658-65, December 1928.

This study is an analysis of the results obtained by giving the Iowa Placement examinations in English, mathematics, and chemistry to 300 freshmen in the College of engineering at the University of Minnesota. It demonstrates that achievement in engineering courses can be predicted with a fair degree of reliability.

326. **Larson, Selmer Christopher.** Studies in aptitude forecasting with the multiple regression equation. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

327. **Leker, Charles A.** Guessing in true-false tests. *School review*, 36: 768-70, December 1928.

The guessing done by students is predetermined by predisposing tendencies within the individual. The law of chance does not operate freely.

328. **Lester, Olive P.** Performance tests and foreign children. *Journal of educational psychology*, 20: 303-309, April 1929.

A study of 26 children in a retarded first grade in a city school. 18 of the children were from homes where Polish was spoken entirely. Conclusions: (1) Certain performance tests apparently resemble the Binet test more closely than do others (in this study the Mare and Foal and the Kohs block test), and in working in groups of foreign children this must be kept in mind; (2) some of the performance tests, the Healy form board and the Knox cube test, were found in the group studied to correlate better with teachers estimates than did others: etc.

329. **Lewerenz, A. S.** A study of the intelligence distribution of school children killed in Los Angeles traffic accidents. 1929. City schools, Los Angeles, Calif.

330. **Lowe, Mary Louise, and Crawford, C. C.** First impressions vs. second thought in true-false tests. *Journal of educational psychology*, 20: 192-95, March 1929.

A study to discover whether it is better to record the first answer that comes to the mind in taking a true-false test, or whether it is better to stop to meditate or reason on the question.

331. **McAnulty, Ellen Alice.** A comparison of the Terman, the National and the Stanford Binet tests. *Educational research bulletin* (Los Angeles, Calif.), 8: 5-7, October 1928.

159 Palo Alto children were tested with the Terman group test (Form A) and with the National Intelligence examination. The tests were given one day apart. In addition, each of the children had been given a Binet test at some time, by a Stanford examiner, and the results of the Binet test were in the Stanford files.

332. **McFadden, J. H.** A further note on the differential I. Q.'s of siblings. *Journal of applied psychology*, 13: 86-91, February 1929.

333. **McGraw, Sister Mary Louise, and Mangold, Sister Mary Cecelia.** Group intelligence tests in the primary grades. Master's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C., Catholic education press, 1929. 41 p. (*Educational research bulletin*, vol. IV, no. 2, February 1929)

The form and content of primary tests of intelligence, their use in the first grade and a comparative study of eight tests at present on the market.

334. **McMahon, Francis E.** An introduction to the quantitative investigation of judgment. Master's thesis, 1929. Catholic university of America, Washington, D. C. 29 p. ms.

A preliminary battery of tests measuring judgment was administered to several hundred college students. Statistical treatment indicated that judgment is not a unit ability.

335. **Marine, Edith Lucile.** The effect of familiarity with the examiner upon Stanford-Binet test performance. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A study to determine whether there is a real difference between familiar and non-familiar groups as to (a) total Binet performance as indicated by I. Q., and (b) language responses to sub-tests. Findings: The highest experimental coefficient was so low as to indicate that there were only about 2.5 chances to 1 that the experimental factor produced any change in intelligence quotient.

336. **May, Walter M.** A report on the results of the intelligence, history and English tests in grade XII of New Hampshire secondary schools in 1927-28. 1928. Connecticut State board of education, Concord. 8 p. ms.

Conclusions: From the intelligence tests results it is clear that considerable selection has been going on among the seniors. Their general percentage of intelligence shows a large percentage of superior mental ability among the seniors and a small percentage of less than average ability.

337. **Oakland, Calif. Public schools.** Department of research and auxiliary agencies. Report on results of primary group intelligence tests, fall semester, 1929.

338. **Pintner, Rudolph.** Intelligence tests. Psychological bulletin, 25: 389-406, July 1928.

339. **Reading, Pa. Public schools.** Studies in intelligence of pupils—grades 3-6, 7A, and senior high school, 1928-29.

340. **Reinhart, Sister Miriam.** A test for the measurement of judgment in the grammar grades. Master's thesis, 1929. Catholic university of America, Washington, D. C. 40 p. ms.

Three tests designed to measure judgment were constructed and administered to 700 children. Relation to intelligence and inter-relations of tests were treated statistically.

341. **Riess, Bernard.** The Otis self administering test as a predictive measure of success in high school. Master's thesis, 1929. College of the city of New York, New York, N. Y.

This is an evaluation of the Otis self-administering test by means of coefficients of correlations and the comparison of marks of students grouped according to intelligence test scores. Findings: Correlations between intelligence test scores and tests of achievement in Latin and mathematics ranged from .052 to .343.

342. **Riley, Sister Mary of the Visitation.** Visual perception in reading and spelling: a statistical analysis. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C., Catholic education press, 1929. 48 p. (Educational research bulletin, vol. IV, no. 1, January 1929)

A battery of perception tests were devised, and together with a number of reading, spelling and intelligence tests were administered to 110 pupils in the fourth and fifth grades. Correlations of the various perception tests among themselves were fairly high and there was strong indication of a "group factor." Perception of words and letter groups was found to be important in learning to read and spell, while perception of digits and designs was of little significance.

343. **Sangren, Paul V.** Comparative validity of primary intelligence tests. 1928. Western state teachers college, Kalamazoo, Mich.

A study to determine the comparative validity of seven groups of mental tests for grade I.

344. **Schinnerer, Mark C.** Results of Ohio psychological test, form II, Cleveland high school graduates, June 1928. July 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 31 p. ms. (Bulletin no. 11)

Compares median scores of Cleveland high school graduates with median score of entering freshmen in 21 Ohio colleges; shows that Cleveland graduates have a median score 2.3 points above the median of entering freshmen in Ohio colleges.

345. **Schultz, Richard S.** A mental alertness examination for the working age level. Journal of applied psychology, 13: 46-61, February 1929.

A study of the Viteles mental alertness examination for the working age level of T-100. The data presented represent a preliminary evaluation of the test. In addition to figures on the validity and reliability of the test, data on the school, race, age, grade, occupation, and sex differences are given.

346. **Shulson, Violet, and Crawford, C. C.** Experimental comparison of true-false and completion tests. *Journal of educational psychology*, 19: 580-83, November 1928.

It is concluded from this study that while the completion test lacks objectivity, it is as valid as the true-false test and that the two should be used together to supplement each other by measuring different types of mental reactions.

347. **Steinbrink, Brother Lewis Richard.** Can intelligence be measured? Some theoretical and practical implications. Doctor's thesis, 1929. Loyola university, Chicago, Ill. Chicago, Ill., Loyola university press, 1929. 152 p.

348. **Sutherland, H. E. G.** The relationship between I. Q. and size of family. *Journal of educational psychology*, 20: 81-90, February 1929.

A study of a group of children whose fathers all belong to one occupational group, namely miners. Conclusions: While previous investigations have in the main found negative correlations between intelligence and size of family with groups of subjects not homogeneous as regards social status and occupation of the parent, this study would draw attention to the existence of the same phenomenon, though in a less marked degree, among a group of children whose fathers all follow one occupation and who are all of the same social status.

349. **Thompson, Lorin A., and Remmers, H. H.** Some observations concerning the reliability of the Pressey X-O test. *Journal of applied psychology*, 12: 477-94, October 1928.

Observations for this study were made at Purdue university during the school year 1924-25. The students in elementary psychology served as the subjects. The purpose of this paper is to supplement the norms of Pressey, to point out the sex differences that are revealed by rather laborious tabulations, and present data relative to the validity and reliability of the tests.

350. **Thompson, Robert S.** A study of the validity of the Downey will temperament test. *Journal of educational psychology*, 19: 622-28, December 1928.

Members of two classes in practice teaching in the University of Denver training school were studied in this investigation. Of the 12 tests of the Downey group, only four show even a slight relationship with success in practice teaching as measured by rating of expert judges.

351. **Thompson, Rollin Walton.** To determine the effect, if any of teaching the words involved in the McCall multi-mental test upon its reliability as a measure of intelligence. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 31 p. ms.

352. **Thurstone, Louis L.** The intelligence of 1,500 Chicago families. 1928. University of Chicago, Chicago, Ill.

Conclusions: On the average, older children in each family are less intelligent than younger children. The level of intelligence of the children of small families is higher than the level of intelligence of large families, etc.

353. **Verwoerd, H. F.** The distribution of "attention" and its testing. *Journal of applied psychology*, 12: 495-510, October 1928.

In this investigation the attempt is made to distinguish between various types of distribution of "attention" significant for vocational testing, to demonstrate individual differences in such distribution, and to see if there are any indications of a relationship between the total performance in a task requiring a distribution of "attention" and the degree of distribution itself.

354. **Vincenty, Nestor I.** The intelligence of first-graders in Porto Rico. 1929. Department of education, Santurce, Porto Rico.

The tests used in this study were: Detroit first-grade intelligence test; Pintner-Cunningham primary mental test; Dearborn group test of intelligence, (Series I, form A). Findings: Need of ability grouping in the first grades is clearly evidenced by results of tests.

355. **Wallin, J. E. Wallace.** A statistical study of the individual tests in ages VIII and IX in the Stanford-Binet scale. *Mental measurement monographs*, serial no. 6, June 1929.

Gives differences in chronological age, mental capacity, and sex ratios of children referred from many school systems as candidates for special classes. Based on the examination of 4,668 handicapped children in Missouri and Ohio.

356. **Welchons, John.** The average intelligence quotients of pupils who obtain the same rating in the same major subject in high school. Master's thesis, 1928. University of Pennsylvania, Philadelphia. 70 p. ms.

357. **Whitney, Frederick L., Cornell, C. B., and Condit, Philip M.** The relationship of intelligence and achievement test scores to mortality and scholastic ratings. September 1928. Colorado state teachers college, Greeley. 56 p. ms.

A study of 550 freshmen at Colorado state teachers college, class of 1931. Conclusions: (1) The median of the scholastic ratings was slightly raised from quarter to quarter; average for year 3.05; (2) the approximate average scholastic ratings for each quarter increased quite regularly from low to high intelligence scores with the exception of the second decile of intelligence where scholarship was lower for each quarter and for the year; (3) on the whole, the achievement test and the Thurstone test appear to have nearly equal reliability in predicting scholastic success; (4) only 15.7 per cent of the total number received scholastic ratings in the same decile in which their intelligence scores fell; (5) identical decile placement of achievement scores and intelligence scores occurred more frequently than did scholastic ratings and intelligence scores; (6) intelligence and achievement tests have a correlation of $.7348 \pm .0136$; (7) average scholarship correlates $.4543 \pm .0232$ with intelligence and $.4979 \pm .0221$ with achievement scores; (8) scholarship correlates $.5700 \pm .0222$ in winter and spring quarters, $.6012 \pm .0208$ in fall and spring, and $.6160 \pm .0198$ in the fall and winter; (9) mortality amounted to 129 students, or 23.1 per cent.

358. **Witty, Paul A., and Taylor, J. F.** Some results of the multi-mental test. *Journal of educational psychology*, 20: 299-302, April 1929.

In order to evaluate the multi-mental test, data were secured for 522 Lawrence, Kans., school children in grades 4, 5, and 6, to show the correlation between the results of the multi-mental and Stanford-Binet tests. From the material collected it is noted that the multi-mental scale does not yield results sufficiently comparable to those secured from the Binet test to warrant its use as a substitute for the Binet examination. The multi-mental test gives a high coefficient of correlation with the Stanford achievement test.

See also 73, 182, 235, 273, 384, 1220, 1248, 1354-1355, 1491-1492, 1503, 1505, 1510, 1530, 1554, 1752, 2131, 2207, 2498, 2670, 2801, 2904.

EDUCATIONAL TESTS AND MEASUREMENTS

359. **Beaumont, Texas. Public schools.** The testing program of elementary grades (one-five). [1929] 12 p.

Report on the Stanford achievement tests.

360. **Bergman, Walter G.** Influence of various standards of attainment on certain standardized tests. 1928. University of Michigan, Ann Arbor.

The purpose of the study was to determine the relationship of sex, age, mental ability, grade and socio-economic status of the pupils, the size of school community and the training and experience of the teacher to the scores attained on various standardized tests for the purpose of making refinements in the standards of achievement. Records were obtained from the 14,000 pupils who participated in the testing program. Findings: Grade was found to have a high positive relationship to scores attained on the different tests, age, a small negative relationship; sex of the pupil and size of the community, a negligible relationship for all tests except the Wilson language error test. The training and experience of the teacher apparently had very little effect upon the scores attained, although this does not indicate that training and experience of the teacher may not have a significant relationship to the gain in score made by a pupil during the year.

361. **Boyer, Philip A., and Broome, Edwin C.** Report on the subject matter test scores of Philadelphia 12B students. February 1929. Division of educational research, Public schools, Philadelphia, Pa. 57 p. ms. (Bulletin 109)

Part of a state-wide study of the relations of secondary and higher education. Gives results of tests in English, American history, French, German, Latin, Spanish, general science, biology, physics, chemistry, algebra, plane geometry, solid geometry, trigonometry, ancient history, European history, economics, and civics.

362. ——— Voluntary testing program, September 1928, November 1928, and January 1929. Division of educational research, Public schools, Philadelphia, Pa. 49 p. ms. (Bulletins 98, 99, 100, 101, 102, and 108)

Gives results by schools and districts, of tests to 40,819 pupils, in English, elementary algebra, arithmetic fundamentals, spelling, and reading.

363. **Brownell, S. M.** Report on achievement tests. [1928] Superintendent of schools, Grosse Pointe, Mich. 33 p. ms.

Reports by grades, the summaries of scores made on Stanford achievement test, given in grades 2 to 8. Discusses immediate needs indicated by test results.

364. **Burr, Samuel Engle.** The elementary school testing program. Letters to teachers and principals, nos. 1-21. September 1928 to May 1929. Department of research, Public schools, Lynn, Mass. 22 p. ms. (Research bulletin, no. 7)

This is a series of letters, giving instructions to elementary school teachers as to purposes and methods of procedure in testing program; summarizing results; and discussing the uses to be made by teachers of the test results, in ability grouping and special promotions.

365. ——— Junior high school testing series. Letters to teachers and principals, nos. 1-18. September 1928-April 1929. Department of research, Public schools, Lynn, Mass. 44 p. ms.

A series of letters giving instructions to junior high school teachers as to purposes and methods of procedure in testing program; summarizing results; and discussing the uses to be made by teachers of the test results, in ability grouping and special promotions.

366. **Caro, Ida J.** A study of the reliability of the Stanford achievement tests in grades 6, 7, and 8, in Hawaii. Master's thesis, 1929. University of Hawaii, Honolulu. 65 p. ms.

Findings: Reliability as high for Hawaii as for main land.

367. **Carr, William G.** Standardized tests for elementary schools. Department of research, California teachers association. Sierra educational news, 24: 24-27, November 1928.

368. **Chase, Vernon E.** Final achievement test results. July 1928. Bureau of research and statistics, Public schools, Fordson, Mich. (Bulletin no. 15, Reading, 13 p. ms.; no. 16, Arithmetic, 22 p. ms.; no. 17, Spelling, 6 p. ms.; no. 18, Handwriting, 13 p. ms.)

Results for individual schools and for city as a whole, of tests in grades 2-6 in all subjects, and of grades 7-9 in all subjects except spelling in grade 9.

369. ——— Final achievement test results: Iowa high school content examination. July 1928. Bureau of research and statistics, Public schools, Fordson, Mich. 15 p. ms. (Bulletin no. 19)

Results of October and May tests, grades 10, 11, and 12, in history, English, mathematics, and science.

370. ——— Measuring the results of education in Fordson. 1928-29. Bureau of research and statistics, Public schools, Fordson, Mich. 44 p. (Second annual report)

This study shows how the Bureau of research benefits the school child, the teacher, and the taxpayer.

371. **Chicago principals' club, 315 Plymouth Court, Chicago, Ill.** Fourth yearbook. Educational measurement. Ed. by Edward E. Keener. Chicago, Pub. by Chicago principals' club, June 1929. 170 p.

"Contains a study of the validity and usefulness of many standardized tests, and in addition, a presentation of 'homemade' tests which apply more directly to the Chicago course of study."

372. **Daringer, Helen Fern.** An objective measure of ability to make topical outlines. Journal of educational psychology, 20: 112-18, February 1929.

The author gives a test designed to give an objective measure of ability to outline expository paragraphs. The score is a measure of the pupil's ability: (1) To select the central idea of the paragraph; (2) to determine the number of important supporting details; (3) their number being known, to select the correct supporting details.

373. **Duncan, Charles Oscar.** Effort as measured by the achievement test. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 55 p. ms.

374. **Engelhart, Max D.** Standardized tests for students of education. Educational administration and supervision, 15: 93-101, February 1929.

This study presents a description of each of the standardized tests in the field of education, in order to call attention to these tests so that they may be used, improved or replaced.

375. **Ford, Thomas H.** Testing program in southwest junior high school July 1928. Southwest junior high school, Reading, Pa. 7 p. ms.

Results of tests in English and arithmetic, in school having large proportion of pupils of foreign parentage. Better progress in arithmetic than in English was found.

376. **Garlough, L. N.** Achievement curves and their trend through the year. *Journal of educational research*, 18: 303-68, December 1928.
- Fourteen objective tests were administered at two-week intervals to a class of 50 high school students in biology. Conclusions: (1) The normal distribution of achievement is the exception; (2) average skew is negative, and the trend through the year is toward slight reduction of skew; (3) achievement curves are flatter than the normal; the trend during the year is decidedly toward greater flatness; (4) variation is moderately high; and (5) the distribution of the I. Q.'s of the students concerned is of a positive skew comparable to the higher positive skews of the achievement curves.
377. **Greene, Charles E.** Report on curricular tests in language and arithmetic. 1928. Department of research, Public schools, Denver, Colo. 10 p. ms.
- A report of city wide test results. An analysis made to assist in classroom instruction.
378. ——— Report on testing program of January 1929, elementary schools. 1929. Department of research, Public schools, Denver, Colo.
379. ——— Report on testing program of January 1929, junior and senior high schools. 1929. Department of research, Public schools, Denver, Colo.
380. **Greene, Harry A.** Educational tests and the classroom teacher. A handbook on informal and standardized objective tests. Iowa City, Pub. by the University, 1928. 46 p. (University of Iowa extension bulletin, no. 199, July 1, 1928. College of education series, no. 25)
- The meaning, use and interpretation of results of tests for the classroom teacher, together with plans for remedial procedures and a glossary of terms.
381. **Hesselberg, Tillie Beatrice.** The reliability of achievement tests with items arranged in order of increasing difficulty and in chance order. Master's thesis, 1928. University of California, Berkeley. 58 p. ms.
- This study was undertaken to ascertain how much more reliable are test items presented in graded order in comparison with chance order, and the relative amounts of time required for completing a given number of items in graded and in chance arrangements. Conclusions: (1) In general the chance order of arrangement of test items seems to be more difficult than the graded order; (2) in the vocabulary and the nature study and science test the chance order of arrangement does not seem to reduce the reliability of the tests as measures of a pupil's achievement; (3) in the arithmetic reasoning test, where conditions for the discovery of the effect of chance order seem to be most adequately met, chance order definitely lowers the reliability of the tests.
382. **Honaker, Ethel.** A testing program for high schools. Master's thesis, September 1928. University of Virginia, Charlottesville.
383. **Jones, T. J., and Nash, H. B.** Language, arithmetic, and spelling achievement. October 1928. Department of educational research, Public schools, West Allis, Wis. 25 p. ms.
- Results of tests given in grades 1-6, second semester, 1927-28. Median scores by schools and grades, showing gains in June over February scores.
384. **Keller, Frances.** Results of mental and achievement testing at Wade Park school, 1928. September 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 20 p. ms. (Bulletin no. 26)
- Gives the results of tests given to grades 2A-6A in February and May, 1928, shown by grades.
385. **Lazarus, Isabel.** Achievement status of pupils underage for grades 2 and 3. December 1928. Bureau of research, Department of education, Baltimore, Md.
- This study involves 494 pupils found in the second and third grades. The age of each pupil when he entered the school and was given an intelligence rating, his X, Y, Z designation and his reading achievement score when tested, were noted. The material is based on the test results of September 1927.
386. **Lewerenz, A. S.** Testing a test. May 1929. City schools, Los Angeles, Calif.
387. **Lewis, Frank H.** A critical examination and evaluation of the standardized secondary school achievement tests. Master's thesis, 1929. University of New Hampshire, Durham.
- This study includes the construction of a complete file of all standardized achievement secondary school tests published in America; a critical study of each test evaluating it with reference to validity, reliability, economy of administration, and cost per hundred copies.

388. **McCroxy, John B.** The accomplishment quotient; its various correlations and especially its reliability and value for predictive purposes. Doctor's thesis, 1929. University of Wisconsin, Madison. 131 p. ms.

A detailed study of the A. Q. as a reliable and valid measure for individual diagnosis. Findings: (1) A. Q. is unreliable for individual diagnosis; (2) possesses no predictive significance; (3) the factors affecting A. Q. reliability are, (a) reliability of the intelligence test used, (b) reliability of the accomplishment test used, (c) the correlation between intelligence and achievement, (d) factors a, b, and c combine according to the following principle in their effect upon A. Q. reliability: the reliability of the A. Q. varies directly with the reliability of the intelligence and achievements tests and inversely with the correlation between intelligence and achievement. With intelligence and achievement tests of high reliability, the correlation between intelligence and achievement tests matters little. (e) The A. Q. will be useful for individual diagnosis when intelligence and achievement tests possess high reliability, about .95 and above.

389. **Madsen, I. N.** Participation in testing programs by classroom teachers. Educational administration and supervision, 15: 117-26, February 1929.

A study showing the errors made by teachers in scoring tests.

390. **Mallory, Clara.** The testing program of elementary grades (one-five). Beaumont, Texas, Research department, Public schools, 1928-29. 12 p.

A report on Stanford achievement tests in the academic subjects in the first five grades.

391. **Maloney, Estelle L., and Ruch, G. M.** The use of objective tests in teaching as illustrated by grammar. School review, 37: 62-66, January 1929.

This study was based upon data secured from 497 pupils in the ninth, tenth, and eleventh grades.

392. **Mathews, C. O.** Erroneous first impressions on objective tests. 1929. Ohio Wesleyan university, Delaware. Journal of educational psychology, 20: 280-86, April 1929.

393. **Messick, J. D.** Testing program in the Jones county high schools. 1928-29. Jones county public schools, Trenton, N. C. ms.

A study made to ascertain the correlation of achievement and intelligence of high school pupils based upon months in respective elementary schools.

394. **Miller, Mrs. Vera V.** Educational tests and measurements, 1928-29. In A summary of the educational activities, Evanston public school district 75, Evanston, Ill., 1928-29. 15 p. ms.

395. **Morley, Clyde Anson.** The reliability of the achievement quotient, Doctor's thesis, 1928-29. University of Wisconsin, Madison.

396. **Nettels, Charles H.** Some studies of standardized tests. Educational research bulletin (Los Angeles, Calif.), 8: 7-9, May-June 1929.

*The article gives briefly some of the findings of studies made during the past year or two of certain standardized tests. It includes chemistry tests, Latin prognosis, measuring music ability, measuring art ability and testing in geography.

* 397. **Oakland, Calif. Public schools.** Department of research and auxiliary agencies. Report on results of Stanford achievement advanced examination in H-6 grade, spring semester, 1929.

398. **Odell, C. W.** A critical study of measures of achievement relative to capacity. Urbana, University of Illinois, 1929. 58 p. (University of Illinois bulletin, vol. XXVI, no. 29, March 19, 1929. Bureau of educational research. Bulletin, no. 45)

Summary: "A review of all known studies of the reliability of measures of achievement relative to capacity leads to the conclusion that their reliability is decidedly unsatisfactory. This is supported by original data obtained and presented by the writer. Indeed, their reliability is so low that it is recommended that they never be employed for the diagnosis, classification, or other treatment of individual pupils except possibly when they are based upon the combined results from several group tests or one individual intelligence test. Relative measures, for a class or larger group do, however, possess high enough reliability to warrant their use."

399. ——— The use of scales for rating pupils' answers to thought questions. Urbana, University of Illinois, 1929. 34 p. (University of Illinois bulletin, vol. XXVI, no. 36, May 7, 1929. Bureau of educational research. Bulletin, no 46)

Findings: "When all the data from the rating of the sets of 25 answers are combined, the average reliability measures of ratings made with the scales are only very slightly higher than are those of ratings with

out the scales. A separation on the basis of ratings by the same and by different persons does not result in any different conclusions, neither does a division according to types of questions and subjects. When the ratings were grouped according to whether those giving them were experienced teachers or not, it was found that for the latter the use of the scales appeared to be helpful in fixing general standards, but not in increasing the reliability of ratings of individual papers."

400. **Odell, C. W.** Who have contributed most to the educational measurement movement? *School and society*, 29: 751-54, June 8, 1929.

Lists the 25 highest-ranking persons in the field of educational measurement as determined by frequency of mention in recent publications in that field.

401. **Orleans, Jacob S.** An experiment in the local construction and uses of objective tests in several school systems of New York state. Albany, University of the state of New York press, 1928. 43 p. (University of the state of New York bulletin, no. 906, August 15, 1928)

In some 20 school systems, most of them rural, the teachers constructed objective achievement tests that were used for local administrative and supervisory purposes. The report summarizes the procedures and results. Conclusions: The experiment indicated the feasibility of relatively untrained teachers being taught to construct and use satisfactory objective tests through the medium of teachers conferences.

402. ——— Report of the fifth annual nation-wide testing survey conducted through the use of the public school achievement tests. Bloomington, Ill., Public school publishing company, 1929.

Nation-wide medians and percentiles are given for reading, arithmetic, language usage, history, geography, nature-study, and health.

403. **Pearson, Harry M.** A testing program, group VI, Fauquier county, Va. 1929. University of Virginia, Charlottesville.

404. **Pulliam, Roscoe.** Harrisburg self-administering classroom-activity test. *Elementary school journal*, 29: 421-27, February 1929.

The test here given is designed primarily for the teacher's use in testing the activity of her own classes, but may also be used by a professional visitor to a schoolroom to enable him to analyze and evaluate the activities which he observes.

405. **Reading, Pa. Public schools.** Achievement of pupils of grade 7-A. 1928-29.

406. ———. Comparative study in achievement and intelligence of pupils of grade 7-A in the four junior high schools. 1928-29.

407. **Schinnerer, Mark C.** Results of Stanford achievement tests at Oliver Hazard Perry school. August 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 15 p. ms. (Bulletin, no. 18)

Compares October and May results, tests given to grades 2B-7A. Shows situation in each class by chart which compares life, mental, educational, and subject age levels.

408. **Schul, Edna I.** The results of diagnostic testing and remedial teaching in the elementary grades. Master's thesis, June 1929. Colorado state teachers college, Greeley. 90 p. ms.

Eighty-four pupils of the fourth, fifth, and sixth grades of the elementary training school of Colorado state teachers college were used for this study. Spencer diagnostic arithmetic tests, Form A and Form B, and Woody arithmetic scales, Forms I and II were used. Conclusions: After comparing the two tests, the writer came to the following conclusions: (1) Although the grades were able to reduce to a certain extent the number of errors made on Form A, yet there were a large number of errors made on Form B which were not eliminated. Owing to no Spencer forms, a decision could not be reached as to whether the remedial work was successful or not; (2) with regard to the amount of gains made by the different grades in the various fundamentals as measured by the Woody norms, the results were successful in the fourth and fifth grades, but in the sixth, the results of the diagnostic teaching were a failure. Fourth grade gains exceeded the gains made by other grades, possibly because the work extended over a longer period.

409. **Bears, Jesse B.** Sutter county instructional survey. Yuba City, Calif., February 20, 1929. 62 p.

This report was issued from the office of the County superintendent of schools, with the approval of the County board of education, April 15, 1929. It presents the findings of a testing program carried out in the schools of Sutter county, covering grades 5 to 12, inclusive.

410. **Smith, Gale.** Improving instruction through organized testing. In Indiana university. School of education. Fifth annual conference on elementary supervision, 1928. p. 12-24. (Indiana university, School of education, Bulletin, vol. V, no. 1, September 1928)

Gives the results of tests introduced into the elementary and high schools of Brook, Ind.

411. **Stenquist, John L.** Semi-annual instructional survey—city-wide test results for all classes as of February 1929—all elementary schools—white and colored. April 1929. Bureau of research, Department of education, Baltimore, Md. 254 p. ms.

Report on results of primary and intermediate tests in white and colored schools.

412. ———. Semi-annual instructional survey, Vol. V. March, May 1929. Bureau of research, Department of education, Baltimore, Md. March, 52 p. ms.; May, 28 p. ms.

The March study deals with the rank of all white elementary schools for three terms based on standard test results; the May study deals with the rank of all colored elementary schools for three terms based on standard test results.

413. **Stigler, W. A.** Results of the nation-wide testing program. 1929. Public schools, El Paso, Texas. El Paso school's standard, 8: 199-203, January 1929.

Shows El Paso scores in standard test being developed by the Public school publishing company. Scores for El Paso, a 7-year system, are above norms in all subjects.

414. **Traut, Gladys M.** A study of the reliability of the Stanford achievement tests for grades 3, 4, and 5, in Hawaii. Master's thesis, 1929. University of Hawaii, Honolulu. 60 p. ms.

Conclusions: Stanford achievement tests were as reliable for Hawaii as for the main land.

415. **Walters, F. C., and others.** University of Porto Rico general ability test for grades 8-12. 1928-29. University of Porto Rico, Rio Piedras. 8 p.

The study involved reading ability, arithmetic, general knowledge of science, geography, history, and literature. Findings: The test has a reliability coefficient of .97.

416. **West Allis, Wis. Public schools.** Department of educational research. Language, arithmetic and spelling achievement in grades I-VI, 2nd semester, 1927-28. October 1928. 34 p. ms. (Bulletin IX-1)

417. **Wisseman, Charles Louis.** The results of remedial teaching in connection with educational tests. Master's thesis, 1928. Southern Methodist university, Dallas, Texas. 90 p. ms.

This study included tests in group of experiment schools and in group of control schools; remedial teaching in experiment schools; comparison of results by tests after given period. Findings: Definite evidence of the value of remedial teaching by attacking specifically the problems indicated through the tests.

418. **Wood, Eleanor Perry.** The educational achievement and intelligence of independent school children. 1929. Educational records bureau, New York, N. Y. 78 p. ms.

This contains a report of intelligence and achievement tests of 32 private schools, 1927-28, and miscellaneous studies. Findings: Independent school students are superior to public school students in intelligence and achievement. Variations in standards and in achievement, and overlapping of classes and grades are as great in independent schools as in public schools.

419. **Woody, Clifford.** Results of the May testing programs in the elementary and high schools of Michigan. Ann Arbor, Mich., University of Michigan 1928. 40 p. (Michigan. University. Bureau of educational reference and research. Bulletin, no. 119, December 31, 1928)

420. ———. Results of the testing program in Grosse Ile public school. Ann Arbor, Mich., University of Michigan, 1928. 82 p. (Michigan. University. Bureau of educational reference and research. Bulletin, no. 115, August 1, 1928)

This presents the results obtained from a testing program administered in the Grosse Ile public school. The purpose was two-fold: (1) To determine existing levels of achievement in various subjects in different grades; and (2) to make suggestions, if need be, on basis of results obtained for improving the conditions

under which the instruction was given. Mental tests showed that mental ability of pupils under consideration was normal or slightly above normal. The educational achievement was normal. On the basis of the test results Grosse Ile school was accomplishing all that could be expected.

421. **Wright, Wendell W.** The development and use of a composite achievement test. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The development and use of an improved and practical plan for 7th and 8th grade promotion examination in Indiana rural schools. The author provides a prognostic test for success in high school work and a study of the achievement of different types of rural schools. Concludes that while the prognostic value of the Indiana composite achievement test is limited, it compares very favorably with other prognostic measures that have been developed.

422. **Yepsen, Lloyd N.** The reliability of self-scored measures. School and society, 29: 681-82, May 25, 1929.

Repetition of an experiment in self-scoring of tests reported in November 19, 1927, issue of School and Society. The subjects of the present experiment were the 59 members of a summer-school class. In correcting the tests time was allowed members of the class who wished to change their papers a chance to do so. The scored tests were compared with records of initial responses to discover percentage changing scores. The two studies seem to warrant the conclusion that it is a characteristic trait for at least 1 in every 4, if not in every 3, individuals to take advantage of the opportunity to present themselves in an inaccurate manner.

423. **Young, Robert Vivian.** Improvement of the group test. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

See also 73, 80, 127, 182, 272-273, 277, 283, 357, 431-432, 445, 447, 455, 706, 817, 822, 833, 846-848, 851, 977, 997, 1001, 1009-1010, 1020, 1029, 1045, 1050, 1060, 1087, 1089, 1091, 1168-1169, 1380, 1382, 1503, 1740, 1811, 2051, 2209, 2506, 2525.

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424. **Alexander, Carter.** Educational research. Suggestions and sources of data with specific references to administration. 2d ed, rev. New York city, Teachers college, Columbia university, 1929. 77 p.

425. **Anderson, L. Dewey, and Toops, Herbert A.** A new apparatus for plotting and a checking method for solving large numbers of intercorrelations. Journal of educational psychology, 19: 650-57, December 1928; 20: 36-43, January 1929.

A correlation plotting apparatus is described which permits rapid plotting of intercorrelations and increases the accuracy. The capacity of the apparatus is 24 correlation scattergrams from one set-up of the frame. A method of solving the correlations is described which not only reduces the number of calculations but also provides checking formulae at various steps in the process. A time analysis sheet on the plotting of 34 variables indicated that the total time per correlation ($N=100$) was about 22 minutes.

426. **Banker, Howard J.** Correlation studies of the student's ability index. Journal of educational research, 20: 31-37, June 1929.

From this study it seems evident that the student's ability index is an instrument of reliable and valuable service in the progress of educational investigations.

427. ———. The practical application of the student's ability index. Journal of educational research, 18: 282-89, November 1928.

428. **Bliss, Elisha F.** The difficulty of an item. Journal of educational psychology, 20: 63-66, January 1929.

The writer defines the difficulty of an item or single task, derives a formula for it, and then compares it with other definitions of difficulty which have been used or proposed.

429. **Brown, Ralph.** Minimal essentials in statistics. Educational research record (University of Nebraska), 1: 99-103, 107-109, February 1929.

This study was undertaken for the purpose of determining how important a knowledge of statistics really is for the intelligent reading of educational periodicals.

430. **Brubaker, Emma Margaret.** Studies on the methodology of computing reliability coefficients by various methods. Master's thesis, 1929. University of California, Berkeley. 22 p. ms.

A comparative study of the three common methods of finding the reliability coefficients in order to determine the possible difference in the results when the various methods are applied to the same data. Conclusions: (1) The differences in the coefficients resulting from computing them by the three methods are so small as to be negligible in the case of history, science and French; and (2) the results obtained by correlating the odd and even item scores were practically the same as the coefficients obtained by the other two methods.

431. **Burr, Samuel Engle.** Second semi-annual report of the Research department, January-August 1928. Research department, Public schools, Lynn, Mass. 17 p. ms.

A study of personnel and functions of the department; testing program; curriculum construction; special reports; publicity work and new salary schedule.

432. ——— and **O'Neill, Mary P.** Second annual report and third semi-annual of the Research department, January 1928 to January 1929. 1929. Research department, Public schools, Lynn, Mass. 51 p. ms. (Research bulletin, no. 3)

Discusses organization, personnel and functions; tests, measurements, and use of results; report of psychologist; curriculum revision; research activities, etc.

433. **Chapman, H. B.** Educational investigations concluded or in progress, Baltimore public schools. October 1928. Bureau of research, Public schools, Baltimore, Md. 17 p. ms.

Reports author, title of study, probable date of completion, and scope of 47 studies concluded or in progress in the Baltimore public schools.

434. **Dougherty, Mary Lorette.** The educational clinic of the Department of education. Baltimore, Md., The Johns Hopkins press, 1929. 78 p. (Johns Hopkins university studies in education, no. 11)

Presents the records of 18 cases representative of the scope of the clinic and indicative of its procedure with the varied problems brought to its attention.

435. **Douglass, Harl R., and Cozens, Fred W.** On formula for estimating the reliability of test batteries. 1929. University of Minnesota, Minneapolis. *Journal of educational psychology*, 20: 369-77, May 1929.

This is a study of the derivation of a special form of the Spearman-Brown formula for application to the reliability of test batteries. Findings: A formula which is superior to the one commonly employed for such purposes—involving less inaccurate assumptions.

436. **Edgerton, Harold A., and Toops, Herbert A.** A table for predicting the validity and reliability coefficients of a test when lengthened. *Journal of educational research*, 18: 225-34, October 1928.

437. **Flemming, Cecile White.** Psychological survey and research in the Horace Mann high school 1928-1929. Horace Mann high school, Teachers college, Columbia university, New York, N. Y. Ms.

438. **Good, Carter V.** Graduate study and research in education. *High school teacher*, 5: 148-51, 164, May 1929.

439. **Huffaker, C. L., and Douglass, Harl R.** On the standard error of the mean due to sampling and to measurement. *Journal of educational psychology*, 19: 643-49, December 1928.

440. **Keyworth, M. R.** Functional organization and research. Presented before the Department of superintendence of the National education association, February 1929. 21 p.

The author is Superintendent of schools of Hamtramck, Mich.

441. **Koos, Leonard V.** The questionnaire in education. New York, The Macmillan company, 1928. 178 p.

This book presents the findings of an analysis of a large number of questionnaire investigations, and a comparison of these findings with those of other methods of investigation.

442. **Kurtz, A. K.** A special case of the multiple correlation coefficient. *Journal of educational psychology*, 20: 378-85, May 1929.

443. **Lewerenz, A. S.** The use of the educational research technique in the production of a movie for school purposes. June 1929. City schools, Los Angeles, Calif.

444. **Lindquist, E. F., and Foster, R. E.** On the determination of reliability in comparing the final mean-scores of matched groups. *Journal of educational psychology*, 20: 102-106, February 1929.

This article points out a statistical fallacy in the method commonly employed to check the statistical significance of gains for the matched groups.

445. **Los Angeles, Calif. City schools. Psychology and educational research division.** Third yearbook. Los Angeles, 1929. 239 p. (School publication no. 185)

A report of the major activities of the division for 1928-29, including studies on tests, special classes, grading, reading readiness, personality traits of children, high school curriculum, high school counselors, junior high school pupil load, teachers marks, etc.

446. **Miner, George D.** Response validation in the multiple response examinations. Master's thesis, 1929. University of California, Berkeley. 17 p. ms.

To find out the value, if any, in response validation in the multiple response examination; based on tests in both junior and senior high school classes in United States history. Conclusions: Response validation in the multiple response examination does not pay according to the results of this study. Enormous amount of work which accompanies this type of validation not at all in proportion with the results obtained.

447. **Monroe, Walter, S., and others.** Ten years of educational research, 1918-1927. Urbana, University of Illinois, 1928. 367 p. (University of Illinois bulletin, vol. XXV, no. 51, August 21, 1928. Bureau of educational research bulletin, no. 42)

After a chapter on educational research before 1918, there follow chapters on a general survey of the period 1918-1927, research in educational measurement, curriculum research, etc. Pt. II contains a list of 3,650 research publications published from 1918 to 1927.

448. **National education association. Department of superintendence. Educational research service.** City school research studies completed and in progress, October 1928, and April 1929. Washington, D. C., National education association, 1928-29. (Educational research service circulars, no. 1 and 5, 1929)

Reports from school research bureaus in 55 city school systems.

449. **Noble, M. C. S., jr.** Current reports on activity programs, projects, research studies, etc., in North Carolina. Raleigh, N. C., State department of public instruction, 1929. 48 p.

This study lists and describes activity programs, projects, and research studies which were undertaken in North Carolina in 1928-29. The list is by counties, cities, and institutions or agencies.

450. ——— A program of research for rural school supervisors. 1928-29. State department of public instruction, Raleigh, N. C.

This study gives suggestions for rural school supervisors as to kinds of research to be undertaken; methods, etc.

451. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Report for the year ended June 30, 1928. 167 p.

The report contains a summary of findings of the Division of educational research, September 1927 to June 1928.

452. **Powell, Raymond Leo.** Determination of the statistical validity and reliability of certain problem analysis tests. Master's thesis, 1928. State university of Iowa, Iowa City. 53 p. ms.

453. **Rankin, Paul T.** Survey techniques for the experimental determination of the values of materials and methods. In National conference of supervisors and directors of instruction. Second yearbook, 1929. Ch. 17.

454. **Salisbury, Frank S.** A simplified method of computing multiple correlation constants. *Journal of educational psychology*, 20: 44-52, January 1929.

455. **San Francisco, Calif. Public schools. Department of service.** Summary of activities, fall term, 1928. Bulletin, no. 4, January 1929. 6 p. ms. Lists projects under five divisions: testing program; administrative problems; work for high schools; answering of questionnaires; and curriculum revision.
456. **Stuart, Herman U.** An empirical study of certain probable error formulas. Master's thesis, 1928. State university of Iowa, Iowa City. 34 p. ms.
457. **Thurstone, Louis L.** Scale construction with weighted observations. *Journal of educational psychology*, 19: 441-53, October 1928.
The purpose of this study was to develop a scaling technique so that the observed proportion of correct answers, or the observed proportion of each age group that exceeds a given raw score, may be weighted in accordance with its probable error. The scale is applied to the data of Woody's arithmetic scales.
458. **United States. Bureau of education.** Bibliography of research studies in education, 1926-27. Prepared in the Library division, John D. Wolcott, chief. Washington, United States government printing office, 1929. 162 p. (Bulletin, 1928, no. 22)
459. **Vogel, Mabel, and Washburne, Carleton W.** Two years of Winnetka research. Research office, Public schools, Winnetka, Ill. Reprinted, with additions, from *Journal of educational research*, 17: 90-101, February 1928.
All studies completed during the years 1926-1928 were summarized.
460. **Walker, Helen M.** Concerning the standard error of a difference. *Journal of educational psychology*, 20: 53-60, January 1929.
A discussion of the formula for the standard error of a difference.
461. ——— A note on the correlation of averages. *Journal of educational psychology*, 19: 636-42, December 1928.
The study shows that, in general, correlations between averages is the same as correlations between original scores.
462. ——— The sampling problem in educational research. *Teachers college record*, 30: 760-74, May 1929.
463. ——— Studies in the history of statistical method with special reference to certain educational problems. Baltimore, Williams and Wilkins company, 1929. 229 p.
464. **Watson, Goodwin B., and Biddle, Della H.** A year of research—1927. Chicago, Ill., Religious education association, 1929. 82 p. (Religious education monograph, no. 4, July 1929)
An annotated bibliography of 506 investigations published during 1927, bearing upon the programs of religious, educational, and social agencies preceded by a classified discussion.
465. **Weidemann, C. C., and Tremmel, E. E.** One process method of calculation of the Pearson product moment correlation coefficient. 1929. Bureau of educational reference and research, Teachers college, University of Nebraska, Lincoln. Ms.
466. **Whitney, Frederick L.** Research activities at Colorado state teachers college for the college year, June 1928 to June 1929. Mimeographed report, May 1929. Colorado state teachers college, Greeley. 41 p. ms.
467. ——— Statistics for beginners in education. 1929. Colorado state teachers college, Greeley. New York, D. Appleton and company, 1929. 123 p.
This study is based on 62 most commonly used statistical terms, as discovered by two studies, that of LaPoe at Ohio state university, and Kelly at Colorado state teachers college. It deals with various terms used in statistics, getting information, classification, and graphic representation.
See also 79, 130, 195, 560, 649, 1358, 1809, 1986, 1999, 2379, 2396, 2932.

INDIVIDUAL DIFFERENCES

468. **Allman, William Jacob.** A study of certain differences among ability groups in a junior high school. Master's thesis, 1928. Stanford university, Stanford University, Calif.

469. Anderson, Ernest Mitchell. Individual differences in the reading ability of college students. Doctor's thesis, 1928. University of Missouri, Columbia. 77 p. (University of Missouri bulletin, vol. 29, no. 39, Education ser., no. 25, October 14, 1928)

The subjects used for this study were 237 University of Missouri students enrolled in Educational psychology, course A102, during the fall and the winter semesters of 1927-28. The evidence presented seems to justify the following conclusions: (1) Extreme individual differences exist in the reading ability of college students; (2) individual differences in the reading ability of college students are great enough to demand that instruction be individualized to meet the needs of students with varying degrees of reading capacity; (3) the best readers in a course in educational psychology are reading to about 50 per cent capacity but are comprehending only about 20 to 30 per cent of the more difficult material and from 50 to 60 per cent of the easier material.

470. Beelar, Lola A. An experimental study in music to determine the effectiveness of homogeneous versus heterogeneous groupings. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

471. Biddulph, Herbert Kemp. Homogeneous versus mixed groupings in the teaching of general science. Master's thesis, 1928. Stanford university, Stanford University, Calif.

472. Bieri, Margaret, and Archer C. P. Improvement of reading in rural schools through individual instruction. Moorhead, Minn., State teachers college, 1928. 51 p. (Bulletin, ser. 24, no. 3, October 1928)

The material used in this study has been worked out in the rural schools affiliated with Moorhead state teachers college.

473. Bonar, Hugh S. Ability grouping in the first grade. Elementary school journal, 29: 703-706, May 1929.

An experiment in homogeneous grouping which is to continue for three years. The results of the first year showed no advantage in segregating either accelerated or slow pupils.

474. Broady, Knute O. Administrative measures of the adaptation of schools to individual differences. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A formulation of present best opinion and practice in providing for individual differences. The policies collected and evaluated are those which indicate the type of individual for whom adjustment should be made and the specific adjustment needed.

475. Bruce, Claribel. Homogeneous grouping in elementary eight grade school. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 101 p. ms.

A description of homogeneous grouping as conducted in the eight grade school studied, with special reference to retardation and acceleration. Findings: Acceleration does not handicap the child; provided it can be done with advancement in homogeneous groups.

476. Carpenter, Denzil Bruce. An experiment in homogeneous grouping. Master's thesis, 1929. University of Kentucky, Lexington.

477. Carter, Homer L. J. Classification and instruction of rural school pupils on basis of ability. 1929. Western state teachers college, Kalamazoo, Mich.

The purpose of this study was to determine the feasibility and value of dispensing with grades in rural schools and teaching on basis of abilities. Findings: Pupils made remarkable progress and were stimulated to conscientious effort.

478. Chase, Sarah E. Individual differences in the experience of children. Journal of educational method, 8: 62-73, November 1928; 136-47, December 1928; 194-99, January 1929.

The first article gives tabulations of the out-of-school interests and activities of fourth, fifth and sixth grade children in Springfield, Mass., showing a preponderance of individualistic activities. Very little time is given to competitive games and there was practically no showing of any influence of the recreational side of the physical education work of the school. The second article classifies the free reading done by these pupils, showing the popularity of books about children or adults; stories with backgrounds from history, and stories about animals. The third article is a study of the popularity of motion pictures, with this group. The quality found to predominate was excitement; war or fighting was second, and funny actions, third. The question of the motion picture as a factor in educational growth and its influence on the quantity of reading done by pupils are discussed.

479. **Loyola university, Chicago, Ill. Bureau of educational research.** Summary of questionnaire on homogeneous grading. August 1928. 3 p. ms.

Summarizes replies to 27 questions from 47 school systems, as to methods of administering ability grouping and the effects noted.

480. **McAnulty, Leona.** The laboratory plan of individual instruction in English composition. Master's thesis, 1929. University of Illinois, Urbana.

481. **Minneapolis, Minn. Public schools. Instructional research department.** A report on the achievement of homogeneous and heterogeneous groups in the junior high school. [1929] 15 p. ms.

An experiment with 531 7A pupils in three junior high schools, tested before entering junior high school, and again after a year's work. Gains in arithmetic were greater by the heterogeneous group; gains in geography favored homogeneous group. Certain reversals and incongruities deny the existence of a definite trend in favor of either group.

482. **Mort, Paul.** Individual pupil programs. New York city, Teachers college, Columbia university, 1929.

483. **Rankin, Paul T.** The technique of the large-scale experiment. *Journal of educational method*, 8:499-505, June 1929.

A large scale study now in progress in Detroit comparing various plans and degrees of individualization. Explains the steps in the experiment: selecting and stating the problem, formulation of the plan, and criterion for judging the effects of the experimental factors.

484. **Rock, Robert T., jr.** A critical study of current practices in ability grouping. 1929. Catholic university of America, Washington, D. C. 132 p. Washington, D. C., Catholic university of America, 1929. (*Educational research bulletin*, vol. IV, nos. 5 and 6, May-June, 1929)

A study of the significance, reliability and validity of the measures commonly used for the formation of groups homogeneous in respect to ability, and a summary of experimental evaluations of ability grouping to provide for individual differences.

485. **Rosenthal, Myer.** Problem of individual differences in light of history of education. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

486. **Sammons, Vernon E.** The relation of ability grouping to school achievement in the junior high school. Master's thesis, 1929. University of Arkansas, Fayetteville. 71 p. ms.

This is an equivalent paired group study involving 100 seventh grade pupils in mathematics. Pupils were sectioned into four groups: (1) Heterogeneous group; (2) fast homogeneous group; (3) average homogeneous group; (4) slow homogeneous group. Progress was determined by the use of three standard arithmetic tests. Findings: The general conclusion based on the evidences of progress as revealed by equivalent matched pairs is that homogeneous grouping is not an advantage in teaching arithmetic reasoning and arithmetic mechanics.

487. **Shelmadine, M. Marguerite.** The significance of ability grouping for purposes of prognosis. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 150 p. ms.

A case study of 300 children, the 150 ranking lowest on combined intelligence test score and teacher's estimate, and 150 ranking highest. Scholastic attainment, home environment, health and employment were followed for each pupil over a period of 5 to 9 years. Findings: Combined score has high predictive value for the group, but non-school factors contribute much and seriously effect predictive value for the individual.

488. **Stokes, C. N.** A comparison of a certain type of individual and a certain type of group instruction in ninth grade mathematics. Doctor's thesis, 1929. University of Minnesota, Minneapolis. 192 p. ms.

This is a study of ninth grade mathematics. University high school and one boarding school, with 112 cases paired, were used in comparison. Findings: Individual institution appears to be superior in results achieved and is more economical in time.

489. **Tavener, R. W.** Ability segregation. *In Northwest association of secondary and higher schools. Proceedings . . . 1928.* p. 19-23.

A questionnaire was sent to 163 high schools of the Northwest association, and replies were received from 93. Of these 47 are using segregation. This study lists some of the objections or difficulties suggested in the replies.

490. Tyler, Ruthe, and Wilcox, Annie. Free activity work. 1928-29. Newport consolidated schools, Newport, N. C. 25 p. ms.

This study was conducted in an effort to give the child a better opportunity for self expression and fuller development.

491. Washburn, Stephen M. A survey of individual instruction in algebra. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

SPECIAL METHODS OF INSTRUCTION AND ORGANIZATION

492. Alexander, Earl Dewey. Some factors involved in the long vs. the short recitation period in high school. Master's thesis, 1928. State university of Iowa, Iowa City. 59 p. ms.

493. Bowman, H. L. Relation of reported preference to performance in problem solving. Doctor's thesis, 1928-29. University of Missouri, Columbia.

494. Crawford, C. C. Relative values of reading and outlining as methods of study. Journal of educational method, 8:434-39, May 1929.

Three time-limit experiments failed to show significant differences as to number of ideas recalled; two work limit experiments revealed that reading twice and outlining were almost exactly equal and neither was much better than reading once; outlining requires slightly more time than reading twice.

495. DeShazo, B. W. The history and present status of the platoon system of schools in the United States. Master's thesis, September 1928. University of Virginia, Charlottesville.

496. Douglass, Harl B. An experimental investigation of the relative effectiveness of two plans of supervised study. Journal of educational research, 18:239-45, October 1928.

In this study the study-recite sequence was slightly superior for social studies, history, and literature, while the recite-study sequence was better for mathematics and general science.

497. ——— and others. Controlled experimentation in the study of methods of college teaching. Eugene, Oreg., University of Oregon, 1929. 316 p. (University of Oregon, Education ser., vol. 1, no. 7)

The following questions were investigated: (1) The value of extraquiz sections in the teaching of English history; (2) the relative effectiveness of the problem and lecture methods of instruction in the principles of economics; (3) project teaching in a course in educational psychology; (4) an experiment with independent study; and (5) the relative effectiveness of lecture-recitation and supervised-individual methods in the teaching of unified mathematics in college.

498. Esson, Victor E., and Cole, Robert D. The effectiveness of the contract method as compared with the ordinary method of teaching. 1929. University of North Dakota, Grand Forks. School review, 37: 272-81, April 1929.

A statistical study of the relative effectiveness of the contract plan and the ordinary plan of teaching secondary classes in three units of American history. 275 pupils in 10 first class high schools were used in the experiment, 137 pupils constituting the control group for which no change was made from the ordinary plan of procedure used by teachers. The net result of the experiment is rather clearly in favor of the contract plan.

499. Freeble, Charles B. An experiment in supervised study in the field of modern history. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

500. Hanna, Paul E. The relative effectiveness of three methods of problem solving. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

For this study three methods of solving problems in arithmetic were used: (1) The dependencies (graphic or diagrammatical); (2) the conventional-formula (four steps); and (3) the individual method (absence of any formal method). Twelve fourth grades and 12 seventh grades were selected for the experiment. In the final analysis of the results one would not be justified in advocating the use of the conventional-formula method nor could one say definitely whether the dependencies method has most value for aiding children to solve arithmetic problems.

501. **Johnson, Palmer O.** A comparison of the lecture-demonstration, group laboratory experimentation, and individual laboratory experimentation methods of teaching high school biology. *Journal of educational research*, 18: 103-11, September 1928.

In this experiment the demonstration method outflanked the other two in five of the experiments, although the differences found were slight. The individual method provided greater opportunity for the exercise of individual differences.

502. **Jordan, B. H.** A manual on how to study. 1928. Cornell university, Ithaca, N. Y. Cedar Rapids, Ia., Torch press, 1928. 92 p.

Prepared for the Phi Gamma Delta fraternity as a text book for its initiates. Conclusions: College fraternity scholarship is largely dependent upon careful training in methods of study.

503. **Kostiner, Abraham.** Experimental investigation of individual vs. deductive methods of teaching elementary geometry. Master's thesis, 1928. New York university, New York, N. Y. 94 p.

504. **Lewis, Leila.** A study of the modified form of the contract system of teaching English. Master's thesis, 1929. New York state college for teachers, Albany.

An experiment in high school classes, with parallel groups, some working "contracts," others taking "mass instruction." Results seem to show some advantages on side of contract.

505. **Maller, Julius B.** Cooperation and competition: an experimental study in motivation. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

An investigation of the behavior of children under the motives of competition and cooperation, to measure individual differences on a scale ranging from extreme competitiveness to extreme cooperativeness, and to discover the concomitant factors that are associated with either tendency. The efficiency of work under competition was found to be consistently higher than under cooperation.

506. **Melby, Ernest O., and Lier, Agnes.** A practical technique for determining the relative effectiveness of different methods of teaching. *Journal of educational research*, 19: 255-64, April 1929.

An experiment carried on in the John Marshall Junior-senior high school in Minneapolis for the purpose of comparing the effectiveness of the drill and project methods in one criterion only, that of facts learned.

507. **Munkhoff, Katherine.** Direct writing method versus manual method in teaching. Master's thesis, 1929. State university of Iowa, Iowa City. 122 p. ms.

508. **Offutt, Viola.** Supervised study. 1928. George Washington university, Washington, D. C.

A survey to discover principles and procedures.

509. **Persell, George A., chairman.** The use of radio in the public schools. February 1929. Public schools, Jamestown, N. Y. 4 p. ms.

Summarizes results of letters of inquiry to educators and others, regarding desirability of radio in schools. Of 68 replies, 30 favored installation of radio sets, 20 expressed doubts, and 18 were opposed. Presents digest of arguments on both sides. Does not recommend installation for purposes of instruction; suggests that it may be used for entertainment, and may be inspirational in the field of music.

510. **Pogue, Pauline.** A study of the four basic history methods and their value for permanent retention of subject matter. Master's thesis, August 1928. Colorado state teachers college, Greeley. 130 p. ms.

Study of textbook, lecture, source and general reference methods made. Classes in American and European history in training school, Colorado state teachers college were used. Two groups were formed using scores and I. Q's. from Terman group test. Conclusions: (1) No one method is outstandingly of much greater value than another. A difference was found of 4.9 per cent between highest and lowest retention. Combination of all is best method; (2) source method shows 77.4 per cent retention; reference material 76.2 per cent; text, 73.5 per cent and oral presentation 72.5 per cent. All percentages given are averages; (3) study shows retesting upon a topic is of value for retention of material. A few other minor conclusions are given.

511. **Ritchie, Walter Wayne.** The content of a course on "How to study." Master's thesis, 1929. University of Illinois, Urbana.

512. **Shepard, Edwin L.** A comparative study of the contract and the traditional daily-assignment-recitation methods in sixth grade history. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

513. **Sims, Verner Martin.** The relative influence of two types of motivation on improvement. *Journal of educational psychology*, 19: 480-84, October 1928.

Experiments were carried on in order to evaluate the influence upon improvement of two types of motivation, individual-motivation and group-motivation. In these experiments the individual-motivation was found vastly superior to the group-motivation.

514. **Stigler, W. A.** Larger group instruction in the social subjects. Assistant superintendent of schools, El Paso, Texas. [1929] 4 p. ms.

Reports results of an experiment in which classes of from 90 to 150 pupils were formed, for instruction in civics, geography, history, and hygiene, in grades 5-7. Comparisons with a control group taught in regular classes are in favor of the large groups.

515. **Symonds, Percival M., and Chase, Doris Harter.** Practice vs. motivation. *Journal of educational psychology*, 20: 19-35, January 1929.

Gives the results of an experiment carried on in six New York public schools with three sixth-grade rooms from each school.

516. **Threkeld, Zula.** The use of the problem method in the teaching of related science in vocational high schools. Master's thesis, 1928. Iowa state college, Ames. 121 p. ms.

The investigation was confined to a survey of one rural community. Objectives and problems for a course in related science were determined after this survey was made. One class in a small rural school was used for experimental purposes. Conclusions: a survey of the work done in the homes by the mothers and daughters should form a basis for the selection of worth while objectives for a course in related science in high school. The objectives may be reached through the problem method of teaching.

517. **Wait, W. T.** An experiment in teaching Teachers college freshmen how to study. 1929. Colorado state teachers college, Greeley.

The purpose of this study was to determine whether or not giving freshmen specific instruction and practice in the various techniques involved in studying for college classes will improve the level of scholarship during the quarter in which the special instruction is given and in following quarters. Conclusions: While the results are not statistically reliable, the unvarying advantage scored by the experimental group over three control groups suggests, tentatively at least, that such instruction in how to study is a valuable means of increasing the scholarship level of the incoming freshmen.

518. **Willard, Martha.** An experiment in the use of two methods of instruction. *Journal of educational method*, 8: 505-510, June 1929.

An experiment to determine whether a daily recitation plan of instruction or the Ambridge plan of instruction in sixth-grade history is more effective. The results seem to favor the Ambridge plan in that it produces a greater degree of assimilation and better adaptation.

519. **Woodring, Maxie N., and Flemming, Cecile White.** Diagnosis as a basis for the direction of study. *Teachers college record*, 30: 46-64, 134-47, November, December 1928.

Case studies are presented to illustrate the implications of such factors as study conditions at school, extra classroom activities, methods of work, effects of associates, attitude of the pupil toward school work, the teacher's personality and interest, assignments, and ability to direct study.

See also 211, 220, 1570.

VISUAL INSTRUCTION

520. **Asbury, James P.** The motion picture in Harlem as a social agency? Master's thesis, 1929. New York university, New York, N. Y. 37 p. ms.

The study involved the making of personal visits for a period of weeks to two types of theatres in Harlem and investigating the social conditions particularly the physical conditions, characteristics of films portrayed, and seeming effect of films on the patrons.

521. **Bentley, G. E., chairman.** The use of motion pictures in the public schools. 1929. Public schools, Jamestown, N. Y. 3 p. ms.

Gives information as to types of films and machines available for school use, also costs of same. Recommends that the larger schools be equipped with motion picture projection machines, that increased funds be made available for renting and buying films, and that a director of visual education be designated.

522. **Boley, Lena R.** Picture study helps for Greensboro teachers. 1928-29. Public schools, Greensboro, N. C. 100 p. ms.

523. **Freeman, F. N., and Wood, Ben D.** Motion pictures in the classroom; an experiment to measure the value of motion pictures as supplementary aids in regular classroom instruction. Eastman kodak company, Rochester, N. Y. Boston, Houghton Mifflin company, 1929. 392 p.

Two complete sets of tests were given to 9,000 children in 12 cities. Twenty films were used, 10 in geography and 10 in general science. Conclusions: The use of the film in these subjects and under these conditions gives better comprehension of the subject than teaching without the film, by the usual methods, especially the comprehension of the concrete aspects of the subjects. When they are a part of well organized instruction and when they are so made as to supply the needed knowledge of the appearance and physical properties of things, and of their actions, the films supply a useful and in many cases a unique factor in the child's experience.

524. **Irwin, Manley.** An investigation to determine the effectiveness of classroom films. 1928. Public schools, Detroit, Mich.

An attempt to determine the effectiveness of classroom films for instructional purposes in the fields of general science and geography.

525. **Lewerenz, Alfred S.** The educational effect of coloring stereopticon slides. Educational research bulletin (Los Angeles, Calif.), 8: 8-13, 14, October 1928.

Findings: Considering the average amount of information gained from the two types of slides, the plain slides had a marked advantage over those that had been colored. Expressed in terms of per cent, colored slides did but 88 per cent as well as did the plain slides. Children show a two to one preference for the slides that have been tinted; etc.

526. **Lincoln, Nebr. Public schools. Department of measurements and research.** Eighth grade pupils ideas regarding Yale historical films. May 16, 1929. 3 p. ms.

Summarizes the data obtained by a questionnaire to pupils who were in classes using the Chronicle of America photoplays during the first semester of 1928-29, in the Lincoln public schools. Thirteen films were used.

527. **Marrs, George Oliver.** The use of graphs and diagrams in teaching. Master's thesis, 1929. University of Denver, Denver, Colo.

A study of: (1) What should be the proportion of graphs and diagrams to other matter in teaching? and (2) what should be the nature and setting of the graphs and diagrams so used? By a unique system of dialogue the thesis first asks questions and then answers them for itself. There are many well drawn graphs and pictures throughout. Conclusions: There is a modern movement toward the greater use of visual material. The use of charts in teaching is now 4 per cent, but increasing rapidly. Modern visual movement is quite recent, hardly 10 years old, and has developed most within the last two years.

528. **Meador, Mildred.** Some educational results of visual education in the elementary schools. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

529. **Miller, John C.** An analysis of the visual aids used in the teaching of history in the secondary schools. Master's thesis, 1929. College of the city of New York, New York, N. Y. 113 p. ms.

Survey of literature on the subject. The author draws inferences from the data collected and embodies them in the form of practical principles.

530. **Oakland, Calif. Public schools.** Visual aids in our vicinity. October 1928. 87 p. ms. (Course of study ser., no. 120)

Lists visual aids such as pictures, slides, motion picture films, charts, models, and museum specimens which may be borrowed by the Oakland public schools from libraries, museums, art galleries, and other centers.

531. ——— Department of research and auxiliary agencies. Use of stereopticon lantern in the teaching of reading to retarded children. 1929.

532. **Taylor, Harvey Grant.** The value of free industrial material—an aid in vitalizing the school curriculum. Master's thesis, 1929. Stanford university, Stanford University, Calif.

533. **Weber, Joseph J.** Picture values in education. Chicago, Educational screen, inc., 1928. 156 p.

This gives the results of an experimental investigation of photographs, stereographs, lantern slides, motion pictures, and other aids, together with their significance for classroom teaching and school administration. Findings: Each of these types of visual aids has its advantages and limitations. The projected pictures are, of course, best for group use, and the others for individual study.

534. **Wood, Ben D.** What is the potential value of the teaching film? *Nation's schools*, 3: 54-60, March 1929.

The author characterizes the classroom film as "an agency whose potentialities are easily underestimated."

See also 443, 806, 1026, 1038, 1059, 1114, 2620.

SPECIAL SUBJECTS OF CURRICULUM

READING

535. **Beck, Mae Miller.** An analytical study of the vocabulary of 12 primers. Master's thesis, 1928. George Peabody college for teachers, 1928. 70 p. ms.

This is an analytical study of the vocabularies of 12 primers. Findings: The 12 primers use 1,521 different words; of these 799 appear in but one primer and 35 are common to the 12 primers. The range of words appearing but once in the individual primer is from 15 to 195 and the range in per cent from 7.1 to 33.3. The range of words common to any two primers is 60 to 275 and in per cent from 14.9 to 76.1. The number of running words and of different words in the primers varies widely. The range in running words is from 2,568 to 7,987; in different words from 134 to 682. The range of words used that are in the child's spoken vocabulary is from 97 to 430. The significant fact, however, is that nine of the 12 primers have more than 71 per cent of their vocabulary in the child's spoken vocabulary. When the number of running words and the number of different words of the eight recent primers and of the four earlier were reduced to averages, there was little difference. It is to be noticed, however, that the range of the four earlier primers is narrow and of the eight recent primers is notably wider. For instance, the range of the number of different words in the four earlier primers is 131; in the eight recent primers, 548.

536. **Bedwell, Robert Lafayette.** Improvement of reading in the public schools. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 105 p.

There was selected for this study two school systems as nearly alike in all essential particulars as possible. Measurements were made of learning ability, and achievement in reading of all pupils in all grades, and of achievement in all subjects for pupils in grades one to eight. The results show that the experimental children made greater improvement in reading at every grade level than the control children; the improvement of experimental children in all other subjects than reading was greater than the improvement of the control children, except in arithmetic.

537. **Bender, Elsie.** A phonetic study of certain phonic system. Master's thesis, 1928. State university of Iowa, Iowa City. 94 p. ms.

538. **Bickett, W. J.** Elementary course of study: reading and literature. Trenton, N. J., Superintendent of schools, July 1928. 212 p.

A committee report emphasizing the adaptation of the course of study to three-track grouping of pupils. Dorothy K. Cadwalader was chairman of the committee.

539. **Boren, Duralde.** Critical survey of methods for beginning reading. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn.

This study attempts to give a systematic survey of methods for beginning reading. The investigator aims: (1) To give a brief historical sketch of studies and investigations of reading methods made since 1800; (2) to show the progress made in the development of reading methods; (3) to give a brief synopsis of 35 representative reading methods; and (4) to judge reading methods by certain subjective standards.

540. **Bruner, Herbert B.** Determining basic reading materials through a study of children's interests and adult judgments. New York city, Teachers college, Columbia university, 1929. 25 p.

The author aimed to discover basic reading selections chosen through applying duplicate criteria of children's interests and teachers' judgments as to appropriateness. 50,000 children and 1,500 teachers cooperated. Findings: Only 22 per cent of prose literary selections belong in grades where now placed by courses of study and textbooks, when criteria used in this study are employed.

541. **Burks, Jesse D., and Stone, Clarence R.** Relative effectiveness of two different plans of training in silent reading. *Elementary school journal*, 29: 431-36, February 1929.

The purpose of this experiment was to determine scientifically the relative effectiveness of two distinctly different plans of training in silent reading, one based on "Standard test lessons in reading," by W.A. McCall and Lelah M. Crabbs; the other based on "Learn to study readers," by Ernest Horn and others. The tests show little difference in the relative effectiveness of the two plans.

542. **Cain, Mary J.** Reading materials then and now. Master's thesis, 1928-29. Howard college, Birmingham, Ala.

543. **Coulter, Merle Aline.** Effect of repetitions on comprehension and retention in reading. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa.

544. **Cox, Rose Marian.** The development of score cards for evaluating silent reading lessons in the intermediate grades. Doctor's thesis, 1929. Indiana university, Bloomington. 344 p. ms.

Six various kinds of tests of the score cards were applied to many silent reading lessons given by rural school teachers, intermediate teachers, and critic teachers. Findings: Score cards are helpful: (1) To critics in grading silent reading lessons of the teachers under their supervision and (2) to teachers as self-aids.

545. **Cutright, Prudence; Halvorson, George P., and Brueckner, L. J.** A study of one factor in the grade placement of reading materials. *Elementary school journal*, 29: 284-95, December 1928.

The problem considered in this article is "How shall the difficulty of comprehension of reading materials be measured?"

546. **Dawson, Mildred A.** Materials of a historical nature contained in twenty-six primary readers. *Elementary school journal*, 29: 756-66, June 1929.

The writer analyzed seven series of readers, none of them having appeared before 1923. The amount of space in 26 readers which is devoted to historical material is small, but it tends to increase from grade to grade. The primers and the first readers include little or no historical material. The third readers contain, on the whole, more than three times as much historical material as do the second readers.

547. **Deitrich, Emil.** Reading improvement in small schools. Master's thesis, 1928. University of North Dakota, Grand Forks. (Abstract published in *School of education record*, 14: 117-20, January 1929)

Findings: By supplemental reading, work books, enlarged library facilities and training of teachers remarkable silent reading of pupils was brought about.

548. **Eckert, Mollie Horton.** The importance of context in reading. *University of Pittsburgh school of education journal*, 4: 97-102, March-April, 1929.

A study of the effect of context upon children's understanding of unfamiliar words conducted with 48 children in the Pittsburgh public schools. In 80 per cent of the 250 cases, context aided in comprehension.

549. **Eurich, Alvin C.** An experimental study of the reading abilities of college students. Doctor's thesis, 1929. University of Minnesota, Minneapolis.

This study shows attempt to improve the reading abilities of college students by means of reading exercises. Findings: When measured by tests which overlap the training exercises the gains made by the experimental group are significantly greater than the gains made by the control group. When measured by general tests which do not overlap the training exercises no such differences are observed.

550. **Fennell, Ethel L.** Recurring words and their relation to difficulties in comprehension. *Elementary school journal*, 29: 42-53, September 1928.

This study is based on an analysis of the following readers: The Winston readers, The Elson readers, The Boys' and girls' readers, The Pathway to reading, and The Child's own way series. In all, 222 different words were found that recurred at least once in the readers. For these 222 words, a total of 842 meanings were discovered, making, on the average, 3.79 different interpretations for each word in the entire set of 14 readers.

551. **Field, Helen A.** Extensive individual reading versus class reading. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A study of approximately 2,000 children over a period of about five months, to determine which is more valuable in building up skills in reading in second, third and fourth grades—extensive individual reading or class reading. Findings: The two procedures are about equally effective in developing reading ability in the transition grades in typical public schools.

552. **Gates, Arthur I.** *New methods in primary reading.* New York city, Teachers college, Columbia university, 1928. 236 p.

This book brings together and interprets a series of carefully planned investigations relating to the initial stages in learning to read. The data presented show conclusively that habits of accuracy and fluency in word recognition can be developed successfully without excessive emphasis on phonetics, thus avoiding the dangers which attach to traditional phonetic methods of teaching reading.

553. **Gray, C. T.** A comparison of the two types of silent reading as used by children in different school grades. *Journal of educational psychology*, 20: 169-76, March 1929.

554. **Gray, William Scott.** Summary of reading investigations (July 1, 1927, to June 30, 1928). I-II. *Elementary school journal*, 29: 443-57, 496-509, February, March 1929.

Pt. I contains an annotated list of the investigations; Pt. II presents a brief résumé of the important findings of most of the studies reported. The problems which were discussed most frequently during the period relate to the following topics: the reading interests and habits of children and adults, methods of improving comprehension and the technique of study, reading vocabularies, and diagnosis and remedial teaching. In the first paragraph of Pt. I, mention is made of previous summaries by the same author.

555. **Greene, Charles E.** *Diagnosis and improvement of reading difficulties in grades 2B to 6A.* 1929. Department of research, Public schools, Denver, Colo.

556. **Griffin, Lloyd H.** *The scientific teaching of reading in rural elementary schools.* 1928. University of Virginia, Charlottesville.

557. **Harbo, R. T.** *Relation of growth in reading to intelligence.* Master's thesis, 1928. University of Minnesota, Minneapolis.

A study to determine the relation between progress in reading and mental age and general intelligence.

558. **Holmes, Eleanor Ruth.** *Relative merits of reading guided by questions versus careful reading and re-reading without questions.* Master's thesis, 1929. University of Chicago, Chicago, Ill. 174 p. ms.

The author compares the two procedures described in title for college students, as to: (1) meaning values derived in terms of questions used by one group in study; (2) values derived in terms of supplementary questions not known to either group before test; and (3) total values derived in terms of study and supplementary questions, for different types of material. Conclusions: In general, the guidance of specific questions results in a larger number of meaning values in terms of study questions themselves, no loss of supplementary values, and a larger total number of meaning values, when the purpose of the reading is delayed recall of science material or material relating to the history of English literature. For immediate recall of material relating to the history of English literature, question-directed careful reading surpasses undirected careful reading in terms of study questions and total meaning values. For immediate recall of science material, both procedures are of equal value in terms of total meaning values derived. Question-directed careful reading significantly surpasses undirected careful reading for acquisition of specific information in terms of study questions even here, however.

559. **McCallister, James M.** *An analytical study of reading deficiencies of junior high school pupils.* Doctor's thesis, 1929. University of Chicago, Chicago, Ill. 306 p. ms.

A study of the reading deficiencies of 18 retarded readers and the reading difficulties arising in the study activities in American history, mathematics, and general science. The results of the study show the necessity for differentiating between pupils who are retarded in reading and pupils who merely encounter difficulties peculiar to the reading activities demanded in the study of various subjects. Many pupils enter the junior high school seriously retarded in reading and the need for provisions for remedial training in reading is shown. Lists and describes 56 reading difficulties arising in the study of American history, mathematics, and general science.

560. **McCarrel, Fred.** *Application of research to reading.* Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 78 p. ms.

This is an investigation to determine the extent to which the findings of research in reading are being practiced in actual schoolroom situations. Information was sought from: (1) City and state courses of study; (2) catalogues of normal schools and teachers' colleges; (3) series of readers and their manuals; (4) reports of city and state departments of education; (5) personal visits to schoolrooms; and (6) state, county and city school surveys. Findings: City and state courses of study give much evidence that progressive methods in reading are expected of teachers. With almost no exception, widely used series of readers and their manuals conform to recommendations of leading authorities in reading. College cata-

logues indicate that very few teacher-training institutions are furnishing their students the information necessary for the successful teaching of reading. Reports of departments of education indicate that only in a few schools are the best methods of teaching reading in use. Most schoolrooms visited are inadequately supplied with materials for teaching reading. School surveys show that city children are, on the average, above the national norms in reading while rural children, on the average, are from one to two years retarded.

561. **McCarrel, Virginia Gilliland.** Initial approach to reading. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 99 p. ms.

The purpose of this study is to set forth favorable situations, materials, and techniques for a satisfactory approach to reading for young children. Findings: In the approach to reading there has been a gradual change from a mechanical process to a developing process; a transfer of emphasis from teacher authority to spontaneous activity on the part of children, and from a very limited to a greatly extended amount and variety of material. More importance is being given to child psychology, to the psychology of learning, and to an appreciation of individual differences and needs of growing boys and girls. Increased recognition is being given to the importance of the physical make-up of books.

562. **Monroe, Marion.** Methods for diagnosis and treatment of cases of reading disability, based on the comparison of the reading performance of 120 normal and 175 retarded readers. Worcester, Mass., Clark university, 1928. p. 335-456. (Genetic psychology monographs, vol. IV, nos. 4 and 5, October-November 1928)

An experimental study in the diagnosis of reading difficulties and the development of remedial work for their correction. In this experiment the children made rapid progress in reading and this improvement was reflected in their work in spelling and arithmetic.

563. **Parr, Frank Winthrop.** A remedial program for the inefficient silent reader in college. Doctor's thesis, 1929. State university of Iowa, Iowa City. 403 p. ms.

564. **Paterson, Donald G., and Tinker, Miles A.** Studies in typographical factors influencing speed of reading. Journal of applied psychology, 13: 120-30, April 1929.

This is a study to determine the influence of various mechanical factors such as type form and size of type on speed of reading. The conclusion is drawn that the line of print 80 mm. in length and that type of 10-point size yield the fastest reading and are therefore the optimum of dimensions.

565. **Peters, Florentine.** Difficulties of Italian children in beginning reading. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 51 p. ms.

566. **Pueblo, Colo.** School district no. 1. Reading, course of study, first, second, third grades. 32 p. ms.
Preliminary committee report.

567. **Pyle, W. H.** The reading span. 1928. Detroit teachers college, Detroit, Mich. Elementary school journal, 29: 597-602, April 1929.
A determination of the age and grade norms of the reading span.

568. **Reading, Pa. Public schools.** Survey in reading, arithmetic, language usage and spelling—grades 3-6. 1928-29.

569. **Rebert, Gordon N.** A laboratory study of the reading formulas and familiar numerals... Doctor's thesis, 1929. University of Chicago, Chicago, Ill. 430 p. ms.

The investigation was primarily a laboratory study based upon photographic records of eye movements registered by means of the eye-movement camera. 60 subjects of varying degrees of training in the subject-matter read chemistry, algebra, physics, calculus, and geometry selections containing familiar formulas, and an American history selection containing familiar dates. It was found that increase in ability to read formulas and familiar dates tends to be associated with decreases in the number and duration of fixations and in the number of regressive fixations made in reading them. The number of regressive fixations is the least reliable measure of this increase in ability.

570. **Reed, Mary.** The effect of a balanced reading program on third grade Mexican children. Master's thesis, 1929. State university of Iowa, Iowa City. 194 p. ms.

571. **Remmers, H. H., and Stalnaker, J. M.** An experiment in remedial reading exercises at the college level. *School and society*, 28: 797-800, December 22, 1928.

Reports an experiment designed to gain some insight into, and mastery of, a justifiable and sound technique as a basis for a broader and more comprehensive future experiment in improving the reading ability of college students. Contains a summary of previous investigations, results of present experiment with seven students, and suggestions for future experiments.

572. **Rhoads, Luke C.** Systematic remedial training for pupils of superior reading-ability. *Elementary school journal*, 29: 771-73, June 1929.

Gives results of a study recently made in the school system of Mount Vernon, N. Y., to determine whether or not superior pupils who read a large number of books for appreciation without any special training in interpretation gain as much power to understand words, sentences, and paragraphs as do superior pupils who read a limited number of selections with specific remedial training. Results: The class given special remedial instruction made the greater progress in ability to interpret words, sentences, and paragraphs.

573. **Rittenberg, Fanny.** A study of the effect of oral reading vs. silent reading on children's preferences. 1928-29. Syracuse university, Syracuse, N. Y.

574. **Robinson, Roscoe R.** Two centuries of change in the content of school readers. Doctor's thesis, 1928. George Peabody college for teachers, Nashville, Tenn.

575. **Seegers, J. C.** Reading methods in Pennsylvania first grades. *Journal of educational method*, 8: 510-15, June 1929.

The results of Pressey first grade reading test given at the beginning and end of the semester to 2,331 children show that no one of the commercial "systems" is markedly superior or inferior to another.

576. **Severance, Clarabelle.** The effect of having definite objectives in the teaching of upper grade reading. Master's thesis, 1928. University of Idaho, Moscow.

577. **Simpson, Mabel R.** Qualitative and quantitative standards of attainment in reading, grades I-VI. Rochester, N. Y. [1929] 118 p.

This pamphlet is the product of a long period of study and experimentation in the Rochester school system and describes in detail the stages of progress through which pupils should be expected to pass in their mastery of the art of reading.

578. **Smith, Guy R.** The effect of length of line on rate of reading mimeographed material. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

579. **Smith, Nila Banton.** Matching ability as a factor in first grade reading. *Journal of educational psychology*, 19: 560-71, November 1928.

580. **Snyder, Edwin D.** Factual versus story material. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

An article with the same title is contained in the *University of Pittsburgh school of education journal*, 4: 94-96, March-April 1929. It gives the results of a controlled comparative study of the efficiency of the factual and the story form in presenting reading material in the sixth, seventh, and eighth grades. The totals were almost a tie between the two groups.

581. **Springstead, Clara B.** First steps toward a differentiated course of study in reading for ability groups in primary grades. *Journal of educational method*, 8: 19-25, September-October 1928.

A study of group ing based on: (1) Opinion of the teacher; (2) the results of an intelligence test; (3) the opinion of the principals. Contains two questionnaires sent to teachers to help in studying the abilities and needs of the X and Z groups in grade one, and lists some of the significant replies thereto.

582. **Stone, Charles R.** A study of the reading interests of children during a period of years. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

583. **Sultzer, Mary F.** What gains (experimentally determined) will children make in reading when specific remedial measures are applied over a limited period (2 months)? Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

584. **Thompson, Jessie L.** Relationship of total reading age to six variables. 1929. Colorado state teachers college, Greeley. (Report to Dr. McKee, May 2, 1929)

585. **Thompson, Ruth C.** The effect of length of sentence upon comprehension. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

586. **Tille, Samuel.** An examination of the vocabulary difficulties in a set of textbooks used in a 3B grade of a New York city elementary school. Master's thesis, 1929. College of the city of New York, New York, N. Y. 63 p. ms.

A comparison of textbook vocabulary with Gates compilation of the child's reading vocabulary. The author cites the vocabulary difficulties of several texts in different subjects.

587. **Tinker, Miles A.** Photographic measures of reading ability. *Journal of educational psychology*, 20: 184-91, March 1929.

Sixteen university students and 10 high school seniors were used as subjects in this experiment. The purpose of the study was to show the relative validity of the various photographic measures of reading performance and to demonstrate how variation in the kind of material read affects the consistency of these measures.

588. ——— and **Paterson, Donald G.** Influence of type form on speed of reading. *Journal of applied psychology*, 12: 350-68, August 1928.

A speed of reading record was obtained for texts set up in roman lower case, italic, and all capital letters. Comparisons were made between all capital versus lower case text, and between italic versus lower case text. There were 640 subjects used in the experiment. The text in lower case letters was read 13.4 per cent faster than that in all capital. The text in lower case letters was read 2.8 per cent faster than the italics.

589. **Truby, Charlotte C.** Analysis of the training exercises included in certain silent readers for intermediate grades. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa.

590. **Washburne, Carleton W., and Vogel, Mabel.** A revised list of phonics for grade II. Research office, Public schools, Winnetka, Ill. *Elementary school journal*, 28: 771-77, June 1928.

The words listed in Gates "Reading vocabulary for the primary grades" were broken up into vowel elements and phonograms and frequencies were listed. The most common vowel elements and phonograms (exclusive of those in first grade list) were listed for grade II.

591. **Weaver, Carolyn.** Trends in the teaching of phonics. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 52 p. ms.

This study involved an analysis of 20 manuals of widely used reading texts published since 1917. The conclusions, however, are based for the most part on those manuals published in 1926 and 1927. Findings: The trends are: (1) To give a less detailed system of phonics, but one based rather upon the essential elements; (2) to measure the amount of phonic instruction required by the child rather than by the system; and (3) to give phonics only to the children who need it, and to fit the instruction to the child's special difficulty.

592. **West Allis, Wis. Public schools.** Department of educational research. Survey of reading, arithmetic, spelling and language. March 1929.

593. **Wise, Forest George.** The trait terms in grade school readers. Master's thesis, 1929. University of Chicago, Chicago, Ill.

All trait terms in three volumes from Atlantic and Horace Mann readers were located. Readers were compared on basis of number of trait terms occurring therein and difficulty of these terms in Teachers word book, by Thorndike.

594. **Woo, Mien.** A study of effects of some incentives upon mental efficiency of school children. Doctor's thesis, 1929. University of California, Berkeley. 246 p. ms.

A study of the effect of encouragement and discouragement on the reading efficiency of the upper elementary grade school children, as measured by the Thorndike-McCall reading scale. Conclusions: (1) Encouragement and discouragement increase the mental efficiency of ordinary 6th, 7th and 8th grade pupils. They increase but little the efficiency of 6th, 7th and 8th grade children low in mentality; (2) younger children do better than older ones as a result of practice; while older ones do far better than the younger ones as a result of praise or reproof; (3) little or no sex differences were shown; (4) little or no racial differences were shown; and (5) differences between encouragement and discouragement incentives were small; what difference there was favored encouragement incentive.

595. **Zirbes, Laura.** Comparative studies of current practices in reading with techniques for the improvement of teaching. New York city, Teachers college, Columbia university, 1928. 230 p. (Contributions to education, no. 316)

The major problem investigated is "How shall current practice in reading be reconstructed if it is to apply progressive theory and incorporate the integrated findings of pertinent scientific studies?"

596. ——— Some character and personality problems of remedial cases in reading. *Childhood education*, 5: 171-76, December 1928.

The case records of seven children chosen from a group of 28 children each of whom was handicapped by failure in reading.

- See also 73, 78, 161, 445, 469, 472, 531, 672, 877, 1521, 1749, 1754, 2189, 2216, 2761.

TESTS

597. **Alhambra, Calif. City schools.** Department of educational research and guidance. A report on the Gates primary reading test as used in grades 1A, 2B, 2A. March 1929. Educational research and guidance bulletin (Alhambra, Calif.), 1: 4-5, June 1929.

Gives range of scores and medians, by schools, on types 1, 2, and 3, of the Gates test.

598. **Chase, Vernon E.** Final achievement tests results, reading. July 20, 1928. Bureau of research and statistics, Public schools, Fordson, Mich. (Bulletin, no. 15)

599. **Eurich, A. C.** A speed of reading test for college students. 1929. University of Minnesota, Minneapolis.

The purpose of this study was to construct a test of the rate at which college students read. Findings: A speed of reading test was constructed and evaluated for reliability and validity. Norms were established on approximately 2,000 students.

600. **Fordson, Mich. Public schools. Bureau of research and statistics.** Reading in primary grades, September to January, 1928-29. April 1929. 3 p. ms. (Bulletin, no. 28)

Shows rates of progress as measured by Gates primary reading test, by school and grade sections.

601. ——— Results of the Monroe silent reading test for September and January 1928-29. April 1929. 5 p. ms. (Bulletin, no. 26)

Shows progress by grade-sections, from September to January.

602. **Haggerty, M. E., and Eurich, A. C.** A test of reading comprehension. 1929. University of Minnesota, Minneapolis.

The purpose of this study was to construct a test of reading comprehension for college students. Findings: A test of reading comprehension was constructed and evaluated for reliability and validity. Norms were established on over 5,000 students.

603. **Keller, Frances.** Comparison of achievement in reading at Oliver Wendell Holmes as determined by the Stanford achievement reading tests, forms A and B, February and June 1928. August 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 7 p. ms. (Bulletin, no. 30)

Effect of remedial instruction in reading, grades 2-6, by grades and for different sections of test.

604. ——— Results of Stanford achievement test, Form A, at Marion school, March 1928. September 1928. Bureau of educational research, Public schools, Cleveland Ohio. 4 p. ms. (Bulletin no. 27)

Test in reading ability, grades 2A-6A. Shows median scores by grades, on each section of test.

605. **Lewerenz, Alfred S.** Measurement of the difficulty of reading materials. Educational research bulletin (Los Angeles, Calif.), 8: 11-16, March 1929.

Gives a method of determining the vocabulary difficulty of reading material through a sampling of words and determining the per cent of words beginning with certain letters which have been tested as indices of difficulty.

606. **Lundberg, L. D.** Silent reading survey—intermediate grades. September 1928. Department of research and statistics, Public schools, Flint, Mich. 31 p. ms.

A detailed study of silent reading of grades 4, 5, and 6, in the light of Sangren-Woody silent reading test.

607. **McAnulty, Ellen Alice.** The Devault primary reading tests compared with other primary reading tests. Educational research bulletin (Los Angeles, Calif.) 8: 11-12, May-June 1929.

608. **Macy, Dole Sylvester.** Measurement of comprehension of silent reading. Master's thesis, 1928. State university of Iowa, Iowa City. 110 p. ms.

609. **Minneapolis, Minn. Public schools. Instructional research department.** Achievement test results: reading and spelling. 5 p. ms. (Standard test series, no. 4a, October 1928)

Results of Gates silent reading tests in grades 3B-8A and Horn-Ashbaugh and Pearson-Suzzallo tests in spelling in grades 2B-7A. Shows that Minneapolis is above the test standard in reading; and that spelling achievement is somewhat higher than the year previous.

610. _____ Primary reading test comprehension scales, forms R, S, and T. 1929. 8 p., 4 p. ms.

611. _____ Primary reading test word recognition scales R, S, and T. 1929. 12 p. ms.

612. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** Report on reading ability of H-4 grade pupils, as shown by Stanford achievement test, spring semester. 1929. 6 p. ms.

613. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Report on reading tests. Voluntary testing program—September 1928. 12 p. ms. (Bulletin, no. 102)

614. **Philippine Islands. Bureau of education, Manila.** Progress in silent reading achievement as measured by the Thorndike-McCall reading scale. 1929. 1 p., 1 p. ms.

In this study all the second-year students in 18 secondary schools were tested with form 1 in March 1928; with form 2 in June 1928; and with form 3 in October 1928. Findings: There is a gain in the mean average of silent reading ability of students as their stay in the grade becomes longer; second-year normal students tested in June 1928 had a mean average of 47.2; those tested in October 1928, had a mean average of 52.9; and those (another group of students in the previous school year) tested in March 1928, had a mean average of 54.4.

615. **Portland, Oreg. School district no. 1. Department of research.** Reading. February 1, 1929. 3 p. ms.

A city wide reading survey of grades 3A, 3B, 4A, 4B, 5A, and 5B.

616. **Schinnerer, Mark C.** Results of Thorndike-McCall reading scale at Audubon junior high school. July 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 4 p. ms.

Results of October testing, followed by remedial teaching and retesting in January. Significant gains in only 6 of 15 sections were made.

617. **Shank, Spencer.** An analysis and evaluation of student responses involved in the measurement of reading comprehension. Doctor's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

618. **Van Horn, Virginia.** Objective tests as a motive to improve silent reading. 1928-29. West Virginia university, Morgantown.

619. **Wilber, Flora.** Predictive value of Thorndike-McCall reading scale. March 1929. Bureau of tests and measurements, City public schools, Fort Wayne, Ind. 7 p. ms.

See also 94, 175, 342, 362, 368, 384, 402, 415.

HANDWRITING

620. The effect of the quality of penmanship on grades. Journal of educational research, 19: 102-105, February 1929.

As graded by 450 teachers, the average grade, as a composition, of the good penmanship paper was ten points higher than that of the poor penmanship paper of identical content.

621. **Gates, Arthur I., and Brown, Helen.** Experimental comparisons of print-script and cursive writing. *Journal of educational research*, 20: 1-14, June 1929.

The data collected for this study from grades 1 to 6 suggest that print-script is learned a little more rapidly than cursive writing during the first half year of training. The advantage in quality is slight; the advantage in speed is most pronounced during the first six to ten weeks.

622. **Gray, W. H.** An experimental comparison of the movements in manuscript writing and cursive writing. Doctor's thesis, 1929. University of Chicago, Chicago, Ill. 120 p. ms.

This investigation is limited to an analysis of the writing movements in the two types of writing with a view to discovering the differences between them. The analysis was made by means of motion pictures. Conclusions: Internal speed changes differ in the two types of writing. The differences in speed changes are largely due to differences in the form of the letters in the two types of writing.

623. **Hawk, R. F., and others.** Standards for schoolroom blackboard writing, 1929. Washington state normal school, Cheney. 16 p. ms.

It was the purpose of this study to find out what had been done in the field and to set up tentative standards for blackboard writing. Conclusions: Practically nothing has been attempted in this field, at least there is no literature available. Some definite standards based on simple experiments have been obtained.

624. **Kirk, John G.** Research in handwriting in business. In National association of penmanship teachers and supervisors. Report, 1929. p. 37-50. (Lillian Bushman, secretary, Burlington, Wis.)

From a review of research studies in handwriting the following points are deduced: (1) Handwriting is necessary for the business worker since practically 50 per cent of the work in the average business house is done by hand; (2) the handwriting ability resulting from instruction in the first six years of school attendance is not sufficient for the preparation of all pupils for entrance into business; (3) all boys and girls entering a business career should write at least a quality of 70 on the Ayres' Measuring scale for handwriting (Gettysburg edition) at a rate of speed of 85-100 letters a minute; the business man is not concerned with character in handwriting, he looks for legibility, accuracy, speed and neatness.

625. **Kramer, Emily, and Lauterbach, Charles E.** Resemblance in the handwriting of twins and siblings. *Journal of educational research*, 18: 149-52, September 1928.

Data were collected on 205 pairs of twins in the public schools of Wisconsin and 101 pairs of siblings in the public schools of Montana. Conclusions: (1) Twins show a greater degree of resemblance than siblings; (2) like-sex twins show a greater degree of resemblance than unlike-sex twins; (3) resemblance in older twins is no greater than that in younger twins; and (4) symmetry reversal is not a factor making for greater resemblance.

626. **National association of penmanship teachers and supervisors.** Report of the investigation and research committee, 1929. In its Report, 1929. p. 59-86. (Lillian Bushman, secretary, Burlington, Wis.)

627. **Newland, T. Ernest.** A study of the specific illegibilities found in the writing of Arabic numerals. Master's thesis, 1929. Ohio state university, Columbus. 60 p. ms.

A study of 138,000 digits, written by some 1,127 different persons of ages from nine to about 80 or 80 years. The material was gathered from eight sources. Findings: Numerals 5, 2, and 0, tend to become more illegible with age. The numeral 4, tends to become more legible with age. Certain types of illegibilities persist with increasing age. Perhaps making a 5 backwards (dash first from right to left, then continuing with rest of numeral) may decrease illegibilities. Also there is a tendency to omit first short dashes of the 2 and the 7.

628. **Oregon state teachers association, Portland, Oreg.** Handwriting in Oregon schools. 13 p. ms.

Quality of handwriting of school pupils in the elementary and high schools, and rapidity with which students write. It is believed that lack of quality in writing decreases as the speed increases. This is probably the case rather than lack of efficiency in teaching writing in Oregon schools.

629. **Orleans, Jacob S., and Baer, Joseph A.** Handwriting in the rural and village schools of New York State. Albany, University of the state of New York press, 1929. 52 p. (University of the state of New York bulletin, no. 922, April 15, 1929)

The results of this study show that the quality of the handwriting in informal writing is inferior to that found in formal writing; the handwriting of the seventh and eighth grades seems up to standard but that of earlier grades is quite obviously low.

630. **Scarff, Dora Waldo.** An experiment in teaching handwriting to first grade children. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 13 p. ms.

631. **Shear, Barnet E.** A method of comparing handwriting with intelligence. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

632. **Shepherd, Everett M.** The effect of the quality of penmanship on grades. Journal of educational research, 19: 102-105, February 1929.

An English composition was copied in good handwriting and then in poor handwriting. Copies of these papers were given to 450 teachers to grade. The good penmanship paper was graded about 10 points higher than the poor penmanship paper.

633. **Smith, Karl C.** The influence of kindergarten training on handwriting quality and rate. Master's thesis, 1928. State university of Iowa, Iowa City. 71 p. ms.

634. **Turner, Olive Grace.** The comparative legibility and speed of manuscript and cursive handwriting. Master's thesis, 1929. University of Chicago, Chicago, Ill.

Handwriting as found in the first six grades. Conclusions: Manuscript is more legible and can be as rapidly written.

635. **Wittler, Milton.** A study of handwriting with special reference to anatomical development, intelligence, and some other mental and physical functions. Doctor's thesis, 1929. Harvard university, Cambridge, Mass. 270 p. ms.

A study of the relationship of ossification of the carpal bones (anatomic index), and of intelligence to scores in rate and quality of handwriting among 550 public school children of a city suburban to Boston, Mass. Conclusions: Anatomic age appears to bear no relation to motor coordination as expressed in handwriting. I. Q. is positively related to quality and markedly so to rate of writing. Bright children write faster, though no better than ordinary, or even dull children.

See also 2645.

TESTS

636. **Boyer, Philip A., Kirk, John G., and Broome, Edwin C.** Report on survey test in handwriting, June 1928. October 1928. Division of educational research, Board of public education, Philadelphia, Pa. 9 p. ms.

Test in grades 2-8; Zaner scale in grades 2-4; Ayres in grades 5-8. Median scores by districts and grade sections.

637. **Conard, Edith U.** Manuscript writing standards. Teachers college record, 30: 669-80, April 1929.

638. **Fordson, Mich.** Public schools. Bureau of research and statistics. Results of handwriting tests as measured by the Ayres scale. March 1929. 4 p. ms. (Bulletin, no. 25)

Shows that consistent and continuous improvement in penmanship has resulted from the remedial instruction following the 1927 survey of handwriting difficulties.

639. **Keller, Frances.** Results of penmanship survey at Benjamin Franklin school, May 1928, Elementary school. July 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 46 p. ms. (Bulletin, no. 3)

Compares scores with those made by pupils in certain other schools and with the Cleveland standard. Finds that high quality and high speed occur together. Distribution by grades, ability groups, and sex is given.

640. ——— Results of penmanship survey at Nathaniel Hawthorne, May 1928, Elementary school. Bureau of educational research, Public schools, Cleveland, Ohio. 1928. 48 p. ms. (Bulletin, no. 72)

Results show low speed but excellent quality of handwriting. Presents medians by grades, ability groups, and sex groups.

641. ——— Results of the penmanship survey at Nathaniel Hawthorne junior high school, May, 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 1928. 30 p. ms. (Bulletin, no. 73)

Results show a decline in the quality of penmanship in the junior high school grades, except in the 7A grade, where the quality exceeds the Ayres standard and the speed is near the standard.

642. **Portland, Oreg. School district no. 1. Department of research.** Writing. March 4, 1929. 7 p. ms.

A city wide writing test in grades 3A, 4A, 5A, 6A, 7A, and 8A.

643. _____ Writing survey. March 4, 1929. 7 p. ms.

A city wide survey of writing in grades 3A, 4A, and 5A.

644. **Snider, Frank J.** Progress norms for handwriting rates and quality in Iowa. Master's thesis, 1928. State university of Iowa, Iowa City. 180 p. ms.

See also 368.

SPELLING

645. **Abernathy, Ethel.** Photographine eye-movements in spelling. 1928-29. Queens college, Charlotte, N. C. Ms.

The general problem of this study was to determine the relation between the method of learning to spell, as indicated by photographic records of eye movements, and efficiency in learning. Good and poor spellers were compared. The two groups differed mainly in the more marked tendency of the good spellers to concentrate attention upon the more difficult parts of words.

646. **Athan, Mary E.** The effect of method on learning in spelling. Master's thesis, 1929. University of Minnesota, Minneapolis.

647. **Bayles, Lucy M.** Pupil participation in grading spelling papers. Educational research record (University of Nebraska), 1: 38-44, October 1928.

This study was carried on in the daily spelling classes in 20 sixth grades of the public schools of Lincoln, Nebr. The data were obtained from the daily spelling papers of 682 pupils. Findings: Twelve schools attained an accuracy of 99 per cent. One school of the control group and 11 schools of the experimental groups attained more than 99 per cent in efficiency in finding errors on their own papers before the end of the training period.

648. **Book, William F., and Harter, Richard S.** Mistakes which pupils make in spelling. Journal of educational research, 19: 106-18, February 1929.

An analysis of 5,196 test papers in spelling or English composition, in which 18,840 mistakes in spelling occurred, was undertaken in order to determine the kinds of mistakes which were regularly made. Phonetic spelling and the omission of letter were the chief causes of error.

649. **Branson, Ernest P.** Report on 7B spelling research, September 1928. 1928. Department of research, City schools, Long Beach, Calif. 2 p. ms.

Describes the procedure in a study to determine what words of the Commonwealth list not now taught in Long Beach should be embodied in future courses of study for elementary and junior high schools.

650. **Emanuel, Mary A.** The standards of usage in punctuation and spelling. Master's thesis, June 1929. Colorado state teachers college, Greeley. 145 p. ms.

Sources of information were four English handbooks and four publishers' style guides: Greever-Jones' *Century collegiate handbook*, Ponce's *A manual of the mechanics of writing*, Woods-Stratton's *A manual of English*, and Woolley's *New handbook of composition* were used. Conclusions: The summary consists of certain definite rules set forth for punctuation. Use of comma, 23 conclusions; use of semicolon, 6; use of colon, 3; use of period, 7; use of the question mark, 6; use of the exclamation point, 4; use of the dash, 8; use of parentheses, 5; use of brackets, 2; use of quotation marks, 7; use of simplified spelling, 1; use of the hyphen, 6; rules for capitalization, 19; abbreviations, 8 rules; use of numbers, 12 rules; a group of words for correct spelling.

651. **Farrar, Joe.** Distribution of learning in spelling. Master's thesis, 1929. State university of Iowa, Iowa City. 45 p. ms.

652. **Fitzpatrick, Frank Charles.** A study of errors in spelling made by Oregon high school students. Master's thesis, 1928. Stanford university, Stanford University, Calif.

653. **Gannon, John.** Improvement of spelling abilities in an eighth grade class; a case study. Master's thesis, 1928. State university of Iowa, Iowa City. 78 p. ms.

654. **Goodrich, T. V., and Lefler, M. C.** Report on experiment of pupil marking of spelling papers. October 1928. Department of measurements and research, Public schools, Lincoln, Nebr. 1 p. ms.

Gives three techniques for improvement of accuracy in marking spelling papers by pupils in grade 6.

655. ———— Results of the spelling improvement project—1927-28. November 1928. Department of measurements and research, Public schools, Lincoln, Nebr. 2 p. ms.

Shows progress made by pupils in mastering spelling lists, for which certificates were awarded.

656. **Greene, Charles E.** Relationship between words misspelled in composition and words taught in the Horn list. 1929. Department of research, Public schools, Denver, Colo.

657. **Hedrick, E. H.** An investigation of the efficiency in teaching spelling in Medford schools. Master's thesis, 1929. University of Oregon, Eugene. 53 p. ms.

A study carried on in grades 3B to 6A inclusive, in four schools of Medford, Oreg., in order to find out what per cent of words proposed for study of the New World Speller can the pupils spell before beginning formal study of them and what per cent can they spell after certain set limits of time; also to find out to what extent the initial spelling ability as shown by pre-test functions in their final proficiency, as shown by the final test. It was found that the average class can learn more words in spelling than the usual 4,000 to 45,000 given in texts for eight years. This amount can be done in six years.

658. **Horn, Ernest.** The child's early experience with the letter A. *Journal of educational psychology*, 20: 161-68, March 1929.

An analysis of the unphonetic character of the English language based upon 47 different sound-letter associations for the letter A, in words occurring in first, second and third readers.

659. ———— The influence of past experiences upon spelling. *Journal of educational research*, 19: 283-88, April 1929.

The three words selected for this study were circus, tease, and miscellaneous. The writer shows the variety of actual spellings of these three words.

660. ———— A source of confusion in spelling. *Journal of educational research*, 19: 47-55, January 1929.

The writer shows the number of possible methods of spelling phonetically the syllables of the word "circumference."

661. **Kramer, Grace A.** What words do adults mis-spell? *Baltimore bulletin of education*, 7: 92, January; 165, April 1929.

662. **McCowen, Annie Margaret.** Problems in training teachers to teach spelling. Doctor's thesis, 1929. State university of Iowa, Iowa City. 173 p. ms.

663. **Miller, Helen, and Curtis, S. A.** Creative teaching in the field of spelling. September 1, 1928. Public schools, Hamtramck, Mich. 107 p. ms. (Creative supervision monograph, no. 1)

This study is to be continued. It involves the construction of a new course of study in spelling, with new methods of teaching, to train children in self-direction, self-appraisal, self-control, and cooperation. The work is completely individualized. An experimental edition is being used in Hamtramck.

664. **Mitchell, Nina V.** A study of spelling and use of the most common adverbs used in writing. Master's thesis, 1928. State university of Iowa, Iowa City. 94 p. ms.

665. **New York (State) Education department.** Spelling syllabus. Committee report. Albany, N. Y., New York state education department, 1929. 48 p.

666. **Papez, Emilie Barbara.** The elimination of writing errors in spelling and composition. Master's thesis, 1929. State university of Iowa, Iowa City. 72 p. ms.

667. **Prehm, Ernest Albert.** Grouping words by structure and sounds as factors in the teaching of spelling. Master's thesis, 1929. State university of Iowa, Iowa City. 36 p. ms.

668. Pueblo, Colo. School district no. 1. The phonetic drill book, grades I-III. [1928] 58 p.

Committee report, Maud Boreing, chairman.

Lists of words for phonic drill in primary grades, intended to be put in the hands of the children.

669. ——— Spelling for the grades. [1928] 7 p. ms.

Committee report on aims and methods.

670. Selke, Erich. A study of the vocabulary of ten spellers. Elementary school journal, 29: 767-70, June 1929.

In the spellers examined a total of 8,427 different words were found. 1,080, or 13 per cent were common to all spellers.

671. Simpson, Mary Ione. The vocabulary of children's spellers. Master's thesis, June 1929. Colorado state teachers college, Greeley. 208 p. ms.

Children's letters were collected from 39 states. 522 were received. Frequencies were tabulated giving 67,143 running words with 3,735 different words. Conclusions: (1) Children's needs in spelling vocabulary seem to be adequately cared for by the adult vocabulary; (2) the spelling needs of adults are not adequately cared for by the writing vocabulary of children; (3) a spelling list based on words common to most of the theme investigations would not provide for the spelling needs of children in life outside the school.

672. Standing, Ethel S. The effect of reading in the primary grades upon spelling. Master's thesis, 1929. State university of Iowa, Iowa City. 147 p. ms.

673. Steffey, Arthur J. A supervisory program in spelling. Master's thesis, 1928. State university of Iowa, Iowa City. 90 p. ms.

674. Stigler, W. A. Better spelling and less drill. El Paso (Texas) schools standard, 8: 283-87, April 1929.

Reports on experiment in which children in low third grade were tested on two lists of words: (1) selected from spellers in first two grades, and (2) words not on the spelling lists, selected from readers of the first two grades. Considering the relative difficulty of the two lists, the pupils made nearly as good scores on the reader list as on the speller list.

675. Stoddard, Coral M. The effect of the pronunciation exercise on spelling. Master's thesis, 1929. State university of Iowa, Iowa City. 147 p. ms.

676. Trowbridge, Cornelia B. Spelling by rule. Journal of educational psychology, 20: 205-11, March 1929.

An experimental study of the extent to which pupils generalize in spelling.

677. Washburne, Carleton W., and Morphett, Mabel Vogel. A simple technique for determining whether children know the meaning of spelling words. Research office, Public schools, Winnetka, Ill. Journal of educational research, 19: 196-200, March 1929.

Children indicated their familiarity with a given list of words. They were given a multiple choice test on these same words. The technique of having each child check unfamiliar words was found to be valid.

678. Watts, Winifred. An investigation of the test-study method of teaching spelling. Master's thesis, 1928. State university of Iowa, Iowa City. 81 p. ms.

See also 78, 568, 592, 609, 693.

TESTS

679. Bixler, H. H. High school spelling test, forms I, II, III, IV. Board of education, Atlanta, Ga. Atlanta, Ga., Smith Hammond and company, 1929. 4 p.

A 100 word spelling test with norms for grades 7, 8, 9, and 12, together with a suggested exemption score. Conclusions: A 100 word test is reliable (.93) and useful for a high school test.

680. Boyer, Philip A., and Broome, Edwin C. Report on survey test in spelling, June 1928. September 1928. Division of educational research, Public schools, Philadelphia, Pa. 9 p. ms. (Bulletin, no. 90)

Results of tests in grades 2A-8B, given to over 150,000 pupils. Shows scores by grade sections, schools and districts.

681. Brink, L. B., and Miller, Helen. The use of learning tests in spelling. 1928. Hamtramck public schools, Hamtramck, Mich.

The purpose of this study was to determine the natural rate of learning of classes and of individuals in order to develop better methods of studying spelling.

682. **Croad, James Russell.** Testing spelling ability by recognition and correction of misspelled words. Master's thesis, 1929. Stanford university, Stanford University, Calif.

683. **Fisher, George Karl.** The construction of a spelling test for senior high schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 70 p. ms. (To be published)

The study involved the selection of words made from vocabularies valid for pupils, grades 9 to 12, inclusive; equivalent tests were made, A and B forms; tests were given to 3,100 pupils. Norms were calculated for each grade, each age group 13 to 18, both sexes, and entire school population. Reliability was high.

684. **Fordson, Mich.** Public schools. Bureau of research and statistics. Ayres spelling test results for September and January, 1928-29. 5 p. ms. (Bulletin, no. 20, March 1929)

Shows the per cent of accuracy for each grade level and grade levels attained by each grade section, for city and individual schools.

685. **Gittins, George William.** Picture-word association spelling test. Master's thesis, 1929. Stanford university, Stanford University, Calif.

686. **Pintner, Rudolf; Binsland, Henry D., and Zubin, Joseph.** The evaluation of self-administering spelling tests. Journal of educational psychology, 20: 107-111, February 1929.

To measure the dictation method of spelling, the Otis test (known in this study as Alpha) and the Gates test (known as Beta) were used. Conclusions: (1) The correlation between the two experimental forms and the criterion are sufficiently high to claim for them validity and reliability as group spelling tests; (2) form Beta is slightly superior to form Alpha both in correlation with the criterion and in the size of the probable error in an individual score; (3) form Beta yields a considerably higher coefficient of association with the criterion; and (4) it is believed that this is a reliable test of that part of spelling ability or word knowledge which involves recognition of the correct spelling of a word.

687. **Portland, Oreg. School district no. 1.** Department of research. Spelling test, October 18, 1928. January 5, 1929. 12 p. ms.

A city wide spelling survey of grades 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, and 8B.

688. **Wallin, J. E. Wallace, and Coles, Charlesanna.** Phonetic spelling scales. Pedagogical seminary and Journal of genetic psychology, 35: 434-70, September 1928.

See also 342, 362, 368, 383, 416, 1157.

ENGLISH LANGUAGE

GRAMMAR AND COMPOSITION

689. **Alvey, Edward, jr.** Do educational gains, as measured by standardized tests, justify ability grouping in English? Master's thesis, 1928. University of Virginia, Charlottesville.

690. **Ashley, Imo Agnes.** Home and school cooperation in elementary language. Master's thesis, 1929. University of Chicago, Chicago, Ill. 132 p. ms.

Three sophomore classes in English and the homes represented by the members of the experimental class were studied. Conclusions: Home and school cooperation is valuable, especially for the average child in eliminating certain types of language errors.

691. **Baker, Elizabeth Whitmore.** The development of elementary English language textbooks in the United States. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn.

692. **Berry, Endoras Clifford.** A study of the relative effect of high school English on success in college. Master's thesis, 1928. University of Idaho, Moscow.

693. **Bickett, W. J.** Elementary course of study, English and spelling. Trenton, N. J., Superintendent of schools, July 1928. 138 p.

Committee report, J. Harry Shoemaker, chairman.

This report emphasizes the adaptation of course to three-track grouping of pupils.

694. **Burnce, Frances.** The history and the present status of the supervision of English in the secondary schools. Doctor's thesis, 1928-29. Boston university, Boston, Mass.

695. **Chicopee, Mass. Public schools.** Syllabus: language, grades I-VI. 1929. 7 p. ms.

696. **Clark, Harriet M.** Frequency and persistency of errors in sentence-structure in the written composition of 100 university freshmen. Educational research record (University of Nebraska), 1: 31-37, October 1928.

Two themes, one written at the beginning and the other at the end of the year, were secured from each of 100 Teachers college (University of Nebraska) freshmen. From the data obtained the conclusion is drawn that instruction in English composition does not seem to be functioning in regard to consistent improvement.

697. **Crenshaw, T. C.** A basic English vocabulary for Spanish-speaking students. Master's thesis, 1928. Colorado state teachers college, Greeley. 47 p. ms.

This investigation involved the selection of 527 English words, according to studies made by Thorndike and others, the meaning of the word in Spanish, and making of English vocabulary. Conclusions: A multiple choice test of a fair sampling of the words was constructed under the supervision of a research expert, and given the students to determine the reliability of their checking. The check of the 180 students lists which showed no discrepancy with the multiple-choice test was then tabulated to determine the relative difficulty of the words. To test the relative difficulty of the 527 words, lists of them were submitted to 186 Spanish-speaking students, who were asked to check those which they would understand in their reading. The 527 words were then rearranged according to the number of students recognizing them. This list of words, arranged in the order of difficulty, and with the Spanish equivalent of each word placed after it, constitutes a working vocabulary to be used by the teacher in presenting new words to the Spanish-speaking student beginning the study of English.

698. **Detmoyer, Mary Susan.** Sentence structure in the junior high. Master's thesis, 1929. University of Denver, Denver, Colo. 67 p. ms.

This study involved the examination of 1,350 papers (67,500 sentences) from 54 classes of 9 schools. The test was of two parts: (1) Recognition of the kind of sentence; and (2) punctuation. The problem was to decide: (1) If the results are suggestive of definite knowledge of sentence structure; (2) Will a comparison of the tests show an improvement has been made? and (3) Can we attribute any improvement to the functioning of the course of study? Conclusions: (1) No definite proof, but evidence of knowledge of nomenclature and punctuation; (2) some gain noted; (3) improvement can be attributed to the functioning of the course of study.

699. **Dolan, Alice M.** Teaching of English in secondary school. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 46 p. ms.

An evaluation of training, method and objectives of English teachers. Conclusions: Need for clearer understanding of objectives, more thorough training, and broader perspective is imperative.

700. **Eason, Joshua Lawrence.** A diagnostic study of technical incorrectness in the writing of graduates of Tennessee county high schools. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 89 p. (Contributions to education, no. 64)

For this study 638 entering freshmen at the University of Tennessee in the fall of 1927 were taken as representative of the schools of the state, and samples of their writing used as the basis of this study. Of these 638 freshmen, 358 are county high school graduates.

701. **El Paso, Texas. Public schools.** "Espicking the English". El Paso schools standard, 8: 225-26, February 1929.

Gives list of 12 special vocabulary difficulties of beginning Mexican children, compiled by El Paso teachers; chiefly difficulties in pronunciation.

702. ———— Functional English. El Paso schools standard, 8: 255-59, March 1929.

Gives a list of 88 errors in construction of English sentences by high school pupils of Mexican parentage.

703. **Ernst, Walter L.** A study of the difficulties in forming the present participle. Master's thesis, 1929. State university of Iowa, Iowa City. 75 p. ms.

704. **Fellows, John E.** Activities used in developing compositional skill. Master's thesis, 1929. State university of Iowa, Iowa City. 91 p. ms.

705. **Fish, Ethel E.** Spoken English as a subject of instruction in the secondary school. Master's thesis, 1928-29. Brown university, Providence, R. I. 70 p. ms.

A study to determine the aims now held and practices in vogue in the teaching of oral English. Findings: Oral English has received increased attention in the secondary school during the last decade; formal training in debate and declamation has been subordinated to training in natural expression, in extemporaneous speaking and conversations; correction of speech defects was found to be an important objective.

706. **Foster, Richard Ryder.** Some aspects of teaching and testing in college freshmen English. Doctor's thesis, 1928. State university of Iowa, Iowa City. 164 p. ms.

707. **Gettinger, Leona.** A study of achievement in English composition. Master's thesis, 1928-29. University of Pennsylvania, Philadelphia.

708. **Green, Thomas C.** A survey of the language skills and their grade location in certain elementary language textbooks. Master's thesis, 1929. State university of Iowa, Iowa City. 71 p. ms.

709. **Greene, Charles E.** English for slow-learning groups in grade 10B. 1929. Department of research, Public schools, Denver, Colo.

710. **Grote, Caroline E.** A study of the writing vocabulary of some tenth grade girls. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

A comparison of pupils in academic with those in commercial courses in high school—word frequencies, vocabularies rated in terms of chronological age, school standing, I. Q., and other features.

711. **Haar, Daniel F.** A study of the effects of summer vacation on pupils' retention of the mechanics of English language usage and grammar. Master's thesis, 1929. New York state college for teachers, Albany.

Tests were made in June and a retest in September, before instruction, of 790 elementary school pupils, and a comparison was made of those tested in September with 850 pupils exempted from the June examinations. It was found that the summer loss was not very great. Exempt and non-exempt pupils were not far apart in ability in September.

712. **Hatley, Selma.** English composition as a means for training in effective reflective thinking. Master's thesis, 1929. University of Chicago, Chicago, Ill. 139 p. ms.

An experiment with two comparable English composition classes as to increase in ability to do reflective thinking after instruction in technique of reflective thinking. One class was so instructed and the other was not. The instructed class surpassed in ability to do reflective thinking as a result of instruction in technique of reflective thinking.

713. **Healy, Katharine L.** A study of the factors involved in the rating of pupils' composition. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

714. **Hermans, Mabel C.** A study of the achievement of junior high school pupils in language. Educational research bulletin (Los Angeles, Calif.), 8: 4-6, November 1928.

Scores in grades B7-B9 indicate a grade placement slightly above norm for the average learning groups.

715. **Hewitt, Florence Hamilton.** The organization and supervision of a high school English department with special reference to the problem of working with young teachers. Master's thesis, 1929. University of New Hampshire, Durham.

A consideration of the working organization of a high school English department in relation to the administration of the school and to the supervision of instruction in English. Suggestions for guidance of young teachers.

716. **Hoffman, H. G.** The vocabulary of sixth grade children's letters. Master's thesis, 1928. Colorado state teachers college, Greeley. 94 p. ms.

A study of 366 letters written spontaneously by 347 sixth grade children in 17 different states. Conclusions: As this study is only preliminary, and the data a small part of a big study, the author gives but few tentative conclusions. (1) Due to the fact that so few words used commonly by children as found in this investigation, are not used by adults commonly, it seems reasonable to conclude that a list of words used commonly by adults will include the very great majority of those so used by children; (2) due to the fact that so

many words used very commonly by adults do not appear at all in the vocabulary of children's letters as judged by this investigation it seems reasonable to infer that a list of words used commonly only by children will not include many words so used by adults; (3) due to the fact that so many common words found even in this preliminary investigation are not found in the common theme list, it is clearly evident that important theme investigations have utterly failed to determine the child's writing vocabulary; (4) in comparing the common theme list with the word list of this investigation, it is clear that we have no reliable knowledge of the child's written vocabulary.

717. **Hufeland, Eleanor.** A course in English for the seventh and eighth grades of vocational schools in New York state, (Thesis includes a book—English—individual lesson sheets for seventh and eighth grades.) Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 20 p. ms.

718. **Hyde, Gilbert.** A study of a number of students in the Oxford high school as to their abilities in English. Master's thesis, 1929. University of Mississippi, University.

719. **Idaho. State board of education.** Language activities course of study and manual of methods for elementary public schools. Boise, Idaho, State board of education, September 1928. 172 p. (Idaho bulletin of education, no. 8, September 1928)

720. **Johnson, Lillian.** A study of the vocabulary of intermediate school pupils. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 89 p. ms.

721. **Johnson, Roy Ivan.** Determining standards in English composition. School review, 36: 757-67, December 1928; 37: 44-48, January 1929.

722. **Kaulfers, Walter.** The prognostic value of general language. School and society, 28: 662-64, November 24, 1928.

A comparative study of pupil achievement in general language and foreign language based upon final grades in general language for fall term in 1927 by 186 high school pupils and end-semester marks received by same students in the first half year of Spanish, French and Latin during the spring term, 1928. The correlations indicate that teachers' marks in general language are no more certain predictive measures for foreign language than ordinary intelligence quotients, and are less accurate than simple grades in English.

723. **Leonard, John Paul.** The use of practice exercises in the teaching of punctuation and capitalization. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The problem of this study was to determine whether the use of practice exercises in the nature of proof-reading, error correction, and dictation practice materials improves pupils' ability to write compositions free from punctuation and capitalization errors. 82 pupils from the eighth and ninth grades were chosen as subjects for this study. The tests used were the Terman group test of mental ability, Pressey diagnostic tests in English composition, and Leonard proof-reading test in punctuation and capitalization.

724. **Lorenz, Elsie.** The writing vocabulary of third grade children. Master's thesis, 1929. State university of Iowa, Iowa City. 99 p. ms.

725. **Louisiana. State department of education, Baton Rouge.** State course of study in language for the elementary schools. Baton Rouge, State department of education, 1928. 180 p. (Bulletin, no. 131, August 1928)

726. **Lowrey, Sherman L.** The cruciality of punctuation as shown in litigation. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa.

727. **Lyman, B. L.** Summary of investigations relating to grammar, language, and composition. Chicago, University of Chicago, 1929. 302 p. (Supplementary educational monograph, no. 36)

728. **Nemzek, Claude L.** Trends in the English program of Iowa high schools. Master's thesis, 1929. State university of Iowa, Iowa City. 246 p. ms.

729. **Nichols, Mary.** An English syllabus for the junior high school teachers' use. Master's thesis, 1928. University of Virginia, Charlottesville.

730. **Olcovich, Annie.** Grammar for junior high school students. Master's thesis, 1929. University of Denver, Denver, Colo. 98 p. ms.

A text founded upon years of experience in grammar teaching in junior high school; one which is planned to fit the "contract method."

731. **Pueblo, Colo.** School district no. 1. Elementary English. [1928] 5 p. ms.

Preliminary report of committee on course of study.

732. **Rigg, Melvin G.** A psychological analysis of certain problems of learning involved in college English. Doctor's thesis, 1929. Ohio State university, Columbus. 112 p. ms.

A study of capitalization, punctuation, grammar, sentence structure, and authors and titles in American literature. Findings: In regard to the mechanics, the attainment of students entering college was low, and the gain made during the freshman year slight. In some cases there was a loss. Knowledge of one instance of a usage by no means insured knowledge of another apparently similar instance. In regard to literature, it was found that textbooks contain an excessive amount of detail; college students know very little about important names and titles in American literature; a college course in this subject has slight effect.

733. **Rodgers, Grace S.** Objective evidence for the criticism of the teaching of English composition in junior high schools. Educational research bulletin (Los Angeles, Calif.), 8: 10-13, April 1929.

The material for this study was selected from about 20,000 friendly letters written on assigned subjects by as many junior high school students.

734. **St. Louis, Mo.** Public schools. Division of tests and measurements. Survey of letter writing in grades V and VI. Public school messenger, 26: 15-27, September 1, 1928. (Research and survey series, no. 5)

Findings: The letters examined in this survey show that there is a general increase from grade to grade in the length of the letter, literary merit, and the number of different words used, together with a decrease in the total number of mechanical errors found. Spelling and punctuation constitute the errors of greatest frequency.

735. **Santa Monica, Calif.** Public schools. Department of research. Division of curriculum. Course of study in English for junior high school. [1929] 6 p. ms.; supplement, 14 p. ms.

Tentative course for grammar and composition in grades 7 and 8. Supplement gives references for supplementary work in formal grammar.

736. **Seybold, Arthur M.** An adventure in demonstration teaching. Educational method, 8: 89-93, November 1928.

A successful demonstration with written language and dramatization.

737. **Shambaugh, C. G., and Shambaugh, Olive L.** A core vocabulary for elementary school pupils. Journal of educational research, 19: 39-46, January 1929.

The writers have compiled a list of 1,309 words common to all grades IV to VIII on the basis of free-association test. This list is checked against Thorndike's list and Horn's list.

738. **Smith, Stevenson, and Powers, Francis F.** The relative efficiency of discrete word vs. sentence learning. 1929. University of Washington, Seattle. 25 p. (To be published probably in the Journal of educational psychology)

An exhaustive study of the extent to which sentence-learning of vocabulary material is possible. Results indicate that sentence-wholes are never handled as such but are broken up in units which are memorized.

739. **Soffel, Catherine A.** A comparison of the use of imposed subjects with the use of self-chosen subjects in assignments of compositions for elementary school children. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

740. **Spray, Edith J.** A study of grammatical errors made by pupils of grades III, IV, V, VI, and IX of the South Bend schools. Master's thesis, 1929. University of Chicago, Chicago, Ill.

The purpose of this study was to ascertain frequency of error and degree of elimination at each grade level.

741. **Stoddard, George D.** A survey of English grammar in the high schools of Iowa, 1926-1927. Journal of educational research, 19: 13-21, January 1929.

Results of tests given to about 7,000 students in grades nine to twelve in spelling, punctuation, errors in grammar, and common errors in language.

742. **Stratton, K. F.** The group versus the composite plan of teaching punctuation. Master's thesis, 1928. University of Minnesota, Minneapolis.

A comparison of the relative effectiveness of teaching one punctuation mark at a time and all punctuation marks simultaneously, with implications upon the arrangement of textbook and exercise material.

743. **Sullivan, Helen J.** Achievement of North Dakota high schools in the minimum essentials of written English, with suggested remedial measures. Master's thesis, 1929. University of North Dakota, Grand Forks. 46 p. Grand Forks, N. Dak., University of North Dakota, 1929. (University of North Dakota. Departmental bulletin, vol. XIII, no. 1, May 1929. School of education bulletin, no. 5)

A survey covering nearly all of the high schools of North Dakota, made under the direction of the Department of public instruction for the benefit of the high schools of North Dakota.

744. **Symonds, Percival M., and Lee, Baldwin.** Studies in the learning of English expression. Teachers college record, 30: 461-80, 686-92, February, April 1929.

The first study is on punctuation and the second on capitalization.

745. **Tanruther, Edgar M.** An inventory of instructional devices for stimulating written language production in the elementary grades. Master's thesis, 1929. State university of Iowa, Iowa City. 126 p. ms.

746. **Taylor, Warner.** A national survey of conditions in freshman English. Madison, Wis., University of Wisconsin, 1929. 44 p. (University of Wisconsin. Bureau of educational research bulletin, no. 11, May 1929)

300 questionnaires were sent to colleges and universities, with enrollments of 500 students or more, located in all parts of the country and representative of all types. From the replies received it would seem that there is unquestionably, if not a spirit of unrest over freshman English throughout the country, at least a spirit of inquiry. Aside from some changes made by the older, endowed institutions of the East, the course stands fundamentally as it was a decade or more ago. More colleges are using placement tests for sectionizing students today, fewer are using standard rhetorics.

747. **Thompson, Irene Alice.** The oral English of a Ghetto group. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

748. **Van Brussel, Anna.** An analysis of the content of six language texts for fifth and sixth grades. Master's thesis, 1929. State university of Iowa, Iowa City. 98 p. ms.

749. **Vaughan, William E.** High school and college articulation in English. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The articulation of English between the senior high school year and the freshman college year as affecting 21 state-supported higher southern institutions and their articulated high schools. Findings: English offered in the last high school year articulates very slightly with that of the freshman college year. The high schools devote three-fourths of the senior year to the study of literature and one-fourth of the year to the so-called fundamentals; more than half the reporting colleges spend as much as 75 per cent of the year in fundamentals and all at least half the year.

750. **Walker, Editha.** A suggested course of study in oral English for the secondary schools. Master's thesis, 1928. Colorado state teachers college, Greeley. 130 p. ms.

Senior and junior high schools of Ault, Greeley, and Ft. Collins, Colo., and senior high schools of Eaton and Winsor, Colo., were used for this trial study. Questionnaires were later sent to 344 high schools in the United States. The study, made for the curriculum committee, Colorado state teachers college, was one of three made in the same field. Findings: (1) Highest per cent of uses in forms of oral English is in conversation; public speaking ranks second, and conducting meetings third in use; (2) regarding difficulties, after-dinner speeches rank first, then public-speaking, conducting meetings ranks fourth, conversation offers the least difficulties; (3) causes of difficulties, poor voice and articulation ranks first, then timidity, lack of vocabulary ranks third; (4) uses of five main divisions rank: (a) general needs; (b) voice culture; (c) pronunciation; (d) grammar; (e) vocabulary. Business people find difficulty in using the following words: lie, lay, sit, set, should, would, raise, as, will, ring, did, done, like, can't, who, don't, rise, shall. A course in oral English was presented as part of the thesis.

751. **Walker, Lillian O.** Mechanical errors made in English composition by college freshmen. Master's thesis, June 1929. Colorado state teachers college, Greeley. 130 p. ms.

Themes of 362 freshmen students, averaging 504 words, received from seven teachers colleges was the basis of this study. Conclusions: (1) The data seemed from the other studies and similar studies in this field to reveal the fact that college freshmen have not manifested a working knowledge of the mechanics of English composition; (2) only a small correlation was shown between grammatical knowledge and the ability to judge sentence correctness; (3) the data seemed to reveal "that if the greatest contribution which the study of grammar can make is the mastery of the sentence, grammar is not being given a chance to make its highest contribution"; (4) there is a close correlation between the results of this study and the findings in other studies made in schools, colleges, and universities over the country. It might be concluded that in general the freshmen are weak in ability to employ the correct mechanics; (5) this study shows that a few wrong forms constantly repeated constitute the bulk of the errors.

752. **Wallman, Lawrence.** Curricular activities in English. 1928-29. West Virginia university, Morgantown.

753. **Whitaker, Hershel E.** The relation between correct expression and the knowledge of formal grammar. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

754. **Witty, Paul A., and Fry, Mabel.** The vocabulary content of compositions written by college students. *Journal of educational research*, 19: 135-38, February 1929.

The vocabulary employed by university freshmen and upper-classmen in composition writing was studied. An appalling paucity of expression was manifested by both groups. 85 per cent of the words written in 25 minutes by the freshmen were found to fall in first 1,000 of the Thorndike Word Book, while 84 per cent of the words used by the upper-classmen occurred in this category.

755. **Woodbury, Martha.** A comparative study of the vocabulary of personal letters. Master's thesis, 1928. State university of Iowa, Iowa City. 68 p. ms.

See also 78, 133, 154, 296, 480, 504, 568, 592, 666, 857, 892, 982, 1083-1279, 1312, 1392, 1447, 1492, 2010, 2066, 2112, 2179, 2700, 2977.

ENGLISH LITERATURE

756. **Brock, Mamie Denham.** Handbook of helps for teaching the Merchant of Venice. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 94 p. ms.

A large part of the material given appears in the form of bibliographies, arranged in alphabetical order according to the author's names. The content of the work is organized into four chapters, as follows: Use in schools, Editions, Backgrounds, Critics and criticisms, and Teaching helps.

757. **Broening, Angela Marie.** Developing appreciation through teaching literature. Baltimore, Johns Hopkins press, 1929. 118 p. (Johns Hopkins university studies in education, no. 13)

758. **Burch, Mrs. Mary (Crowell).** Determination of a content of the course in literature of a suitable difficulty for junior and senior high school students. From the Department of education of Stanford university. Worcester, Mass., Clark university, 1928. p. 165-332. (Genetic psychology monographs, vol. IV, nos. 2 and 3, August-September 1928)

An experimental study in which tests were prepared for a large number of literary selections and administered to high school pupils for the purpose of determining their ability to comprehend the meaning of the different selections. The conclusion is drawn from the experiment that "Students in English in the junior and senior high schools must be divided into ability groups for instruction if it is to be effective for the majority of them".

759. **Clark, Icie Hope.** Study of the children's poetry of James Whitcomb Riley. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 121 p. ms.

Findings: This study shows that Riley has written 248 poems about children. Of these, 152 are reminiscent of the poet's own childhood; 60 show a child's attitude toward adults; 23 are poems about children who have died; 62 are poems of nonsense and humor; and 29 are about babies.

760. **Conkright, Josephine.** Historical backgrounds necessary for an understanding of English literature in the high school. Master's thesis, 1928. Colorado state teacher's college, Greeley. 121 p. ms.

This is an analysis of the college entrance requirements, the course of study found in Hosie's Reorganization of English in the secondary schools, and the literature courses of twelve high schools. Conclusions: Analysis showed: (1) That the different schools do not agree on the exact selections to be taught; (2) that they do not agree on the grades in which many of the selections are to be taught; (3) that very few of the courses indicate the exact titles of contemporary literature that are being taught. Denver is almost the only school that shows a definite course in this field; (4) that some types of literature are not as firmly established as others, notably the one-act play and the modern essay; (5) that only about 15 per cent of the selections making up the course of study are listed under exact titles by a majority of the schools under consideration; (6) that among the titles so listed, outside of those under American speeches, the name of only one American author appears; (7) that, in spite of this, American literature is being taught, as shown by survey and elective courses, as well as individual selections in many courses. A course of study was formulated from the results of this analysis. It was learned that history may aid literature in four different ways; by making the process of teaching and learning easier and more agreeable; by making the result of such teaching more permanent; by enriching and deepening the imaginative and emotional life of the student and by giving him an appreciation of moral values; by arousing in the mind of the student an admiration and appreciation of great characters, both in literature and life.

761. **Foster, Dorothy V.** Analysis of the content of ninth and tenth grade literature. Master's thesis, 1928. University of Washington, Seattle.

A study in 12 outstanding high schools in the United States of the content of 9th and 10th grade literature in order to obtain a general view of the literary situation, to see if there is any uniformity among high school courses, to see if there is any correlation between aims of English departments. Findings: Five principal aims were discovered; no standardized English courses were found; children are not separated on the basis of ability.

762. **Guberlet, Muriel.** Application of objective methods to problems of the literature curriculum. Master's thesis, 1928. University of Washington, Seattle. 168 p. ms.

Studies of two years issues of Atlantic Monthly, 1913 and 1926, to see how effective "present social utilization" would be as an approach to curriculum construction. Findings: This objective is a sound one.

763. **Hoffman, Lenore White.** A study of the appreciative and interpretative skills of normal school students in poetry, with a view toward training them for better creative teaching of poetry in grades. Master's thesis, 1929. New York university, New York, N. Y. 38 p. ms.

A study of 250 students over a period of one year.

764. **Jackson, Joyce Watson.** Bret Harte and the short story—a critical study of his materials and methods. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 94 p. ms.

765. **Jaffe, Samuel S.** An experimental study of the part-whole methods of learning. Master's thesis, 1929. College of the city of New York, New York, N. Y. 28 p. ms.

Comparison in learning of poetry by 304 pupils, grades 4-7, by means of part method by stanzas, whole method and progressive part method. Findings: In the 4th grade there was practically no superiority of one method over the others. In the other grades the whole method was found to be slightly superior to the others. The purely part method was found to be least effective in each of the grades.

766. **Jones, Norman L.** Study of boys' interest in literature. Master's thesis, 1929. University of Pennsylvania, Philadelphia.

767. **Kefauver, G. N.** The relationship of certain factors to the content of the curriculum in English literature in the secondary school. Doctor's thesis, 1928. University of Minnesota, Minneapolis.

An investigation concerning the validity, reliability, and possible use of the ratings of selections of literature on difficulty and enjoyment by pupils in the six grades of the secondary school. Intensive analyses were made of the influence of age, sex, grade, intelligence, and the like, upon the reactions of pupils to specific selections of literature.

768. **McMillan, T. H.** A study of the locale of American literature. Doctor's thesis, 1928-29. State teachers college, Bowling Green, Ky. 60 p. ms.

The study of locale of American literature develops a map for class use with all current textbooks used as a basis.

769. **Montgomery, Neva Wetzel.** Study helps in literary textbooks for junior high schools. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 79 p. ms.

770. **Pfennig, Hazel Tesh.** An orientation course in a teachers college. A course in contemporary literature for women. Master's thesis, February 1929. Teachers college, Columbia university, New York, N. Y. 23 p. ms.

771. **Pickering, Anna K.** High school studies in regional fiction. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 25 p. ms.

772. **Reich, Morris.** Present status of experimental studies in high school literature. Master's thesis, 1929. College of the city of New York, New York, N. Y. 72 p. ms.

A survey of periodicals, etc., on the subject for the last ten years.

773. **Roberts, Marie D.** Basic contributions of a selected group of English classics. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

774. **Whitely, Paul L., and McGeech, John A.** The curve of retention for poetry. *Journal of educational psychology*, 19: 471-79, October 1928.

It is concluded from this study that the curve of retention for poetry over long intervals of time, falls quite abruptly from immediate recall to recall after 30 days, and very gradually from 30 to 120 days. The drop from 30 days to 90 days is relatively insignificant.

775. **Wickham, Goldie.** The ballad as a literary type for the junior high school. Master's thesis, August 1928. Colorado state teachers college, Greeley. 86 p. ms.

Material as to what Junior high school pupils like was gathered from teachers of English, supervisors, principals, superintendents, and professors of English. Conclusions: (1) Regarding children's choices of literary material, it was found that they like literature that has a story, strange, unusual, an interesting plot, swift action, emotional content, and rhythmic sparkle of life, and zest of reality; (2) an analysis of the ballad revealed the following facts:—the ballad epitomizes many types of literature which contain the elements that junior high school-children like; it is of great value to them in six different ways; (3) study shows that 1,200 children like 39 of the 109 ballads which were presented out of the list of 228. Of these generally liked ballads, 33.3 per cent were folk, the remaining 66.6 per cent were literary ballads.

776. **Williams, Ralph E.** A comparative study of extensive and intensive teaching of literature in the ninth grade. Master's thesis, 1929. University of Chicago, Chicago, Ill.

See also 42, 254, 496, 538, 1277, 2061, 2559, 2569.

TESTS

777. **Alhambra, Calif. City schools.** Department of educational research and guidance. A report of the Pressey punctuation test as used with A9 English classes, January 1929. *Educational research and guidance bulletin* (Alhambra, Calif.), 1: 3-4, April 1929.

Results for May and January by X, Y, and Z groups; the difference in the groups indicates that they are classified on basis of actual accomplishment.

778. ———— Report of Tressler minimum essentials test as used with B11 English classes, May 1929. *Educational research and guidance bulletin* (Alhambra, Calif.), 1: 3-4, June 1929.

779. **Ballenger, Harvey Leigh.** The validation of a series of diagnostic tests in language. Doctor's thesis, 1929. State university of Iowa, Iowa City. 126 p. ms.

780. **Boyer, Philip A., and Broome, Edwin C.** Report on survey test in technical English, Philadelphia English test, part III, grade 5A, June 1928. September 1928. Division of educational research, Public schools, Philadelphia, Pa. 7 p. ms. (Bulletin, no. 91)

Results of test given to grade 5A, June 1928; gives median scores by schools, and districts, for various sections of test.

781. **Bunch, Jackson P.** An analysis of the content of certain standardized language tests. Master's thesis, 1929. State university of Iowa, Iowa City. 161 p. ms.

782. **Cavins, Lorimer Victor.** Standardization of American poetry for school purposes. Chicago, University of Chicago press, 1928. 134 p.

This study included two types of tests, one to measure the child's grasp of the factual content and the other to determine his ability to discern the real meaning of the poem. The results showed that the average child can understand the individual facts of poems as now classified but that the central purpose and thought escape him. Since understanding improves from grade to grade, the author was able to construct a simple scale for determining grade placement.

783. **Eyre, Ruth.** The counselor cooperating with the English department. Educational research bulletin (Los Angeles, Calif.), 8: 9-11, December 1928.

Junior high school test scores in grammar, charted and graphed by the counselor as an aid to the classroom teacher.

784. **Hamer, Anna M.** A study of the overlap in language skills in six elementary tests. Master's thesis, 1929. State university of Iowa, Iowa City. 59 p. ms.

785. **Hartmann, George W.** Initial performance as a basis for predicting ultimate achievement. School and society, 29: 495-96, April 13, 1929.

In four measures of the speed of verbalization the average correlation between the initial and final scores was approximately .60, thus justifying the assertion that the size of the initial score provides a reasonably good prediction of the final score.

786. **Huxtable, Zelma Langdon.** Criteria for judging thought content in written English. Educational research bulletin (Los Angeles, Calif.), 8: 11-15, January 1929.

Also in Journal of educational research, 19: 188-95, March 1929.

787. **Hyde, Gilbert F.** A testing program in English in the high school. Master's thesis, 1929. University of Mississippi, University.

788. **Maloney, Estelle L., and Buch, G. M.** The use of objective tests in teaching as illustrated by grammar. School review, 37: 62-66, January 1929.

Presents some suggestions relative to the use of objective tests in teaching and reports brief experimental results supporting the values of this practice.

789. **Oklahoma City, Okla. Public schools. Research department.** A study of errors made by junior high school pupils in English. [1929] 2 p. ms.

Results of tests in grades 7B-8A, calling attention to specific questions and sections of the test on which the percentage of errors was high.

790. **Perry, Edgar C.** A study of the use of diagnostic tests and remedial measures in capitalization. Master's thesis, 1929. University of Pennsylvania, Philadelphia.

791. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Report on Philadelphia English test—Part IV. Voluntary testing program—September 1928. 1928. 4 p. ms. (Bulletin, no. 99)

792. ————— Report on survey test in technical English. Philadelphia English test—Part III—grade 5A, June 1928. 1928. 7 p. ms. (Bulletin, no. 91)

The test was administered to a total of 10,869 5A pupils. Findings: The median score for all pupils tested is 42.9. This is approximately 57 per cent of the total possible score of 75. The range of information is 9.3. Thus, the middle 50 per cent of pupils had scores ranging from 33.4 to 52.0, that is, they answered correctly from 45 to 69 per cent of the elements of the test.

793. **Portland, Oreg. School district no. 1. Department of research.** Language test. January 5, 1929. 5 p. ms.

A city wide language survey of grades 6A, 6B, 7A, 7B, 8A, and 8B.

794. **Beno, John C.** Critical study of proof-reading type of test in English mechanics. Master's thesis, 1929. State university of Iowa, Iowa City. 84 p. ms.

795. **Schindler, Alvin W.** Word meaning knowledge of third grade children and an analysis of the best technique for measuring it. Master's thesis, 1929. State university of Iowa, Iowa City. 114 p. ms.

796. **Schinnerer, Mark C.** Complete reports of results of diagnostic tests in English composition, sentence structure, Lincoln high school, March, May 1928. July 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 12 p. ms.

Tests in March, followed by remedial teaching, and retesting in May. Gives medians by grade and class, compared with author's norms.

797. **Shachtman, Joseph.** Elements of English related to the judgment of poetry in grade eleven, the senior high school. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 51 p. (Contributions to education, no. 373)

An examination into the relationship which may exist between a knowledge of English grammar, correct usage, understanding of literary passages and judgment of poetry as measured by the Abbott-Trabue tests, in the eleventh grade of the senior high school. The results of both the present use of the Abbott-Trabue tests and those of the original work of Abbott and Trabue show that the Abbott-Trabue tests have a low reliability in the senior high school and that the subjects in the present study did about equally as well as the subjects of the original study.

798. **Speer, Dorothy.** Experimental evaluation of eight English composition scales: Doctor's thesis, 1929. Johns Hopkins university, Baltimore, Md. Baltimore, Md., Johns Hopkins press, 1929. 85 p.

799. **Speer, Robert K.** The measurement of appreciation in poetry, prose and art and studies in appreciation. Doctor's thesis, 1929. Teachers college, Columbia university, New York; N. Y.

Findings: The tests of recognition of merit in poetry, recognition of merit in prose, general art judgment, aesthetic sensitiveness, sensitiveness to merit in the pictorial arts, and sensitiveness to merit in the fine arts proved to be as reliable as the commonly used, commercially distributed, group achievement tests. Occasional use of tests of these capacities and achievements would have a salutary psychological effect on teachers. The relationship between writing a composition and recognition of merit in prose is low. The economic status of the family did not correlate at all with recognition of merit in either verbal or aesthetic features.

800. **Sterling, Edna L., and Cole, M. E.** Diagnostic and measurement tests to accompany English for daily use. New York, Henry Holt and company, 1929. 111 p.

See also 336, 361-362, 369, 375, 377, 383, 391, 402, 415-416.

ANCIENT CLASSICS

801. **Anderson, J. P., and Jordan, A. M.** Learning and retention of Latin words and phrases. *Journal of educational psychology*, 19: 485-96, October 1928.

A study of 31 pupils of grade 7 of the Chapel Hill, N. C., public school. The average age of the group was 12 years and 11 months. In this study, the curve of forgetting for English equivalents of Latin words is less abrupt than that for nonsense material and is similar to that for English poetry; there is a high correlation between immediate memory and delayed recall and a high correlation between intelligence and immediate memory of Latin-English equivalents and between intelligence and delayed memory of Latin-English equivalents.

802. **Berry, Gladys S.** Selection and classification of materials useful in motivating elementary Latin. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

803. **Brown, Sidney L.** The trend in the teaching of Latin. 1928-29. College of the city of New York, New York, N. Y. 69 p. ms.

A survey of the aims, content, teaching and texts in Latin as indicated in various sources. The author draws conclusions with respect to the probable improvement in the subject of Latin.

804. **Cocke, Hazel.** Relation between intelligence and achievement in Latin. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 49 p. ms.

A group of Latin tests were given to 44 pupils of the Clarksville high school, Clarksville, Tenn., who were studying Latin for the second and third years. There is a positive relationship between intelligence and achievement in Latin but the relationship is not high enough to predict the value of the coefficient of correlation with any degree of accuracy.

805. **Englar, Margaret T.** Revision of course of study tests—junior high Latin. Various dates. Bureau of research, Department of education, Baltimore, Md. 9 p. ms.

806. **Fenton, Norman, and Hill, V. D.** An experimental study of a visual method in Latin instruction. California bureau of juvenile research, Whittier state school, Whittier, Calif. School review, 36: 675-78, November 1928.

807. **Fredericks, Alma M.** Recent changes in first year Latin textbooks. Master's thesis, 1929. Tulane university, New Orleans, La.

Compares 10 texts published prior to the Classical investigation with 10 published since. Discloses numerous changes which indicate that the Classical investigation has had a pronounced influence upon teaching procedures.

808. **Hart, Lillian Huntley.** The great high school triumvirate: Cicero, Caesar, and Vergil. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 122 p. ms.

A comparative study of the lives of Cicero, Caesar, and Vergil, their personalities and achievements, in order to furnish to the Latin student a clearer understanding of the many factors that contributed to their development, and at the same time to instill a desire to pursue with deeper interest and keener appreciation the study of the lives and works of these men.

809. **Hutchinson, Mark E.** The correlation between the difficulty of Latin constructions and their frequency in high school Latin. Cornell college, Mount Vernon, Iowa. Classical journal, 24: 412-20, March 1929.

Results from the giving of a standard test in Latin syntax to 500 students are examined to see how difficulty and frequency correlate. Findings: Correlation was found to be low and it is recommended that lists of "Latin syntax demons" be made.

810. ——— Hutchinson Latin grammar scales, A and B (with record sheets and directions for scoring). Bloomington, Ill., Public school publishing company, 1928. 32 p.

This is a standardized and scaled test.

811. **Lecron, Wilbur B.** A comparative study of nine beginning Latin texts. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

812. **McGuinness, Mae.** A tabulation of errors found in the prose section of the three-year Latin examination as issued by the regents of the state of New York. Master's thesis, 1929. New York state college for teachers, Albany.

813. **Martin, Muriel O., and Maness, Lorená.** Teaching relation between Caesar vocabulary and second-year French vocabulary. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 144 p. ms.

The purpose of this study is to show the relationship between French and Latin vocabularies, and to study this relationship as it applies to teaching second-year high school vocabularies, by showing what percentage of a given French vocabulary is derived from Caesar words, and drawing conclusions therefrom.

814. **Orleans, Jacob S., and Solomon, M.** A study in Latin prognosis. Classical journal, 24: 174-90, December 1928.

815. **Pitts, F. L.** The application of the findings of the Classical investigation to the classroom. 1928-29. Syracuse university, Syracuse, N. Y.

816. **Provence, Effie Ruth.** Vergil's dramatic treatment of omens, oracles, and visions. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 176 p. ms.

817. **Schinnerer, Mark C.** Results of Cleveland language tests, Latin, January 1928. August 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 6 p. ms.

Medians by schools and per cent of pupils omitting or missing each item; all pupils in Latin classes, grades 7-9.

818. **Sperber, Isaac A.** To what extent does drill in labelling improve the ability of first year Latin students. 1928-29. College of the city of New York, New York, N. Y. 7 p. ms.

A brief experimental study of the effect of special drill on ability in the Henmon Latin test; 26 students were used. Findings: The students improved in their ability to translate Latin into English only one-tenth as much as they did in their ability in labelling.

819. **Watkins, Vivian.** Teaching the private life of the Romans in the high school. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 91 p. ms.

The purpose of this study is to show how a teacher of high school Latin may plan supplementary lessons and work out interesting topics on the private life of the Romans, with a minimum of reference material.

820. **West, Mary.** Trends of teaching of Latin in secondary schools. Master's thesis, 1929. University of Kentucky, Lexington.

See also 41, 154, 361, 396.

MODERN LANGUAGES

821. **Alhambra, Calif. City schools.** Department of educational research and guidance. Study of Spanish and French classes using the Columbia research bureau tests. June 1929.

822. ———— A study of the use of standardized tests with modern language classes in southern California high schools. April 1929. Educational research and guidance bulletin (Alhambra, Calif.), 1: 10-12, June 1929.

823. **Buchanan, M. A., and MacPhee, E. D.** An annotated bibliography of modern language methodology. Toronto, University of Toronto press, 1928. 428 p. (Publications of the American and Canadian committees on modern languages, vol. VIII)

Reprinted from Modern language instruction in Canada, Vol. I. An analytical survey planned to give in brief compass a review of the best contributions to the science of language learning and teaching, and intended to serve as a basis for further researches and experimentation.

824. **Foster, Olive Reeves.** Reorganized course of study for French, Spanish. 1929. Whatcom high school, Bellingham, Washington. (Mimeographed)

Complete survey of population of city as to nationality. Findings: Complete reorganizing of objectives of modern languages—introduction of languages for community absorption.

825. **Hay, Lura Jewell.** The meaning of liberal education with special reference to the teaching of foreign language. Doctor's thesis, 1928. Ohio state university, Columbus. 144 p. ms.

The historical background, present-day problems; a proposed solution bearing on organization of subject matter and teaching method.

826. **Rendtorff, Gertrude Emma.** The teaching of German in the secondary schools of California. Master's thesis, 1929. Stanford university, Stanford University, Calif.

827. **Shields, ——— and McAnulty, Ellen Alice.** Modern language survey. April 1929. City schools, Los Angeles, Calif.

828. **Sioux City, Ia. Public schools.** Committee of teachers. Tentative foreign language curriculum. 1928.

The junior and senior high schools are included in this study.

829. **Steindorff, Elfrieda.** In what grade should the study of foreign language begin? *Elementary school journal*, 29: 209-12, November 1928.

The results of a test made in the Lakeview junior high school at Oakland, Calif. The conclusion reached is that while the numbers are too small for any definite conclusions, the seventh-grade pupils seem to be learning the language in a way which is entirely satisfactory, and, so far as this particular school is concerned a foreign language may be begun in the seventh grade as successfully as in the eighth or the ninth grade.

830. **Symonds, Percival M.** A modern foreign language prognosis test. In *Publications of the American and Canadian committees on modern languages*. New York, The Macmillan company, 1929. Vol. 14, ch. 6.

831. **Weideman, Anna Helene.** Die Resel and Fraulen Susannens Weihnachtsabend (Marie von Ebner-Eschenbach) with notes and vocabulary. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 131 p. ms.

See also 146, 272, 361, 1477.

FRENCH

832. **Baker, Florence M.** A tentative vocabulary for first year French students. *Journal of educational research*, 18: 369-77, December 1928.

The 400 vocabulary given in this study claims not only to include material which would likely be needed in a first year's acquaintance with a foreign language, but to include it in terms which admit of being repeated constantly until they are learned. They are words which will fit without artificial arrangement into the conversation, reading, or composition.

833. **Bolen, Emma Ruth.** Scaled achievement tests in first year French grammar. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 88 p. ms.

834. **Derrick, Dorothy Marie.** A laboratory manual for the Holzworth and Price Beginner's French. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn.

835. **Ells, Laura Anne.** The teaching of French in junior high and senior high schools. Master's thesis, 1928-29. Boston university, Boston, Mass.

836. **Godfrey, Harry S.** New type questions in French. Master's thesis, 1929. New York state college for teachers, Albany.

Analysis of four texts in French, to find points of grammar common. Gives list of representative short type questions to cover these points.

837. **Henmon, V. A. C.** Some significant results of the modern foreign language study. *Journal of educational research*, 19: 79-91, February 1929.

The writer shows the difference in achievement in French in secondary schools of Canada, England and the United States. Wide variation between individual schools and classes is noted.

838. **Hildebrandt, Leah E.** A series of tests covering the minimum grammar essentials for 9-B French. May 1929. Bureau of research, Department of education, Baltimore, Md. 20 p. ms.

839. ——— Term standards in French. January 1929. Bureau of research, Department of education, Baltimore, Md.

A study of 9A minimum essentials in French, with practice tests.

840. **Lewis, Asa.** A study of the vocabulary in beginner's French books. 1928-29. West Virginia university, Morgantown.

841. **Moore, Ruth Agnes.** Laboratory exercises for the new Fraser and Square French grammar. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 78 p. ms.

842. **Pral, Charles Edward.** A study of reading maturity in French at the college level. Doctor's thesis, 1928. State university of Iowa, Iowa City. 332 p. ms.

843. **Schapiro, Mrs. Paula.** A program of activities for a junior high French class. Master's thesis, 1929. University of Akron, Akron, Ohio. 60 p. ms.

A supplement for the class work in French gives opportunity to build up vocabulary and speak French.

844. **Schardt, Elizabeth Burke.** A laboratory manual for McKenzie and Hamilton's elementary French grammar. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 69 p. ms.

845. **Seibert, Mrs. Louise C.** A series of experiments in the learning of French vocabulary. Doctor's thesis, June 1929. Johns Hopkins university, Baltimore, Md. (To be published in the Johns Hopkins university studies in education.)

See also 361, 813, 821, 824, 1466.

SPANISH

846. **Alhambra, Calif. City schools. Department of educational research and guidance.** A report on the American council Spanish test as used with A10 Spanish classes, January 1929. Educational research and guidance bulletin (Alhambra, Calif.), 1: 11-13, April 1929.

847. **Bramlage, Julia Antoinette.** The progress of language students as determined by their ability, using as a basis of measurement the Stanford Spanish tests. Master's thesis, 1929. Stanford university, Stanford University, Calif.

848. **Edmondson, ——— and McAnulty, Ellen Alice.** The American council foreign language tests (Spanish) in relation to teacher's grades. May 1929. City schools, Los Angeles, Calif.

849. **Gordon, Margaret Frederick.** Laboratory exercises for Hamilton and Van Horne's elementary Spanish grammar. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn.

850. **Greenup, Julian C., and Segel, David.** Experimental study of the relation between method and outcomes in Spanish instruction. 1929. City schools, Long Beach, Calif. 4 p. ms.

Comparison of grammar-translation-reading-conversation method of teaching with reading-conversation method. A group of junior college students taught by the usual grammar-translation-reading-conversation methods made less progress in comprehension than did an equated group taught by a reading-conversation method where grammar was incidental.

851. **Grover, C. C.** Results of American council Spanish tests in the junior and senior high schools, October 1928. Bureau of curriculum development, research, and guidance, Public schools, Oakland, Calif. 12 p. ms.

Scores by schools and grades. Emphasizes the work of the individual pupil.

852. **Ivey, A. J.** A practical Spanish word book. Bloomington, Ill., Public school publishing company, 1928. 22 p.

The 1,600 words most frequently used in newspaper Spanish in the United States. There has long been a keenly felt need among the teachers of Spanish for a practical vocabulary to present to their students. Spanish as used in everyday life is found in textbooks in only a limited degree. As a result of this, students of the language often are not able to converse freely with Spanish-speaking people. The principal aim, therefore, of the *Practical Spanish word book* is to provide pupils with a list of essential and practical words upon which they may base their conversation in Spanish and which will also serve as a foundation for increasing their vocabulary to fit their particular needs in later life. Newspapers were chosen as the source because from the newspapers we get a vocabulary used by many and varied types of people.

853. **Haulfers, Walter.** Intelligence of one thousand students of foreign languages. *School and society*, 28: 597-99, November 10, 1928.

A study of the intelligence of 1,002 students, distributed through eight semesters of Spanish in 18 junior and senior high schools of San Diego and Los Angeles in an effort to discover some of the causes for failure in foreign languages.

854. **Mayer, Lena C.** A critique of fifty American poems found in Spanish translation. Master's thesis, August 1928. Colorado state teachers college, Greeley. 272 p. ms.

A selection was made of 50 American poems of the United States which have been most popular, to consider their popularity in Spanish translation, to discover the faithfulness and beauty of the best translations into Spanish which have been made of these poems. Conclusions: (1) American poetry is translatable into Spanish which retains the meaning, beauty, work-coloring, and spirit of the original.

Not all the translations considered contained the sum total of those elements so characteristic of the original; the predominance of those that were translations, in the truest sense, gave evidence that it was possible; (2) in few instances, the quality and system of rhyming of the original was adhered to. Very often the translator divided or combined the stanza formation of the original; when similar rhythm was used, the result was forced; (3) translations are of great value to the teacher of languages, primarily in the early period of the study. With the familiar original well in mind much less difficulty is presented in the study of its translated version.

855. Perz, John Raymond. The teaching of Spanish in the high schools of the United States. Master's thesis, 1929. Catholic university of America, Washington, D. C. 67 p. ms.

The problem is approached historically and statistically to give a picture of its present status. The values claimed for the study of Spanish are considered in relation to criticisms, and an attempt is made to determine the factors responsible for unsatisfactory results when such are found.

See also 361, 821, 824.

MATHEMATICS

856. Brande, L. J. Trends in the mathematics curriculum of Iowa high schools. Master's thesis, 1929. State university of Iowa, Iowa City. 98 p. ms.

857. Brown, Frank. The prognosis of ability in teachers college mathematics on the basis of English, intelligence, and general achievement. Master's thesis, 1929. Colorado state teachers college, Greeley. 105 p. ms.

Intelligence scores, grades and credits in mathematics, English and other subjects were copied directly from the students' original files in the registrar's office, Colorado state teachers college; students having less than 12 hours of mathematics were not considered. Findings: Individuals do not live up to their own expectations in some instances, excel in other instances, and are subject to the influence of circumstance; therefore it is concluded that individual performance can never be predicted with a higher degree of accuracy than unity reduced by the combined influence of all independent factors. With an infinite number of cases under consideration and all factors governing conditions accounted for, prediction on the basis of the regression equation would form a perfect probability curve. With only a few factors which influence a criterion under consideration, the maximum possible accuracy of prediction can only be approached within certain limits determined by inter-relationships of the factors employed.

858. Brudos, Henriette Louise. Present practices in junior high school mathematics as determined by an analysis of courses of study. Master's thesis, 1929. University of California, Berkeley. 71 p. ms.

A study of the various trends followed by textbook writers and makers of courses of study which have led to the formation of definite judgments and certain tentative procedures in mathematical instruction in junior high schools. It was found that there is a considerable emphasis placed upon drill in the fundamental operations of arithmetic throughout the first two years of junior high school. This study shows the emphasis that is placed on other phases of mathematics in the junior high school.

859. Carroll, Helen N. A study of correlation between teachers' judgment and pupils' performance in eighth grade mathematics. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

860. Coit, Wilbur Aiden. A preliminary study of mathematical difficulties. School review 36: 504-509, September 1928.

Through the administration of algebraic tests in grades IX B to XII A, it was found that difficulties in mathematics consisting of fundamental concepts and skills persist through higher levels. The solution is given of isolating these difficulties and mastering them through skill.

861. Congdon, Allan Ray. Training in high school mathematics essential for success in certain college subjects. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 102 p. (Contributions to education, no. 403.)

Findings: (1) College subjects dealing with quantitative data make use of an extensive symbolic language quite different from that used in high school mathematics; (2) the arithmetic computations found in college subjects dealing with quantitative data are more complicated than the types of computations now generally advocated for courses in arithmetic; (3) there are comparatively few geometric facts involved in the subjects investigated; etc.

862. Douglass, Edgar M. Application of the Morrisonian unit plan in ninth grade mathematics. Master's thesis, 1929. George Washington university, Washington, D. C.

Ten units were constructed, applied, and evaluated. Units were revised and suggestive procedure outlined.

863. **Ferris, Harvey Harrison**. A proposed course of study in mathematics for high schools. Master's thesis, 1928. Stanford university, Stanford University, Calif.

864. **Fisher, George Harold**. The status of mathematics in the public high schools of Indiana, including the ninth, tenth, eleventh, and twelfth grades, 1925-26. Master's thesis, 1929. Indiana university, Bloomington. 56 p. ms.

865. **Follette, Clara E.** Ninth year mathematics. Master's thesis, 1929. University of Pennsylvania, Philadelphia.

866. **Georges, J. S.** The nature of difficulties encountered in reading mathematics. School review, 37: 217-26, March 1929.

The article reports the results of an attempt to determine the reading difficulties encountered by a first year junior high school class in mathematics in the University high school of the University of Chicago. Reading difficulties were classified. Contains list of words and phrases and of mathematical symbols and notations causing reading difficulties, etc.

867. **Hess, William E.** Value of mastery technique for large classes in junior high school mathematics. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

868. **Kendall, C. Victor**. A study of certain factors involved in the selection of ninth grade mathematics texts. Master's thesis, 1929. Ohio state university, Columbus.

Three textbooks were analyzed to find out how they meet certain objectives. Findings: The present texts have little cultural value; they prepare students to further pursue the field and aid them in other fields. Much of the material presented is disciplinary only and the training is not useful in ordinary life.

869. **La Franz, Frances C.** A comparison of junior high school mathematics with that taught in elementary grades seven and eight. Master's thesis, 1929. Tulane university, New Orleans, La. 200 p. ms.

This study comprises: (1) Statistical comparison of objectives as stated in courses of study and by educational writers for both types of school; (2) topics for both types of school as recommended by courses of study and textbooks. Notes differences between two courses and divergencies of theory from practice.

870. **McCormick, Clarence**. The teaching of general mathematics in the secondary schools of the United States. A study of the development and present status of general mathematics. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 173 p. (Contributions to education, no. 386)

The purpose of the study was to trace the development and growth of general mathematics; to summarize the results of experiments already performed and of significant data which have been collected; to examine textbooks for evidence of general mathematics and present trends; to determine the attitude of leading specialists in the teaching of mathematics, and the attitude of high school teachers concerning general mathematics.

871. **Morey, Anna A.** A study of credits earned by pupils in regents' arithmetic, part I and part II, and regents' algebra, part I and part II. Master's thesis, 1929. New York state college for teachers, Albany.

872. **Remmers, H. H., and Grant, A.** The vocabulary load of certain secondary school mathematics textbooks. Journal of educational research, 18: 203-10, October 1928.

Twelve different books in algebra and geometry were studied for the purpose of measuring the vocabulary burden of each and to determine the reliability of measurement in the methods employed.

873. **Sumstine, David B.** High school course of study in mathematics. Pittsburgh, Pa., Department of curriculum study and educational measurement and research, Public schools, 1928. 214 p. (Bulletin, no. 17)

For junior and senior divisions, grades 7-12. Committee reports: senior high school, A. C. Baird, chairman; junior high school, H. J. Spenser, chairman.

874. **Thorngate, Vesta M.** Departmental headship in mathematics. Master's thesis, 1929. University of Nebraska, Lincoln. 83 p. ms.

There were included in this study, 109 heads, 79 cities, 26 states, in all sections of the country. Conclusions: Of the heads of departments, 80 per cent had had experience as teachers in schools they now serve as heads; 57.4 per cent have bachelors' and 38 per cent, masters' degrees; 1 per cent, doctor's degrees, and 4 per cent no degree. Five have neither major nor minor in mathematics; 30 are planning graduate degrees. The undergraduate courses most commonly taken were psychology, history of education, principles of education, general methods and methods in mathematics; only 14 had had undergraduate courses in administration and supervision, 79.8 per cent have taken graduate work in education and 67.9 per cent graduate work in academic subject-matter; 78 heads supervise, 13 a little, and 15 not at all. The most commonly stated needs were time for supervision, adequately trained and inspiring teachers, more room and equipment, smaller classes, higher salaries and more clerical help.

875. **Trigg, T. S.** Status of the third year of mathematics in high schools of the United States. Master's thesis, 1929. University of Chicago, Chicago, Ill. 96 p. ms.

This study included 329 of the larger cities of the United States. Gives findings as to textbooks used, number enrolled in intermediate algebra and solid geometry, whether the enrollment was increasing or decreasing, objectives involved, and analysis of widely used textbooks.

See also 23, 369, 488, 496-497, 1082, 1437, 1441, 1446, 1483, 1700, 2122, 2185, 2728.

ARITHMETIC

876. **Alhambra, Calif.** City schools. Department of educational research and guidance. Survey of reasoning in arithmetic—grades 4 to 8. (Using the Los Angeles test.) April 1929.

877. **Anderson, Grace.** The relation of comprehension in reading to ability to solve arithmetical reasoning problems of eighth grade pupils. Master's thesis, 1929. New York university, New York, N. Y. 38 p. ms.

878. **Barclay, Robert William Thomas.** Analysis of addition drill in three textbooks. Master's thesis, 1928-29. Boston university, Boston, Mass.

879. **Beito, E. A.** A measurement of transfer in a simple arithmetic function. Master's thesis, 1928. University of Minnesota, Minneapolis.

This experiment was designed and conducted to reveal the extent to which learning of fundamental number combinations in one order transfers to their learning in the reverse order.

880. **Benthack, Emil.** Standards for the selection of arithmetic textbooks. Educational research record (University of Nebraska), 1: 85-90, February 1929.

881. **Betts, Emmett Albert.** An analysis of the contributions of addition, subtraction and multiplication to ability in long division. Master's thesis, 1928. State university of Iowa, Iowa City. 114 p. ms.

882. **Bickett, W. J.** Elementary course of study: arithmetic. Trenton, N. J., Superintendent of schools, 1928. 103 p.

Committee report, Clara M. Briscoe, chairman. Emphasizes the adaptation of the course of study to three-track grouping of pupils.

883. **Boros, Arnold L.** The present status of experimental studies in arithmetic. Master's thesis, 1929. College of the city of New York, New York, N. Y. 139 p. ms.

A survey of educational journals, bulletins, and books. The studies cited call attention: (1) To the need for more emphasis on fundamental operations; (2) to a great lack of uniformity as to what should be eliminated from the course; (3) to need for standardization of textbooks; (4) to lack of agreement as to distribution of topics, length of period and the like; and (5) to the pupils difficulty with the reading material in arithmetic.

884. **Boyer, Philip A.** Diagnosis in problem solving in arithmetic. Schoolmen's week proceedings, March 1929. Philadelphia, University of Pennsylvania, 1929.

885. **Brueckner, Leo J.** Analysis of difficulties in decimals. Elementary school journal, 29: 32-41, September 1928.

This article contains the results of a study of the errors made by pupils in grades VI, VII, and VIII in analytical tests on the four processes in decimals.

886. **Buswell, Guy Thomas.** Summary of arithmetic investigations (1928). I-II. Elementary school journal, 29: 691-98, 737-47, May, June 1929.

These articles deal with the quantitative and critical literature of arithmetic published during the year 1928. The first article consisted in an annotated bibliography of 56 references. Most of the studies are summarized briefly in the second article.

887. **Clemens, Paul B., and Neubauer, Paul F.** A supervision project in multiplication. Journal of educational research, 18: 387-96, December 1928.

The results of this study show that drill upon the specific skills in which pupils were weak yielded larger returns than indiscriminate drill.

888. **Collins, Esther A.** An experiment in teaching logarithms. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 60 p. ms.

889. **Crooks, David D.** An evaluation of certain remedial drills on problem solving in arithmetic. Master's thesis, 1928. State university of Iowa, Iowa City. 67 p. ms.

890. **Cushman, John W.** Some aspects of the teaching of percentage with an analysis of the more difficult factors. Master's thesis, 1928. State university of Iowa, Iowa City. 142 p. ms.

891. **Cutright, Prudence, and Sifert, Earl.** Curriculum test in fractions, forms 1 and 2. Minneapolis, Minn., Public schools, 1929. 8 p.

892. **Dale, Edgar.** Factual basis for the reorganization of the curriculum in arithmetic with special reference to children's understanding of business terms. Doctor's thesis, 1929. University of Chicago, Chicago, Ill.

This study involved: (1) Formulation of a master list of all the common business words in the English language; (2) determination of frequency of appearance of each of these business words in 310,000 running words of investment literature written by experts for the lay reader; (3) determination of children's understanding of 300 of the most common business words by testing pupils in grades 7 to 12 in two communities of widely varying social composition. Conclusions: (1) Selection of business words studied in eighth grade arithmetic textbooks is haphazard and unscientific. Well-known textbook writers vary greatly in the business terms used; (2) approximately half of the 300 most common business words are known by the average eighth grade pupil, and approximately three-fourths of the words are known by the average twelfth grade pupil; (3) children's understanding of common business terms can be greatly improved if study is concentrated on the words most frequently used in business literature.

893. **Daley, H. C., and Dahms, Bernadine.** Persistent difficulties encountered by pupils in the elementary school. 1928. Public schools, Highland Park, Mich.

A study undertaken to reveal to pupils, teachers and supervisors some of the significant weaknesses which persist in arithmetic work in the upper grades of the Highland Park public schools in spite of the concentrated attack upon the weaknesses in the lower grades.

894. **Eaton, George D.** The evaluation of certain remedial materials in the teaching of fractions. Master's thesis, 1928. State university of Iowa, Iowa City. 40 p. ms.

895. **Edwards, Arthur U.** An analysis of pupil errors in percentage. Master's thesis, 1928. State university of Iowa, Iowa City. 108 p. ms.

896. **Felkins, Frank.** The value of the Lennes practice pads in teaching arithmetic in the fifth and sixth grades. Master's thesis, 1929. Indiana university, Bloomington. 41 p. ms.

Findings: In general, all pupils profited from the use of the practice pads; the good pupils gained more from the use of the practice pads than the poor pupils.

897. **Foster, Harry H.** Relative functions of silent reading comprehension and skill in the four fundamental processes in arithmetical problem solving. Master's thesis, 1928. State university of Iowa, Iowa City. 23 p. ms.

898. **Fritz, Kathryn.** Elementary supervision. Evaluation of primary arithmetic. Master's thesis, 1929. Ohio state university, Columbus. 115 p. ms.

899. **Fuller, Florence D.** Achievement of slow pupils in arithmetic. Educational research bulletin (Los Angeles, Calif.), 8: 2-5, May-June 1929.

900. **Glenn, Carrie Eugenia.** Effect of vacation on achievement scores in arithmetic. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 27 p. ms.

901. **Grace, Sister M.** Preliminary study of the nature and interrelations of arithmetical abilities. Master's thesis, 1929. Catholic university of America, Washington, D. C. 45 p. ms.

Twenty-two tests, including measures of arithmetical ability—computation and reasoning—intelligence, perception and memory were administered to 100 sixth grade pupils. The inter-correlations of tests involving numbers are higher, in general, than those which have no numerical content. In general, the data seem to indicate that there is a common factor operative in all kinds of arithmetical operations. Any correlations between intelligence, memory or perception and arithmetic seems to be due to a common factor for when "g" is eliminated, the residual correlations are all negligible.

902. **Graham, Cecil S.** An objective rating of book two, Searchlight arithmetic. Master's thesis, 1929. State university of Iowa, Iowa City. 89 p. ms.

903. **Greene, Charles E.** Diagnosis and improvement of arithmetic in grades 2A to 6A. 1929. Department of research, Public schools, Denver, Colo.

904. **Hayes, Margaret.** A diagnostic study of arithmetic and remedial work. Raleigh N. C., State department of public instruction, 1928.

The purpose of this study was to find the real problems in elementary school arithmetic and to offer the proper remedial treatment necessary to individual pupil progress in this subject.

905. **Hayward, Orville Byron.** Disabilities in arithmetical reasoning and their remedial treatment. Master's thesis, 1929. University of Chicago, Chicago, Ill. 120 p. ms.

A diagnostic study of disabilities in arithmetical reasoning exhibited by seventh and eighth grade pupils. The following types of disabilities were identified: failure to analyze the statements of the problem correctly, failure to identify the facts given, failure to identify the facts called for, inability to determine the right process to use, inability to interpret quantitative relations, lack of understanding of the problem activity. The writer believes that it is possible by applying appropriate remedial measures to improve substantially the arithmetical-reasoning ability of pupils who are below standard and that it is necessary to test the pupils individually in order to determine with any degree of accuracy just what their mental processes are.

906. **Heubner, Bernhard P.** The relative effectiveness of drill periods of different length and frequency in arithmetic. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

907. **Himebaugh, Oscar.** Conclusion of the vocabulary study of English and metric units of measure. Educational research bulletin (Ohio state university); 8: 175-80, April 17, 1929.

An analysis of the most popular magazines was made for the period of one month to discover the extent to which units of measure were referred to in the periodicals examined. A record of the use which the average family had for them in its business transactions for one week was also recorded. An analysis of five typical seventh- and eighth grade arithmetics was made with a view of noting the relative emphasis with which these units of measure were presented. The results show that there is a comparatively small number of important units (35), while the arithmetics include material on 115 units.

908. **Hinton, Estelle.** Line of life activities in arithmetic. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 43 p. ms.

The study purposes to determine whether number work in primary grades should be based on life activities. In order to do this the line of life activities has been traced from earliest possible data to the present time. Findings: The line of life activities can be traced from the beginning to the present day. Data from 370 B. C. shows this line of life activities clearly. It runs steady and strong until the third century. Then the practical side in numbers is almost overshadowed by the work of philosophers who wish to make it a mental recreation. But from the fifth century it slowly swings back to the original level. To-day the line of life activities runs through not only number work but all school work.

909. **Hughes, Rose I.** The curve of relearning after summer vacation. Master's thesis, 1929. New York state college for teachers, Albany.

A study of vacation loss in arithmetic fundamentals among elementary school students, with curve of relearning in the period of review after vacation.

910. **Irmira, Sister M.** The relative merits of the methods of subtraction. Washington, D. C., Catholic education press, 1928. 29 p. (Catholic university of America. Educational research bulletins, vol. III, no. 9, November 1928)

Findings: There are two fundamental methods of subtraction commonly used in the school systems of to-day. These two are the additive and the subtractive methods. The third, the complementary method, has not received general recognition. Both of the accepted methods have advantages and disadvantages, but the most reliable experimental evidence points to the greater efficiency of the subtractive method.

911. **Jones, Horace Grady.** An analysis of arithmetic textbooks. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 53 p. ms.

A quantitative analysis of the arithmetical content and sequence of topics of nine three-book arithmetic series. The content of the books is analyzed according to topic, for each of which the number of pages, number of occurrences, number of drill exercises and number of problems is determined.

912. **Kelley, Fred Ewan.** An analysis of the relative difficulty of types of examples in fractions. Master's thesis, 1929. University of Minnesota, Minneapolis.

913. **Knight, Frederic B., and Behrens, Minnie S.** The learning of the 100 addition combinations and the 100 subtraction combinations. New York, Longmans, Green and company, 1928. 82 p.

This is an attempt to supply data not merely about the relative difficulty of number combinations, but to indicate how much practice each combination seems to require.

914. ——— and **Stuebaker, J. W.** Arithmetic course of study grades I, II. Chicago, Scott Foresman and company, 1929.

915. **Lazar, May.** Diagnostic and remedial work in arithmetic fundamentals. New York city, Bureau of reference, research and statistics, Board of education, 1929. 175 p.

This study was undertaken to demonstrate practically the possibilities of diagnosis and remedial work in arithmetic under the limitations of the normal classroom situation. The study also aims to point out the function of tests and measurements in such diagnostic work. It was found that tests were valuable aids in diagnostic work and that class group and individual remedial instruction could be given effectively by the class teacher as a part of the regular arithmetic work.

916. **Logan, Hugh S.** The evaluation of a specific remedial program in arithmetic. Master's thesis, 1929. State university of Iowa, Iowa City, 85 p. ms.

917. **Louisiana.** State department of education, Baton Rouge. Course of study in arithmetic for grades four, five, six, and seven of the elementary schools of Louisiana. Baton Rouge, State department of education, 1928. 135 p. (Bulletin, no. 129, July 1928)

918. **McGrath, Robert Timothy.** Causes of error in the interpretation of concrete problems in arithmetic. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

919. **Maclin, Gladys, chairman.** Differentiation of course of study in arithmetic for the borderline child. 1928. Department of elementary education, Public schools, Denver, Colo. 31 p. ms.

A tentative course of study as a working basis for classroom experimentation, prepared by the Special classes committee, in cooperation with the Director of research of Denver, Colo.

920. **McMurray, J. Fred.** Teaching arithmetic orally versus teaching it as written arithmetic. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

921. **Mahoney, Nano Elizabeth.** An analysis of instructional units in percentage of U texts. Master's thesis, 1928. State university of Iowa, Iowa City. 90 p. ms.

922. **Minneapolis, Minn. Public schools.** Practice exercises in 4A arithmetic. Minneapolis, Minn., Public schools, 1929. 62 p.

923. **Mitchell, Claude.** The specific type of problem in arithmetic versus the general type of problem. *Elementary school journal*, 29: 594-96, April 1929.

924. **Monroe, Walter S.** How pupils solve problems in arithmetic. Urbana, University of Illinois, 1928. 31 p. (*University of Illinois bulletin*, vol. XXVI, no. 23, February 5, 1929. Bureau of educational research. Bulletin, no. 44)

It has been assumed that much of the training which pupils receive in arithmetic is secured by solving arithmetical problems which give opportunity for reflective thinking. The present investigation indicates that pupils do not think reflectively in solving problems.

925. **Moore, Vernetta Belle.** An analysis of denominate numbers with data on their teaching. Master's thesis, 1929. State university of Iowa, Iowa City. 108 p. ms.

926. **Morgan, L. D.** Specific versus general drill in fundamentals of arithmetic in grade 4. 1929. Kansas state teachers college, Pittsburg. *School science and mathematics*, 29: 528-29, May 1929.

Findings: For drill to be effective it must be specific, and remedial measures must be applied at the point of error.

927. **Myers, Garry Cleveland.** The price of speed pressure in the learning of number. *Educational research bulletin (Ohio state university)*, 7: 265-68, September 19, 1928.

Conclusions: "The loss of learning efficiency from the strong speed pressure as applied to the simple number combinations in arithmetic under which many children must work in school today is appalling. This loss is in addition to the obvious discomfort incident to the modern mania for speeding in the classroom."

928. ——— and **Myers, Caroline C.** The cost of quick shifting in number learning. *Educational research bulletin (Ohio state university)*, 7: 327-34, October 31, 1928.

This study inquires into the nature and frequency of errors in solving 100 simple combinations so mixed that the pupils must shift rapidly and almost constantly among the four fundamental processes. The results demonstrate conclusively that rapid random shifting from one to another among the four fundamental processes is the cause of a large number of errors and the loss of considerable time.

929. **Neal, Elma A., and Foster, Inez.** An experiment with remedial work in common fractions. *Elementary school journal*, 29: 280-83, December 1928.

Conclusions: Organized practice material in the hands of the children, with provision for the diagnosis of difficulties and remedial work, is more effective in economy of the teacher's time and of the children's time and in final results in maintaining skill in the manipulation of common fractions than is the usual practice provided by the teacher.

930. **North Carolina. State department of public instruction, Raleigh.** A diagnostic study in arithmetic: (Educational publication, no. 124, Division of elementary instruction, no. 27)

931. **Oakland, Calif. Public schools.** Arithmetic work book. Book I, for grade low 3; Book II, for grade high 3; Book III, for grade low 4; and Book IV, for grade high 4. 1929.

932. **Oregon state teachers association.** State arithmetic survey, 1928-29. Oregon state teachers association, Portland, Oreg. 1929. 51 p. ms.
Objectives and standards in arithmetic in schools of Oregon.

933. **Panlasigui, Isodoro.** The effect of awareness of success on skill in arithmetic. Doctor's thesis, 1928. State university of Iowa, Iowa City. 232 p. ms.

934. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Problem solving in arithmetic, grades 3B to 7A, March 1929. 1929. 15 p. ms. (*Bulletin*, no. 119)

935. **Repp, Austin C.** A study of the effects of mixed versus isolated drill on the maintenance of skills in arithmetic. Doctor's thesis, 1928. State university of Iowa, Iowa City. 265 p. ms.

936. **Rice, Clara.** Critical analyses of drill units in percentage in N texts. Master's thesis, 1929. State university of Iowa, Iowa City. 159 p. ms.

937. **Riebe, Harvey August.** The use and value of supplementary text material in arithmetic. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

938. **Ringwald, John Christian.** Studies of methods of instruction in the Monroe electric calculating machine. Master's thesis, 1928-29. Ohio state university, Columbus.

939. **Rubado, Clarence A.** Problems of the city school superintendent in the field of arithmetic. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 107 p. (Contributions to education, no. 406)

The purpose of the study was to organize the results of investigations in arithmetic so that they can be related to the work of the superintendent, and to determine what administrative and supervisory problems there are in the field of arithmetic which require specific knowledge on the part of the superintendent of schools and demand solution by him.

940. **St. Louis, Mo. Board of education. Division of tests and measurements.** Methods of subtraction. Public school messenger, 26: 28-32, September 1, 1928. (Research and survey series, no. 5)

An inquiry to city school systems showed that 7 cities have no prescribed system of teaching subtraction, 5 prescribe Austrian or additive method, 6 prescribe the borrowing method. A study of 1,065 St. Louis pupils in 8th and 9th grades revealed that the 320 children using the take-away equal additions method attempted more problems, solved more problems correctly, and secured a higher correlation between speed and accuracy than those pursuing either the borrowing or the additive method.

941. **Santa Monica, Calif. Public schools. Department of research.** The course of study in arithmetic for junior high schools. [1929] 8 p. ms.

Tentative outline for consideration of teachers.

942. **Scott, Rothmer Albert.** Evaluation of two diagnostic techniques in fifth grade arithmetic. Master's thesis, 1928. State university of Iowa, Iowa City. 164 p. ms.

943. **Searle, Albert Henry.** Case studies of pupils' errors in common fractions. Doctor's thesis, 1928. State university of Iowa, Iowa City.

944. **Seyb, Mrs. Edna L.** The ability in arithmetical problem solving by teacher-training seniors in high schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 52 p. ms.

One thousand four hundred and fifty-two teacher-training seniors and a sample group of 202 were used for this study.

945. **Smith, Vida Violet.** A comparative study of the achievements made in the fundamentals of arithmetic and in problem solving by certain junior and non-junior high school pupils in Madison, Wisconsin. Master's thesis, 1929. University of Minnesota, Minneapolis.

946. **Spencer, Peter L.** Diagnosis of difficulty in sixth grade arithmetic. Doctor's thesis, 1929. Stanford university, Stanford University, Calif. (about 200 pages)

A study of errors in arithmetic as made by sixth grade pupils in public schools. Data were obtained by use of a diagnostic test.

947. **Sumstine, David B.** Course of study in mathematics (arithmetic). Pittsburgh, Pa., Department of curriculum study and educational measurement and research, Public schools, June 1928. 215 p. (Bulletin, no. 16)

For elementary division, kindergarten to grade 6. Committee reports: grades 4-6, H. G. Masters, chairman; kindergarten, grades 1-3, Mary A. Swan, chairman.

948. **Tripp, Frederic Ackley.** A study of the relative difficulty of the simple addition combinations. Master's thesis, 1929. University of Minnesota, Minneapolis.

949. **Underwood, Adele.** A vocabulary study of elementary arithmetic. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 127 p. ms.

950. **Veith, Charles F.** Teaching of problem solving in arithmetic. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

951. **Voogd, Abe Oltman.** The curriculum in arithmetic in the small high school. Master's thesis, 1929. State university of Iowa, Iowa City. 198 p. ms.

952. **Washburne, Carleton W., and Morphett, Mabel Vogel.** Unfamiliar situations as a difficulty in solving arithmetic problems. Research office, Public schools, Winnetka, Ill. *Journal of educational research*, 18: 220-24, October 1928.

A comparison of the scores on problems involving familiar situations and unfamiliar situations. Where there was conclusive evidence, it was in favor of the problems involving familiar situations.

953. **Waterson, C. E., and Unruh, H. B.** A critical study of errors in addition combinations. *University of Kansas Bulletin of education*, 2: 19-21, February 1929.

Review of a master's thesis with the same title, by H. B. Unruh, University of Kansas, 1928.

954. **Wells, Frank Lowrance.** A study of the instructional material of textbooks of arithmetic. Doctor's thesis, 1928. State university of Iowa, Iowa City. 173 p. ms.

955. **Wheat, Harry Grove.** The relative merits of arithmetic problems of the conventional type and arithmetic problems of the imaginative type. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

This investigation was limited to the problem-solving activity of the earlier stages of arithmetic. The negligible differences between the totals of responses of the two types of problems indicate that pupils of the intermediate grades are neither hindered nor helped in their problem practice exercises by problems of the imaginative type, when no limits are imposed upon the amounts of time of the practice periods.

956. **Wilson, Guy M.** Promise and performance in arithmetic drill service. *Journal of educational research*, 19: 169-76, March 1929.

The purpose of this study was to discover how fully the text meets the requirements of covering all of the addition combinations and giving them emphasis in proportion to difficulty.

957. **Wright, Wendell W.** Indiana state course of study in arithmetic, 1929. State department of public instruction, Indianapolis.

958. **Young, Lucile.** Skills in arithmetic fundamentals as found in seven series of modern arithmetic texts. Master's thesis, 1929. University of Colorado, Boulder. 37 p. ms.

Analysis of seven modern arithmetic texts to find out: (1) To what extent they include fundamental skills; (2) sequence of presenting these skills; (3) relative importance as to space given. Findings: Addition norm=56; addition of fractions basic 11st=38; greatest number of skills=248; least number=113; great difference on most important skill.

See also 73, 78, 500, 568, 592, 871, 986, 1090, 2189.

TESTS

959. **Adams, Eunice V.** The comparative reliability of eight arithmetic tests. Master's thesis, 1929. University of California, Berkeley. 37 p. ms.

This investigation presents comparable statistical constants on eight of the leading arithmetic tests. Coefficients of reliability, probable error of scores, measures of central tendency, and measures of variability are presented for these eight tests on a constant school population. Conclusions: 1. The Reavis-Brealich and the Schorling-Clark-Potter tests stand highest in validity, and the Pittsburgh scale lowest

960. **Alhambra, Calif. City schools. Department of educational research and guidance.** Report of fundamentals of arithmetic survey, October 1928. Educational research and guidance bulletin (Alhambra, Calif.), 1: 12-15, November 1928.

A report on Woody-McCall mixed fundamentals test in arithmetic, to grades 4B-8A. Results indicate that a short review of fundamentals during the first few weeks of school largely offsets the loss in accomplishment during summer vacation.

961. **Boyer, Philip A., and Broome, Edwin C.** Report on survey tests in arithmetic, June 1928. October 1928. Division of educational research, Public schools, Philadelphia, Pa. 37 p. ms. (Bulletins, nos. 94, 95, and 96)

Grades 4B-5B, fundamental operations; grades 6A-8A, decimals and common fractions. Results by grade-sections, for schools and districts.

962. ———— Report on survey tests in fundamental operations in arithmetic, grades 5A to 7B inclusive, February 1929. April 1929. Division of educational research, Public schools, Philadelphia, Pa. 26 p. ms. (Bulletin, no. 112)

Results by schools and districts; plans for detailed diagnosis of pupils' difficulties.

963. **Chase, Vernon E.** What Fordson pupils know about arithmetic fundamentals as measured by the Woody-McCall arithmetic test. February 1929. Bureau of research and statistics, Public schools, Fordson, Mich. 7 p. ms. (Bulletin, no. 24)

Tests to grades 3-8, in October and January. Shows amount of progress by grade sections; points out errors made by large numbers of pupils; raises questions for consideration of classroom teachers.

964. **Haskins, Charles E.** A validation of certain verbal problem tests in arithmetic. Master's thesis, 1928. State university of Iowa, Iowa City. 32 p. ms.

965. **Keck, Malcolm B.** The measurement of some of the achievements in commercial arithmetic. Master's thesis, 1928. State university of Iowa, Iowa City. 53 p. ms.

966. **Lenne, N. J., and Fee, Ira B.** Variability of individual performance. School and society, 29: 264-68, February 23, 1929.

A study of 135 test records made throughout a school year by pupils in the seventh grade on "The Lenne Practice and Test Sheets" in addition, subtraction, multiplication, and division, to determine amounts of individual variability and causes of same. It is proposed to continue this investigation on a much larger and more exact basis another year.

967. **Los Angeles, Calif., City schools.** Comparison of the Stanford achievement and the Los Angeles arithmetic fundamentals in the 5th and 6th grade groups, 1929.

968. **Minneapolis, Minn. Public schools. Instructional research department.** Special arithmetic bulletin. October 1928. 9 p. ms. (Standard test series, no. 4b)

Results of Monroe reasoning test, grades 4B-8A; Curriculum test (whole numbers and fractions) grades 4A-6A; and Minneapolis primary arithmetic test, grades 3B-4B. Shows Minneapolis scores slightly below the test standards.

969. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Report on diagnostic tests in fundamentals of arithmetic, grades 2A to 7B inclusive—February 1929. Philadelphia, Pa., April 24, 1929. 19 p. ms. (Bulletin, no. 115)

970. ———— Report on survey test in decimals and common fractions, grades 6A-8A—June 1928. Philadelphia, October 31, 1928. 17 p. ms. (Bulletin, no. 96)

"Results of the test indicate the desirability of persistent review with continued stress upon the necessity of absolute accuracy in the basic skills of arithmetic. This point is emphasized by the wide variations in results from the several schools."

971. **Portland, Oreg.** School district no. 1. Department of research. Arithmetic test. January 5, 1929. 14 p. ms.

A city wide survey of arithmetic in grades 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B.

972. **Rivenbark, Joe T.** Reliability of certain standardized arithmetic tests. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 33 p. ms.

The following tests were given to the sixth and seventh grades in the Peabody demonstration school: Woody-McCall's mixed fundamentals, Monroe's standardized reasoning test in arithmetic, Pittsburgh arithmetic scale, Buckingham's scale for problems in arithmetic, and Otis arithmetic reasoning test. The study shows that the tests in question are 20 to 50 per cent better than a guess in assigning marks to pupils in arithmetic.

973. **Sansom, Clarence.** Diagnostic value of a test in relation to its difficulty. Doctor's thesis, June 1929. University of Chicago, Chicago, Ill. 185 p. ms.

The purpose of the study was to determine what degree of difficulty of a test correlates most highly with a criterion. Conclusion: The 50 per cent degree of difficulty of arithmetic problems tends to correlate more highly with intelligence as a criterion than easier or more difficult problems, with a slight tendency for easy problems to give higher correlations than difficult problems.

974. **Schinnerer, Mark C.** Results of Cleveland arithmetic test, O-T, Form 1, in grades 7 and 8, March 1928. August 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 17 p. ms. (Bulletin, no. 24)

Gives medians by schools for each grade and ability group; analyzes results for each problem.

975. **Sheldon, Phebe.** Summary of compass survey tests in arithmetic, given in seventh and eighth grades. 1929. City schools, Pomona, Calif.

A diagnosis of mathematical abilities and difficulties.

976. **Stormzand, M. J.** Diagnostic test in arithmetic for grade B7. [1929] Department of research, Public schools, Santa Monica, Calif. 12 p. ms.

Designed for use of individual teachers as a basis for making individual assignments of work to pupils.

See also 362, 368, 375, 377, 383, 402, 415-416.

ALGEBRA

977. **Alhambra, Calif.** City schools. Department of educational research and guidance. Study of algebra classes using the Hotz algebra tests, series B. June 1929.

978. **Anderson, Hanson Hale.** Ability to solve written problems in algebra as a prognosis of success in first semester plane geometry. Master's thesis, 1929. Indiana university, Bloomington. 65 p. ms.

A study of 310 pupils who had completed both algebra and geometry. Findings: The best prognostic device developed in the study for success in geometry is the ability to solve problems in algebra of the lever and number types; the general intelligence test used has not prognostic value for success in geometry either as measured by a standard test or by teachers' marks; to exclude pupils from geometry courses because of low scores in algebra tests would eliminate many who have high chances of success.

979. **Chateaufneuf, Amy Olive.** Changes in the content of elementary algebra since the beginning of the high school movement as revealed by the textbooks of the period. Doctor's thesis, 1929. University of Pennsylvania, Philadelphia. Philadelphia, Pa., Westbrook publishing company, 1929. 150 p.

This study deals with the content of the topics of elementary algebra (first course in algebra in the high school) since the beginning of the high school movement, as revealed by the textbooks in the subject. Briefly, the data in this study show that present changes in the content of elementary algebra are, generally speaking, either evolutionary or reactionary and not revolutionary or radical. Only a very few changes may, with propriety, be termed real innovations.

980. **Cilek, Caroline Catherine.** A study of pupils' errors in equations. Master's thesis, 1928. University of California, Berkeley. 111 p. ms.

A study in detail of the errors made by first-year algebra pupils in solving linear equations in one unknown involving the use of parentheses, fractions and decimals. A test of first year pupils in the high schools of Santa Rosa and Woodland, Calif., Boise, Idaho, and Great Falls, Mont. Findings: (1) The average number of errors per pupil was 13.1; (2) the greatest number of errors are sign errors—28 per cent of total; (3) reading and copying errors second—27 per cent; (4) miscellaneous errors, third; (5) purely arithmetical errors, fourth; (6) problems left incomplete, fifth.

981. **Everett, John Phelps.** The fundamental skills of algebra. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1928. 109 p. (Contributions to education, no. 324)

This study represents the conclusions gained from an intensive and analytical study of written records of work done in algebra by several hundred pupils. The exercises given consisted of 285 exercises covering the entire course in ninth grade algebra and written on 18 occasions throughout the school year, by 111 pupils in the University of Minnesota high school.

982. **Flood, John William.** A study to determine the degree to which achievement in algebra and English is dependent upon intelligence. Master's thesis, 1928-29. Ohio state university, Columbus.

983. **Fretts, Lillian R.** An experiment in the method of teaching factoring in algebra. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

984. **Hendershot, Bertha M.** Difficulties involved in solving verbal problems in elementary algebra. 1928-29. Syracuse university, Syracuse, N. Y.

985. **Hilmer, Elmer Wayne.** The construction of "X" units of instruction in elementary algebra. Master's thesis, 1929. State university of Iowa, Iowa City. 102 p. ms.

986. **Jacobson, Paul B.** Arithmetic abilities used in elementary algebra. Master's thesis, 1928. State university of Iowa, Iowa City. 55 p. ms.

987. **Kellam, Clyde Estel.** Difficulties in the study of algebraic formulas and some procedures helpful in their solution. Master's thesis, 1929. University of Chicago, Chicago, Ill. 90 p. ms.

Limited to a comparative study of two types of control procedure in the teaching of formulas. Conclusion: A *memory* technique hinders performance progress in evaluation of formulas, while an *understanding* technique is a positive help.

988. **Lueck, William R.** Analysis of the content of texts in first year algebra. Master's thesis, 1929. University of North Dakota, Grand Forks. 93 p. ms.

989. **Maughan, William B.** The influence of age upon the ability of children in algebra and plane geometry. Master's thesis, 1929. University of Utah, Salt Lake City.

990. **Nick, Wm. V.** An experimental study in first year algebra. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

991. **Orleans, Jacob S., and Orleans, Joseph B.** A study of prognosis in high school algebra. *Mathematics teacher*, 22: 23-30, January 1929.

992. **Paden, Ruth Agnes.** A critical study of verbal problems in algebra. Master's thesis, 1928. State university of Iowa, Iowa City. 98 p. ms.

993. **Powell, Jesse Jerome.** Real and genuine problems in algebra. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of the study was to select a list of 500 of the best algebra problems available at the present time, the selection being based on the factors of genuineness, importance and interest. The following sources of data were employed: a list of 1,300 problems selected from a group of 3,000 contributed by 500 experienced algebra teachers, results of the rating by another group of 500 experienced algebra teachers, to secure their judgments with regard to the genuineness, importance, and interest of the problem; etc. Suggestions are made for the teaching of algebra problems based upon the findings.

994. **Quaintance, Carroll B.** Controlled classroom experiment in diagnostic testing and remedial teaching in a first course in algebra. Master's thesis, 1928. University of Pennsylvania, Philadelphia.

995. **Reiterman, Alice.** A study of achievements in first year algebra in certain Los Angeles secondary schools. *Educational research bulletin* (Los Angeles, Calif.), 8: 7-9, September 1928.

996. **Ward, Roscoe H.** The determination by objective tests of the persistency of errors in the four fundamentals of algebra. Master's thesis, 1929., University of Pittsburgh, Pittsburgh, Pa.

See also 29, 361-362, 491, 871, 1083, 1090.

GEOMETRY

997. **Alhambra, Calif. City schools. Department of educational research and guidance.** Report on Webb geometry test. June 1929. Educational research and guidance-bulletin (Alhambra, Calif.), 2: 2-3, December 1929. ms.

998. **Axtel, Theodore F.** The present status of studies in the teaching of geometry. Master's thesis, 1929. College of the city of New York, New York, N. Y. 113 p. ms.

Survey of periodical literature, books, courses of study and geometry texts for last fifteen years.

999. **Beuter, Doris R.** Problems and errors in plane geometry with their possible causes and remedies. Master's thesis, 1929. State university of Iowa, Iowa City. 49 p. ms.

1000. **Bohner, C. A.** Study of ability grouping in second-semester geometry. Master's thesis, 1928. University of Minnesota, Minneapolis.

A study conducted in the Sioux City high school to ascertain the relative merits of teaching geometry to mixed classes and to classes grouped according to ability.

1001. **Borman, Mabel M.** A study of the use of diagnostic tests in plane geometry. Master's thesis, 1928-29. University of Pennsylvania, Philadelphia.

1002. **Brightbill, D. F.** An analysis of the vocabulary involved in plane geometry. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1003. **Freeman, Ellen M.** A comparative analysis of textbooks in plane geometry. Master's thesis, 1928. University of Minnesota, Minneapolis.

The textbooks more commonly used in geometry in 1910 compared statistically with those in general use in 1920, insofar as the topics covered and the methods of presenting the subject are concerned.

1004. **Gilliland, Gladys.** Typical errors in plane geometry. Master's thesis, August 1928. Northwestern university, Evanston, Ill.

1005. **Haertter, Leonard D.** An experiment of the efficiency of instruction in large and small classes in plane geometry. Educational administration and supervision, 14: 580-90, November 1928.

Conclusions: Plane geometry can be learned as well in a class of 40 as in a class of 20 students.

1006. **Hall, John J.** A proposed revised course in geometry. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 125 p. ms.

Original composite course planned primarily for students in high school of less than average ability and who do not desire college entrance geometry.

1007. **Hamilton, Henry C.** A study of the vocabulary of plane geometry. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1008. **Harcey, Sister Yvonne.** A study of general intelligence and other factors related to success in plane geometry. Master's thesis, June 1929. University of Minnesota, Minneapolis.

1009. **Kaufman, Karl.** Experimental tests in geometry and their prognostic value. Master's thesis, 1929. College of the city of New York, New York, N. Y. 43 p. ms.

Comparison of specific prognostic test with general intelligence test in power to predict achievement in geometry. The specific prognostic test yielded a decidedly higher correlation with achievement than did the general intelligence tests.

1010. **O'Brien, F. P., and McMIndes, Maude.** A measure of achievement in plane geometry. University of Kansas Bulletin of education, 2: 16-18, February 1929.

Review of a master's thesis on "The construction of an achievement test in plane geometry," by Maude McMIndes, University of Kansas, 1926.

1011. **Ramsey, Carrie B.** Diagnostic tests in the teaching of plane geometry. Master's thesis, June 1929. Colorado state teachers college, Greeley. 58 p. ms.
Construction of diagnostic tests, and the administration of them is the basis of this study, in which 177 students of plane geometry in the Greeley high school and 32 students in college high were used. Conclusions: (1) Correlations between geometry scores and I.Q.'s was .52; between teachers' marks and I.Q.'s was .43, and between the test scores and the teachers' marks was .47; (2) students' errors resulted from confusion of terms, failure to visualize figures in different positions, failure to think of figures other than the conventional type, mistakes in computation, inability to use formulas, basing conclusions on appearances, and using special instead of general cases; (3) new type tests are considered better because they take less time to administer, they measure a great many abilities, they reveal difficulties which can be corrected by remedial teaching before it is too late, they are liked by students, are more objective, and they are more reliable.
1012. **Welte, Herbert D.** A critical study of errors in plane geometry. Doctor's thesis, 1929. State university of Iowa, Iowa City. 201 p. ms.
See also 279, 361, 503, 978, 989, 1083, 1090, 2122, 2844.

SCIENCE

1013. **Burkhart, C. E.** Concepts of pupils in secondary school science. Master's thesis, August 1928. Colorado state teachers college, Greeley. 101 p. ms.
Issues of Literary Digest from 1921 to 1927, inclusive, were sampled and the "Science and Invention" section of 21 issues or 114 articles were analyzed for concepts. 14 issues of Popular Mechanics magazines were analyzed and the ranks of the science concepts discovered in the eight most valuable popular science books. Findings: In constructing the test for measuring the pupils' knowledge about the concepts, the scientific facts and principles which were most stressed by a number of the more recent general science textbooks were incorporated into the 89 multiple choice questions. The test has an index of reliability of .92, which is thought to be sufficiently trustworthy for testing the pupils' knowledge about the concepts. The test was given to 534 pupils in seven grades of six schools system with two elementary schools, four junior high schools and three senior high schools represented. Eighty students in the junior college were also tested. Ability to grasp the concepts is indicated by the per cents of correct response to the test questions: Grade 6, 47.0; grade 7, 50.9; grade 8, 54.0; grade 9, 67.0; grade 10, 68.2; grade 11, 71.1; grade 12, 72.8; and grade 13, 70.9. Mastery by subjects is as follows: physiography, 66.2 per cent; biology, 63.6; physics, 60.7; and chemistry, 60.6. Striking individual differences are found by comparing the highest 10 pupils of grade 9 with the lowest 10 of grade 11, the former having a percentage of 75.8 and the latter 53.8, a difference of 22 per cent in favor of the lower grade.
1014. **Cross, Charles H.** A study of science articles appearing in current magazines and papers. Master's thesis, 1928. State university of Iowa, Iowa City. 58 p. ms.
1015. **Greene, Charles E.** Relative effectiveness of two types of teaching 7B science. 1929. Department of research, Public schools, Denver, Colo.
1016. **Hurd, A. W.** Problems of science teaching at the college level. Minneapolis, University of Minnesota, 1929. 195 p.
1017. **Mohr, Clifford F. L.** A survey of records in science of 906 graduating high school seniors. Master's thesis, 1929. University of Denver, Denver, Colo.
A study of the seniors in 5 Denver high schools to ascertain the determining factors of success in science teaching. Findings: (1) Science teaching sufficiently helps students in obtaining best science results on standardized tests; (2) chronological age is a negative factor in influencing science results; (3) science marks are not nearly as reliable in estimating pupils' ability in science as standardized tests; (4) mental age correlates highly with achievement tests but poorly with science marks; (5) these tests show that students who have high science standing also have high rating in other subjects, as English, mathematics, and social science.
1018. **Tildsley, John L.** Teaching science as a "Way of life." Annual report for the year 1927-28. Bulletin of high points (New York city), 10: No. 8, October 1928. 186 p.
This study sets forth some of the thoughts and practices of 38 principals, 476 science teachers, and 10,000 pupils. Gives the present situation in regard to science teaching in the high schools of New York city and makes recommendations for its improvement.
1019. **Zeisler, Gustave.** The teaching of science in the senior high schools of Wisconsin. Master's thesis, 1929. University of Chicago, Chicago, Ill. 230 p. ms.
See also 106, 369, 415, 496, 1439, 1567, 2288, 2317, 2330, 2765, 2780.

GENERAL SCIENCE

1020. **Alhambra, Calif., Public schools.** Department of educational research and guidance. A study of two A9 general science classes by means of the Ruch-Popenoe general science test. Educational research and guidance bulletin (Alhambra, Calif.) 1:8, April 1929.

Shows high correlations between test results and teachers' marks; medians are above test standards.

1021. **Beard, Burrus Everett.** The contribution of silent reading abilities to achievement in high school general science. Master's thesis, 1929. State university of Iowa, Iowa City. 60 p. ms.

1022. **Curtis, Francis D.** A synthesis and evaluation of subject-matter topics in general science. 1929. University of Michigan, Ann Arbor. Boston, Ginn and company, 1929. 83 p.

In this study 15 research investigations were combined with three syllabi into a table showing the relative importance of 1,850 topics appropriate to general science.

1023. **Eckermann, Agnes Clara.** A content study of general science. Master's thesis, 1928. University of Idaho, Moscow.

1024. **Joseph, Rosina C.** A comparative study of the achievements in general science of students in academic, commercial and technical courses in junior high school. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

1025. **Latimer, Orion P.** The overlap of general science and biology in high school. Master's thesis, 1929. State university of Iowa, Iowa City. 134 p ms.

1026. **Moore, F. W., Dykhouse, C. J., and Curtis, Francis D.** A study of the relative effectiveness of two methods of reporting laboratory exercises in general science. University of Michigan, Ann Arbor. Science education, 13: 229-35, May 1929.

The conventional method or essay report was compared with the progressive diagram or "moving picture report" in a carefully controlled experiment. Findings: The "moving picture" method gave somewhat better command of subject-matter with a saving of nearly 10 per cent of time.

1027. **Mosher, Florence.** The selection of curriculum materials in general science. 1928-29. Syracuse university, Syracuse, N. Y.

1028. **Muilenberg, Marcus C.** Validation of exercises for use in objective examinations in general science. Master's thesis, 1929. State university of Iowa, Iowa City. 153 p. ms.

1029. **Norvell, Paul C.** A general science test based on present practice in Iowa. Master's thesis, 1929. State university of Iowa, Iowa City. 225 p. ms.

1030. **Pfeiffer, Harrison Sumner.** Informations and misinformations of high school seniors in general science. Master's thesis, 1929. State university of Iowa, Iowa City. 115 p. ms.

1031. **Phelps, Maurice Roy.** The content of general science. Master's thesis, 1928. State university of Iowa, Iowa City. 85 p. ms.

1032. **Riedel, F. A., and Rule, H. C.** The relative value of two methods of teaching general science. University of Kansas Bulletin of education, 2: 6-8, February 1929.

Review of a master's thesis on the "Relative value of teaching eighth grade general science daily, as compared with teaching the same subject on alternate days for an equivalent number of days," by H. C. Rule, University of Kansas, 1927.

1033. **Saulter, Charles R.** Course in general science in the new Lincoln junior high school of Trenton, N. J. Master's thesis, 1928. University of Pennsylvania, Philadelphia.

1034. **Smith, Eleanor Marrian.** Units of appreciation in general science. Master's thesis, 1928-29. Boston university, Boston, Mass.

See also 361, 471, 1157, 2316, 2330.

NATURE STUDY

1035. **Batson, Owen T.** Modern tendencies in the teaching of nature study. Maxwell training school, Brooklyn, N. Y. 7 p. (Nature and science education review, 1929).

This is a study in the modern practices in teaching elementary science in grades 1 to 6. Findings: There is a tendency to combine biological and physical science, to state specific subject matter objectives, and to have no organized course of study.

1036. **Camp, Cordelia.** An experiment in the study of wild flowers in the elementary grades. 1928-29. Cullowhee state normal school, Cullowhee, N. C. Ms.

The purpose of this study was to lead pupils to appreciate the wild flowers around them and to preserve rare specimens. All wild flowers in the community, blooming in July and August were studied and classified. It was concluded that pupils in elementary grades can understand and practice considerable science of this nature.

See also 402, 2463.

GEOGRAPHY AND GEOLOGY

1037. **Bickett, W. J.** Elementary course of study: geography. Trenton, N. J., Superintendent of schools, July 1928. 120 p.

Committee report, Mary H. Finger, chairman. Emphasizes adaptation of course of study to three-track grouping of pupils.

1038. **Callixta, Sister M.** Visualizing and vitalizing the content of geography. Washington, D. C., Catholic education press, 1928. 26 p. (Catholic university of America. Educational research bulletins, vol. III, no. 10, December 1928)

1039. **Chicopee, Mass. Public schools.** Syllabus: geography, grades III-VI. 1929. 2 p. ms.

1040. **Little, Greta Peck.** Certain techniques for the elementary school teacher to use in deriving human geography principles. Master's thesis (1929) University of North Carolina, Chapel Hill.

An annotated bibliography of materials most useful to the teacher and for the children is given. Among the children's books emphasis is placed upon recent source materials and stories with geographic content and value.

1041. **Malone, Rev. Thomas J.** Mission magazines as supplementary reading for geography. Master's thesis, 1929. Catholic university of America, Washington, D. C. 37 p. ms.

A survey of 21 Catholic mission magazines (10 numbers each), to measure their geographic content and two aspects of form, general appearance and type size, to determine the suitability of these magazines for supplementary reading in geography in the elementary school. It was found that the average mission magazine has sufficient geographic content and is suitable in form to warrant its use as supplementary reading, but is deficient in maps and references to relationships and interpretations.

1042. **Newark, N. J. Public schools. Department of reference and research.** Report on primary geography study, grade 4B. December 1928. 13 p. ms.

Results of a test constructed by the local research department, consisting of questions concerning environment, food, clothing, shelter, direction, weather, land and water forms, etc., given to 4B classes. To be used in connection with curriculum revision.

1043. **Opperman, Erwin W.** Determination of the concepts of physics and chemistry implied or expressed, in the content of a first college course in geology. Master's thesis, 1928. State university of Iowa, Iowa City. 106 p. ms.

1044. **Pease, Marian Smith.** One measure of the relative value of geographic terms. Master's thesis, 1929. State university of Iowa, Iowa City. 77 p. ms.

1045. **Portland, Oreg. School district no. 1. Department of research.** Preliminary geography test. March 25, 1929. 3 p. ms.

A city wide test in 6A geography.

1046. **Schafer, Lewis G.** The derivation and analysis of a vocabulary in world geography. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1047. **Sherwood, Anna Pope.** Trends in geography and geography teaching, and a tentative course of study in geography for grades one to eight. Master's thesis, 1929. Indiana state teachers college, Terre Haute. 178 p.

1048. **Stephens, Mrs. Myrtle.** Trends in teaching geography as revealed by an investigation of textbooks over a period of 60 years. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1049. **Thompson, Rebecca.** Teaching the geography of Mexico and the Carribean countries. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 60 p. ms.

1050. **Tilley, Harvey C.** A diagnostic study of a test on map-reading abilities. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1051. **Uhrbrock, Richard S.** Reciprocal ratings: a comparison of the judgments of a teacher and pupils in estimating ability in United States geography. Cornell university, Ithaca, N. Y. Journal of educational psychology, 19: 572-79, November 1928.

Forty-four girls in grade 7B were given 7 United States geography tests and National intelligence test. Each girl rated all her classmates for "ability in United States geography." Ratings were also made by teachers. Teachers' estimates agreed more closely with criterion (average rank in 7 United States geography tests) than did the average ranking of pupils by pupils. There was a great tendency to over-estimate ability.

1052. **Watts, Maxine.** Expressed and implied biological concepts included in first year university course in geology. Master's thesis, 1929. State university of Iowa, Iowa City. 165 p. ms.

1053. **Worcester, Mass. School department.** Course of study in geography for grades III-VI. 1929. 255 p.
 - See also 396, 402, 418.

BIOLOGY AND BOTANY

1054. **Cobb, Charles S.** A study of the natural sciences taught in the high schools of Iowa and an evaluation of the zoological material. Master's thesis, 1929. State university of Iowa, Iowa City. 60 p. ms.

1055. **Ettinger, Walter O.** The social objectives to be obtained in the teaching of biology. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1056. **Green, Edmund C.** The validation of a series of objective exercises in high school biology. Master's thesis, 1929. State university of Iowa, Iowa City. 132 p. ms.

1057. **Merrill, Amos N.** An objective basis for the determination of the objectives and materials for a course in botany for secondary schools. Journal of educational research, 19: 31-38, January 1929.

A comparison of the results of a study of periodical literature with an analysis of the content of 12 widely used books in botany.

1058. **Morris, Robert H.** Determination of the concepts of chemistry implied or expressed in the content of a first year college course in zoology. Master's thesis, 1929. State university of Iowa, Iowa City. 79 p. ms.

1059. **Priest, John.** Visual education in biology. 1928-29. West Virginia university, Morgantown.

1060. **Segel, David.** A report on the Long Beach biology unit tests. 1929. City schools, Long Beach, Calif. 16 p. 3 p. ms.

Tests covering four units of biology: life processes of the organism, continuity of life, organic development, and organisms in their external relations. Statement on tentative norms, reliability, time limits, and probable errors of scores is given.

1061. **Shontz, Ethel Geraldine.** Determination of the concepts of physics implied or expressed in the content of a first year college course in zoology. Master's thesis, 1928. State university of Iowa, Iowa City. 56 p. ms.
See also 34, 207, 361, 376, 501, 1025, 1052, 1557, 2330, 2364.

CHEMISTRY

1062. **Bagby, Grace.** The correlation of laboratory and classroom work in the teaching of high-school chemistry. *Journal of educational research*, 19: 336-40, May 1929.

A comparison of the relative efficiency of three methods of correlating classroom and laboratory work, in the study of high-school chemistry, as measured by immediate and delayed recall of subject-matter.

1063. **Erickson, A. J.** Individual laboratory experiments vs. demonstration experiments in high school chemistry. Master's thesis, June 1929. New York university, New York, N. Y. 53 p. ms.

1064. **Ernest, Herman.** Determination of a curriculum in industrial chemistry for an all-day adolescent industrial school. Master's thesis, 1929. New York university, New York, N. Y. 175 p. ms.

Survey of industry in section to be served and development of curriculum based on the survey.

1065. **Freeman, Loren K.** The effectiveness of teaching chemistry in the Alton high school since 1903, in respect to retention of chemical knowledge and other factors bearing a relationship to this subject. Master's thesis, 1929. Washington university, St. Louis, Mo.

1066. **Gilruth, Henry A.** Validation of certain objective exercises in high school chemistry. Master's thesis, 1929. State university of Iowa, Iowa City. 104 p. ms.

1067. **Greene, Charles E.** The basic text in chemistry as against the reference text. 1929. Department of research, Public schools, Denver, Colo.

1068. **Hazlett, J. Roy.** An analysis of present practice with respect to teaching objectives and methods in high school chemistry. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1069. **Nettels, C. H., and others.** Analysis of chemistry texts. February 1929. Psychology and education research division, Public schools, Los Angeles, Calif. 27 p. ms.

Procedure in selecting a text on the basis of committee reports and balloting by teachers. Books evaluated on seven items: introduction, inorganic chemistry, organic chemistry, topic sequence, other points, laboratory manual, illustrations and mechanical features.

1070. **Noll, Victor H.** The influence of individual laboratory work and other factors upon achievement in general inorganic chemistry. Doctor's thesis, June 1929. University of Minnesota, Minneapolis.

1071. ———. The results of certain experiments in the teaching of chemistry to college students. [1929]. University of Minnesota, Minneapolis. 6 p. ms.

1072. **Parker, Druley.** An attempt to determine the elements and radicals that need to be automatized by students of high school chemistry. Master's thesis, 1929. Indiana university, Bloomington. 40 p. ms.

For this study seven texts and six laboratory manuals were selected at random. Findings: 17 elements and radicals accounted for 85 per cent of all the formulas; 65 different elements and radicals were encountered.

1073. **Peterson, Hugh W.** Methods of teaching high school chemistry. Master's thesis, June 1928. Brigham Young university, Provo, Utah. 184 p. ms.
A survey of recent literature.

1074. **Powers, Samuel Ralph.** The correlation between measures of mental ability and measures of achievement in chemistry. *School science and mathematics*, 28: 981-86, December 1928.

1075. **Schultz, Magnus P.** An evaluation of chemistry textbooks. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1076. **Shelton, William Ralph.** A study of the industrial topics in high school chemistry textbooks. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 158 p. ms.

1077. **Toby, Ethel Lillian.** A comparative study of the use of textual and non-textual reading material for students in high school chemistry. Master's thesis, 1929. University of Denver, Denver, Colo. 72 p. ms.

In order to determine the use throughout the country of texts, syllabi and outside reading and also the teachers' judgments of non-textual material, questionnaires were sent to 218 selected high schools in 48 states. 114 replies from 36 states were received. Another questionnaire was sent to chemistry students in the Denver high schools to get their judgments. This experiment was made in four classes covering a period of 25 weeks. There were two groups; controlled, who studied from text and manual, and experimental, who did not have individual textbooks and manuals but studied from the non-textual materials selected (by results of the questionnaire). Findings: Experimental group did as well and better than controlled group in all cases. The non-textual materials used in the experiment can be grasped even by students of limited ability. Experimental group did better in actual textual material, although they did not have individual texts. Most effective plan would seem to be a combination of textual and non-textual material in teaching chemistry.

See also 361, 396, 1043, 1058, 2288, 2330.

PHYSICS

1078. **Bail, Philip Milo.** Methods of recording experiments in physics. Master's thesis, 1928. State university of Iowa, Iowa City. 116 p. ms.

1079. **Barrett, Lawrence Adams.** A comparative study of seven high school physics textbooks. Master's thesis, 1929. University of Colorado, Boulder. 137 p. ms.

Questionnaires were sent to 160 high schools of Colorado, for the following information concerning the texts used: (1) Comparison of texts; (2) most widely used; (3) what states had physics texts; (4) states with preferred lists; (5) teacher ratings of texts used in Colorado; (6) texts suitable for different high schools. Findings: (1) Millikan and Gale, most widely used; (2) Black and Davis, had most mathematical questions; (3) Fuller, Brownlee and Baker, most mathematical practice, most pages and chapters; (4) Carhart and Chute, most illustrations by area; (5) Millikan and Gale, most full page illustrations; (6) two-thirds of states allow free choice of textbooks.

1080. **Cates, M. M.** The intelligence quotient and the ability to answer various types of physics questions. Master's thesis, 1928. University of Minnesota, Minneapolis.

An investigation into the relationship between the intelligence of high-school pupils, as measured by intelligence tests, and their ability to answer various types of questions and to solve problems in physics.

1081. **Crawford, John Raymond.** A study of individual and group laboratory experiments in an engineering course in college physics. Master's thesis, 1929. State university of Iowa, Iowa City. 54 p. ms.

1082. **Donaldson, Geneva.** The number of bonds of high school mathematics necessary for the study of high school physics. Educational research record (University of Nebraska), 1: 110-22, February 1929.

1083. **Gish, Grace I.** The comparative value of English, algebra, and geometry in predicting success in high school physics. Master's thesis, 1929. University of Chicago, Chicago, Ill.

1084. **Grothaus, John H.** Trends in the organization of physics in Iowa high schools. Master's thesis, 1929. State university of Iowa, Iowa City. 122 p. ms.

1085. **Hopper, Grace.** A study of the vocabularies of high school physics textbooks. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

This study is based on most widely used texts in physics, and comparison is made with an earlier text to show vocabulary growth in recent years in the 5 main sections of the science. Vocabulary tests using the undefined words in the textbooks are constructed.

1086. **Hurd, A. W.** High school physics as prognostic of success in university physics. 1929. (University of Minnesota, Minneapolis.) ms.

1087. **Meyer, Stanton Herbert.** An evaluation of certain standard tests in high school physics. Master's thesis, 1929. University of California, Berkeley. 24 p. ms.

A study to determine comparable statistical constants on five of the most recent standard tests in high school physics. Findings: (1) The five tests showed relatively wide difference in reliability. The coefficients of reliability ranged from .75 to .89 when computed from the test scores of a common population of 89 high school students; (2) probable errors of estimated true scores were computed which showed that the error of measurement of the least reliable test is almost one and one-half times as great as that of the most reliable test; (3) intercorrelation values indicate that in the case of only one test of this series do the functions measured overlap the functions measured by the other tests by as much as 50 per cent.

1088. **Miller, Paul S.** A quantitative investigation of the efficiency of instruction in high-school physics. Journal of educational research, 19: 119-27, February 1929.

A study of the efficiency of instruction in physics in 28 high schools, ranging in size from 24 to 3,500 pupils.

1089. **Sangren, Paul V., and Marburger, W.** Instructional tests in high-school physics and instruction in physics. 1929. Western state teachers college, Kalamazoo, Mich. 50 p.

A series of 22 tests in high-school physics. It was found that the average student gets about 60 per cent of subject-matter treated in physics.

1090. **Scribner, Helen Q.** Analysis of the problem in Stewart's "Physics, a textbook for colleges", for the specific algebraic, geometric and higher arithmetical skills involved in their solutions. Master's thesis, 1929. State university of Iowa, Iowa City. 110 p. ms.

1091. **Wagner, Guy W.** The relative value of various tests as a prognosis of success in high-school physics. Master's thesis, 1929. State university of Iowa, Iowa City. 35 p. ms.

1092. **Watson, Raymond A.** An analytical study of references to physics in agricultural publications. 1928. University of Chicago, Chicago, Ill.

1093. **Wolcott, Harry.** An analysis of secondary school texts in physics in use since 1825. Master's thesis, 1929. University of Minnesota, Minneapolis. See also 361, 1043, 1061, 1516, 2330.

SOCIAL STUDIES

1094. **Baldwin, James W.** The social studies laboratory. A study of equipment and teaching aids for the social studies. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 98 p. (Contributions to education, no. 371)

The purpose of this study was to determine as nearly as possible, with the means available to the writer, what constitutes the minimum laboratory equipment necessary to make possible effective teaching in the social studies in grades 4 to 12. Conclusions: The same laboratory should serve all the social studies in the intermediate grades in each building, or in each junior high school, but in the senior high schools which enroll more than a thousand pupils there is little argument against the provision of laboratories for some one or two subjects; each class using the laboratory should have a laboratory period at least twice each week; the social studies laboratory should have an area in floor space at least one and one-half times that of the classrooms that do not require the use of laboratory equipment and do not provide for laboratory activities, etc.

1095. **Bamesberger, Velda C.** An appraisal of a social studies course, in terms of its effect upon the achievement, activities, and interests of pupils. New York city, Teachers college, Columbia university, 1928. 91 p. (Contributions to education, no. 328)

1096. **Barr, A. S.** Characteristic differences in the teaching of good and poor teachers of the social studies. Bloomington, Ill., Public school publishing company, 1929. 127 p.

1097. **Braman, Byron L.** Trends in the social studies program in Iowa high schools. Master's thesis, 1929. State university of Iowa, Iowa City. 66 p. ms.

1098. **Broom, M. Eustace, and Fox, Guy F.** Predicting success in first semester college social science. *School and society*, 28: 689-90, December 1, 1928.

An investigation, based upon data secured from records of the State teachers college of San Diego, to determine which of the following five measures, if any, is valuable in predicting what the high-school graduate will achieve in his first semester of study in college social sciences: (1) Average grade points per year (unit) of credit in social science in high school, (2) number of years of study (units) of social science in high school, (3) total scores on the Thorndike intelligence examination, Series of 1925-1929, (4) decile ranks on the reading section (Part III) of the Thorndike intelligence examination, and (5) decile ranks on the trade information section (Part II, section 5) of the Thorndike intelligence examination. The study concludes that a carefully standardized test of mental ability designed to secure a critical measure of the ability of high-school graduates to do college work would appear to supply the needed data.

1099. **Cutright, Prudence.** A survey of teacher-pupil activities in social studies. 1928-29. Public schools, Minneapolis, Minn. 8 p. ms. (*Social studies bulletin*, no. 8)

A survey of the current teaching practices in the elementary schools.

1100. **Gray, L. Eura.** Vocabulary difficulty in three social science texts. 1928-29. West Virginia university, Morgantown.

1101. **Haehlen, J. Kynett.** Construction of X units in sociology problems. Master's thesis, 1929. State university of Iowa, Iowa City. 63 p. ms.

1102. **Harden, Mary.** Social studies in the first six grades of the elementary schools—syllabus, bibliography and units of work. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 135 p. ms.

1103. **Jamison, Benjamin Franklin.** An experimental study in methods of teaching social sciences in high school. Master's thesis, June 1929. University of Southern California, Los Angeles.

1104. **Lacy, Joy Muchmore.** Social studies in the primary grades, a study in grade placement. Master's thesis, February 1929. Teachers college, Columbia university, New York, N. Y. 71 p. ms.

1105. **Maupin, Nell.** Reasoning ability in social studies and its relation to information. Doctor's thesis, 1928. State university of Iowa, Iowa City. 50 p. ms.

1106. **Mills, Jess.** Some aspects of the problem of social studies in the junior high school. Master's thesis, 1928. State college of Washington, Pullman. 124 p. ms.

Answers were received from 75 junior high schools, representing 29 states. Findings: (1) Social studies are increasing, especially in the ninth grade; (2) history, geography and community civics are accepted by all schools as social studies, vocational civics and occupations are accepted by one-half of the schools; (3) sociology and economics are included as parts of other subjects; (4) problem-project teaching is fairly well established, with regular textbooks used in geography, history, and civics; etc.

1107. **Minneapolis, Minn. Public schools. Instructional research department.** Activities used in the teaching of the social studies. 1929. 12 p. ms.

Four hundred observations were made on the teaching of the social studies. With the aid of a survey sheet, on which was listed possible teacher-pupil activities in the social studies, the observer reported the activities used in that one period. Conclusion: The giving of oral reports predominates as an activity in all grades 3B through 6A, inclusive. The results of the survey are being used as the basis for a teacher-training program.

1108. ———— A survey of teacher-pupil activities in social studies. January 1929. 8 p. ms. (*Social studies bulletin*, no. 8)

1109. **Moore, Harold E.** The status of the social studies in the public junior colleges of the United States. Master's thesis, 1929. Indiana university, Bloomington. 120 p. ms.

From an examination of the catalogues gathered from the public junior colleges of the United States, it was found that history is the leading social science offered in the public junior college followed by these studies in the order named: Political science and government, economics, sociology, orientation, civics, social problems, American civilization, world civilization, and citizenship.

1110. **Smith, Walter B., and Crowell, Ethel S.** Status of social science in Kansas high schools. University of Kansas Bulletin of education, 2: 3-5, February 1929.

Review of a master's thesis by Ethel S. Crowell on the "Status of social science in Kansas high school," University of Kansas, 1928.

1111. **Washburne, John N.** The use of questions in social science reading material. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. Journal of educational psychology, 20: 321-59, May 1929.

The purpose of the study was: (1) To find the effect of the use of questions in social science reading material upon the recall of factual material connected with and not connected with the questions, and the making of generalizations from factual material; and (2) to determine where questions should be placed in the social science reading material. It was found that the best placement is the grouping of all questions at the beginning of the story.

See also 106, 496, 514, 1376, 1679, 2122, 2564, 3004.

HISTORY

1112. **Bassett, Sarah Janet.** Retention of history in the sixth, seventh and eighth grades with special reference to the factors that influence retention. Baltimore, Johns Hopkins press, 1928. 110 p. (Johns Hopkins university. Studies in education, no. 12)

The results of this study show that the mean amount of history retained after 16 months was about 72 per cent. History knowledge which is concrete and personal is well remembered; geographical terms, abstract terms, and technicalities of legal documents are forgotten.

1113. **Bickett, W. J.** Elementary course of study: History. Trenton, N. J., Superintendent of schools, July 1928. 87 p.

Committee report, Raymond S. Michael, chairman. Emphasizes adaptation of course of study to three-track grouping of pupils.

1114. **Brinser, Harrison Shearer.** Illustrative material in teaching history. Master's thesis, 1928-29. Ohio state university, Columbus.

1115. **Brooks, Fowler D. and Bassett, S. Janet.** The retention of American history in the junior high school. Journal of educational research, 18: 195-202, October 1928.

This report shows the amount of American history actually retained by 495 pupils of grades seven and eight in Baltimore, Md., from four to sixteen months after the semester in which it was studied. The results indicate that pupils forget 23 per cent of first or second year junior high-school American history in a year's time.

1116. **Carstensen, Eva H.** The use of history in advertising. Master's thesis, 1929. University of Chicago, Chicago, Ill. 68 p. ms.

Sixteen magazines over a period of 10 years and 46 magazines for the first 6 months of 1929 were examined. Findings: (1) Interest is most predominant in social activities of the group; (2) if frequency of mention is a criterion, interest in historical personages is higher than in any other one thing; (3) specific dates are most popular.

1117. **Chicopee, Mass. Public schools.** Syllabus: History, grades I-VI. 1929. 3 p. ms.

1118. **Glucas, Charles Samuel.** Analysis and measurement of certain background factors conditioning the study of history. Doctor's thesis, 1928. Ohio state university, Columbus. 133 p. ms.

This investigation aims to locate certain important factors of background information important for the study of history, and to construct tests permitting measurement of the extent to which a given student possesses this background. Some orientation as indicated by certain key dates, and technical vocabulary, have been previously considered.

1119. **Cordier, Ralph Waldo.** A study and organization of the early colonial period of American history with a view to realizing the democratic ideal. Master's thesis, 1929. Ohio state university, Columbus. 98 p. ms.

The study covered early Virginia, Jamestown, and was treated from the point of view of the junior high school.

1120. **Crawley, Alice.** Organization of the material of instruction in American history in secondary schools. Master's thesis, 1928. University of Virginia, Charlottesville.

1121. **Eberhardt, Rose.** Vocabulary burden and variability of vocabulary difficulty, in supplementary history readings for the seventh and eighth years. Master's thesis, 1929. College of the city of New York, New York, N. Y. 81 p. ms.

Study of uncommonness of words in samples from 139 texts and supplementary books. Findings: (1) Great variability was found in books designed for same grade; (2) the words in many books showed percentages of difficulty which were regarded as too high by the author.

1122. **Eckles, Jane Figg.** An analysis of the literature on aims for teaching history. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 46 p. ms.

The purpose of this study was to determine what has been written concerning the aims of history teaching and not to determine what should be the aims. The changing concept of aims for teaching the subject is shown and the variety of aims that have been given for history teaching is discussed.

1123. **Floyd, Oliver R.** Overlapping between the senior high school courses in problems of democracy and American history. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1124. **Gifford, Clarence Wesley.** A vocabulary study of senior high school textbooks in American history. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

1125. **Hammond, Rosa Lee.** Evaluating methods of teaching history in junior high schools. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 79 p. ms.

1126. **Harbourt, John.** Treatment of the World war in secondary texts of Germany, France, England, and the United States. Master's thesis, 1929. University of Chicago, Chicago, Ill. 83 p.

The study involves examination of 15 American, 11 German, 1 French, and 8 English secondary texts.

1127. **Harder, Anna Lenore.** Trends in the teaching of world history in the secondary schools. Master's thesis, June 1929. University of Southern California, Los Angeles.

1128. **Hartranft, J. F.** A plan for a world history. Master's thesis, 1928-29. Franklin and Marshall college, Lancaster, Pa.

This study aims to approach the history of the world from an unbiased viewpoint. It shows that usually history is taught with an object in view which determines the sources. Here the author aims to allow each nation of people to tell its own story as seen by the nation of people whose history is being told. The plan contemplates a book covering the world peoples that should be included in a course in history in the tenth grade.

1129. **Herriott, M. E.** Objectives of United States history: the aims of the elementary school versus the expectations of the high school. School review, 37: 107-16, February 1929.

The authors found that there was a gross lack of agreement between elementary school teachers and high school teachers of United States history as to the date and name objectives of history. This conclusion was based on data obtained from public school teachers in two counties in Illinois.

1130. **Hill, Howard C., and Weaver, Robert B.** A unitary course in United States history for the junior high school. School review, 37: 256-66, April 1929; 363-70, May 1929.

Explains the selection and organization of the subject matter in course.

1131. **Keso, Edward Elmer.** An annotated bibliography of methods of teaching history. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 99 p. ms.

1132. **Knapp, Crawford E.** Validation of a series of objective exercises in American history. Master's thesis, 1928. State university of Iowa, Iowa City. 368 p. ms.

1133. **Lerner, Israel S.** Adjusting the course of study in seventh grade history in the public schools of Philadelphia for pupils of high ability. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1134. **Marker, Nathan Dewey.** Some difficulties in high school history. Master's thesis, August 1928. Colorado state teachers college, Greeley. 56 p. ms.

Analysis of ten widely used high school history texts. Conclusions: (1) Results of true-false test showed that a large per cent of difficult history passages are not understood by high school pupils. The mean score was 2.57 when tested on paragraphs containing these difficulties. When the difficulties were removed, the pupil made a mean score of 3.79, 1.22 points improvement; (2) relationship between Monroe's silent-reading test and history passage scores showed that pupils of normal reading ability comprehend less than 70 per cent of the original paragraphs, and show only 15 per cent improvement when the paragraphs are simplified; (3) the free expression test indicated that high school pupils refuse to respond to the greater part of subject matter which they do not understand. Lack of comprehension was due to three sources: (1) Authors of texts include unnecessary abstract words, etc.; do not give sufficiently concrete explanations to necessary difficulties; (2) schools fail to teach many skills necessary for comprehension of difficult history subject matter; (3) courses of study include subject matter beyond the comprehension of the pupils.

1135. **Mitchell, Ethel.** Materials and methods for teaching European background in the grades. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 38 p. ms.

1136. **Nelson, Ethel Redfield.** The content of American history for grades VII and VIII as revealed in state examinations. Master's thesis, 1929. University of Chicago, Chicago, Ill. 82 p. ms.

In this study only questions in American history issued by the State department of education for elementary grades were used. These questions cover approximately five years, 1924-1929, number 3,353 and include the 21 states that give examinations. Findings: The content of a course in American history, based upon the materials of this study: (1) would emphasize political, social and economic phases; about 35.6 per cent of the topics relate to social and economic; 29.4 to political; (2) the outstanding personages are those whose names are associated with great political causes or documents and include 18 per cent of the topics; (3) civics and locational geography are factors to be considered in forming the history content, since 13.3 per cent of the questions include references of this nature; (4) attention is being diverted from wars, campaigns, and battles, and directed toward the causes of war and the changes that are brought about as a result. Only 3.6 per cent of the topics refer to military material; (5) the emphasis placed upon events leading up to the Civil war designates this as the crucial period of American history. Second in importance is the period of reconstruction with its problems of industry, expansion, and conservation.

1137. **Newlun, Chester Otto.** Teaching children to summarize in fifth grade history. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

From this study the following conclusions seem justified: (1) Summarizing is a desirable study skill; (2) children as low as the fifth grade can be successfully taught to summarize in history by using only a portion of their class time; (3) the most important skill in summarizing is the ability to distinguish between the important and the less important for the purpose in mind, etc.

1138. **Nudelman, Edward A.** Pupil exercises used in elementary history textbooks. Elementary school journal, 29: 351-57, January 1929.

From an examination of a number of typical elementary history textbooks, the following conclusions were drawn: Textbook writers differ a great deal among themselves as to the types of pupil exercises used; in devising pupil exercises, present-day textbook writers are influenced by the recent tendencies in the teaching of history to make the study concrete, and to emphasize reasoning about history as well as acquisition of facts.

1139. **Owen, Ada H.** Adjusting the curriculum in the seventh grade history to the low I. Q. group. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1140. **Polatchek, Joseph.** Present status of experimental studies. Master's thesis, 1929. College of the city of New York, New York, N. Y. 152 p. ms.
Gives brief summaries of experimental studies reported in 25 periodicals for the last 15 years relative to elementary and junior and senior high school history.
1141. **Bohrberg, Morris.** Experimental study in historical sense of pupils in high school. Master's thesis, 1928. New York university, New York, N. Y. 101 p.
1142. **Rosenbloum, Minnie.** Men mentioned in five junior high school American history textbooks, 1925-1927. Master's thesis, 1928. State university of Iowa, Iowa City. 457 p. ms.
1143. **Rudisill, Josephine.** The story of North Carolina. 1928-29. Public schools, Gastonia, N. C. 25 p. ms.
A pageant of music and folk dances depicting the history of North Carolina, resulting in increased interest on the part of pupils and citizens in North Carolina history.
1144. **Santa Monica, Calif. Public schools.** Department of research. Report on tracking in history and civics. January 1929. 6 p. ms.
Test results show that present tracking system bears a general relation to the abilities of pupils in history, civics, and intelligence, but that there is great overlapping between tracks.
1145. **Schulze, Helen.** Does our present method of teaching history and civics fit our children for their civic duties of adult life? Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.
1146. **Shambaugh, C. G.** A study of the vocabulary of ancient history texts. School and society, 28, 494-96, October 20, 1928.
A word count of five history texts, selected on the basis of the extent of their use in secondary schools, for the purpose of measuring the vocabulary difficulty in high-school textbooks in ancient history and to ascertain the extent to which the content of the text is suited to the needs and capacities of the ninth grade student.
1147. **Smith, Walter Wayne.** The biographical emphasis in secondary school history. Master's thesis, 1928. University of Idaho, Moscow.
1148. **Smock, Lenna E.** A study of the intermediate grade history textbooks commonly used in the state of Indiana with special reference to the relative difficulty of the vocabulary and the length of sentence. Master's thesis, 1929. Indiana university, Bloomington. 71 p. ms.
For this study five books most commonly used as basic textbooks for the teaching of history in each of the intermediate grades were selected. Two random samplings of approximately 1,000 words each were taken from the vocabulary of each of the books.
1149. **Vinie, Earl.** The treatment of the principles of religious freedom and other religious content in American history textbooks for elementary and secondary schools. Doctor's thesis, 1929. Yale university, New Haven, Conn. 532 p. ms. and 8 p. bibliography.
An analysis of the content of the 12 most widely used elementary and secondary textbooks in American history, with a view to an evaluation of the treatment in these books of the principle of religious freedom; together with a constructive proposal for a new correlation of religious education and secular education centering about the development of the principle of religious freedom as a base or core.
1150. **Warin, Mary Eulalia.** An analysis of junior high school texts in United States history. Master's thesis, 1929. State university of Iowa, Iowa City. 106 p. ms.
1151. **Wilson, Elizabeth.** Sam Houston, a state builder. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 62 p. ms.
This study attempts to give full, rich, concrete material for the teaching of the life and work of Sam Houston, and to organize it into form that will be of practical value to the teacher.

1152. **Yarbrough, Vida.** Some inaccuracies in the treatment of the Civil war in certain school history textbooks. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 79 p. ms.

Sixteen texts, suitable for use in the junior high school, were examined. Conclusions: In these texts there are certain mistakes which, one feels, were caused by the author's desire to stress the part played by either the North or the South. In many instances it is probable that the mistakes resulted from incorrect information rather than a deliberate attempt to misrepresent facts.

See also 271, 274, 497, 499, 510, 512, 516, 529, 546, 1312, 1891, 2558.

ECONOMICS

1153. **Barnette, Mary B.** Pupil appraisement of a senior high school course in economics. School review, 37: 282-92, April 1929.

At end of second semester, 1927-28, 50 seniors were asked to write thousand-word articles on "What economics has meant to me." An analysis of the verbatim quotations from these articles constitutes the major part of the study.

1154. **Egan, Howard E.** The evolution of the study of economics in the junior and senior high schools of the United States. Doctor's thesis, 1928. Loyola university, Chicago, Ill. Chicago, Ill., Loyola university press, 1929. 64 p.

Bibliography: p. 45-64.

See also 497, 1158.

TESTS

1155. **Bixler, Clyde Isaac.** A critical evaluation of certain techniques of testing in history. Master's thesis, 1929. State university of Iowa, Iowa City. 43 p. ms.

1156. **Crouch, John Emmons.** The results of an objective test in high school sociology in state of South Dakota. Master's thesis, 1929. University of Colorado, Boulder. 46 p. ms.

The aims of this study were: (1) To make an objective test that would serve as state-wide measure of ability; and (2) to determine practical results by giving the test to group of representative schools in state. Findings: The material of test though it had validity of source did not have validity of function. Range of material must be wide in sociology.

1157. **Eckert, Dana Z.** Report on tests in history and general science at close of first semester. Curriculum study and educational research bulletin (Pittsburgh, Pa.), 3: 178-86, March-April 1929.

Deals with results of tests given to pupils in the Pittsburgh schools at the close of the first semester; divided into three sections: (1) The Pittsburgh mastery spelling test, Form A; (2) The Pittsburgh general science test for seventh grade—fall semester; and (3) The Denny-Nelson American history test.

1158. **Ellis, Claire L.** Objective tests in high school economics. Master's thesis, 1929. State university of Iowa, Iowa City. 106 p. ms.

1159. **Gibbons, Alice N.** Tests in the social studies. Chicago, National council for the social studies, 1929. 170 p.

Experimental work at Rochester, N. Y. Contains a bibliography.

1160. **Gipson, Lola Ethel.** The achievement of pupils in mastering objectively determined content in American history in grade VIII. Master's thesis, 1929. University of Chicago, Chicago, Ill. 108 p.

Eight hundred and fifteen eighth grade pupils were tested by a test including material which had been objectively determined. Conclusion: Pupils know less than 50 per cent of the material in descending order, persons, geography, events, dates, concepts.

1161. **Grimes, Karl Loren.** A test for a single textbook in American history. Master's thesis, 1929. State university of Iowa, Iowa City. 148 p. ms.

1162. **McAllister, Walter Alex.** Objective tests for a single textbook in European history. Master's thesis, 1928. State university of Iowa, Iowa City. 102 p. ms.

1163. **Nelson, E. H.** The relative validity of certain American history tests. Master's thesis, 1929. State university of Iowa, Iowa City. 39 p. ms.

1164. Philadelphia, Pa. Board of public education. Division of educational research and results. Report on survey test in history of the United States—grade 7 B, June 1928. Philadelphia, Pa., September 29, 1928. 5 p. ms. (Bulletin, no. 92)

This test was administered to all regular 7 B classes, comprising 10,337 pupils. The results show the city median to be 35.7. There are 55 elements in the test. Thus the median seventh grade pupil answered correctly 65 per cent of the material of the test.

1165. Stephan, Henry Burton. An experiment in American history in testing for attitudes, concepts, and ideals. Master's thesis, 1929. Indiana university, Bloomington. 94 p. ms.

From this study it would seem that the brighter pupils, as a rule, show the most desired change or consistency in attitude, although there are some outstanding cases of commendable responses from pupils of lower scholarship standing; there seemed to be no appreciable difference in the results shown by boys and girls in the class.

See also 94, 336, 361, 369, 402, 415.

PSYCHOLOGY

1166. Bathurst, J. E., and Scheidemann, Norma V. The college psychology test. Journal of applied psychology, 13: 81-85, February 1929.

A test covering the first year psychology in the liberal arts college.

1167. Haggerty, M. E. Topics in psychology. University of Minnesota, Minneapolis. Minneapolis, University of Minnesota press, 1929. 86 p.

In this study an analysis of the content of 52 books on psychology was made. The material was then put into outline form to be as used a check list.

1168. Longstaff, Howard P., and Porter, James P. Speed and accuracy as factors in objective tests in general psychology. Journal of applied psychology, 12: 636-42, December 1928.

1169. Buch, G. M., and Charles, John W. A comparison of five types of objective tests in elementary psychology. Journal of applied psychology, 12: 398-403, August 1928.

See also 1480.

MUSIC

1170. Bevill, Corinne. Status of accrediting music instruction in secondary schools of Arkansas. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 86 p. ms.

1171. Breach, William. Course of study in music. 1928-29. Public schools, Winston-Salem, N. C. ms.

1172. Buckton, LaVerne. College and university bands: their organization and administration. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. 102 p.

The problem of this study was to discover the present status of bands in institutions of higher education in the United States and set up standards which may be used in improving the organization and administration of these bands. In most cases studied the director seems to be adequately cared for as set up in the standards; in 77.7 per cent of the total institutions studied the director is a member of the Music department. There seems to be some confusion between the duties of the director and the duties of business manager. Lessons given through the Music department, where a department exists, should include class instruction to supplement private lessons in order to interest a larger group in instrumental work. Many of the colleges fail to furnish at least a part of the instruments necessary.

1173. Davis, F. Edna. An attempt to correlate musical ability and athletic ability. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1174. Denver, Colo. Public schools. Department of research. Methods of supervision in music in the larger city school systems. [1929] 4 p. ms.

Summarizes data from 29 cities furnished in reply to a questionnaire. Gives information for individual cities on employment of director of music and director of orchestra, instrumental music by group instruction, and type of organization, whether line-functional or line-staff.

1175. **Good, Carter V.** The music curriculum in secondary schools. American educational digest, 48: 176, 178, December 1928.

1176. **Heinlein, Christian Paul.** A new method of studying the rhythmic responses of children together with an evaluation of the method of simple observation. Pedagogical seminary and Journal of genetic psychology, 36: 205-28, June 1929.

The writer believes that the method of simple observation is unreliable in diagnosing the characteristics of a child's marching response to rhythmic musical stimulation. He describes an electro-mechanical device by means of which it is possible to obtain exact records of the rhythmic performance of children in marching to various musical patterns.

1177. **Hughes, Cecil L.** Music instruction in the high school. California quarterly of secondary education, 4: 335-41, June 1929.

Information is presented on the following points: (1) The rise of music instruction in the high school curriculum; (2) the present extent, types and credits allowed for music instruction; (3) present courses of study in the large cities; and (4) summary of present tendencies.

1178. **Johnson, Ruth Theresia.** An analytic study of music in the high schools of Ohio, 1926-1927. Master's thesis, July 1929. University of Minnesota, Minneapolis.

1179. **Littlejohn, Elfleda.** The professional treatment of music in teachers colleges. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 60 p. ms.

1180. **McKee, William Dean.** Iowa high school music associations. Master's thesis, 1929. State university of Iowa, Iowa City. 132 p. ms.

1181. **Mohr, E. E.** Music for the elementary school. Greeley, Colorado state teachers college, 1929.

. This study deals with the course of study for elementary school music.

1182. **National bureau for the advancement of music, New York, N. Y.** National survey of piano classes in operation. New York, National bureau for the advancement of music, 1929. 96 p.

A study of piano classes as conducted in 250 towns and cities throughout the country, mostly in the schools, but partly in the private teacher's studio. Findings: Great and rapidly growing interest in group piano instruction; success in interesting children; new methods in use; best results from smaller groups, most people recommending 12 or less in a group; importance of proper grading.

1183. **Savage, Howard S.** A study of the correlation existing between musical ability and achievement. Master's thesis, 1929. New York university, New York, N. Y. 54 p. ms.

1184. **Ulmer, Rev. Roland C.** The place of music in the curriculum of the Catholic high school. Master's thesis, 1929. Catholic university of America, Washington, D. C. 73 p. ms.

1185. **Weber, Elizabeth B.** Modern tendencies in the didactics of music. 1928. New York university, New York, N. Y. 57 p.

Experimental investigation in music teaching.

1186. **Weidemann, C. C., and Weidemann, E. P. W.** Adventures with home-made musical instruments for junior high school boys and girls. Lincoln, Extension division, University of Nebraska, 1929. (Bulletin, no. 57)

1187. **Wright, Jean C.** The vocational value of music to high school pupils. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa. 69 p. ms. Curriculum study and educational research bulletin (Pittsburgh, Pa.), 4: 96-120, November-December 1929.

A study of the vocational interest in music of the pupils of the junior and senior high schools of Pittsburgh.

See also 470, 1143, 1277.

TESTS

1188. **Branson, Ernest P.** Report of elementary music test, 6B-6A grades, January 1929. March 1929. Department of research, Public schools, Long Beach, Calif. Report, 3 p.; test, 6 p. ms.

Gives scores by schools and by sex. The test is to be subjected to further critical study.

1189. ——— Report of music test given in 6A grade, June 1928. September 1928. Department of research, Public schools, Long Beach, Calif., Report 2 p., test, 5 p. ms.

Gives medians and range of scores by schools; compares platoon and non-platoon schools. Discusses needed revisions in test.

1190. **Brown, Andrew W.** The reliability and validity of the Seashore tests of musical talent. *Journal of applied psychology*, 12: 468-76, (October 1928 (Studies from the Institute of juvenile research, Chicago. Series C, no. 141)

The results of the study show that the reliability coefficients of the Seashore tests with the exception of that for pitch, intensity and perhaps memory must be considered low; the validity of the individual tests as determined by their correlation with teachers' judgment as a criterion is also low; there is little relation between intelligence and musical ability as measured by these tests; etc.

1191. **Farnsworth, Paul R.** The Spearman-Brown prophecy formula and the Seashore tests. *Journal of educational psychology*, 19: 586-88, November 1928.

On a study of the Seashore battery of sound tests, Lanier had previously found that the Spearman-Brown prophecy formula failed to function when checked against retests. In this study two forms of each test were made from a single rendition. The formula was found to predict with considerable accuracy in most instances.

1192. **Fracker, George Cutler, and Howard, Virgie M.** Correlation between intelligence and musical talent among university students. Offprinted from the *Psychological monographs*, vol. XXXIX, no. 2, 1928. p. 157-61.

A study of 230 students, freshman, sophomore, and junior classes at the University of Arkansas. Taken as a group, the correlation results seem to confirm the position of Seashore that music tests are not in any significant way tests of intelligence.

1193. **Schick, Helen Florence.** A tentative objective test for the musical achievement of children. Master's thesis, 1928-29. Ohio state university, Columbus.

1194. **Stanton, Hazel M.** Measuring musical talent. *Personnel journal*, 7: 287-92, December 1928.

Reports on the use of Seashore measures of musical talent in the Eastman school of music in determining admissions, eliminations, and relative performance of students and in awarding scholarships.

See also 396.

ART EDUCATION

1195. **Agnew, Frederick W.** An investigation of student reaction to a curriculum in mechanical drawing. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1196. **Baltimore, Md.** Department of education. Art course of study for the junior high school. Baltimore, Department of education, 1928. 148 p. This outline is based upon the result of over two years of classroom experience.

1197. ——— Tentative art course of study for the senior high schools. 1929. 83 p. ms.

This outline is based upon the result of over four years of classroom experience.

1198. **Grether, Eulalie.** The place of art appreciation in the high school. Master's thesis, 1928. New York university, New York, N. Y. 62 p.

Study of the status of the subject in the New York city high schools, with proposals for a reorganization of the subject.

1199. **Hartman, Hazel.** The abstract idea in design. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 18 p. ms.

1200. **Lewerenz, Alfred S.** The effect of training on the ability to recognize color. Educational research bulletin (Los Angeles, Calif.), 8: 5-6, May-June 1929.

From an experiment conducted at the Edinboro state teachers college in Pennsylvania, by Alme H. Doucette, it would seem that color recognition is not subject to training.

1201. ——— Predicting ability in art. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 96-97.

1202. **Martin, Minnis S., and others.** Curriculum bulletin, no. 6, Art education. 1928-29. Public schools, Raleigh, N. C. 119 p. ms.

A course in art education for grades I-XI.

1203. **Price, Lena Wootten.** Course of study in art education for Oklahoma teachers college. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 140 p. ms.

This investigation, regarding present theories and practices in the teaching of art in the elementary grades, the junior and senior high schools, has sought to bring together the opinion of the best authorities in the field of art education and to apply in the teaching of art the same principles used in teaching other subjects. A suggested course of study has been formulated, based upon these opinions.

1204. **Rosell, Clarence Arthur.** An analysis of the mechanical drawing occurring in periodical literature. Master's thesis, 1929. University of Chicago, Chicago, Ill. 80 p. ms.

Twelve magazines covering various numbers of each magazine from 6-32, were included in this study. Conclusions: Need for some mechanical drawing for the layman for nonvocational purposes.

1205. **Sargeant, Mrs. Mary F.** Tendencies in contemporary American graphic arts seen in the work of some representative men and women. Evaluated as a help on judging student work. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 37 p. ms.

1206. **Vandermark, Parthenia.** An experimental study of what types of pictures children are most interested in and why. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 18 p. ms.

1207. **Vandiver, Mabel.** Theory and practice of teaching design in grades I-VI. Master's thesis, 1928. George Peabody college for teachers. Nashville, Tenn. 136 p. ms.

This study contains a compilation of the opinions of our foremost authorities on art education in order to give to the teachers of art in the elementary grades the educational essentials used in teaching design. The material has been analyzed in the light of the Report of the Federated council on art education; the courses of study from representative cities have been evaluated from the criteria for evaluating art courses by Stratemeyer and Bruner.

1208. **Walsh, Frank William.** Uses of mechanical drawing. Master's thesis, 1928. State university of Iowa, Iowa City. 66 p. ms.

1209. **Wiseltier, Joseph.** Art education for elementary schools and secondary schools. Master's thesis, February 1929. Teachers college, Columbia university, New York, N. Y. 102 p. ms.

See also 106, 1277, 2628.

TESTS

1210. **Branson, Ernest P.** Report of art test for grades VII-IX, September 1928. Department of research, Public schools, Long Beach, Calif. Report, 3 p., test, 10 p. ms.

Test devised by Mrs. Metrice A. Richard includes three sections: knowledge of color, color recognition, and comprehension of line and form. On test given in May, 1928, to 824 pupils, girls made noticeably higher scores.

1211. **Dietsch, Mildred Kathryn.** A correlation of the intelligence quotients of the drawing test with the Stanford Binet. Master's thesis, 1928-29. Ohio state university, Columbus.

1212. **Fischer, Ferdinand A. P.** Development and preliminary standardization of a series of tests for mechanical drawing. Master's thesis, 1929. University of Chicago, Chicago, Ill. 90 p. ms.

Preliminary standardization of a series of tests for mechanical drawing for high schools.

1213. **McAdory, Margaret.** The construction and validation of an art test. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 35 p. (Contributions to education, no. 383)

The purpose of this study was to construct a reliable instrument for determining consensus of agreement for order of preference of given subjects and art elements and for estimating or measuring the differences of agreement of groups and individuals.

1214. **Noel, Bernard W.** A free-hand lettering scale. Master's thesis, 1929. University of Chicago, Chicago, Ill. 67 p. ms.

The construction of the scale and the determination of its reliability. Conclusions: The scale can be used in evaluating the general merit of free-hand lettering of a group.

1215. **Tierney, Elizabeth Margaret.** A study of freshman student achievement in the school of fine arts in the University of Nebraska. Educational research record (University of Nebraska), 1: 54-63, December 1928.

The author recommends the adoption of tests to determine general intellectual abilities; these tests to be administered to the students upon entrance so that the personnel of the classes in theory of music may be differentiated accordingly.

See also 278, 396, 799.

DRAMATICS AND ELOCUTION

1216. **Cheape, Eugenia Howell.** The development and presentation of a May Day pageant. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 63 p. ms.

1217. **Gilson, Grace Ellen.** Procedures in teaching high school dramatics. Master's thesis, June 1929. University of Southern California, Los Angeles.

1218. **Hosman, Everett M.** Report on school plays questionnaire. [1929] Nebraska state teachers association, Lincoln. 11 p. ms.

Plays and operettas staged by Nebraska schools. Shows frequency of exhibition, educational and entertainment values.

1219. **Jersild, Arthur.** Modes of emphasis in public speaking. Journal of applied psychology, 12: 611-20, December 1928.

The present study raises the question as to the value of various forms of emphasis in public speaking as effected by repetition, position, and special emphasis devices. The results show that the most effective, although not the most economical, form of emphasis is repetition to the extent of three or more presentations. Repetition is most effective when the several presentations are separated by intervals of time. One of the least effective forms of emphasis is to repeat an item immediately following its first presentation; etc.

1220. **Knower, Franklin H.** Psychological tests in public speaking. Quarterly journal of speech, 15: 216-22, April 1929.

In conclusion, the writer says that when used with discretion a series of scores received from a reliable group of tests of intelligence, achievement, and personality traits may be of great benefit in aiding the development of efficiency in public speaking.

1221. ——— A suggestive study of public-speaking rating-scale values. Quarterly journal of speech, 15: 30-41, February 1929.

1222. **Kyzer, Virginia Meetze.** The dramatic methods in secondary schools of South Carolina. Master's thesis, May 1929. University of South Carolina, Columbia.

1223. **Moore, Mary E.** A sociological study of debating in northeast junior high school, Reading, Pa. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 26 p. ms.

1224. **Mundt, Mary E.** Vitalizing dramatics in the small high school. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 69 p. ms.

1225. **O'Dea, Katherine Stanislaus.** The drama as a factor in education. Master's thesis, 1928-29. Marywood college, Scranton, Pa. 50 p. ms.

1226. **Patten, Cora Mel.** Report of survey of dramatic activities in elementary schools of the United States. 1928. Drama league of America, Chicago, Ill. *Drama*, 19: 59-61, November 1928.

A survey of dramatic activities in the elementary schools in the United States during the spring of 1928.

1227. ——— Report on community and little theatre survey. 1928. Drama league of America, Chicago, Ill. *Drama*, 19: 28-29, October 1928.

A survey of children's drama and children's theatre work carried on by communities and little theatres.

1228. **Reilly, Loretto Cecilia.** The educational value of the children's theatre movement. Master's thesis, 1929. Marywood college, Scranton, Pa. 34 p. ms.

1229. **Ross, James Glenn.** Techniques for investigating psychological aspects of public speaking and some preliminary results. Master's thesis, 1928-29. Ohio state university, Columbus.

1230. **Sanderson, Virginia Somes.** Dramatic art in the secondary schools of California: a survey and critical analysis. Doctor's thesis, 1929. University of California, Berkeley. 119 p. ms.

The aim of this study was to discover by means of a survey and critical analysis, the scope, subject content, conditions, and teaching problems of dramatic art in the secondary schools of California; this to be preceded and supplemented by an investigation of knowledge already available in other theses, books and magazines. Findings: (1) no general acceptance as to the place of dramatic art in the program of studies; (2) titles, content, and method of teaching are left to a great extent to the individual teachers, who in most cases, have no training in dramatic art or preparation for teaching or supervising it; (3) dramatic art as an extracurricular activity occupies a large place in secondary school life, etc.

1231. **Smith, Eunice Winn.** Educative dramatics. Master's thesis, 1928. University of Idaho, Moscow.

1232. **Steckel, Edwin M.** Spring in Carolina. 1928-29. Gastonia public schools, Gastonia, N. C. 25 p. ms.

This pageant is the culmination of accomplishments of music and physical education departments.

1233. **True, Bert G.** Interschool debate. Master's thesis, 1929. University of Florida, Gainesville. 98 p. ms.

1234. **White, H. Adelbert.** Debating in our high schools. *School and society*, 28: 660-62, September 24, 1928.

A questionnaire study of the organization, popularity and results of debating in the high schools based upon replies from 24 States.

See also 37, 237, 736, 1143.

SCHOOL JOURNALISM

1235. **Dewlaney, Barbara Constance.** A study of problems confronting high school teachers of newswriting in California. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1236. **Fleenor, Leonard Alonzo.** An analysis of the content, management, and cost of high school annuals. Master's thesis, July 1929. University of Minnesota, Minneapolis.

1237. **Long, Hazel Gertrude.** Methods of teaching journalism in secondary schools. Master's thesis, June 1929. University of Southern California, Los Angeles.

1238. **Michaelson, William E.** The school newspaper in North Dakota. Master's thesis, January 1929. University of North Dakota, Grand Forks. 97 p. ms.

Financing, analysis of content, supervision, management, mechanical make-up, and purposes of school papers are presented and evaluated.

1239. **Snyder, Gladys Lillian.** Making the high school annual. Master's thesis, June 1929. University of Southern California, Los Angeles.

1240. **Stollar, Paul Stewart.** The printing and management of student publications in the larger high schools of California. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1241. **Thomure, Laura R.** Developing scales for rating junior high school publications. Master's thesis, 1929. University of Chicago, Chicago, Ill. 207 p. ms.

Development of rating scales for junior high school magazines and newspapers; their application to 100 newspapers and 60 magazines. Conclusions: Rating scales are useful in measuring junior high publications; many criteria for measuring these publications need special attention to encourage improvement.

THRIFT

1242. **Burton, Mrs. Henrietta K.** A study of the trends in savings accounts. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The study of 5,000 records taken by numerical sampling from the files of the Bowery Savings Bank, New York city, shows that girls deposit at earlier ages than do boys and outnumber the latter; most of the junior depositors are still attending school; few foreign-born children had savings accounts; there were few savers between the ages of 15 and 20.

1243. **Comer, Harry F.** Saving for education through an educational savings stamp plan integrated with the State public school system in North Carolina, using the plan at the same time as a thrift education project. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 65 p. ms.

SAFETY

1244. **Branson, Ernest P.** Study of serious accidents reported, 1921-1929. April 1929. Department of research, City schools, Long Beach, Calif. 3 p. ms.

Accidents classified, as follows: apparatus, games, individual accident, shop accident, collisions, other accidents involving more than one person, accidents occurring only three times or less.

1245. **Spencer, T. E.** Report of the director of reference, research and publicity. Report no. 1. February 1929. Public schools, St. Louis, Mo. Printed, proof sheet, 1.

Results of a survey of practice in other cities in regard to boy patrols in the public schools. Of 32 cities replying, 26 have safety patrols.

1246. **Stack, Herbert James.** Safety education in the secondary schools: objectives and materials of instruction. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York, National bureau of casualty and surety underwriters, 1929. 157 p. (Educational series, vol. IV)

The purpose of this investigation was to determine objectives and materials in safety education to be used in the subject matter fields of the secondary schools; to show the need of safety education in the secondary schools; and to determine valid objectives and materials for teaching safety.

1247. **Woodward, Jesse Carl.** Fire drills in the schools. Master's thesis, 1929. Ohio state university, Columbus.

This is a survey of the state requirements, legal and otherwise, in regard to fire drills in the school, including instruction in fire prevention, etc., recommended minimum requirements for the state and a suggested set of rules for conducting fire drills in the schools. Findings: 26 states require fire drills in the schools; wide variations as to provisions governing these in regard to frequency, types of buildings, who included, instruction in fire prevention, providing courses of study, penalties for violations, etc. Out of a comparative study of these requirements and recommendations and a realization of the seriousness and prevalence of school fires, a list of recommended minimum state requirements in regard to fire drills was derived. A set of suggested rules governing the administration of these fire drills was then drawn up to provide a technique for properly meeting these recommended minimum state requirements for fire drills in the schools.

See also 329.

PRESCHOOL, KINDERGARTEN, AND PRIMARY EDUCATION

1248. **Armstrong, Marjorie Ruth.** A study of psychological test results as significant for the understanding of the behavior of preschool children. Master's thesis, 1929. Smith college, Northampton, Mass. 156 p.

1249. **Bynum, Mary Rees.** A study of the kindergarten in Mississippi in 1929. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 56 p. ms.

1250. **Carter, Cornelia.** Activity program for primary department. 1928-29. Public schools, Charlotte, N. C. Ms.

A study which had for its aim making school a part of life, rather than a preparation for life.

1251. **Cox, Mrs. E. L., jr.** Activity program of first grade. 1928-29. Public schools, Durham, N. C. 30 p. ms.

This study had as its object the enlargement of children's experience. Gives the results of a year's program based upon such interests as, a play house, farm, pets, holidays, dramatization, city life, school, garden, chapel program.

1252. **Davidson, Helen Pye.** An experimental study of bright, average, and dull children at the four-year mental level. Doctor's thesis, 1929. Stanford university, Stanford University, Calif.

Three groups of preschool children were used for this study, one group of five bright three-year-olds, one of four normal four-year-olds, and one of four dull five-year-olds. So far as the subjects of this experiment are concerned, it was found that at least some children with a mental age of four years can learn to read in a manner comparable with the success of average first-grade children, although individual differences are very large. Bright, average, and dull children; all of the same mental level, do not learn to read equally well under the same experimental conditions, the bright three-year-olds being very superior to the others, and the average four-year-old children being appreciably superior to the dull five-year-old children.

1253. **Davis, Mary Dabney, comp.** Nursery schools in the United States, 1928-29. Washington, D. C., 1929. 16 p. ms. (U. S. Bureau of education. City school circular, no. 11, March 1929)

1254. **Detroit teachers college, Detroit, Mich.** Experimental studies in preschool education. Detroit, Mich.; Detroit teachers college, 1929. 46 p.

Prepared by William H. Pyle and Helen Katharine Murphy.

1255. **Dougherty, Linus Milford.** Nature and scope of preschool education in the United States. Master's thesis, 1929. Catholic university of America, Washington, D. C. 57 p. ms.

1256. **Edmonds, Edna Deaton.** Provisions for kindergarten training in North Carolina. Master's thesis, 1928. University of North Carolina, Chapel Hill.

The data for this study were obtained by means of questionnaires sent to the superintendents of the 86 largest cities in North Carolina. The study reveals the fact that the people of North Carolina apparently have not awakened to the values of and needs for kindergartens.

1257. **Felton, Mrs. B. S.** An observational study of the behavior of a preschool child from notes taken by a mother in the home during a two-year period. Master's thesis, 1929. Cornell university, Ithaca, N. Y.

1258. **Fenker, Irma Sander.** Specific studies made from nursery school data, summers, 1927-28. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 61 p. ms.

1259. **Flack, Hally.** An analysis of the functions of the nurse and social worker in a nursery school. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 41 p. ms.

1260. **Goodenough, Florence L., and Brian, Clara E.** - Certain factors underlying the acquisition of motor skill by preschool children. *Journal of experimental psychology*, 12: 127-55, April 1929.

An experimental study of the motor skill of preschool children, in which practically no relation was found between initial status and gain.

1261. **Hammack, Isabella S.** Techniques of nursery school observation. Master's thesis, 1929. University of California, Berkeley. 79 p. ms.

Gives: (1) A description of techniques of observation of nursery school children based on results of questionnaires sent to 46 nursery schools under the administration of educational institutions in the United States; (2) A summary of results and description of a preliminary study of the overt effects of observation on the behavior of children at the Institute of child welfare of the University of California. Findings: It is important that there should be careful scheduling and control of observation of adults. The results of observation on most of the children was negligible.

1262. **Harley, C. Winifred.** What is the worth of a diary record? (To the nursery school teacher). Merrill-Palmer school, Detroit, Mich. Childhood education, 5: 293-41, January 1929.

1263. ——— What the nursery school contributes to the day nursery. Merrill-Palmer school, Detroit, Mich. Child health bulletin, 5: 77-80, May 1929.

1264. **Hollingshead, Billie.** Curriculum adjustment and the half-day session in first and second grades—Provo. Master's thesis, 1929. Brigham Young university, Provo, Utah. 62 p. ms.

1265. **Jones, Harold Ellis; Jones, Mary C., and Wolff, Lotta V.** Data collection upon the development of children enrolled in the nursery school at the Institute. 1928-1929. Institute of child welfare, University of California, Berkeley.

In this study data were collected concerning 50 nursery school children, between the ages of 18 and 54 months. By systematic observation, measurement, physical examination, and photography, and by special laboratory methods involving apparatus assemblies information was gathered at regular intervals concerning the anatomical, physiological, and psychological development of these children.

1266. **Katz, Edwin.** Present status of experimental studies of motor and social development of the preschool child. Master's thesis, 1929. College of the city of New York, New York, N. Y. 91 p. ms.

Survey of texts, journals, etc. since about 1918.

1267. **Lincoln, Nebr. Public schools. Department of measurements and research.** Study of 50 children entering kindergarten before 5 years of age—admitted to the Lincoln city schools. 1929. 8 p. ms.

From this study it appears that the children who entered as special cases carry on the work in a creditable way, that they are better than average in school work, and that their attendance is affected very little because of their youth, and that school achievement is fairly well predicted by mental age at entrance.

1268. **Ludwig, Gladys, and others.** Body temperature in children at nursery school. 1928-29. Institute of child welfare, University of California, Berkeley.

A study of the variations in rectal temperature occurring at the nursery school in 18 children between the ages of 21 months and four years. The marked lability of temperature in these children is clearly shown in relation to exercise and relaxation.

1269. **Macfarlane, Jean W.; Wolff, Lotta V., and Atsatt, Marjorie.** A study of behavior problems in pre-school children. 1928-29. Institute of child welfare, University of California, Berkeley.

Data were gathered concerning the physical, mental, emotional, social and economic factors associated with the behavior anomalies of 36 children between the ages of 3 and 6 years.

1270. **Miller, Eleanor Omstead.** A study of the pre-school child's picture and story books. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

1271. **Nash, Corinne.** A study of the vocabulary of primary school pupils. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 51 p. ms.

1272. **National society for the study of education.** The twenty-eighth yearbook. Preschool and parental education. Pt. I, Organization and development; Pt. II, Research and method. Bloomington, Ill., Public school publishing company, 1929. 875 p.

Dr. Lois Hayden Meek, chairman.

Pt. I contains chapters dealing with general history and basic considerations, followed by surveys of the agencies and their activities concerned with educating preschool children and parents. Pt. II discusses methods of educating young children and parents, and includes reports of research in child development.

1273. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** Standards for modernization of primary classrooms. 1929.

1274. **O'Grady, Rita Frances.** An investigation of spoken phantasy in preschool children. Master's thesis, 1929. Catholic university of America, Washington, D. C. 32 p. ms. (Washington child research center, Washington, D. C.)

Spoken phantasies of five children between the ages of three and six were investigated to determine the content and type of the phantasy, influence of environment, play and conflict, and the effect of phantasy on personality. Types of phantasy were studied by means of a dictograph machine—thus recording objectively the conversation of a child. Findings: Phantasy can be divided into two types, namely, casual and systematic.

1275. **Osborn, Charlotte.** Effect of kindergarten training upon first grade readiness. Master's thesis, 1929. State university of Iowa, Iowa City. 46 p. ms.

1276. **Portland, Oreg. School district no. 1. Department of research.** Kindergarten report, term ending January 1929. 5 p. ms.

A city wide survey of kindergarten children to discover their success or failure at the end of the first grade.

1277. **Pyle, William H., and Murphy, Helen K.** Experimental studies in preschool education. Detroit, Mich., Teachers college, 1929. (Bulletin)

A study of the possibilities of instruction in preschool music, art, and literature.

1278. **Raybold, Emma.** Comparison of B-1 entering children with and without kindergarten experience. 1929. City schools, Los Angeles, Calif.

1279. **Rugg, Harold; Krueger, Louise, and Sondergaard, Arensa.** Studies in child personality: I—A study of the language of kindergarten children. *Journal of educational psychology*, 20: 1-18, January 1929.

A study of the language behavior of 27 children to ascertain the predominant personality traits as revealed by their language.

1280. **Smith, Mary Flora.** Pre-school work under the direction of the Woman's home missionary society of the Methodist Episcopal church. Master's thesis, 1929. State university of Iowa, Iowa City. 171 p. ms.

1281. **Stone, Esther Gunhild.** A study of values of the free activity period in kindergarten. Master's thesis, 1929. University of Denver, Denver, Colo. 61 p. ms.

Finds free activity period gives the child an opportunity to develop good social habits; helps the backward, slow, timid child to gain confidence in himself and approval of the group. It especially helps the child with a low I. Q.—usually shoved to the background.

1282. **Sweeny, Mary E.; King, Helen; Wilson, Charles A., and Hejinian, Lucea.** A method of recording the posture of preschool children. Detroit, Mich., Merrill-Palmer school, 1929. 33 p.

Review of methods of testing and recording posture; evolution of a photographic method of recording posture; summary of equipment; technique of handling child; printing the photographs; measurements on the photographs and interpretation; records of foot conditions.

1283. **Thurston, Flora M.** A preliminary study of the factors affecting the time taken by nursery school children to eat their food. *Pedagogical seminary and Journal of genetic psychology*, 36: 303-18, June 1929.

Two groups of nursery school children ranging in age from 1 year and 7 months to 3 years and 10 months were studied from the standpoint of the amount of time they took to eat a standardized meal of three courses.

1284. **Tilson, Marie Agnes.** Problems of preschool children; a basis for parental education. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 90 p. (Contributions to education, no. 356)

An analysis of the 14 problems more often presented by 225 preschool children referred to seven habit clinics. Opinions of specialists in child care concerning the importance of the home in child care and training are given. Contains also history of habit clinics in the United States and suggestions for use of data in parental education.

1285. **Tupper, Helen B.** The effect of systematic training upon food intake and concentration during feeding of preschool children. Master's thesis, 1929. University of Chicago, Chicago, Ill. 122 p. ms.

Study in the nursery school of feeding problems of eight 4- and 5-year olds. Experimental and control groups. Training was given to experimental group before and during lunch period to improve attitude and food habits. Conclusions: "Problem eaters" improve both in food intake and concentration with a systematic type of training at 4 and 5 years of age.

1286. **Walsh, Mary Elizabeth.** The nursery school and behavior. Washington, D. C., National Catholic school of social service, 1929. 9 p. (Social science monographs, vol. 1, no. 2, September 15, 1929)

A study of the effect of attendance at a nursery school on personality traits. The Bonham-Sargent scale was used. Findings: In general the nursery school children became less inhibited, more spontaneous and more socialized, developed more initiative, independence, self-assertion and self-reliance, revealed a greater increase of curiosity and interest in respect to the objects of their environment, and showed a greater gain in the formation of orderly habits.

1287. ——— The relation of two, four or six months period of nursery school training to the development of certain personality traits. Master's thesis, 1929. Catholic university of America, Washington, D. C. 38 p. ms.

Twenty-two nursery school children were tested for personality traits on admission and again after two, four or six months' training. Control group of 21 tested at same age levels and again after a period of two, four or six months. The experimental group showed a greater degree of development than the control group in initiative, independence, self-assertion, self-reliance, spontaneity, socialization, curiosity, and order.

1288. **Warth, Ellen Wood.** A study of the nutrition of a pre-school child. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 46 p. ms.

1289. **Webb, Elmer Ione.** Vocabulary of a kindergarten child in a limited sphere of summer activities. Master's thesis, 1929. State university of Iowa, Iowa City. 106 p. ms.

1290. **Wright, Pearl M.** A comparative study of traditional and activity programs in the primary grades. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

See also 183, 193, 259, 265, 284, 306, 309, 311, 318, 322, 333, 337, 343, 354, 473, 546, 575, 579, 581, 597, 600, 607, 610-611, 680, 633, 668, 672, 898, 1104, 1448, 1498, 2069-2070, 2090, 2104, 2290, 2333, 2355, 2359, 2381, 2449, 2513, 2628, 2891, 2934.

ELEMENTARY EDUCATION

1291. **Baldwin, Bird T.** The educational growth of elementary school children. Iowa child welfare research station, State university of Iowa, Iowa City. Journal of educational psychology, 19: 521-35, November 1928.

The aim of this article is to summarize briefly the educational growth of the pupils as determined by the application of the Stanford achievement educational tests in five elementary schools in Cleveland, Ohio.

1292. **Bruene, Elizabeth.** Effect of the summer vacation on the achievement of pupils in the fourth, fifth and sixth grades. Journal of educational research, 18: 309-14, November 1928.

The Stanford achievement test, Form A, was given to the fourth, fifth and sixth grades of the University training school of the University of California at Los Angeles, in May 1927. In September 1927 the Stanford achievement test, form B, was given to the same grades. The data here presented indicate that in arithmetic computation there is a decided detrimental effect, in arithmetic reasoning the loss was negligible. In reading the effect of the summer vacation is on the positive side, with slight gains also in nature study and science. The vacation brought a loss in spelling, language usage, and in history and literature.

1293. **Bullock, Augustus Rufus.** An educational survey of the placement of pupils in the elementary grades of Salisbury city schools. Master's thesis, 1928. University of North Carolina, Chapel Hill.

The purposes of this survey were twofold: (1) To point out and compare the discrepancies between the actual grade placement of pupils in the elementary grades of the Salisbury city schools and the grade achievement; and (2) to make recommendations for the solution of existing conditions, so that the individual needs of the pupils may be met more adequately.

1294. **Evans, Roy Vincent.** What effect has summer vacation on school achievements? Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 73 p. ms.

1295. **Fulghum, Susan.** Standard elementary schools in North Carolina. 1928-29. State department of public instruction, Raleigh, N. C. 14 p. ms.

This study deals with the increase in number of standard elementary schools, five-year progress, report on libraries in standard schools, outstanding needs in elementary education and a complete list of standard elementary schools.

1296. **Jones, James Bate.** The adaptability of our state elementary school curriculum to boys as compared with girls. Master's thesis, 1928. University of North Carolina, Chapel Hill.

Measurements of 178 boys and 176 girls were obtained in age, reading comprehension, arithmetic fundamentals, arithmetic problem solving, and in intelligence. Conclusions: (1) There is an apparent difference between boys and girls in all factors measured in each grade; (2) the curriculum appears to be better adapted to girls than to boys, but to no significant extent; (3) there are no definite, consistent trends; (4) the correlation between each pair of traits is higher with girls than with boys; and (5) there is no real problem in adjusting the curriculum to the sexes.

1297. **McAnulty, Ellen Alice.** Distribution of intelligence in the Los Angeles elementary schools. Educational research bulletin (Los Angeles, Calif.), 8: 6-8, March 1929.

Conclusions: The percentage distribution of intelligence quotients shows a significant difference for the various types of schools; the percentage of mentally retarded children is greatest for the neighborhood type of school, and least for the normal type of school. The reverse is true of the children of superior mentality.

1298. **Mager, Clara M.** Pupil activities in the fifth grade as evidenced by courses of study. Master's thesis, 1929. University of Chicago, Chicago, Ill. 153 p. ms.

This is an analysis of 30 state, city and training school courses, which yielded 12,958 pupil activities. Findings: Activities provided by courses of study are of the proper type for the all-round development of the child, but are unequally distributed.

1299. **Morrison, Roy Williamson.** Some inequalities in North Carolina elementary schools. Doctor's thesis, 1928. University of North Carolina, Chapel Hill.

Seventeen North Carolina elementary schools were selected for study. It was found that: (1) Approximately one half of the pupils in the elementary school had been eliminated before they reached the seventh grade; (2) a large proportion of those pupils who remained in school had repeated one or more grades; (3) a considerably larger proportion of repeaters than of nonrepeaters had been eliminated; (4) there were differences in children's rates of progress in achievement which correspond to the differences in the rates of their progress through the grades; and (5) from lower to higher grades a progressively larger proportion of pupils were handicapped in their development by having been placed one grade or more too high or too low.

1300. **Nelson, Martin J.** The differences in the achievement of elementary school pupils before and after the summer vacation. Doctor's thesis, 1929. University of Wisconsin, Madison. Madison, Wis., University of Wisconsin, 1929. 48 p. (University of Wisconsin. Bureau of educational research bulletin, no. 10, June 1929)

Grades 3, 5, and 7 were studied in various subjects and in general intelligence. Findings: It required from two to fifteen weeks for pupils to regain in the fall the spring level of achievement.

1301. ——— How much time is required in the fall for pupils of the elementary school to reach again the spring level of achievement? Journal of educational research, 18: 305-308, November 1928.

* The results of this study may be summarized by saying that grade 7B had regained the spring level of achievement in speed in solving arithmetic problems involving only the fundamental processes, at the end of four weeks. In the number of problems solved correctly, they had reached the spring average six weeks after the opening of school, and in spelling within two weeks.

1302. **Thomas, Mattie Elizabeth.** South Carolina elementary school manual. Master's thesis, May 1929. University of South Carolina, Columbia.

See also 6, 12, 15, 80, 85, 127, 134, 141, 152, 196, 359, 367, 378, 390, 408, 410-412, 419, 475, 528, 1306, 1337, 1396, 1439, 1453, 1460-1461, 1464, 1467-1468, 1483, 1524, 1536, 1564, 1573, 1881, 1979, 1998, 2013, 2020-2021, 2028, 2032, 2301, 2319-2320, 2332, 2346, 2368, 2390, 2392, 2407, 2409, 2554, 2560, 2585, 2902, 2931, 3000; and under School management; Special subjects of curriculum.

SECONDARY EDUCATION

1303. **Arkansas. State department of education.** High school reorganization. Little Rock, Arkansas State department of education, 1929. 44 p.

A survey of the high school course of study and the teaching staff. The study includes the size of high school, curriculum offerings, professional training of teachers employed, teaching combinations, etc. Data as to findings are unpublished. The printed bulletin presents the reorganized course of study and the training courses required of teachers.

1304. **Baer, Joseph A., and Soper, Wayne W.** High school changes suggested by teachers and principals. Study made under the direction of a committee of the New York state associated academic principals. [1929?] New York state education department, Albany. (Summary, 8 p. ms.)

The study is based on questionnaires filled out by high school teachers and principals in which an opportunity was given to express opinions with regard to desirable changes in curriculum, administration and general function of the high school.

1305. **Bain, V. D.** A survey of Springfield high school, Springfield, Oreg. Master's thesis, June 1929. University of Oregon, Eugene. 86 p. ms.

This study, made to discover the problems and needs of Springfield high school, Springfield, Oreg., deals with the pupils, school plant, organization and control, finance, instruction, teaching staff, and student activities. Recommendations are given for the solution of problems faced by school.

1306. **Beik, A. K.** The relation of classroom success of children in college preparatory courses of the high school to their rate of progress in the elementary school. State college for teachers, Albany, N. Y. *Journal of applied psychology*, 12: 429-36, August 1928.

65 high school freshmen and 1,290 high school graduates entering college were included in the study. Children who repeat grades in elementary school from lack of ability are less likely to succeed in high school. Those who skip grades in elementary school successfully are more likely to rank high in high school; they are also more likely to go into college with state scholarships earned in high school (New York State) than either those who repeated or those who made normal progress in elementary school.

1307. **Biddle, Anna Eleanora.** An analytic study of one class in high school. Doctor's thesis, 1928. University of Pennsylvania, Philadelphia. (Reprinted from the *Psychological clinic*, 17: 97-118)

1308. **Blanchard, Everett Ellis.** Elementary statistics as applied to secondary education. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1309. **Boyce, George A.** Is the private school fulfilling its function? *School review*, 37: 347-62, May 1929.

Data were collected concerning 250 private schools in 34 states.

1310. **Bradley, Raymond J.** A study of programs of study in use in American high schools. Doctor's thesis, 1929. University of Minnesota, Minneapolis.

A nation-wide study in towns of 1,000 and over.

1311. **Bridge, Laura Belle.** Major factors conditioning success of high school seniors before graduation. Master's thesis, June 1929. University of Southern California, Los Angeles.

1312. **Bursch, Charles W.** Taking stock of high school teaching. *Nation's schools*, 3: 44-48, April 1929.

A report of the development of a technique and the results of the use of that technique in observing 62 English and history classes in two medium-sized California high schools.

1313. **Causey, O. S.** The grades and distribution of 500 high school graduates. Master's thesis, 1928-29. Howard college, Birmingham, Ala.

1314. **Clayton, Clarence B.** Certain important problems of administration arising from the changing student personnel in high school. Master's thesis, 1929. Indiana university, Bloomington. 84 p. ms.

This study was limited to the Manual training high school of Indianapolis. Findings: The changing student personnel of the school caused a decrease in number of students enrolled from 2,976 in 1926-27, to 2,058 in 1927-28, and a decrease in subject enrollments from 26,032 in 1926-27, to 18,061 in 1927-28, a decrease

of 31 per cent. There was a general decrease in the enrollments in mathematics and foreign language and corresponding increase in science, commercial work, and physical training; per cent of failures and per cent of enrollments in elective subjects seemed to vary inversely. Cost of instruction decreased 7 per cent from 1926-27 to 1927-28; enrollments decreased 31 per cent; number of teachers decreased 13 per cent; salaries of teachers increased 3 per cent; and cost of instruction per credit increased 42 per cent.

1315. **Clifton, John Leroy.** The small secondary school in Ohio. A study of its potentialities and shortcomings. Doctor's thesis, 1929. [Ohio state university, Columbus] Columbus, Ohio, R. G. Adams and company, 1929. 131 p.

1316. **Cole, Robert Danforth.** Private secondary education for boys in the United States. Philadelphia, Westbrook publishing company, 1928. 353 p.

This study, after presenting certain general statistics, deals with the legal principles underlying the existence of private secondary schools for boys, their aims and curricula, personnel, organization and administration, etc.

1317. **Coleman, Clarence T.** A comparison of the disciplinary problem pupil with the ideal pupil in high school. Master's thesis, 1929. University of Chicago, Chicago, Ill. 135 p. ms.

One hundred and twenty-five pupils who frequently caused disciplinary difficulties in high school were compared with a like number of pupils who were in no way identified with misconduct. The points of comparison were I. Q.'s, school record, activities outside the traditional school subjects, family relationships, home conditions, attitude, plans for the future, and health.

1318. **Cook, Inez M., and Goodrich, T. V.** How high school pupils spend their time. School review, 36: 771-78, December 1928.

The investigation of high school student's use of time indicates a wholesome balance of activities and that no general reform is needed.

1319. **Crow, L. D.** A study of parent, teachers and student cooperation in high school. School and society, 29: 553-56, April 27, 1929.

An attempt to impress each group with its responsibility for pupils' progress by means of questionnaires.

1320. **Daniel, Joseph McTyeire.** South Carolina high school graduates in South Carolina colleges. Master's thesis, July 1929. University of South Carolina, Columbia.

1321. **Devera, Andres B.** The development of public high schools in the Philippine Islands. Master's thesis, 1929. University of Chicago, Chicago, Ill.

1322. **Feingold, Gustave A.** Scholarship, attendance and deportment. School and society, 28: 333-35, September 15, 1928.

An analysis of the scholarship records, by semesters, of 183 high school graduates and their attendance and deportment records, which shows that frequent absence from school is responsible, in part, for poor achievement.

1323. **Focht, William Ralph.** A study of the records and reports of the smaller high schools of Southern California. Master's thesis, June 1929. University of Southern California, Los Angeles.

1324. **Freeman, Loren K.** A study of pupils who re-entered Alton high school. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1325. **Garretson, Oliver Kelleam.** Relationships between expressed preferences and curricular abilities of ninth grade boys. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 77 p. (Contributions to education, no. 396)

Results of a questionnaire administered to 1,882 boys enrolled for the first time in the ninth grades of three public high schools of New York City.

1326. **Gerberich, J. Raymond.** A study of the Iowa high school survey, 1923-1928. Doctor's thesis, 1929. State university of Iowa, Iowa City. 365 p. ms.

1327. **Hawks, Lena J.** - Certain relationships between scholarship in high school and in college. Doctor's thesis, June 1929. Johns Hopkins university, Baltimore, Md. (To be published in the Johns Hopkins university studies in education.)

Works out correlations between high school grades and first year college work, using data from Johns Hopkins college of arts and science, Vanderbilt university, and Gettysburg college.

1328. **Holden, Theodore.** A high school for Doddridge county. 1928-29. West Virginia university, Morgantown.

1329. **Hollingsworth, J. E.** Judgments of superintendents, principals and supervisors as to the best practices in realizing the seven aims of education. Master's thesis, 1929. Iowa state college, Ames. 78 p. ms.

A total of 139 schools, from 26 states and Hawaii contributed to the study. Findings: (1) The seven aims of education have not been completely accepted; (2) the general tendency is to secure more student activities; (3) the extent that schools are attempting to realize the vocational aim is not shown accurately; (4) the 6-3-3 and 6-6 plans of organization seem to be gaining in popularity; (5) officials in our better schools are not satisfied with their accomplishments; (6) school officers, as a group, have an attitude which gives promise of greater achievements.

1330. **Jessen, Carl A.** Requirements for high-school graduation. Washington, United States Government printing office, 1928. 24 p. (U. S. Bureau of education. Bulletin, 1928, no. 21)

1331. **Keal, Harry M.** Mental ratings, scholarship and health. School and society, 28: 277-80, September 1, 1928.

Traces the progress through high school of a large group of pupils, differentiated as to high, medium and low mental ratings secured by means of group tests. The experiment included individual diagnoses and prognoses, tests, and, in the case of the low rating group, physical examinations and corrective work. The results showed a larger percentage of the lower group remaining at the end of the course than had been assumed from the mental ratings and lower percentages for the high and medium groups. 100 per cent of the failing pupils of normal mental health were found to be suffering from physical defects. In each case of the low group remaining corrective work had been done. It is concluded that mental ratings determined by group tests are not alone reliable bases of prediction of success.

1332. **Klosterkemper, Rev. Herbert A.** The accrediting system and its relation to Catholic high schools. 1929. Catholic university of America, Washington, D. C.

The first part of the study treats of the history and nature of the accrediting system together with its effects on secondary education in general; the second part investigates the influence of the accrediting agencies on Catholic secondary education. Replies from 125 Catholic high schools showed, in general, a favorable influence from secular accrediting agencies. There were, however, several instances where accrediting was undesirable from a Catholic viewpoint, e. g., textbook requirements.

1333. **Koch, Harlan C.** A preliminary and partial report on the status and functions of department heads in senior high schools. April 1929. Teachers college, University of Nebraska, Lincoln. 83 p. ms.

1334. **Koos, Leonard V.** Secondary education in California. Report of a preliminary survey. Sacramento, California state department of education, 1929.

An abstract of this report is contained in the California quarterly of secondary education, 4: 73-81, October 1928.

The following topics are discussed: The growth of secondary education in California, types of districts and schools, the development of higher education as affecting secondary schools, the students, the curriculum, the teaching staff and financial problems.

1335. **Landis, Henry G.** A study of the correlation between attendance and scholarship in two senior high schools. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1336. **Larsen, Henry.** Analysis of nationality and other factors as possible influences upon mental test scores and high school grades. Master's thesis, 1928. University of Washington, Seattle. 120 p. ms.

Findings: There seems to be no nationality problem. After all, the chief matter of mental differences is that of relative amounts of differences, within the nationality groups themselves.

1337. **Levi, Isabelle J.** Student leadership in elementary and in junior high school and its transfer into senior high school. Doctor's thesis, June 1929. University of Cincinnati, Cincinnati, Ohio.

1338. **Loftus, Mary Ruth.** Growth of secondary education in St. Louis. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1339. **Lyseth, H. C.** Tabulation of the results of the personality questionnaire. 1929. State department of education, Augusta, Maine. 6 p. ms. (Also in Journal of proceedings of Maine teachers association)

Data were secured from nearly 2,500 pupils of the graduating classes of the secondary schools of Maine. Results: English was the subject best liked, and the subject which was considered of the greatest benefit; 14.1 per cent wished they had studied Latin; clearness of explanation was the trait most commendable in teachers; honor was the quality most admired among both boys and girls; American magazine was the favorite magazine; Lindbergh was the living character most admired; etc.

1340. **McGinty, Mary Louise.** Prejudices. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 35 p. ms.

1341. **Mathias, Oliver J.** The growth of emphasis upon worthy home membership as an objective in secondary education. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1342. **Mayfield, John C.** A comparative study of two groups of pupils in the university high school of the University of Chicago. University of Chicago. Chicago, Ill., 1928.

1343. **Myers, C. E.** Hampton city high school. February 15, 1929. State department of education, Richmond, Va. ms.

1344. ——— **Groseclose, H. C., and Peters, D. W.,** Reorganization of secondary education in Charlotte and Prince Edward counties, Va. May 1929. State department of education, Richmond, Va. ms.

1345. **Nichols, M. Louise.** The high-school student and scientific method. Journal of educational psychology, 20: 196-204, March 1929.

An experimental study from which the author concludes that a certain proportion of the girls entering the South Philadelphia high school acquire little in the way of mental training.

1346. **Oakland, Calif. Public schools.** Department of research and auxiliary agencies. Clerical help in the senior high school. 1929. Pt. I. The basis of assignment of clerical help, 69 p. ms.; Pt. II. Office arrangement and routine duties of each clerical position, 83 p. ms.

1347. **O'Brien, F. P.** A six-year study of selection, persistence and achievement in high school and college. University of Kansas Bulletin of education, 2: 1-28, April 1929.

Findings: Of the 6,547 students who completed the high school course, 39 per cent entered college; there was an evident tendency for the high school graduates who entered college to rank above the average of the total group of high school graduates in the mental test record; but 43 per cent of the high school graduates who did not enter any college ranked above the average in mental ability. Forty-one per cent of the number that entered college graduated from college, 57 per cent withdrew from college and two per cent are still pursuing their work; etc.

1348. **Ohio. Department of education.** Ohio high school standards. 1929 edition. Prepared by T. Howard Winters. Columbus, Ohio, The F. J. Heer printing company, 1929. 171 p.

A survey of the present high school situation in Ohio, containing definitions of terms, standards, equipment, outlines of courses, extracurricular activities, etc.

1349. **Oklahoma. Department of education.** High school reorganization. Oklahoma City, Department of education, 1928. 83 p. (Bulletin no. 119, October 1928)

A committee of educators in Oklahoma, with Dr. J. Henry Highsmith of North Carolina as chairman was selected to study existing conditions and to formulate a reorganization program. A number of conferences were held and this bulletin contains the report of the committee. The work was limited to high schools in which fewer than seven teachers are employed because the larger schools employ a sufficient number of teachers to limit the work of each to a single field.

1350. **Oregon state teachers association. Research committee.** Report of the committee to measure certain factors of efficiency in Oregon high schools. 1929. 31 p. ms.

1351. **Painter, William I.** A vocabulary study of the Indiana state adopted high school texts. Master's thesis, 1929. Indiana university, Bloomington. 79 p. ms.

The results of this study show that the total vocabulary burden of the sophomore year seems to be far greater than that of any other year, while there is very little difference between the vocabulary burden of the freshman, junior, and senior years.

1352. **Palm, R. B.** Factors of size of high school and popularization of secondary education in the United States. Master's thesis, 1928. University of Minnesota, Minneapolis.

Statistical analysis of the influence of such factors as density of population, race, nationality of people, intelligence, per capita wealth, and the like upon popularization and size of high schools.

1353. **Patterson, M. Rose.** Investigations of achievement of secondary school pupils. September 1928–August 1929. Bureau of research, Department of education, Baltimore, Md. 96 p. ms.

This includes the following studies: (1) Reading ability of pupils entering junior high schools, September 1928; (2) Ability in fundamental processes and reasoning in arithmetic of pupils entering our junior high schools, September 1928; (3) 8 A algebra; (4) Latin in 8 B, 8 A, and 9 B; (5) Commercial arithmetic and typing; (6) Ability in fundamental processes and reasoning in arithmetic of pupils entering our junior high schools, February 1929; (7) Survey test in geography for pupils entering our junior high school, February 1929; (8) Results of Detroit history test; (9) Results of Detroit chemistry test; (10) Results of a survey of spelling in all grades in our junior high schools; (11) Results of 9 A French test; (12) Latin in 8 B, 9 B, and 9 A; (13) Algebra test to 8 A classes in colored schools; (14) Commercial arithmetic and typing.

1354. **Philadelphia, Pa. Board of public education. Division of educational research and results.** Cooperative program for the study of the relations of secondary and higher education. Report on mental ability of Philadelphia 12 B pupils as measured by scores in Otis test of mental ability, higher examination. Philadelphia, October 31, 1928. 21 p. ms. (Bulletin, no. 97)

1355. ———— Cooperative program for the study of the relations of secondary and higher education. Report on the subject matter test scores of Philadelphia 12 B students. Philadelphia, Pa., February 15, 1929. 57 p. ms. (Bulletin, no. 109)

1356. **Phipps, C. H.** A comparative survey of the public and private secondary schools of the State of Virginia. Master's thesis, September 1928. University of Virginia, Charlottesville.

1357. **Pierson, Celia D., and Nettels, Charles H.** A study of high-school seniors to determine who shall be recommended to college. School and society, 28: 215–16, August 18, 1928.

Describes a two-year study conducted in a Los Angeles high school for the purpose of effecting a more scientific method of arriving at a decision of individual recommendation to college. It involved the setting up of a procedure for a thorough study of the personnel of the senior class and the comparison of the high school scholarship and character ratings of 50 members of the class with their college freshman scholarship reports. The statement is made that the study is merely preliminary to what might and should be done in this direction.

1358. **Beavis, William C., and Butsch, Russell L. C.** Abstracts of unpublished masters' theses in the field of secondary-school administration. Cicero, Ill., Department of secondary schools principals of the National education association, 1929. 202 p. (Bulletin of the Department of secondary school principals of the National education association, no. 24, January 1929)

1359. ———— and **Woellner, Robert.** Labor-saving devices used in office administration in secondary schools. School review, 36: 736–44, December 1928.

522 secondary schools were investigated in order to find the percentage of schools using typewriters, filing cabinets, telephones, mimeographs, and program clocks. The mimeograph is the most common form of duplicating machine; the adding machine, the most common calculating device; and the filing cabinet, the most common device for increasing personal efficiency.

1360. **Reavis, William C., and Woellner, Robert.** The time and the personnel available for administrative duties in secondary schools. *School review*, 36: 576-92, October 1928.

Data secured from 522 secondary school principals representing all but four states in the union. The conclusion reached is that the number and character of assistants, the amount of clerical service, and the time available for administrative work are such that secondary school principals in general have organizations which should enable them to project and carry out efficient programs of administration.

1361. **Remnitz, Annabel.** A comparative study of the scholastic achievement of boys and girls in high school. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1362. **Sanguinet, E. H.** Trends of secondary education as shown by reports of some major committees. *Educational administration and supervision*, 14: 559-73, November 1928.

Traces the reports of the major committees on secondary education from Dr. Eliot's address before the National education association, in 1888, to the Reports of the Committee on the reorganization of secondary education in 1918 and 1919.

1363. **Shannon, J. R.** An unexploited opportunity in the six-year high school. *School review*, 36: 745-56, December 1928.

A study to determine the extent to which the six-year high schools in Indiana are taking advantage of the opportunity to procure more specialization of instruction than obtained under the 8-4 plan.

1364. **Shelby, T. H.** Survey of San Antonio senior high schools. 1929. School inquiry bureau, Division of extension, University of Texas, Austin.

Adequacy and efficiency of high-school buildings: growth and probable needs of city for high-school accommodations.

1365. **Sorenson, Herbert.** High-school subjects as conditioners of college success: implications and theories concerning mental factors and faculties. *Journal of educational research*, 19: 237-54, April 1929.

Some of the conclusions drawn from this study are as follows: (1) There is an apparent relationship between the amount of various subjects studied in high-school and college scholarship; (2) Latin differentiates according to college success more markedly than does any other subject. French and mathematics do so to a less degree.

1366. **Sparks, Ralph Perkins.** Administrative factors in the high schools of Benton county, Ind. Master's thesis, 1929. State university of Iowa, Iowa City. 67 p. ms.

1367. **Stout, John Balmer.** A study of certain factors affecting educational opportunity in fifteen small four-year high schools in Illinois. Master's thesis, 1929. University of Chicago, Chicago, Ill. 170 p. ms.

Study of organization, curriculum, teaching staff, buildings and playgrounds of fifteen small high schools. The findings indicate a need for: (1) State legislation to enable small township and community high schools to cooperate with elementary schools; (2) curriculum revision; (3) development of teaching staff trained for service in small high schools; (4) development of health program; and (5) the development of educational opportunities in library and auditorium features of small high school.

1368. **Suter, Clarence.** A survey of certain aspects of Highlands high school, Ft. Thomas, Ky. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1369. **Thomson, Lyle G.** Objectives of secondary education according to the opinions of pupils. *School review*, 37: 198-203, March 1929.

A list of 21 reasons was submitted to 400 pupils in South Milwaukee high school, with the instruction that they indicate in order of importance seven reasons why they were in high school. The citizenship and vocational objectives seemed to be most important.

1370. **Traister, Harold W.** An analysis of the administration of personnel problems of high-school boys. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1371. **Tritt, William Winters.** The administrative problem involved in determining the recommendation to higher institutions of graduates of a senior high school of Los Angeles. Master's thesis, June 1929. University of Southern California, Los Angeles.

1372. **Turner, Rex Hardin.** Desirable qualifications and duties of a high-school dean of boys. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1373. **United States. Bureau of education.** Accredited secondary schools in the United States. Prepared in the Division of statistics, Frank M. Phillips, chief. Washington, United States Government printing office, 1929. 144 p. (Bulletin, 1928, no. 26)

1374. ————^A Some features of the junior and senior high schools of Roanoke, Va. Report of a survey made by the United States Bureau of education. Roanoke, Va., Board of education, 1929. 51 p.

Survey staff: W. S. Deffenbaugh; Carl A. Jessen.

This survey involves a study of the teaching staff, the curriculum, pupil load, failures, persistence in school, success of graduates in college, occupations of parents, etc.

1375. **Waggoner, Sherman G.** The eight-month-45-minute period high school vs. the nine-month-40-minute period high school. Master's thesis, 1928. State university of Iowa, Iowa City. 63 p. ms.

1376. **Walker, Samuel.** Participation of social science teachers in public high schools of Kentucky. Master's thesis, 1929. University of Kentucky, Lexington.

1377. **Warmoth, Ray G.** The high school detention room. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1378. **Warren, Ambrose Benton.** The scholarship of high-school pupils with special reference to methods of improving it. Master's thesis, 1928-29. Boston university, Boston, Mass.

1379. **Werner, Charles A.** The personnel of boards of education of public high schools in Nebraska. American school board journal, 78: 59-60, April 1929.

Shows number of members, method of election, term of office, number of meetings held yearly, compensation, etc., of school board members of 256 Nebraska school systems.

1380. **West Allis, Wis. Public schools.** Department of educational research. Achievement of junior and senior high school pupils as measured by Standard and West Allis tests. October 1928.

1381. **White, Anne.** Scholastic articulation of junior and senior high schools in New Haven. Master's thesis, 1929. Yale university, New Haven, Conn. 117 p. ms.

1382. **Witham, Ernest C.** Eight A test scores and high school success. 1929. Department of research, Public schools, Wilmington, Del. 11 p. ms.

An experiment carried on in Wilmington, Del. Conclusions: There is only a fair correlation between the results on the Chapman class product survey test and high-school success; only about half of the pupils in the graduating class were in the same class when they entered school four years earlier.

1383. **Woellner, Robert, and Reavis, W. C.** Administrative practices in dealing with personnel problems in secondary schools. School review, 37: 176-86, March 1929.

Based upon data obtained from 522 representative secondary schools showing who reports daily attendance of pupils, who summarizes reports, number of schools that require pupils to bring written excuses explaining absences, and who acts as counselor of pupils. Concludes that the factual information presented reveals problems which merit local investigation by those interested in efficient personnel administration.

1384. **Woody, Clifford.** Achievements and interests of seniors in the public high schools of Michigan. 1928. University of Michigan, Ann Arbor.

A study to ascertain the nature of the mental capacities, educational achievements and interests of seniors expecting to graduate from the various high schools of Michigan. The Otis self-administering test of mental ability (form A) was given for ascertaining the mental capacity of the pupils; the Iowa high school content examination, consisting of 400 questions covered during the four years of high school, for ascertaining the level of educational achievement. Findings: (1) The mental capacity of the pupils in the Michigan high schools was slightly below that of the pupils in other high schools of the United States;

(2) the level of achievement of the seniors as measured by the Iowa high school content examination was superior in the Michigan high schools to that of seniors in the high schools of Iowa or Arizona; (3) when high school seniors were grouped according to courses pursued in high school, the group taking scientific courses ranked highest in mental capacity and high school achievement; the group pursuing college-preparatory courses, second highest; the group pursuing academic courses, third highest; and those pursuing agricultural, vocational, or business courses, lowest.

1385. **Woody, Wilford H.; Fox, Guy; and Greene, Charles E.** Report of curriculum appraisal programs of June 1928: senior high schools. September 1928. Department of research, Denver, Colo. 8 p. ms.

An effort to determine whether or not the emphasis which the Denver curriculum places on intangible objectives related to character development, broad concepts, and right attitudes has resulted in less efficient work in the traditional fields of academic learning. Satisfactory progress recorded in all subjects tested except grammar and punctuation in 10B English.

See also 1, 2, 14, 21, 24, 26, 33-34, 43-44, 49, 104, 106, 127, 129-130, 146, 287, 296, 312, 336, 339, 341, 344, 356, 301, 369, 376, 379, 382, 387, 393, 410, 419, 437, 445, 455, 492, 501, 506, 516, 529, 1841, 1879, 1886, 1889-1891, 1896, 1902, 1910-1911, 1928, 1934, 1946, 1969, 1985, 1988, 2010, 2015, 2047, 2062, 2072, 2075, 2078, 2083, 2097, 2101, 2105, 2108, 2111, 2113, 2115, 2119, 2121-2122, 2135, 2177, 2179-2180, 2183, 2191, 2194, 2196, 2201-2202, 2209, 2214-2215, 2218-2219, 2267, 2278-2279, 2288, 2305, 2309-2310, 2313, 2316-2317, 2323, 2344, 2348, 2357, 2372, 2451, 2457, 2460, 2465, 2470, 2474-2475, 2491, 2494, 2508, 2513, 2519, 2524, 2534, 2539, 2571, 2580, 2585, 2592, 2598, 2608, 2613, 2618, 2636, 2852, 2856, 2861, 2863-2864, 2872, 2876, 2881-2882, 2898, 2901, 2910, 2959, 2966, 2987, 3002-3003, 3007, 3009, 3015, 3018, 3021, 3026, 3030, 3033-3034, 3042, 3065; and under Agriculture; Athletics; Commercial education; Educational and vocational guidance; Extracurricular activities; Home economics; Manual and vocational training; Physical education; Professional status of teachers; Retardation; School principals; Special subjects of curriculum; Student self-government; Teacher training.

JUNIOR HIGH SCHOOLS

1386. **Brownell, S. M.** Junior high school needs in Grosse Pointe. September 1928. Superintendent of schools, Grosse Pointe, Mich. 13 p. ms.

Gives a digest of the opinions of authorities with reference to the size of junior high schools; the size of the area from which pupils should be drawn; size and desirable location of the school sites. Estimates probable growth in enrollment; recommends alternative plans for the location of proposed junior high schools in Grosse Pointe.

1387. **Cox, Arthur William.** A study of selected problems of the junior high schools of Long Beach, Calif. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1388. **Coxe, Warren W., and Baer, Joseph A.** Analysis of junior high school courses of study. ms. (W. W. Coxe is connected with the State education department, Albany, N. Y.)

1389. **Cutright, Prudence.** A study of junior high school districts according to achievement and intelligence. Research department, Public schools, Minneapolis, Minn. School bulletin (Minneapolis, Minn.), no. 40 a, April 25, 1929. 2 p.

Ranking of schools contributing to each junior high school in intelligence and ability in reading and arithmetic. A very strong factor in the reading and arithmetic achievement of junior high schools is the ability of pupils entering each school from the elementary schools. The academic achievement of pupils in elementary school makes possible the establishment of certain limits within which the pupils will be in junior high school.

1390. **Goodrich, T. V., and Lefler, M. C.** Leisure time of junior high school pupils. October 1928. Department of measurements and research, Public schools, Lincoln, Nebr. 1 p. ms.

Summary of study on when, where and what junior high school pupils play, and how much of their time is devoted to other activities.

1391. **Green, Rhue E.** A study of the distinguishing characteristics of the junior high schools of Nebraska. Educational research record (University of Nebraska), 1: 4-15, October 1928.

Makes an analysis of the standards set up by the North Central association and specialists in the junior high school field, then shows the extent to which all of the junior high schools of the state conform to these respective standards.

1392. **Hermans, Mabel C.** A study of the achievement of junior high school pupils in language. Educational research bulletin (Los Angeles, Calif.), 8: 4-5, November 1928.

1393. **Hill, George Henry.** The development of a junior high school suitable to the needs of a small community. Master's thesis [1929] University of North Carolina, Chapel Hill.

The purpose of this study was to develop a small junior high school best adapted to the needs of a small rural community at Bowersville, Ga.

1394. **Hinkelman, Dorothy.** A study of junior high school results. Master's thesis, June 1929. New York state college for teachers, Albany.

Comparison of pupils of junior high school level in a central school and in smaller sections outside of central institutions.

1395. **Kenny, Rev. John J.** Psychological reasons for the junior high school. Master's thesis, 1929. Catholic university of America, Washington, D. C. 38 p. ms.

A study of mental and physical traits of pupils 12-16 years of age and their relation to the junior high school.

1396. **Kline, LeRoy J.** Comparative success of pupils in the junior high school who made rapid progress, normal progress, and slow progress in the elementary school. Master's thesis, 1928. University of Pennsylvania, Philadelphia.

1397. **Landsittel, F. C.** Scholastic accomplishment in the junior high school. Journal of educational research, 18: 127-35, September 1928.

A comparison of the results achieved by 371 pairs of university freshmen in science, mathematics, and languages. One group had completed three years in the junior high school and three years in the senior high school, while the other had completed the regular eight grades and a four year high school course. In conclusion "the fact seems to be that the new school has failed thus far to justify itself in regard to the central objective of education, viz., intellectual cultivation."

1398. **Leedom, Alma Mater.** A study of the lowest one-third of junior high-school pupils. Master's thesis, 1928-29. Ohio state university, Columbus.

1399. **McGregor, A. Laura.** The junior high school teacher. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 260 p. ms.

Summary of development of the junior high school; the junior high school teacher in relation to administration, counselling, scholarships, and health. The place of the classroom teacher in each function is presented, the point of view supported by original studies.

1400. **Mahan, T. J.** The exploratory objective in the junior high school. 1929. Colorado state teachers college, Greeley.

One thousand three hundred and seventeen junior high school pupils in nine Denver and Greeley schools have been checked upon the completion of the junior and the senior high school courses. They will now be followed into the college.

1401. **Mills, Samuel E.** Characteristic features of the junior high school used in the smaller Nebraska schools. Master's thesis, 1929. University of Nebraska, Lincoln. 45 p. ms.

The purpose of the study was to ascertain which of the essential features of the junior high school are already used in the smaller schools (8 to 25 teachers) in Nebraska, and the extent to which each is used. Practically all characteristic features are used in many of even the smallest schools investigated. Many of the benefits of the junior high school may be secured by the small schools without reorganization and with but little additional cost.

1402. **National committee on research in secondary education.** The rural junior high school. Report of a subcommittee . . . Emery N. Ferriss, chairman. Washington, United States Government printing office, 1929. 79 p. (U. S. Bureau of education. Bulletin, 1928, no. 28)

A comprehensive study of purposes, attitudes of state departments, and legal provisions relating to junior high schools with special attention to organization, administration, program of studies, student activities, provisions for individual differences, pupil guidance, and buildings and equipment of 135 junior high schools in rural sections.

1403. **Noll, Effie M.** How pupils of the Lincoln junior high schools spend leisure hours. Educational research record (University of Nebraska), 1: 16-18, October 1928.

The data were secured by use of three questionnaires, one for Sunday, one for the school days, and one for Saturday. 4,533 questionnaires were tabulated. From the findings it is concluded that the school day is as follows: 7 hours, school, 10 hours, sleep, ½ hour for toilet, 2 hours for meals, 1 hour for play, 1 hour working for pay; ½ hour each for reading, music practice, chores, radio and home study.

1404. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** Clerical help in junior high schools. Survey to determine the basis of assignment of clerical help in the junior high schools. 1929. 80 p. ms.

1405. **Ryker, Anna Blanche.** The introduction and development of an activities period in Central junior high school, Huntington, W. Va. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 23 p. ms.

1406. **Sifert, Earl.** A study of popularity and leadership. 1928. Public schools, Minneapolis, Minn. School bulletin (Minneapolis, Minn.), no. 22a, April 25, 1929. 1 p.

A study of what constitutes popularity and leadership in Jefferson junior high school.

1407. **Struthers Alice B., and Nettels, C. H.** Junior high school pupil load study. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 160-68.

1408. **Witham, Ernest C.** Holding power of junior and nonjunior high school cities; a sound plan of school organization of a prolonged fad. School executives magazine, 48: 451-53, June 1929.

1409. **Woody, Wilford H., Fox, Guy, and Greene, Charles E.** Report of curriculum and appraisal programs of June 1928, junior high schools. September 1928. Research department, Public schools, Denver, Colo. Pt. 1, 8 p. ms.; pt. 2, 19 p. ms.

Survey tests were given to grade 9A; tests in reading and literature were given to all grades in junior high school. This is to be followed by a continuity study which will use the individual records of the June 1928, 6A pupils for the succeeding three years, as a basis for guidance activities.

See also 365, 375, 379, 406, 445, 468, 481, 486, 559, 616, 641, 649, 698, 714, 729-730, 733, 735, 758, 769, 775, 783, 789, 805, 828-829, 836, 843, 851, 853, 858, 867, 869, 941, 945, 1024, 1033, 1106, 1115, 1125, 1130, 1140, 1142, 1150, 1154, 1186, 1196, 1223, 1241, 1337, 1374, 1380-1381, 1457, 1485, 1589, 1657, 2000, 2003, 2023, 2025, 2030, 2048, 2062, 2065, 2072, 2074, 2078, 2099, 2112, 2145, 2167, 2173, 2176, 2178, 2193, 2254, 2273, 2278, 2300, 2321, 2394, 2399, 2442-2443, 2457, 2553, 2649, 2671, 2682, 2696, 2773, 2781, 2809, 2826, 2830, 2948, 3006, 3021, 3031, 3035, 3050.

JUNIOR COLLEGES

1410. **Brand, Rutherford Romaine.** Student opinion in California junior colleges. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1411. **Brothers, E. Q.** Present-day practices and tendencies in the administration and organization of public junior colleges. *School review*, 36: 655-74, November 1928.

Results of a questionnaire sent to 522 secondary school principals show that there is no one type of administration or organization of the public junior college to be found in even a majority of the institutions replying. Among those who are assuming the responsibility of administering this type of college there is little agreement as to how it can best be administered and organized. There is, however, a rather definite tendency toward the 6-4-4 or the 5-4-4 plan of organization, with the principal of the high school as the active executive officer in charge.

1412. **Chandler, Forrest H.** Factors determining personnel of the freshman class of Iowa public junior colleges, 1927. Master's thesis, 1928. State university of Iowa, Iowa City. 81 p. ms.

1413. **Congdon, Wray H.** Tendencies as to the scholastic success of junior college transfers at the University of Michigan. Doctor's thesis, July 15, 1929. University of Michigan, Ann Arbor.

A study of students from Michigan publicly supported junior colleges compared with all other entrants attending the engineering college at the University of Michigan, during the academic generations of the five graduating classes of 1924 to 1928 inclusive.

1414. **Eells, Walter Crosby.** The early history of California public junior colleges. *California quarterly of secondary education*, 4: 214-22, April 1929.

Data presented for each school. All summarized.

1415. ——— Records of junior college transfers in the university. *School review*, 37: 187-97, March 1929.

A study of 317 students who entered Leland Stanford university from junior colleges showed that the ability of these students as measured by the Thorndike intelligence examination was slightly superior to that of students from four-year colleges; that they showed distinct superiority after their first quarter of residence; and as measured by graduation, honors, and continuation into graduate work, they maintained this superiority.

1416. ——— Trends in junior college enrollment in California. *California quarterly of secondary education*, 4: 58-69, October 1928.

A study to show what increases in the enrollment of the junior colleges of California may reasonably be expected in the next 10 or 12 years.

1417. **Hillman, James E.** Statistical study of junior and senior colleges of North Carolina, 1927-1928. 1929. State department of public instruction, Raleigh, N. C. 50 p. ms.

The purpose of the study was to show how completely the individual colleges meet the standards of their classification. The study was made primarily for the committee on standards of the North Carolina college conference.

1418. **Holy, T. C., and Green, B. E.** Determining criteria for establishing junior colleges. Ohio state university, Columbus. 150 p. ms.

This project purposes to establish criteria by which may be determined the feasibility of establishing a junior college in any locality.

1419. **Jones, Alfred H., and Robison, C. H.** Studies based on scholarship of students transferring from junior colleges to the University of California at Los Angeles. *California quarterly of secondary education*, 4: 313-18, June 1929.

Data are given for 409 students who have transferred from junior college in California to the University of California at Los Angeles from 1923 to 1927, inclusive, and who have completed one or two semester's of work.

1420. **Kleinsmid, Rufus B. von, and Touton, Frank C.** Some modern procedures in junior-college and lower-division education. *California quarterly of secondary education*, 4: 166-83, January 1929.

A report setting forth several procedures now employed in college education at the lower division level: as (1) Freshman orientation; (2) educational objectives; (3) standardizing grading practice; (4) use of intelligence tests; and (5) information on habits of work and study of individual students.

1421. **McConnell, T. B.** Status of the junior college in Iowa, 1928-29. [1929] Cornell college, Mount Vernon, Iowa. 9 p. ms.
 * study covering certain phases of enrollment, growth, curriculums offered, size of secondary schools to which colleges are attached, percentage of students from outside district, tuition rates, income, sources of income, teachers' salaries, teachers' degrees, institutions from which teachers' degrees were obtained, percentage of teachers teaching outside graduate major or minor, size and administration of libraries, number of books added in one year, programs of studies.
1422. **Pettit, Clare N.** The effects of the junior college on the small senior colleges in southern California. Master's thesis, May 1929. Occidental college, Los Angeles, Calif. 135 p. ms.
 Effects on enrollment, type of student, scholarship over a period of 15 years, studied with special emphasis on the situation at Occidental college.
1423. **Pittsburgh University.** Division of research in higher education. University of Pittsburgh and its junior colleges. Pittsburgh, Pa., 1929. 94 p. (University of Pittsburgh bulletin, vol. 25, no. 9, January 15, 1929)
1424. **Reeves, Floyd W.** How to improve instruction in junior colleges. Nation's schools, 3: 69-75, April 1929.
 Contains a summary of efforts to improve instruction in 90 junior colleges. The author concludes that "a beginning is being made in a scientific approach to the problem of the improvement of instruction in the junior college" and finds that junior college teachers are more experienced and have more professional training than teachers of junior college students in four-year institutions.
1425. **Reid, J. B.** Texas municipal junior colleges. Austin, Texas, State department of education, 1929. 93 p. (Texas. State department of education. Bulletin, vol. 5, no. 5, June 1929)
 Junior college laws, standards for accrediting junior colleges, and comparative study of standards of public junior colleges of Texas, supplemented partially with information on church junior colleges.
1426. **Ricciardi, Nicholas, and others.** Junior college survey of Siskiyou county, Calif., made by request of Board of supervisors of Siskiyou county, Yreka, Calif., July 1929. 87 p.
 A survey undertaken under the direction of the State department of education of California, to determine the feasibility of establishing a junior college in Siskiyou county.
1427. **Ruch, Giles M., Baker, Dwight C., and Ryce, Edward.** A comparison of the scholarship records of junior college transfers and native students of the University of California. California quarterly of secondary education, 4: 201-13, April 1929.
 Study contains data for two fairly large and presumably typical groups viz., those who entered the lower division of the University or a public junior college in the autumn of 1924. Comparisons are made with a similar study made at Stanford university.
1428. **Showman, Harry M.** Junior college transfers at the University of California at Los Angeles. California quarterly of secondary education, 4: 319-22, June 1929.
 A comparison of records of junior college transfers with native students at the University of California.
1429. **Whitney, Frederick L.** The junior college in America. Greeley, Colorado state teachers college, 1928. 258 p. (Education series, no. 5)
 A study of 146 public, 236 private junior colleges in 39 states, the District of Columbia, and the Philippine Islands, 1927-28. Conclusions are given concerning: (1) Development of the junior college; (2) objectives of the junior college; (3) junior college laws; (4) junior college standards; (5) junior college curriculum; (6) junior college costs; (7) organization of a public junior college.
1430. ——— Junior colleges. 1929. Colorado state teachers college, Greeley. 34 p. ms. (Mimeobrochure, no. 35)
1431. ——— Present standards for junior colleges. Colorado state teachers college, Greeley. School review, 36: 593-603, October 1928.
 An analysis of the requirements of state, national, and regional standardizing agencies on the junior college.

1432. **Whitney, Frederick L.** Seven years' change in the curriculum of the junior college. North central association quarterly, 3: 432-38, December 1928.

Shift of emphasis in 20 subjects offered by junior colleges both public and private is indicated by the study as to "the per cent of institutions making no offering in these subjects, the changes in curriculums in terms of the range in semester hours offered and the average per cent of total curriculum offerings in each case."

1433. ——— Seven years' development in junior college purposes. North central association quarterly, 3: 289-97, September 1928.

This study contains a consideration of the objectives of junior college education as reported by 162 colleges as analyzed by study of catalogues and yearbooks of junior colleges and personal replies to questions as to reasons for the organization of junior college and its definite purposes. Among the arguments presented by these agencies are economy, lowering the cost of college work, desirability of keeping adolescents at home, vocational education, university preparation, making future leaders, etc.

1434. ——— Sources of income for state-supported junior colleges. 1929. Colorado state teachers college, Greeley.

The revenue received from 23 junior colleges supported in part by the state was analyzed.

1435. ——— and **Shaw, J. H.** The junior college movement. 1928. Colorado state teachers college, Greeley. (Bulletin, vol. 28, no. 7)

1436. **Woods, Baldwin M.** Economic analysis of an effective junior college. California quarterly of secondary education, 4: 20-24, October 1928.

Contains data for nine junior colleges regarding size of classes; relationship existing between the average daily attendance, the total enrollment, and the instructional load; tax rate necessary to raise specific sums with different values of assessed valuation. The process of computing the cost of operation is outlined so that any junior college administrator may make his own computations with figures applicable to his own district.

See also 1109, 1470-1471, 1558, 1950, 1992, 2201, 2232, 2427, 2430, 2641, 2817, 2832, 3022.

TEACHER TRAINING

1437. **Anderson, Henry M.** Preparation, teaching combinations, and minor subjects of mathematics teachers in Colorado high schools. Master's thesis, 1929. Colorado state teachers college, Greeley. 70 p. ms.

A study of 250 high school mathematics teachers in Colorado. About 100 questionnaires were returned. Findings: Teachers should be prepared to teach two subjects in addition to their major subject. Many teachers had to teach subjects in which they had neither majored nor minored.

1438. **Biaggini, Albert.** Training and qualifications of rural high school teachers. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1439. **Billig, Florence Grace.** A technique for developing content for a professional course in science for teachers in elementary schools. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purposes of this study were: (1) To select techniques from those which are available and to develop new techniques as they are needed for the selection and organization of the content of a professional course in science for teachers in elementary schools; (2) to apply these techniques to the outlining of content relating to the principle selected for the study through the organization of core material and significant marginal material.

1440. **Bolton, Frederick E.** Overlapping of courses in education. Educational administration and supervision, 14: 610-23, December 1928.

Five widely used textbooks in introduction to education were examined. The author presents a tabulation of the topics found.

1441. **Bryant, Gnar Orman.** Preparation of teachers of mathematics in the public schools of Kentucky. Master's thesis, 1929. University of Kentucky, Lexington.

1442. **Burftt, Leila R. G.** Some of the things which would be useful to know in order to teach. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 108 p. ms.

1443. **Burke, Harry Axel.** The development of the professional education of teachers in Nebraska. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1444. **Carrier, Blanche.** A survey of teacher-training opportunities provided by the churches of Allegheny county. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1445. **Charters, W. W., and Waples, Douglas.** The Commonwealth teacher-training study. Chicago, University of Chicago press, 1929. xx, 666 p.

Contains a comprehensive description of the duties and traits of teachers as a basis for determining systematically and with purpose what teachers should be taught. It defines criteria for teacher training curricula that will eliminate much of the present duplication and supply most of the present deficiencies.

1446. **Cox, James.** A study of mathematics concepts of persons preparing to teach. 1928-29. West Virginia university, Morgantown.

1447. **Curtis, Fern Joanna.** The training and equipment of the teacher of English in the high schools of North Carolina. Master's thesis, 1929. North Carolina college for women, Greensboro. 84 p. ms.

Inquiry into training of 100 high school teachers of English in North Carolina. Suggestions for additional training and equipment in light of insufficiency found.

1448. **Davis, Mary Dabney, and Hemingway, Roberta.** Preparation for teachers of nursery schools, kindergartens, and primary grades. A directory of institutions and description of curricula offered. Washington, United States Government printing office, 1929. 11 p. (U. S. Bureau of education. City school leaflet, no. 31, January 1929)

1449. **Dunn, Thelma A.** Guiding conceptions in education. Master's thesis, 1929. Ohio state university, Columbus. 62 p. ms.

An attempt to show how educational principles function in the preparation of a teacher. A plan is suggested whereby students may be made aware of principles through extensive reading of educational literature with a view to formulation of their own guiding conceptions. Results are presented of a study of Dewey's Democracy and Education. The book was analyzed in order to formulate the educational principles derivable from selected sections. An attempt was made to state a point of view to guide the application of principles.

1450. **Edminster, J. M.** An analysis of the curricula and courses offered in the field of educational administration and supervision by the colleges and departments of education in the universities of the United States. Master's thesis, 1928. University of Minnesota, Minneapolis.

The bulletins of the eighty higher institutions maintaining colleges or departments of education were examined. The study is the result of an intensive critical analysis of the titles, description, and content of the courses offered.

1451. **Erickson, Arthur Edward.** An analysis of commercial teacher-training curricula. Master's thesis, June 1929. University of Minnesota, Minneapolis.

1452. **French, Will.** The professional training of secondary school teachers. North central association quarterly, 3: 333-75, December 1928.

Some of the tentative conclusions registered at the end of a year of study by this committee are as follows: that there should be no limitations as to the field of activity in which this or any other committee should work in the field of professional training; that the magnitude of the problem and needs of this field are worthy of more concentrated study and the use of full-time specialists to get desired results; that there is a gap between the success in courses taught in most teacher-training institutions and ability to teach; and that we are in doubt as to what beginning teachers need to be taught. Standards for teaching in an accredited school, a bibliography on teacher-training for secondary schools, and researches of the committee on questions and problems of securing and developing secondary teachers constitute the last three sections of the report.

1453. **Gamble, Ward E.** An analysis of the professional training of elementary teachers in training departments of high schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 219 p. ms.

Sixteen states offering teacher-training prior to high school graduation and seven states offering teacher-training in one-year post-graduate departments in high schools were studied. Conclusions: (1) Courses offered in teacher-training departments of high schools include general psychology, educational psychology, school management, rural sociology, general methods, special methods, reviews, and observation and practice teaching; (2) high school departments in teacher-training give more time to special methods courses than to any other course; (3) more than 50 per cent of the total number of teacher-training courses in high

schools in the United States are maintained in three states, namely, Kansas, Iowa, and Nebraska; (4) teacher-training at the high school level is not restricted to training teachers for rural schools. Only three of the 23 states maintaining teacher-training in high schools issue licenses limited to rural teaching positions; (5) there is legal justification for teacher-training departments in high school in all states maintaining this work; (6) three states which have maintained teacher-training in high schools have discontinued the practice; (7) three states which now maintain teacher-training departments at the post-graduate level in high schools previously offered the work in pre-graduation departments; (8) there is a noticeable deficiency on the part of several state departments of schools to provide courses of study for teacher-training departments in high schools. However, some states provide in detail the content and the procedures to be followed in offering each course.

1454. Gilchrist, Robert. The educational preparation of secondary teachers. Master's thesis, August 1928. Colorado state teachers college, Greeley. 128 p. ms.

Letters were sent to 26 professors in schools of education in large universities. 12 textbooks were analyzed, and a list of concepts made. Letters were also sent to 40 secondary schools in Colorado; other educational literature was analyzed. Conclusions: (1) Professors of education agree to a considerable extent on texts that are most outstanding in education (list given); (2) a wide range in frequency of mention of educational items according to importance and difficulty occurs. A positive relationship exists between the judgments of liberal arts graduates and teachers college graduates; (3) a wide range in frequency of mention of educational items according to inadequacy of training occurs; (4) the educational concepts that occur in educational literature are not the same for different periods of years. The number of concepts that are of a technical nature seems to be increasing in recent years. Many are of a statistical connotation. The number of concepts, however, are not too large for mastery by secondary school teachers.

1455. Harrison, G. L. Teacher training in negro land-grant colleges. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1456. Hill, Clyde M. The college president and the improvement of college teaching. Educational administration and supervision, 15: 212-22, March 1929.

Ninety-nine liberal arts colleges and universities replied to a questionnaire covering the requirement of courses in education for all new staff members, provisions made for supervision of instruction, training in service, etc. With few exceptions, the presidents and deans replying showed a desire to increase the amount of professional training required of college teachers.

1457. Houchell, Paul. The training of junior high school teacher. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 112 p. (Contributions to education, no. 53)

The writer develops a list of objectives for the junior high school which may point the way for the training of junior high school teachers. The analysis of 10 selected sources for direct or implied statements of qualifications needed by teachers results in a list of 317 teaching abilities which are demanded for participation in junior high school work. The study deals especially with conditions in Alabama.

1458. Hyde, Richard E. Waste in professional education. Journal of educational research, 18: 144-48, September 1928.

In the Fairmont state normal school a class in educational psychology composed of freshmen, and a class in high-school methods composed of juniors and seniors were given tests at the beginning of the course to find out their present knowledge of the course. It was found that: (1) All the members of each course displayed some knowledge of the course; (2) the upper classmen as a whole were more familiar with the instructional content to follow than the freshmen were with their prospective subject matter; (3) certain segments of information were known by almost everyone; (4) each upper classman knew half or more of the true-false statements in his test; and (5) each of the freshmen possessed knowledge of almost one-half or more of the course.

1459. Inman, James Henry. The training of Iowa high school teachers in relation to the subjects they teach. A study of 1,048 graduates of eleven colleges. Iowa City, Iowa, Pub. by the University, 1928. 66 p. (University of Iowa studies. First ser., no. 160. Studies in education, vol. IV, no. 9, August 1, 1928)

Conclusions: Approximately 30 per cent of the teachers are apparently fairly well prepared for teaching all the subjects they teach; about 60 per cent are apparently well prepared to teach some of the subjects they teach, but have too little or no training for the other subjects they teach; approximately 10 per cent are apparently not well prepared for any subject they teach.

1460. **Jameson, Emily Dean.** Physical education for the preparation of general elementary school teachers. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

Twenty-two state teachers colleges and normal schools located in 11 states east of the Mississippi were studied in order to discover the requirements in courses of physical education offered to women preparing to be elementary and junior high school teachers, including those who are specializing in any one subject, such as home economics or physical education.

1461. **Jones, J. W.** A comparison between elementary teacher training students and high school teacher training students. July 1928. Indiana state normal school, Terre Haute.

This is a brief study of comparison of two and four year course students as to instructors marks and psychology ratings.

1462. **Kelly, Robert L.** Great teachers and methods of developing them. Association of American colleges bulletin, 15: 49-67, 214-20, March 1929.

Two phases of college teaching were investigated; the first had to do with those individuals referred to on any college campus as "great teachers," the second was concerned with the methods used by the college officers in the building of these faculties. A total of 187 colleges participated in the investigation regarding the great teachers; a total of 182 participated in the second study.

1463. ——— and **Anderson, Ruth E.** Great teachers and some methods of producing them. Journal of educational research, 20: 22-30, June 1929.

Data for this study were collected from the executives of 349 representative colleges and universities. Conclusions: 80.9 per cent of the great teachers under consideration were reported as holding the degree of master, doctor, or bachelor of divinity. 60.8 per cent achieved what is considered greatness in spite of their lack of the doctorate. Of the qualities and attitudes attributed to great teachers it is significant that "interest in students, sympathetic and helpful attitude," etc., received the largest poll; "scholarship, mastery of subject," ranked second.

1464. **King, Keo.** Analysis of curricula for preparation of fourth, fifth, and sixth grade teachers. Master's thesis, 1929. University of Chicago, Chicago, Ill. 110 p. ms.

An examination of 80 catalogues of teachers colleges, two-year curricula, to determine number, kinds, content, and emphasis of courses for the preparation of fourth, fifth, and sixth grade teachers. Findings: Diversity in number, lack of agreement in kind, and wide variance in emphasis for all courses except psychology, some form of which was required by all teachers colleges in the two-year curricula.

1465. **Krusé, Samuel Andrew.** A critical analysis of principles of teaching as a basic course in teacher-training curricula. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 168 p. (Contributions to education, no. 63)

A study of the historical development, the present status, the constituent topics, and the validity of a course in "general methods" usually designated as *principles of teaching*. As a basic course in teacher-training curricula, principles of teaching, represents the last of a series of differentiations by which six standard courses have evolved from the original omnibus course in "theory and practice"; it appears as a required course in teacher-training curricula more frequently than do any of the other types of method courses; a critical analysis of course descriptions in college catalogues and of the contents of widely used textbooks suggest the topics which should be treated in this course; however, little quantitative and objective evidence can be found in the scientific literature validating the larger teaching procedures which constitute the subject matter of the course, nor was it possible to locate broad, comprehensive generalizations relating to teaching procedures.

1466. **Landon, Mary Augusta.** The plan of graduate study offered by Teachers college in cooperation with the University of Paris to candidates for the degree of master of arts specializing in the teaching of French. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 32 p. ms.

1467. **Lappin, Warren O.** The professional training of white elementary teachers in Kentucky. Master's thesis, 1929. University of Chicago, Chicago, Ill. 147 p. ms.

The purpose of the study was to determine the extent to which a profession exists in Kentucky and whether or not the elementary teachers are in part responsible for the State's low ranking educationally. Conclusions: The professional rank would be low if accurately measured. The teachers are in part responsible for the State's low educational ranking. A number of the outstanding educational problems confronting the State with reference to teacher training are listed.

1468. **Leum, Clara L.** A study of observation of teaching as a factor in the training of elementary teachers with special reference to the exemplification of principles of education. Master's thesis, 1929. Ohio state university, Columbus. 62 p. ms.

A study of observation in seven leading teacher-training schools of Ohio, also a control experiment with 26 students taking observation. Findings: That little attention is paid to the exemplification of principles of education by the schools studied; that students give better results if trained to see the principles when taking observation.

1469. **Luman, John A.** Commercial teacher training in private business schools. April 1929. Peirce school of business administration, Philadelphia, Pa. 12 p. ms.

Wide differences in social and professional subject matter in different schools were found. Courses conform to State admission and certification requirements.

1470. **Mangum, W. A.** Teacher training in the junior college. Master's thesis, August 1928. Colorado state teachers college, Greeley. 123 p. ms.

Questionnaires were mailed to 500 teachers in service, 100 school administrators, and deans of 125 junior colleges. Bulletins from 101 junior colleges were analyzed for aims and objectives in junior college. Bulletins from 26 corresponding departments were analyzed. Conclusions: (1) 72 per cent of all junior colleges investigated maintained teacher-training departments; (2) the junior college would be safer in attempting to train elementary teachers than high school teachers; (3) some apparent weaknesses found in the junior college teacher-training curriculum; (4) in general, the junior college was found to meet the requirements of the various states in preparing its students for the teacher's certificate; (5) the annual supply of and demand for junior college trained teachers in Texas was approximately 1,000; (6) teacher training in the junior college presented many important problems that need further research.

1471. **Martens, Elise H.** Training and experience of teachers in the junior colleges of California. California quarterly of secondary education, 4: 51-58, October 1928

Contains data on degrees held by faculty members, institutions from which degrees were received, number of years of educational experience in California, types of experience, and geographical distribution of experience of junior college teachers.

1472. **Myers, Alonzo F.** The course in observation and participation in its relationship to courses in principles of teaching, methods, school management, etc. Educational administration and supervision, 14: 404-12, September 1928.

Gives the results of a questionnaire submitted to 455 students in education courses in the college of education of Ohio university. Among the students there is practical unanimity that the course in observation and participation has helped them to understand teaching problems considered in courses in educational theory.

1473. **Noble, M. C. S., jr.** Teacher training in North Carolina. Raleigh, N. C., State superintendent of public instruction, 1929. 70 p. (Educational publication no. 135. Division of information and statistics, no. 1)

Chapter I deals with the supply of and demand for trained teachers in the State; Chapter II deals with the specific preparation provided in the teacher-training program now in practice throughout the State.

1474. **North central association of colleges and secondary schools.** Faculty training in the liberal arts college. Report of the committee on faculty scholarship, 1928. North central association quarterly, 3: 172-79, September 1928.

Statistical reports show that the standard of training set by the North central association for teachers in liberal arts colleges and universities is being met only to a certain degree. Two years of study in the respective field of teaching for the professorial group, and for the heads of departments, a Ph. D. degree, a standard which has been met by only about one-half of the heads of departments of colleges and universities in the association, constitute the standards set.

1475. **Peik, W. E.** The relative professional training value to beginning secondary teachers of certain types of content in education. Educational administration and supervision, 15: 321-33, May 1929.

The average ranking of the courses in education by 100 teacher alumni of the University of Minnesota was obtained. In the general order of professional worth to teachers of the various courses there was general agreement; with special methods and practice teaching, first; educational psychology, second; etc. history of education was put sixth and last.

1476. **Perry, K. P.** The professional preparation of industrial arts teachers. Master's thesis, August 1928. Colorado state teachers college, Greeley. 110 p. ms.

Aims determined from Snodden, Warner, Bonser, Bobbitt, Koos, Vaughn, Mays, McMurry, Eggers, Smith, and others. State courses of study, state manuals, were analyzed for aims and objectives. Catalogues from 31 institutions were analyzed. Conclusions: (1) Survey shows lack of agreement on the terms used when reference is made to the same process or shop organization. Fourteen terms were used to express industrial education; (2) the general shop would seem to be the logical plan for the average school; (3) industrial education teachers are receiving insufficient preparation, with the exception of elementary mechanical drawing; (4) fewer than half the training schools are offering courses that would adequately prepare teachers; (5) courses in organization, administration, and shop methods are also lacking; (6) practice teaching is required in but 22 schools and preteaching observation is required in but nine; (7) courses in dendrology, wood anatomy, and shop mathematics are offered in but one or two institutions.

1477. **Purin, C. M.** The training of teachers of the modern foreign languages. New York, The Macmillan company, 1929. 112 p. (Publications of the American and Canadian committees on modern languages, vol. 13)

This report is part of an investigation into the teaching of the modern foreign languages which was begun in 1924 by a committee organized under the sponsorship of the American council on education and working with funds supplied by the Carnegie corporation of New York. An examination of this report shows that the foreign language teachers in this country, as a class, are poorly equipped both in the fundamentals of their subject and in the theory of teaching and the technique provided by practice under supervision. Less than 25 per cent of the modern language teachers in the public secondary schools have enjoyed opportunities beyond the college years.

1478. **Reitell, Charles, and Rohrbach, Quincy A. W.** The personnel of the Pittsburgh public schools, Part III: Training. Pittsburgh, Pa., Citizens' committee on teachers salaries [1928] 7 p. (Series I, Bulletin 6)

Discussion of the significance of various types of training; distribution of Pittsburgh staff according to training and service performed.

1479. **Reynolds, Hazel.** Status of normal training in American high schools, 1925-1926. Master's thesis, 1929. University of Nebraska, Lincoln. 119 p. ms. The author concludes that normal training in high schools is on the wane.

1480. **Robinson, Clara L.** Psychology and the preparation of the teacher in the elementary school. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. (To be printed)

A survey and analysis of practices in the teaching of psychology in certain professional schools for the preparation of teachers.

1481. **Russell, Harvey C.** A study of the academic and professional training of teachers of the negro high schools of Kentucky. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1482. **Saundle, H. P.** The preparation and professional training of the negro high school teachers in West Virginia. Master's thesis, 1928. University of Cincinnati, Cincinnati, Ohio. 83 p. ms.

A study of 152 teachers in 21 high schools for negroes of West Virginia. Findings: 9.2 per cent are teaching subjects for which they have had no collegiate training; 19.1 per cent are below the North central association standard; the median number of semester hours for each group of teachers ranges from 37 down to 8, distributed as follows: science teachers, 37; French teachers, 22; English teachers, 20.66; social science teachers, 20.33; chemistry teachers, 18.18; history teachers, 12.66; mathematics teachers, 12.5; Latin teachers, 10.4; biology teachers, 10; physics teachers, 8.

1483. **TenBrink, Estella.** The professional preparation of elementary mathematics teachers for the public schools. Master's thesis, March 1929. Colorado state teachers college, Greeley.

A study of 24 city and state courses of study, catalogues of 24 teacher-training institutions, books and articles written by experts in the field of mathematics. Conclusions: (1) Elementary mathematics teachers are expected to teach the following topics: Fundamental operations in integers, fractions and decimals, notation and numeration, long division, measurements, denominate numbers, percentage, interest, and business forms. Oral arithmetic is emphasized in all courses, and use of standard tests and measurements in all but one course; (2) 8.3 per cent of all the hours required for the life certificate in Colorado state teachers college have a direct bearing on the teaching of elementary mathematics; (3) 20.8 per cent of all the hours offered for the life certificate in Colorado state teachers college have a direct bearing on the teaching of

elementary mathematics; (4) a course in intermediate grade methods is required in 66.6 per cent of the teacher-training institutions; a course in arithmetic in 25 per cent, a course in professionalized arithmetic in 8.3 per cent, a course in arithmetic methods in 20.8 per cent, a course in tests and measurements in 16.6 per cent of the teacher-training institutions; (5) the results show that rather inadequate preparation is being given to teachers of elementary mathematics.

1484. **Trinidad, Venancio.** Current tendencies in teacher training and their bearing upon the professional education of teachers in the Philippines. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 117 p. ms.

1485. **Vance, Ralph W.** Types of training prescribed for upper grade and junior high school teachers in normal schools and teachers colleges. Master's thesis, 1929. University of Chicago, Chicago, Ill. 144 p. ms.

A study of 55 normal school catalogues of 1910, and 108 teachers college catalogues of 1928. Conclusions: More pertinent training is available for upper grade teachers to-day than in 1910. The teacher training curriculum has been enlarged and enriched.

1486. **Wallis, Dewey.** Training industrial arts teachers in the South. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 65 p. ms.

1487. **Whitney, Frederick L.** Teacher training service of state teachers colleges and state universities. 1928. Colorado State teachers college, Greeley. Educational administration and supervision, 14: 485-89, October 1928.

Compares the relative number of public school teachers which the two kinds of institutions prepare.

1488. **Williams, Allan J.** A comparison of teacher-training centers with schools having a population of like ability. Educational administration and supervision, 15: 184-89, March 1929.

In Buffalo new teachers are placed in training centers under careful supervision, where they remain for a year or more. The results of instruction in nine teacher-training centers were compared with those in nine schools paired with them. The results in reading were practically the same for each group while there was a small advantage in English, arithmetic, and spelling in favor of regular schools.

1489. **Wilson, Wilbur G.** The training of teachers for rural school positions. Master's thesis, 1929. University of Hawaii, Honolulu. 132 p. ms.

Questionnaire study of present procedures in training of rural teachers in the various states.

1490. **Wiric, Victor J.** Training and teaching combinations of teachers of Virginia high schools. Master's thesis, 1929. University of Kentucky, Lexington.

See also 72, 106, 146, 149, 163, 280, 662, 874, 944, 1367, 1509, 1512, 1616, 1660, 1665, 1699, 2029, 2139, 2197, 2366, 2386, 2832, 2869.

NORMAL SCHOOLS

1491. **Allen, C. H.** Correlation between average yearly grades and intelligence ratings for one hundred normal students. 1928-29. Cullowhee state normal school, Cullowhee, N. C. Ms.

The purpose of this study was to help determine to what extent a student's record can be predicted by entrance intelligence examination; also, to search for a basis for eliminations of incapable students.

1492. ——— Correlation between English and intelligence ratings of 80 normal school juniors. 1928-29. Cullowhee state normal school, Cullowhee, N. C. Ms.

The purpose of this study was to determine best tests to use for entrance examination.

1493. **Basford, Louise Ruth.** The financial status of the normal schools in Oregon. Master's thesis, 1928. University of Oregon, Eugene. 83 p. ms.

An investigation of the amount being spent for teacher training in Oregon. Conclusions: The amount spent is not adequate to provide for recognized requirements, to provide proper facilities and a faculty of size and training of good standards.

1494. **McAfee, L. O.** What are the respects in which normal graduates most often fail to do satisfactory work. May 1929. Louisiana state normal college, Natchitoches. 12 p. ms.

The data on which this report is based are from two sources: (1) The evidence observed when the writer visited 122 normal graduates in their classrooms; (2) the reports from principals, parish supervisors, and parish superintendents on 145 normal graduates under their supervision. Both sources of data agree that normal graduates are very frequently deficient in: (1) skill in asking questions, (2) the ability to prevent disturbing acts, (3) skill in conducting drills, skill in teaching how to study, adaptation to individual needs, skill in supervising study and arousing joy and purposefulness in school work.

1495. **Madsen, I. N.** The normal-school curriculum through the eyes of its graduates. *Elementary school journal*, 29: 181-88, November 1928.

Replies received from 184 graduates of Lewiston state normal school, Lewiston, Idaho, indicate that with the exception of the primary group, the graduates favor more emphasis on subject matter and less emphasis on methods.

1496. **Prosch, Frederick.** Vital capacity and thoracic diameter, of normal school students. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1497. **Seymour, John S.** Rural social distance of normal school students. 1928-29. Cullowhee state normal school, Cullowhee, N. C. Ms.

Teacher training institutions in North Carolina were studied for the purpose of ascertaining and measuring attitude of prospective women teachers toward rural life. Results: (1) Overwhelming rejection of rural life; (2) those born and reared in country have a closer sympathy for rural life than those born and reared in towns and cities; (3) those who received their elementary and high school education in rural schools have a closer sympathy for rural life than those who received this same type of education in town and city schools; (4) those who have a closer sympathy for rural life would choose teaching positions most intensive in their rural setting.

1498. **Thompson, Charles H.** The three-year curricula in normal schools for the preparation of kindergarten-primary teachers. *Journal of educational research*, 19: 322-30, May 1929.

The facts as presented in this article show that the three-year curriculum for the specific preparation of kindergarten-primary teachers is primarily an extension of the two-year curriculum in time spent upon subjects already in the two-year course. The justification of the additional year is dependent upon the validity of the present two-year curriculum.

1499. **Viteles, Morris S.** The influence of age of pubescence upon the physical and mental status of normal school students. *Journal of educational psychology*, 20: 360-68, May 1929.

In the case of 236 post-pubescence girls in the first year of the normal school, no significant relationship exists between age of pubescence and height, weight, intelligence and academic achievement.

1500. **Wade, N. A.** A comparison of the time spent by first-year students and expected by teachers in a state normal school. *Journal of educational research*, 19: 183-87, March 1929.

Findings: The average first-year student of the Maryland state normal schools spends 21 hours and 15 minutes per week in study, while according to the average estimate of the teachers, he should spend 23 hours and 29 minutes per week.

1501. **White, Frances Caroline.** Teacher training in normal school extension projects. Master's thesis, 1928. Stanford university, Stanford University, Calif.

See also 17, 38, 78, 763, 1485, 1517, 1590, 1629, 1685, 1998, 2016, 2272, 2352, 2883, 2985, 3017.

TEACHERS COLLEGES

1502. **Chandler, Paul G.** Some methods of teaching in six representative teachers colleges of the United States. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

114 class exercises in five subjects were visited in 6 state teachers colleges. The subjects were arithmetic, social science, psychology, principles of education, and biology. A questionnaire on 46 practices was sent to 90 individuals, each outstanding in his field. The practices found in the observations and checkings are described and the extent to which they are found is compared with the opinion of the outstanding authorities.

1503. **Condit, P. M.** The relationship of intelligence and achievement test scores to mortality and scholastic ratings: a study of 559 freshmen at Colorado state teachers college. 1928. Colorado state teachers college, Greeley. (Mimographed yearly report to Dr. C. B. Cornell, September 1928)

1504. **Frasier, George Willard.** Experiments in teachers college administration. VII. An adventure in cooperation. Colorado state teachers college, Greeley. Educational administration and supervision, 15: 134-38, February 1929.

1505. **Garrison, K. C.** Intelligence test scores and choice of major field. School and society, 28: 630-32, November 17, 1928.

Presents data on 341 teachers college students showing age, sex, year in college, major subject and score made on Otis self-administering tests of mental ability. The major problem of the study is to discover if any relationship exists between choice of college major and the mental ability of teacher or prospective teacher as shown by test scores.

1506. **Gregg, Russell Taaffe.** A study of the scholastic records of the students dismissed from the college of education, 1919-1929. Master's thesis, 1929. University of Illinois, Urbana.

1507. **Jamison, Olin Glen.** A study of the pupil personnel in Indiana state training school. Master's thesis, 1929. Indiana state teachers college, Terre Haute. 127 p.

The purpose of this study was to find out how the pupils of the Training school compare with pupils in other schools throughout the country with reference to ability, achievement, and general progress through the school.

1508. **Jones, John William.** Scholastic prognosis and entrance requirements in a state teachers college. Doctor's thesis, 1929. Indiana university, Bloomington. 226 p. ms.

This study involved first, a study of the teacher training groups at the Indiana state teachers college and second, a study of the entrance requirements in 100 teachers colleges. It was found that the size of the high school is not an important factor in teachers college scholastic achievement; the average high school scholarship is a good index of scholastic achievement in the teachers college. Teachers colleges have entrance requirements which compare favorably with those in liberal arts colleges.

1509. **McAnelly J. R., and Ludeman, W. W.** Training and experience of teachers college faculties. 1929. Southern state normal school, Springfield, S. D.

Teachers college catalogues were studied in order to find whether presidents choose their faculties more for their training or their experience. It was found that teachers college presidents are stressing experience more than training although the latter is coming to have more emphasis.

1510. **McCrorry, John R.** A comparative study of two groups of teacher-college students. Educational administration and supervision, 14: 469-75, October 1928.

A comparison of the students taking the two-year course at the State teachers college, in St. Cloud, Minn., with the students taking the one-year course. According to the Otis self-administering test, the two-year students showed a slight intellectual advantage over those in the one-year course. The two-year students were a little younger, and had a little higher scholastic record in both high school and college.

1511. **Maier, John Valentine.** A comparative study of the records made in Ball state teachers college by graduates of eight and nine months high schools of approximately the same size. Master's thesis, 1929. Indiana university, Bloomington. 131 p. ms.

The results of this study are not in favor of any one group, nor is there a strong evidence that one group is more successful in the college than the other group.

1512. **Mead, A. R.** Laboratory schools for teacher preparation at Tempe state teachers college, Ariz. [1928] Ohio Wesleyan university, Delaware, Ohio.

1513. **Moffett, M'Ledge.** An interpretative study of the personal background of students in state teachers colleges as a basis for determining factors for institutional life. In National association of deans of women. Proceedings of the sixteenth regular meeting . . . Cleveland, Ohio, February 20-23, 1929. p. 155-62. (Headquarters: 1634 Eye street, Washington, D. C.)

1514. **Peik, W. E.** The analysis and evaluation of college and university courses in education. *Journal of educational research*, 18: 345-55, December 1928.

A study of the required training program for prospective high school teachers as offered by the College of education of the University of Minnesota, since 1923 and up to 1928. Gives the alumni evaluation of present training.

1515. **Sangren, Paul V.** Analysis of the student body. Kalamazoo, Mich., Western state teachers college, 1929. (Bulletin, vol. 5, no. 1)

1516. **Stordahl, J. B.** The aims and present status of physics training in our teachers colleges. Master's thesis, 1928-29. University of South Dakota, Vermillion. 37 p. ms.

1517. **United States. Bureau of education.** [Statistics concerning current income, salaries, attendance, and legislative budget requests of state teachers colleges and normal schools] Washington, D. C., January 2, 1929. 37 p. ms.

1518. **Whitney, Frederick L., and Hamlin, H. M.** The personnel of teachers college students. 1929. Colorado state teachers college, Greeley. (Typed report, April 15, 1929)

1519. **Williams, Robert Campbell.** An analysis of the product of Iowa state teachers college for 1928. Master's thesis, 1929. State university of Iowa, Iowa City. 116 p. ms.

See also 30, 52, 166, 510, 517, 770, 857, 1179, 1203, 1450, 1466, 1485, 1487, 1538, 1542, 1556, 1559, 1566, 1574, 1578, 1590, 1726, 1951, 1973, 1991, 1998, 2063, 2071, 2142, 2163, 2195, 2223, 2253, 2261, 2272, 2342, 2389, 2431, 2883, 2980, 3017, 3063.

PRACTICE TEACHING

1520. **Armentrout, W. D., and Whitney, F. L.** Duties, skills and knowledge which should be learned in education 2a as submitted by 83 student teachers, 1928. 1928. Colorado state teachers college, Greeley. (Typed report to W. D. Armentrout, November 5, 1928)

1521. **Brink, Ida Katherine.** A student training program based on reading. Master's thesis, 1929. State university of Iowa, Iowa City. 142 p. ms.

1522. **Broom, M. Eustace.** The predictive value of three specified factors for success in practice-teaching. *Educational administration and supervision*, 15: 25-29, January 1929.

A study of the records of 148 students in the State teachers college of San Diego, Calif.

1523. **Cahoon, Guybert Phillips.** Some factors in the prediction of success in practice teaching. Master's thesis, 1929. University of California, Berkeley. 93 p. ms.

The purpose of the study was to consider some of the factors in the prediction of teaching success, to evaluate their prognostic value and to determine something of the characteristics of student teachers as a group, relative to success in teaching. Conclusions: (1) There seems to be no evidence of any significant relation between the intelligence test scores and the practice-teaching success of the practice teachers of the two groups considered; (2) there is only a slightly higher relationship between intelligence test scores and marks in college courses than between intelligence test scores and practice teaching success; (3) the ratings of practice teachers by supervising teachers using the new rating sheet indicate that the practice teachers are not properly rated in general; (4) other factors than intelligence test scores and college marks make for success in practice teaching, notably personality and character traits.

1524. **Canine, Edwin Nelson.** A survey and re-organization of an elementary school to adapt it to use as a training school. Master's thesis, 1929. Indiana university, Bloomington. 128 p. ms.

1525. **Colebank, George H.** Practice teaching in the colleges of the North central association. North Central association quarterly, 3: 376-431, December 1928.

This study indicates that teacher training institutions are using the public high schools increasingly for student training; that State teachers colleges own and control the high schools used for practice work to a greater extent than do other types of teacher training institutions in the group studied; that 90 per cent of the colleges give credit for practice teaching. Two important activities of student teachers upon which schools generally agree are class teaching and lesson plan preparation.

1526. **Frasier, C. M.** The selection of the student teacher. Master's thesis, August 1928. Colorado state teachers college, Greeley. 80 p. ms.

Random samplings of students at Lewiston state normal school, Lewiston, Idaho; and Colorado state teachers college, Greeley, were used to test the use of the regression equation as a method of selecting student teachers. Conclusions: "In the regression equation we have an effective and valuable means of predicting scientifically student teaching success. The regression equation is effective in proportion to the extent to which the traits used are expressed. In terms of amounts which have been objectively determined. The Thurstone test seems to be a more reliable measure of teaching intelligence than the Army Alpha. Intelligence, knowledge of psychology, and knowledge of academic subjects play an important part in determining success in student teaching."

1527. **Hertzler, Silas.** A partial survey of the critic teacher situation among the secondary schools of Indiana, 1929. Goshen college, Goshen, Ind. 28 p. ms.

1528. **Hill, L. B.** Teaching qualities in former graduates as guides in improving student teaching. Educational administration and supervision, 15: 362-66, May 1929.

375 teachers in West Virginia were ranked by 35 principals of high schools in order of merit. 107 of these had received their training at West Virginia university. Each principal was asked to state the teaching qualities in which he regarded teachers trained at West Virginia university strong, and those in which he regarded them weak, in order that better qualified teachers may be graduated from the University.

1529. **Hillman, James E.** Standards and suggestions for practice teaching in North Carolina senior colleges. Raleigh, N. C., State department of public instruction, 1929. 16 p.

This study gives suggestions on organization of academic departments and department of education. Minimum standards for the administration of practice teaching with special reference to certification requirements are set up.

1530. **Krantz, Sister Mary Helen.** A study of the relation of intelligence, marks in academic and professional courses and success in practice teaching. Master's thesis, June 1929. University of Minnesota, Minneapolis.

1531. **Leamer, Emery W.** La Crosse launches an experiment in teacher training. Nation's schools, 3: 35-41, May 1929.

A report of an experiment by which the work of student teachers is more closely coordinated with the work they are preparing to do after graduation.

1532. **Lee, Margaret Naomi.** An interpretation of modern educational principles for student teaching. Master's thesis, 1928-29. Ohio state university, Columbus.

1533. **Matthews, James Carl.** Critical analysis of the duties of the student teacher. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 78 p. ms.

The aim of this study was to analyze the literature relative to the duties of the student teacher and to determine which of these duties are being emphasized in Texas state teachers college. A questionnaire comprising a list of duties was sent to the eight Texas state teachers colleges.

1534. **Mead, A. B.** Supervised student teaching. Ohio Wesleyan university, Delaware. Richmond, Va.; Johnson publishing company, [1929]

A detailed study of theory, present practices, and constructive suggestions of observation of teaching, participation, supervised student teaching, laboratory schools for teacher preparation. Considers legal status, organization of such work, student-teacher's activities, value of work, and evolution of such work.

1535. **Munzenmayer, Lester Henry.** An analysis of the practice-teaching facilities needed by the Ohio state university. Master's thesis, 1928-29. Ohio state university, Columbus.

1536. **Noe, Elizabeth T.** The demonstration school as a means of improving teachers and service in the elementary grades. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1537. **Peterson, Ada K.** Devices for evaluating the student teacher. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

1538. **Sharp, L. A.** Status of the demonstration schools in the state teachers colleges in the United States. 1928. North Texas state teachers college, Denton. (Submitted to the Peabody journal of education for publication)

All work completed by January 1929.

1539. **Torry, Margaret B.** An objective study of the beginners' class of a demonstration school. Master's thesis, 1929. Rutgers university, New Brunswick, N. J. 96 p. ms.

1540. **Trow, William Clark, and McLouth, Florence.** An improvement card for student teachers. Educational administration and supervision, 15: 1-10, 27-33, January, February 1929.

A review of the literature on teacher-rating, classifying and comparing the more suggestive inquiries, in order that those who are struggling with the problem may become acquainted with earlier workers in the field and thereby helped in their own teacher-rating problems.

1541. **Wade, N. A.** Comparison and distribution of student-teachers' time. Educational administration and supervision, 14: 657-63, December 1928.

The data for this study were collected during the school year 1927-28 among the second year students of the Maryland state normal school at Frostburg.

1542. **Whitson, Willie.** A study of student-teacher activities in Missouri teachers colleges. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 62 p. ms.

1543. **Zaut, James H.** Predicting success in practice teaching. Educational administration and supervision, 14: 664-70, December 1928.

A study of 200 students of the Southeastern state teachers college, Durant, Okla. It was found that marks in educational psychology and in education and methods courses were not good indication of success in practice teaching.

See also 1488, 1512, 1643, 2016, 2387.

PROFESSIONAL STATUS OF TEACHERS

1544. **Anderson, Earl W.** Combinations of subjects. Educational research bulletin (Ohio state university), 8: 234-38, May 29, 1929.

An analysis was made of the programs of the inexperienced teachers in the high schools of Ohio for the years 1927-28 and 1928-29, in order to discover what combinations of subjects were taught by beginners. A table is given showing the most frequent subject combinations taught by these teachers.

1545. **Apperson, C. J.** The secondary school teacher in France, Germany, and the United States—a comparison. Master's thesis, June 1929. University of Virginia, Charlottesville.

1546. **Baer, Joseph Alva.** Men teachers in the public schools of the United States. Doctor's thesis, 1928-29. Ohio state university, Columbus.

1547. **Bathurst, J. E.** Do teachers improve with experience? Personnel journal, 7: 54-57, June 1928.

The purpose of this investigation was to determine the relation of teacher efficiency to teacher experience and teacher age among high school teachers. The results show that teacher efficiency among high school teachers decreases slightly with age when age is independent of experience and increases slightly with experience when experience is independent of age. The study suggests that we must look for factors other than age and teaching experience if we would find those which constitute teacher efficiency among high school teachers.

1548. **Bjorlie, John Edwin.** The teaching personnel in the different types of high schools of North Dakota—1925-26. Master's thesis, 1929. University of Chicago, Chicago, Ill. 138 p. ms.

A comparison of educational preparation of teachers in each subject field, teaching load in number of classes taught daily and number of preparations necessary and number of fields in which instruction is being given, salaries and per pupil tasks, in classified high schools and consolidated high schools, to determine in which types of school the community receives the greatest return for money expended for teachers' salaries. The classified high schools yield greater returns than consolidated schools. The small classified high schools yield a smaller return than the large schools.

1549. **Carroll, Howard S.** The teacherage problem in Ohio. Master's thesis, 1929. Ohio state university, Columbus. 78 p. ms.

An investigation to determine the need for board of education owned or controlled homes for superintendents, supervising principals and teachers in Ohio. A careful consideration of the facts brought out in this study shows the need of a law that will allow boards of education to meet the exigencies due to a lack of suitable homes that have arisen or may arise in their respective districts.

1550. **Davis, Calvin O.** What qualifications are demanded of teachers. *Nation's schools*, 3: 31-34, January; 62-68, February; 71-76, May; 46-50, June 1929.

Study made upon analyses of forms used by administrative officers and a perusal of official reports.

1551. **Diamond, Thomas, and Myers, George E.** Report on teachers of commercial subjects in the state of Michigan. University of Michigan, Ann Arbor. *Michigan vocational news bulletin (Ann Arbor)*, 6: 2-6 January-February 1929.

From this study it would appear that the university should set up standards for teachers of commercial subjects. The teachers should be required to meet these standards and should be stimulated into further study to keep themselves in step with the times. Opportunity should be provided for teachers to specialize in one of two fields. The university should not teach the fundamental skills but should make the possession of them a prerequisite to entrance into the commercial course. The course should be broad in character and should include educational subjects, cultural subjects including accounting and economics. Although a broad course is advocated each teacher should have had some practical experience in business and the university should make their experience a prerequisite to entrance into the commercial course.

1552. **Elledge, Lela M.** Present requirements for teachers of subnormal and superior children. *Elementary school journal*, 29: 303-306, December 1928.

This study is based on returns for 4,148 teachers. A very small percentage of the teachers studied have the necessary qualifications.

1553. **Fenton, Norman.** Teachers and the political life of the nation. California bureau of juvenile research, Whittier state school, Whittier, Calif. *School and society*, 27: 472-74, October 20, 1928.

1554. **Garrison, K. C.** Intelligence test scores and choice of major field. 1928-29. North Carolina state college, Raleigh. *School and society*, 28: 630-32, November 17, 1928.

In this study 331 teachers were used and findings were as follows: graduate group of teachers were superior in intelligence; freshmen and specials, inferior; while other groups were approximately the same. Age bears no relation to intelligence. Foreign language, mathematics, and science teachers scored highest on the test.

1555. **Goodier, Floyd T.** Another conclusion regarding the married woman teacher. *Nation's schools*, 2: 51-52, December 1928.

Presents figures showing that in one school system the percentage of absence was greater and the amount of professional study was less among married women than among single.

1556. **Goodman, A. K.** The economic status of teachers college faculties: a preliminary report of comparative data for the University of California, and seven state teachers colleges in six states. April 1929. Colorado state teachers college, Greeley, 67 p. ms.

Sixty-three comparative tables are given.

1557. **Grable, Mrs. Joe C.** Status of teachers of biological science in the secondary schools of Kentucky. Master's thesis, 1929. University of Kentucky, Lexington.

1558. **Haggerty, M. E.** Faculty qualifications for junior colleges. North central association quarterly, 3: 305-309, December 1928.

Data, presented in tabular form of qualifications obtained from 48 state departments of education as to the requirements for instructors in public junior colleges, show that in about 50 per cent of the states there are specific or professional requirements or both, of all, or of a large proportion of the junior college faculty; in ten states the requirements are set by the state department of education; the North central association needs only to concern itself with those institutions which are not within the scope of state department regulations.

1559. ——— Whither the teachers college in the academic world? 1929. University of Minnesota, Minneapolis. In National education association. Proceedings, 1929. p. 849-61.

This shows the relative degree to which teachers college faculties and others hold membership in national academic societies.

1560. **Hamme, T. A.** A study of the status of negro teachers in eighteen accredited high schools of North Carolina. 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

This study briefly summarizes as follows: there were 221 teachers studied, 45 did not have any degrees, 114 held A. B. degrees, 48 B. S. degrees, 9 A. M. degrees, 5 held other degrees. Forty-four were trained in the schools of North Carolina; 22 of these came from Shaw university. As to teaching experience, it was found that the majority of teachers had teaching experience less than six years. The average monthly salary ranged from \$70.00 to \$90.00.

1561. **Harry, David Percival.** Cost of living of teachers in the state of New York. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1928. 184 p. (Contributions to education, no. 320)

The purpose of the study was to ascertain the variations in the cost of living among certain communities of New York state, and then to utilize this knowledge in deriving a technique for correcting the measure of educational need of the communities of the state.

1562. **Idaho education association.** Professional progress in Idaho. In its Proceedings, 1928.

1563. **Illinois schoolmasters club.** Opportunities for high school graduates in public school teaching in Illinois. Normal, Ill., Illinois state normal university, 1928. 24 p. (Normal school quarterly, ser. 27, no. 108, October 1928)

1564. **Johnson, Orlando Henry.** The adjustment of new elementary school teachers to city school systems. Master's thesis, 1929. University of Chicago, Chicago, Ill.

The purpose of this study was to consider the extent to which there were well and less-well defined procedures designed to facilitate the adjustment of new and inexperienced elementary-school teachers to their work in city school systems over the country, as indicated by data furnished by city superintendents.

1565. **Keene, Archie T.** A comparative study of the teacher requirements and qualifications of different sized Indiana six-six and regular high schools, based on certain specific factors. Master's thesis, 1929. Indiana university, Bloomington. 127 p. ms.

The sources of data for this study were from the daily programs on file in the State department of public instruction, from the principals' annual reports, the blanks of the names and qualifications of high school teachers, and from licenses in the licensing division in the State department. The results show that the requirements made on six-six teachers and administrators are heavier than those exacted from regular teachers and administrators; the six-six teachers in general are less well qualified, compared to the regular teachers.

1566. **Krausbeck, Ruth, and McClain, Ruby.** Comparison of the professional success of sorority versus non-sorority graduates of Indiana state teachers college. Master's thesis, 1929. Indiana state teachers college, Terre Haute. 40 p.

The data for this study were secured from a questionnaire sent to white women graduates with bachelor's degrees of Indiana state teachers college. The study included 277 graduates and covered the years 1900-1926. The findings of this study reveal the fact that before and after graduation non-members were more successful than members in yearly salary, tenure in position, tenure in profession, and training.

1567. **Merritt, Stephen.** A survey of science teachers in the supervisory districts and villages under superintendents in the state of New York. Master's thesis, 1929. New York state college for teachers, Albany.

1568. **National education association.** Practices affecting teacher personnel. Washington, D. C. Research division, National education association, 1928. p. 206-255. (Research bulletin, vol. VI; no. 4, September 1928)

A questionnaire was sent to all school systems of the 2,880 cities over 2,500 in population. A total of 1,532 usable replies were received. Contains information concerning practices in regard to salary scheduling, training requirements, married women as teachers, leave of absence for study and travel, sick leave, efficiency ratings, etc.

1569. ——— **Committee on ethics of the profession.** The ethics of the teaching profession. Washington, D. C., National education association, 1929. 26 p.

Presents a "Code of ethics of the National education association of the United States." Three sections: Relations with pupils and to the community; relations to the profession; and relations to members of the profession. Summarizes opinions of 1,600 teachers and school officials as to whether or not certain practices are to be considered ethical.

1570. ——— **Department of classroom teachers.** Fourth yearbook: Creative teaching and professional progress. Washington, D. C., National education association, 1929. 227 p.

A compilation of reports from individual teachers. Sections as follows: Creative work in teaching (with subject matter subdivisions); Teacher load; Special activities of local organizations and professional problems; and State organizations of classroom teachers.

1571. ——— **Department of superintendence.** Educational research service. Data on married women as teachers, leave for study and travel, sick leave, ratings, differentiated salaries for men and women and number of monthly salary payments, in 66 cities over 100,000 in population. Washington, D. C., National education association, 1928. 5 p. (Educational research service circular, no. 9, 1928)

Reports practices for individual cities; based on questionnaire issued in March 1928.

1572. **Porch, Marvin E.** The status of the married woman school teacher in the state of New Jersey. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1573. **Price, Malcolm Poyer.** An analysis of the rural and city elementary public school teaching personnel of the state of Iowa. Master's thesis, 1929. State university of Iowa, Iowa City. 230 p. ms.

1574. **Ransom, Sara Anne.** Types of service rendered by West Tennessee teachers college. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 96 p. ms.

The purpose of this study was to determine whether graduates and certificate students of the West Tennessee state teachers college go to rural communities to teach and remain there, or whether they go to cities and large towns to teach. Findings: (1) The one-teacher rural schools receive no teaching service from the graduates and very little service from the certificate students; (2) the two-teacher rural schools receive a very small per cent of teaching service from the graduates and certificate students; (3) the three or more teacher rural schools receive a larger per cent of teaching service from the graduate and certificate classes than do the city schools; (4) a very large per cent of the students remain in active teaching positions; (5) a small per cent of the teaching service is lost; (6) a comparatively small per cent go into other states or other parts of the State to teach.

1575. **Beeves, Charles E.** Should the married woman teacher be disqualified? Nation's schools, 2: 13-18, October 1928.

Suggests nine possible ways of dealing with the question.

1576. ——— **Why discriminate against married teachers?** Nation's schools, 2: 53-56, September 1928.

Quotes opinions from several superintendents on the questions arising from the employment of married women as teachers. Finds very little objection to employment of married men.

1577. **Reitell, Charles, and Rohrbach, Quincy A. W.** The personnel of the Pittsburgh public schools, Part I. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 10 p. (Series I, bulletin 4)

Gives distributions of Pittsburgh teachers by sex, service groups, age, marital condition, and dependency.

1578. **Rhodes, Earl N.** The extent to which graduates from differentiated curricula of teachers colleges teach in their respective fields. 1929. State teachers college, Bloomsburg, Pa.

Number of students graduating from each curriculum; number teaching in primary, intermediate, rural and secondary fields; percentage of graduates from each curriculum teaching within their respective fields and in fields for which not trained; number of graduates from each curriculum in excess of requirements; all of the foregoing for each of five successive years and totals for the five-year period.

1579. **Segel, David.** Summary of vacation reports from teachers for summer, 1928. 1929. City schools, Long Beach, Calif. 3 p. ms.

A study of how 989 school employees spent their summers. Twenty-four per cent were in summer schools; five per cent teaching; 18 per cent travelling; 39 per cent on vacation; 14 per cent employed. Details by groups of employees are given.

1580. **Short, James Franklin.** The contribution of high school teachers to professional periodicals. Master's thesis, 1929. University of Illinois, Urbana.

1581. **Staffelbach, Elmer H.** Living conditions of teachers in service. Department of research, California teachers association. Sierra educational news, 25: 39-40, 42, 44, May 1929.

Gives the results of a study of methods in use at the present time by school administrators in California in helping their teachers to find suitable living accommodations in the communities in which they teach.

1582. **Stahl, Edgar A.** A study of teaching personnel in Indiana. Master's thesis, 1929. Indiana state teachers college, Terre Haute. 99 p.

Through the study of the actual environmental backgrounds of 331 individual teachers in Indiana, an attempt was made to determine whether or not the personal history of a teacher affects her teaching success.

1583. **Sutherland, John Enoch.** Teachers' meetings in Minnesota. Master's thesis, July 1929. University of Minnesota, Minneapolis.

1584. **Swanson, Nellie R.** Factors relating to the professional meetings of the Minnesota education association. Master's thesis, 1928. University of Minnesota, Minneapolis.

A study by the questionnaire method of the influence which such elements as time, distance, expense, method of deciding attendance, and the like have on the attendance and success of the general and divisional meetings conducted under the auspices of the Minnesota education association.

1585. **Ullman, Roy.** Prognostic values of certain factors relating to teaching success. Doctor's thesis [1929] University of Michigan, Ann Arbor.

An experimental study carried through three years of time.

1586. **Wagner, Jonas E.** The professional status of faculty members in Pennsylvania teacher training institutions. Educational administration and supervision, 15: 202-11, March 1929.

From an analysis of the undergraduate and graduate degrees, amount and kind of professional experience, ages and salaries of the faculty members of Pennsylvania teacher training institutions, a high standard of education, training, and experience was found.

See also 8, 28, 1305, 1376, 1766, 2490, 2755.

APPOINTMENT AND TENURE

1587. **Alltucker, Margaret M.** Tenure in present positions and training of city school superintendents. School and society, 29: 649-52, May 18, 1929.

A study of the membership list in the 1929 yearbook of the Department of superintendence, showing a median tenure for 1,371 city superintendents of seven years in their present positions. Fifty-four per cent of those reporting hold either a master's or doctor's degree.

1588. **Anderson, Earl W.** The work of an appointments division. Educational research bulletin (Ohio state university), 8: 67-73, February 20, 1929.

This is the second of a series of studies showing the work of the Appointments division of Ohio state university. This study was undertaken for the purpose of analyzing and organizing as many facts regarding teacher placement as possible.

1589. **Atkinson, Carroll.** The selection of junior high school teachers; an effort to evaluate certain qualities to be sought for in the employment of teachers for junior high school work. Master's thesis, June 1929. University of Southern California, Los Angeles.

1590. **Birkelo, Carl P.** A study of some factors involved in the selection of normal school and teachers' college instructors. Educational administration and supervision, 14: 393-403, September 1928.

A study of 17 normal schools and teachers colleges located in seven north-central and western states in order to discover some of the social and economic factors which have a bearing upon the selection of instructors in teacher-training institutions.

1591. **Boitnott, John W.** The tenure of high school principals in Virginia. Master's thesis, September 1928. University of Virginia, Charlottesville.

1592. **Burgeson, W. Bernard.** Current factors affecting teacher selection in South Dakota. July 1929. University of South Dakota, Vermillion. 36 p. ms.

The answers to a questionnaire received from 220 superintendents and heads of schools in South Dakota indicate that superintendents usually select their own teachers or possess the chief voice in the selection made; personal interviews are reported as the one most satisfactory course of information used in selecting teachers; teachers' agencies are reported as the least satisfactory; a small majority of the reports express no preference as to the religion of the teacher; in considering the appointment of teachers, superintendents place more emphasis upon personality than upon the scholastic attainments or other qualifications of the applicant; in a majority of instances married women are discriminated against.

1593. **Carr, William G.** Teachers tenure in California. Division of research, California teachers association, San Francisco. Sierra educational news, 24: 21-24, September 1928.

1594. **Crawford, Lawrence Theodore.** The selection of teachers. Master's thesis, 1929. University of California, Berkeley. 85 p. ms.

A study of: (1) The items of information concerning applicants that superintendents desire, as shown by analyses of teacher application blanks and reference blanks; (2) methods of collecting this information; (3) use made of this information and procedure followed in the final selection. Findings: (1) Tendency for cities to use only one form of application blank; (2) enormous number of "personal information" items included that are wholly irrelevant; (3) tendency to require three, four, five, or six references; (4) many unimportant questions concerning "experience;" (5) none of the "miscellaneous" items can be justified as necessary; (6) 70 per cent of the cities use either one or both sides of a single sheet; (7) 20 per cent of the application blanks show careful preparation and organization; (8) total number of items on blank varied from 17 to 153; (9) tendency toward a rating scale for the various items on the reference blank; and (10) majority require two years academic preparation for elementary school positions and four years for high school positions.

1595. **Davis, Frank G.** Duties and requirements for appointment as personnel officers in city school systems. Doctor's thesis, 1929. New York university, New York, N. Y. 206 p. ms.

This study covers personnel officers such as attendance officers, vocational counselors, deans and advisers of boys and girls, psychologists, psychiatrists, visiting teachers, appointment officers, etc. Only the larger cities were selected for the study.

1596. **Dean, Renwick G.** A study of teachers' contracts. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1597. **Franklin, Ray.** The selection of teachers in cities. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1598. **Gough, H. B.** The procedure followed in the employment of teachers in cities of 2,500-5,000 population in certain selected states. Master's thesis, 1928. University of Minnesota, Minneapolis.

A study of practices followed in 234 cities in North Dakota, South Dakota, Illinois, Indiana, Iowa, Massachusetts, Michigan, New York, Ohio, and Wisconsin in regard to the selection and employment of teachers.

1599. **Hill, A. C. C., jr.** The appointment of college teachers. International Y. M. C. A. college, Springfield, Mass. American association of colleges bulletin 14: 522-40, December 1928.

1600. **Jacobs, F. R.** A study of teacher turnover in the Cincinnati schools. Educational research bulletin (Ohio state university), 7: 343-46, November 14, 1928.

From this study, conducted in the schools of Cincinnati, it was found that the most important factors that cause teachers to resign are marriage, an opportunity to teach elsewhere, and a desire to leave the teaching profession. The most important factor in producing turnover is marriage which causes almost 30 per cent of the entire turnover.

1601. **Johnson, R. R.** An analysis of certain factors concerned with the selection of teachers in the smaller school systems in Minnesota. Master's thesis, 1928. University of Minnesota, Minneapolis.

A detailed analysis of the administrative procedure followed in the selection of teachers and the causes of turnover in Minnesota school systems having less than 5,000 in population.

1602. **Keller, Frank.** Use of the teachers' application blank. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa.

1603. **Minneapolis, Minn. Public schools.** A study of turnover in Minneapolis public schools. 1929. 3 p. (School bulletin, no. 40a, April 25, 1929, p. 3-5)

Shows the effect of turnover upon clerical service, teaching achievement, and general problem of administration.

1604. **Reitell, Charles, and Rohrbach, Quincy A. W.** The personnel of the Pittsburgh public schools, Part V. Tenure. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 23 p. (Series I, bulletin 14)

Shows relationships between tenure and age, sex, and professional growth of Pittsburgh staff.

1605. **Seeder, R. I.** Aspects of tenure and turnover among Minnesota teachers. Master's thesis, 1928. University of Minnesota, Minneapolis. American school board journal, 77: 55, 56, 112, 114, 117, October 1928.

The study shows statistics relating to tenure and turnover in the various types of school systems in Minnesota, for the school year, 1924-25. Of the 21,000 teachers employed approximately 8,500 were in rural schools, 8,600 in the elementary graded schools, and 4,400 in the high schools. The annual demand for teachers for the year was greatest in the rural schools where 26 per cent of the total employed were needed to replace those who left this field. Includes several relevant graphs.

1606. **Stevenson, Fred Gray.** Teachers' contracts in the city school system. Master's thesis, 1929. University of Chicago, Chicago, Ill. 118 p. ms.

An analysis of 420 teachers' contract forms used in as many city school districts. A study of these in comparison with forms supplied by state departments. Conclusions: No standard form of contract in use by a majority of cities was found. Of 460 cities 9 per cent use no form of contract; 37 per cent use "notice and acceptance" forms; the remainder use formal two-party agreement forms. The forms studied show little agreement as to number or nature of stipulations. One-third or more of the contract forms make the following stipulations: (1) Salary for the school year; (2) date for commencing work; (3) that a legal certificate be required; (4) that employment be subject to the rules and regulations of the employing board. Leading provisions in state forms of contracts (i. e., forms furnished by 29 State Departments) are: (1) Date for commencing work; (2) employment subject to rules and regulations of employing board; (3) certificate or license to teach required; (4) requirements of state law part of contract; (5) salary for the school year; (6) length of school term; (7) dismissal for cause; (8) deductions from salary for retirement fund.

1607. **Tiegs, Ernest Walter.** An evaluation of some techniques of teacher selection. Bloomington, Ill., Public school publishing company, 1928. 108 p.

The author has made a critical, analytical evaluation of the present available evidence bearing on the qualifications necessary to good teaching. Contains a discussion of the findings and limitations of the studies of other writers, a presentation and evaluation of studies made by the author in schools in Minneapolis, Minn., and suggests techniques which give promise of improvement in the effectiveness with which teachers may be selected.

1608. **Tilton, Edwin B.** An analysis of applications for teaching position in a city school. Master's thesis, 1929. Leland Stanford university, Palo Alto, Calif.

Intensive study of the 600 applications on file for current year, and comparison instituted with the 600 teachers now employed in city schools, to determine whether professional training, successful experience and evidence of growth in the candidates equals or surpasses that of the regular staff in the city schools.

1609. **Vick, Claude Edward.** A study of the written recommendation as a factor in the selection of teachers. Master's thesis, 1929. University of Illinois, Urbana.

1610. **Waller, Jesse Crawford.** Tenure of transiency of teachers in Kentucky. Doctor's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 54 p.

1611. **Whitley, S. H.** Factors and qualities to be considered by those charged with the responsibility of selecting college faculty members. 1928. East Texas state teachers college, Commerce. 26 p. ms.

A letter of inquiry was sent to 200 college presidents. Replies were received from 110 of them. Findings: In considering faculty people, colleges throughout the country desire to know that they are graduates of well-regulated and fully affiliated high schools, standardized colleges and universities. Most of the colleges demand masters' or doctors' degrees. Practically all colleges require some information relative to the teaching ability of the proposed faculty member; etc.

1612. **Willett, George W.** Efficiency of teacher placement agencies. (A committee report.) North central association quarterly, 3: 187-99, September 1928.

Private agencies are filling many of the best paying positions, according to the replies to an inquiry of 1925-26 sent out by a committee of the North central association of colleges and secondary schools. School reporting indicate that while they notify institutional bureaus twice as often as they do private agencies, due to the failure of institutional bureaus to keep informed of the progress of their graduates they are unable to satisfy the demand for experienced teachers.

See also 94, 1700, 1730, 1854, 2521.

CERTIFICATION OF TEACHERS

1613. **Cammack, James W.** Extension work offered by Kentucky teachers for certification in 1928. Master's thesis, 1929. University of Kentucky, Lexington.

1614. **Gray, Robert F.** Certification. November 1928. Department of service, Public schools, San Francisco, Calif. 2 p. ms. (Bulletin no. 2)

Data as to types of certificates held by teachers in various types of schools, also levels of professional training.

1615. **Myers, George E.** Desirability of tendencies in certification of teachers. 1929. University of Michigan, Ann Arbor.

A summary of judgments of deans of schools of education, presidents of teachers colleges, state superintendents, and superintendents of city schools on the desirability of tendencies in certification as reported by the United States Bureau of education.

1616. **Noble, M. O. S., jr.** Specific preparation of teachers in North Carolina as revealed by transcripts presented in application for various types of teachers certificates. 1928. North Carolina state department of public instruction, Raleigh. 125 p. ms.

Data for five groups are presented; namely, (1) 100 teachers who hold primary grade class A teachers certificates; (2) 100 teachers who hold grammar grade class A teachers certificates; (3) 100 high school English teachers who hold high school class A certificates; (4) 100 high school history teachers who hold high school class A teachers certificates; and (5) 100 high school French teachers who hold high school class A teachers certificates.

1617. **Reitell, Charles, and Rohrbach, Quincy A. W.** The personnel of the Pittsburgh public schools. Part II: Certification. Pittsburgh, Pa., Citizens' committee on teachers salaries [1928] 9 p. (Series I, Bulletin 5)

College certificates, normal school certificates, standard certificates, partial certificates, held by Pittsburgh teachers. Partial information from eight other cities, discussion of principles.

1618. **Whitney, Mabel May.** The history of the certification of teachers in the State of Oregon. 1928. University of Chicago, Chicago, Ill.

1619. **Yeager, William A.** State certification as a factor in the training of elementary teachers-in-service. Doctor's thesis, 1929. University of Pennsylvania, Philadelphia. Kutztown, Pa., Kutztown printing co., 1929. 350 p.

State of Pennsylvania.

IMPROVEMENT OF TEACHERS IN SERVICE

1620. **Barthelmess, Harriet M., and Boyer, Philip A.** A study of the relation between teaching efficiency and amount of college credit earned while in service. *Educational administration and supervision*, 14: 521-35, November 1928.

Gives the results of a questionnaire filled out by 5,002 elementary and 1,220 junior high school teachers and the principals supplying the efficiency ratings. The following correlations were found: Experience and credits, .228 (elementary) and .346 (junior high); experience and efficiency, .272 and .355; credits and efficiency, .16 and .189.

1621. **Bunney, Rollie A.** Some types of professional growth required and provided for by boards of education for Nebraska high-school teachers. *Educational research record (University of Nebraska)*, 1: 71-79, December 1928.

The purpose of this study was to determine the policies or practices that exist in Nebraska with respect to the encouragement of professional growth for Nebraska high-school teachers required and provided for by boards of education.

1622. **Frost, Mary Cooper.** Sabbatical leave for the public school teacher. Master's thesis, 1929. University of Denver, Denver, Colo. 64 p. ms.

A questionnaire was sent by the teachers' interests committee of the Denver classroom teachers association to various cities in the country to find out what teachers are eligible for sabbatical leave; how many may be on leave at one time, and what basis there shall be for granting or refusing leave in case more eligible teachers apply than can be permitted to go on leave. The findings show that the economic loss to the community is negligible; service is prolonged, and professional skill is stimulated.

1623. **Helfenstein, Vernon A.** Teachers' reaction to institute programs. Master's thesis, 1928. State university of Iowa, Iowa City. 61 p. ms.

1624. **Ivins, Lester S.** Training teachers of vocational agriculture in service. Recommendations for formulating state programs for improving agricultural teachers. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 84 p. (George Peabody college for teachers. Contributions to education, no. 54)

1625. **Oakland, Calif. Public schools.** Report on the professional study of teachers and principals of the Oakland public schools for the year ending December 31, 1928. 1929.

1626. **Philadelphia, Pa. Board of public education.** The relation between teaching efficiency and amount of college credit earned while in service. Philadelphia, Pa., Board of public education, 1928. 28 p.

A cooperative study by the Public school council and the Department of superintendence. Data gathered from more than 6,000 teachers were analyzed and interpreted to discover the relationships among the various factors contributing to teaching efficiency. The general conclusion of this investigation shows that there is a positive relation between advanced study during service and teaching efficiency.

1627. **Soelberg, John.** The relation between amount of professional study and teacher efficiency. Master's thesis, 1929. University of California, Berkeley. 85 p. ms.

The purpose of this study was to determine the relation between the amount of professional study that Oakland teachers complete while in service and principals' ratings of their efficiency as teachers. Conclusions: The writer concludes that the unreliability of the Oakland teaching rating scale, used as a measure of real teaching efficiency makes impossible the statement of any final conclusions regarding this factor. In view of the fact that validity of judgment can not, except as a matter of chance, be very much higher than reliability of judgment, the low order of reliability shown by principals' ratings of teaching efficiency in Oakland, renders very doubtful the validity of such judgments as measures of real teaching efficiency.

1628. **Umbarger, H. L.** The training of teachers in service as an aid to supervision in the small high school. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 26 p. ms.

See also 1568, 1571, 1579, 1581, 1619.

RATING OF TEACHERS

1629. **Allen, C. H.** Statistical study of teachers' grades given in the Cullowhee state normal during session 1927-28 and summer, 1928. 1928-29. Cullowhee state normal school, Cullowhee, N. C. Ms.

The purpose of this study was to make an analysis of the distribution of each instructor's grades given over a period of one year of four quarters.

1630. **Baird, James, and Bates, Guy.** The basis of teacher rating. Educational administration and supervision, 15: 175-83, March 1929.

A study of the ratings made by 128 principals on 571 teachers in Detroit, for the purpose of discovering to what extent the general merit rating given to teachers by principals is correlated with success in teaching when measured by standard tests in reading.

1631. **Barr, A. S., and Emans, Lester M.** An analysis of teachers rating scales. ms. (A. S. Barr is professor at the University of Wisconsin, Madison)

1632. **Beam, M. S.** Self rating of teachers, 1928-29. Public schools, Albemarle, N. C. Ms.

This study was conducted in the interest of improvement of teachers and teaching by self-analysis, resulting in salary schedule worked out by teachers and self rating sheet made by teachers.

1633. **Courtis, S. A.** The measurement of the effect of teaching. School and society, 28: 52-56, 84-88, July 7, 14, 1928.

The writer attempts to show that measurement of the effects of teaching by objective tests is an unreliable method, and presents a new analytical technique, demonstrated through experimentation, as a satisfactory measurement of the effects of teaching.

1634. **Davis, Calvin O.** What qualifications are demanded of teachers? Nation's schools, 3: 31-34, January; 62-68, February; 71-76, May; 46-50, June 1929.

In determining the retention, dismissal, or promotion of teachers, the use of the following standards appears to be desirable: (1) The adoption of a five-point scale of discrimination; (2) the making of not fewer than three ratings each year; and (3) the scoring on a limited number of definite items only, such as health, interest in the general work of the school; interest in pupils, etc.

1635. **Frasier, George W.** Teaching as measured by pupils, school officers and other teachers. Greeley, Colorado state teachers college, 1928. (Colorado parent-teachers, 1928)

1636. **Gipson, David William.** The reliability of teachers rating scales. Master's thesis, 1929. University of Chicago, Chicago, Ill. 62 p. ms.

Ninety teachers rated college instructors, and five supervisors rated 90 teachers in the public schools. Findings: The Rugg teachers rating scale will give results as reliable as unaided judgment. Results obtained by a judge using the Freyd rating scale are not as reliable as results obtained by unaided judgment.

1637. **Henry, Beryl.** Evaluating teaching by means of pupil activity chart. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 120 p. ms.

1638. **Hunt, Thelma.** Measuring teaching aptitude. Educational administration and supervision, 15: 334-42, May 1929.

Describes the teaching aptitude test prepared by the Department of psychology of George Washington university, Washington, D. C.

1639. **Kitson, Harry Dexter.** Measuring the interest of teachers in their work. Teachers college record, 30: 28-33, October 1928.

A group of 409 teachers were measured in order to find the degree of interest each one had in her work. The computations show that, in general, the teachers with the highest degree of interest had been engaged in teaching the longest period of time.

1640. **Morris, J. V. L.** Students rating of teachers. 1928. Northwestern state teachers college, Alva, Okla. Oklahoma teacher, 10: 14, 16, 32, September 1928.

Students ranked all their instructors in 1, 2, 3, 4, 5 order and stated basis for choosing first one as first and last one as poorest. Faculty was ranked on this basis and correlations with President's ranking computed (.61±.08); with the average of term grades given by same instructors (.02±.13). Findings: The high correlation with President's ranking suggests large significance in student rating and almost zero correlation with average of term grades; students did not form their estimate of instructor on the basis of his generosity in grading.

1641. **Nanninga, S. P.** Estimates of teachers in service made by graduate students as compared with estimates made by principal and assistant principal. *School review*, 36: 622-26, October 1928.

There is a tendency for the raters to agree on the teachers and their ratings.

1642. **Newmark, David.** Students' opinions of their best and poorest teachers. *Elementary school journal*, 29: 576-85, April 1929.

Data for this study were obtained from 223 students in Philadelphia normal school.

1643. **Reager, Beatta.** The reliability of the Iowa state rating scale for student teachers. Master's thesis, 1929. Iowa state college, Ames. 59 p. ms.

The reliability of the Iowa state college rating scale was determined upon the basis of a study of two different ratings by 272 students on 15 instructors.

1644. **Remmers, H. H.** The college professor as the student sees him. Lafayette, Ind., Purdue university, 1929. 63 p. (*Bulletin of Purdue university*, vol. XXIX, no. 6, March 1929. Studies in higher education XI)

The present study deals with an effort to achieve self-improvement of teaching by consulting the students concerning the characteristics of what may be called the teaching personalities of their teachers. Conclusions: Validity for the Purdue rating scale for instructors is synonymous with reliability; the reliability of the average scale score compares favorably with that of the best standardized objective tests if from 75 to 100 students' judgments are averaged, etc.

1645. **Smith, William Jefferson.** Evaluation of teaching by analysis of learning exercises. Master's thesis, 1929. George Peabody college for teachers. Nashville, Tenn. 153 p. ms.

1646. **Stalnaker, J. M., and Remmers, H. H.** Can students discriminate traits associated with success in teaching? *Journal of applied psychology*, 12: 602-10, December 1928.

The conclusions reached from this study are: (1) Students show a high degree of agreement in their judgment of the relative importance of the ten traits of the Purdue rating scale for instructors; (2) there is little halo effect in student judgments of teacher traits; and (3), each of the traits comprising the scale adds something to the total picture of the teacher as seen by the student.

1647. **Storey, Ralph E.** The development of teacher rating: Its significance and implications. Master's thesis, 1928. University of Washington, Seattle. 226 p.

The development of the practices of teacher rating as reflecting the educational and sociological forces governing it, with particular emphasis upon the significance of rating to teachers and the profession, and its implications with respect to its elevation of professional spirit and practices.

See also 1540, 1568, 1571, 1620, 1626-1627.

TEACHER LOAD

1648. **Anderson, Earl W.** The teaching-load of the beginner in high school. *Educational research bulletin (Ohio state university)*, 7: 280-81, 291-92, October 3, 1928.

This reports a study carried on as part of the work of the Appointments division, Ohio state university. Based on the reports of 60 1927 graduates, the beginning teacher has one chance in four of teaching only in his major or minor fields, he has one chance in four of teaching only one subject outside of his major or minor, one chance in four of teaching two outside subjects, and one chance in four of being asked to handle three or more subjects for which he has not prepared in college.

1649. **Ayer, Fred C.** How the teaching load is handled in state and other universities. *Nation's schools*, 3: 21-25, June 1929.

Thirty-two state and 28 non-state universities were studied. The conclusion is reached that in state universities the size of the teaching load decreases as the rank of the faculty member becomes higher and as the enrollment of the university becomes larger.

1650. **Chapman, H. B.** Pupil-teachers ratio report. February 1929. Bureau of research, Department of education, Baltimore, Md. 11 p. ms.

An administrative study of the ratio of pupils to teachers in the several types of schools.

1651. **Douglass, Earl R.** Measuring the teaching load in the high school. *Nation's schools*, 2: 22-24, October 1928.

Suggests tentative formulas for measuring teaching load.

1652. **Main, Mabel Fredrika.** A survey of teachers' loads. Master's thesis, 1928. University of California, Berkeley. 152 p. ms.

The purpose of the study was to show the teaching loads of senior and junior high school teachers in six cities around the San Francisco Bay section; and to make a comparison of the teaching loads in different schools, and in various departments. Findings: (1) The smallest average number of hours taught in any department is found in English; the largest, commerce; (2) the smallest average in number of pupils taught in any department is in ancient language; the largest in music; (3) the smallest average number of pupils advisory is found in music and trade and industries; the largest in modern language; (4) the smallest average of total number of pupils in any department is found in trades and industries; the largest in mathematics; (5) the smallest average number of pupil-hours teaching load in any department is in ancient language; the largest in music; (6) the smallest average of total number of pupil-loads is found in trades and industries; the largest in mathematics; (7) the smallest average number of classes in any department is found in English, the largest in trades and industries.

1653. **Nelson, M. G.** Subject combinations in the programs of teachers in small secondary schools in New York State. *School review*, 37: 426-32, June 1929.

Study seeks to determine the subject combinations existing in 210 secondary schools during the school year 1927-28.

1654. **Powdermaker, Theresa.** Statistical study of the teaching load of women physical education instructors. *American physical education review*, 34: 580-83, May 1929.

Abstract of a study made by sending questionnaires to 200 physical education instructors in high schools throughout the country. The study brings out the fact that the total teaching load in colleges and universities varies from 24 to 26 hours per week while in high schools it is about 55 hours per week. This is far too excessive a load for women teachers of physical education.

1655. **Reichard, Clifford Emerick.** The working day of the high school teacher in Minneapolis. Master's thesis, June 1929. University of Minnesota, Minneapolis.

1656. **Reitell, Charles, and Rohrbach, Quincy A. W.** The teaching load. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 10 p. (Series 1, Bulletin 13)

Presents data as to length of school year, length of school day, and the teaching load based on pupil-recitations.

1657. **Unzicker, S. P.** A study of teaching loads in junior high schools in Wisconsin. *School review*, 37: 136-41, February 1929.

From replies to a questionnaire received from 23 schools in 17 cities, a great range in the number of pupils per teacher was found. The median was 22 and the mean 24.

1658. **Van Slyke, Bert S.** Recapitulation of replies to questionnaire of November 10, 1928. Board of education, Sioux Falls, S. D. 3 p. ms.

Shows pupil load per teacher figured in two ways—on enrollment and on average daily attendance—for grade schools, junior and senior high schools, in 14 cities in states neighboring to South Dakota.

1659. **Walker, Mary, and Laslett, H. R.** Time expenditure by high-school teachers. *School and society*, 29: 131-32, January 26, 1929.

An investigation to find the amounts of time actually spent on their several activities by the three teachers of a typical small high school. Record of time spent in each activity was recorded for each half day for a week and results tabulated. Benefit to teachers of time budgets pointed out.

See also 102, 1436, 1490, 1544, 1548, 1570.

TEACHER SUPPLY

1660. **Bolton, Frederick E.** Training and supply of high school teachers in the northwest states. *In Northwest association of secondary and higher schools. Proceedings of the eleventh annual meeting . . . Spokane, Wash., April 5, 1928.* p. 11-19.

Results of a questionnaire sent to city schools seem to show a distinct shortage in the fields of athletics, chemistry, drawing, manual arts, music, physics, art, elementary school principalships, and junior high school teachers. A supply not quite equalling the demand is shown in the fields of botany, zoology, dramatics, geology, Spanish, stenography, and high school principalships. A very definite oversupply is revealed in the fields of civics, economics, English, history, home economics, mathematics, political science, sociology, primary grades, and superintendencies in small towns. A slight excess of supply over demand is found in the fields of Latin and typewriting.

1661. **Grant, Albert, and Cowley, W. H.** A technique for analyzing the supply and demand of educational workers. *School and society*, 29: 618-20, May 11, 1929. (Taken from an unpublished study made at the University of Chicago under the direction of Frank N. Freeman)

Analyzes and evaluates data derived from the files of the Board of vocational guidance and placement of the University of Chicago as to requests for educational workers received and individuals registered as candidates for educational positions to show the relation between supply and demand as to types of work, individual subjects, and related subjects. Suggests that reliability of results depends upon size of numbers involved and that further indication as to reliability can be achieved by making the analysis perennial.

1662. **Messner, Clarence J.** The demand for public school teachers in the state of Colorado. Master's thesis, March 1929. Colorado state teachers college, Greeley. 152 p. ms.

Repetition of Buckingham's Ohio study. 36 first-class, 79 second-class and third-class districts in Colorado were studied. School year 1926-27 was used. Conclusions: (1) One-third of the teachers new to the state come from teacher-training institutions in other states; (2) the entire teaching staff of the state changes approximately every three years; (3) the new special teachers and administrators nearly all come from outside the state.

1663. **Ohio education association. Educational council.** The relation between the demand and supply of elementary teachers in Ohio with special reference to the question of raising the statutory training requirements for admission to the profession. Columbus, Ohio, May 1929. 54 p. ms.

According to the data collected, the estimated total demand for elementary teachers in Ohio in 1928-29 was at least 3,874, and the corresponding estimated supply only 2,106, making the estimated shortage of "trained" elementary teachers in the public schools of Ohio at least 1,768. It is recommended that legislation be enacted to provide that after a specified date every elementary teacher beginning service in Ohio shall be required to have at least two years of specific professional preparation beyond the high school, and to hold a state-wide certificate for teaching in the elementary field, etc.

1664. **Silas, Paul Gordon.** The private colleges of Iowa as a source of teacher supply. Master's thesis, 1929. State university of Iowa, Iowa City. 75 p. ms.

1665. **Tope, Donald E.** The normal training high schools in Iowa as a source of teacher supply. Master's thesis, 1929. State university of Iowa, Iowa City. 65 p. ms.

1666. **Whitney, Frederick L.** Teacher demand and supply in the public schools, 1929. Colorado state teachers college, Greeley. 139 p. (Colorado state teachers college education series, no. 8)

1667. **Williams, Lewis W.** Supply and demand as applied to high school teachers. Urbana, Ill., University of Illinois, 1929. 11 p. (University of Illinois bulletin, vol. XXVI, no. 26)

The author thinks that there is evidence of an oversupply of high school teachers in particular lines.

1668. **Woodward, Clair L.** State university of Iowa as a source of teacher supply. Master's thesis, 1929. State university of Iowa, Iowa City. 78 p. ms.

TEACHER'S HEALTH

1669. **Bishop, Ralph Thomas.** A study of the health of teachers in a western city. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1670. **Kidwell, Kathro.** A study and investigation of the health of women teachers of physical education. *American physical education review*, 34: 83-90, February 1929.

An investigation of the health of 214 teachers of physical education. The article also includes a summary of factors such as extracurricular and leisure time activities which might have a very direct bearing on the health of the teacher of physical education. The questionnaire brings out the fact that the teaching load is far too heavy.

1671. **Luckey, G. W. A.** Longevity of eminent educators. *School and society*, 28: 244-48, August 25, 1928.

A study of the longevity of 1,172 eminent individuals covering different occupations and periods of history based upon data secured from Monroe's *Cyclopedia of Education* for 1911.

1672. **West, Herman E.** Administration of teacher sick leave benefits in Oakland, Berkeley and San Francisco. Master's thesis, 1929. University of California, Berkeley. 63 p. ms.

The problem is to determine factors which must be considered in forming a sick leave benefit plan. Findings: Oakland grants sick leave benefit of $\frac{1}{2}$ regular pay for a maximum of 60 days yearly; Berkeley grants full pay for 10 days, and the remainder of salary after deducting pay of substitute teacher for the next 20 days, yearly; San Francisco, grants full pay for 5 days and $\frac{1}{2}$ pay for the next 10 days yearly. Oakland sick benefit plan has cost, on average, \$0.40 per annum for each teacher; San Francisco's sick benefit plan has cost, on the average, \$12 per annum for each teacher; Berkeley's plan has cost on the average, \$13.68 per annum for each teacher. Teachers are absent under the Oakland plan less than those under the other two; women are absent about three times as many days per annum as men; the younger teachers are absent more than the older teachers.

1673. **Wood, Thomas F., chairman.** Teacher's health. 1928.

Results of a study made through the Department of health education of Teachers college, Columbia university.

See also 1496, 1499, 1568, 1571.

TEACHERS' PENSIONS

1674. **Carr, William G.** Teacher opinion on retirement salaries. 1928. Committee on retirement, California teachers association. Sierra educational news, 24: 8-9, November 1928.

Questionnaire returns from 4,552 California teachers, sampling 21 counties. Findings: Two out of three teachers now favor a flat-rate plan. There is a very wide range of opinion on preferred annual deposits, though few respondents favor more than \$40 annually or over 6 per cent of the annual salary.

1675. **Cebollero, Pedro A.** A study of the teachers pension system of Porto Rico. Master's thesis, 1929. University of Chicago, Chicago, Ill. 121 p. ms.

Evolution of pension legislation in Porto Rico; present law evaluated against American legislation and authoritative pronouncements. Findings: Porto Rican law inadequate; actuarially unsound; rates too low; no refunds provided; no individual accounts kept.

1676. **National education association. Committee on retirement allowances.** Report of the Committee on retirement allowances. Washington, D. C., National education association, 1929. 21 p.

A list of state and local teacher retirement systems now in effect is given; also a bibliography. Principles are discussed.

1677. **Schwiering, O. C.** Survey of Wyoming teachers, 1928. 1928. Wyoming state teachers association, Laramie.

Data gathered for actuarial evaluation to determine sound teacher retirement law for Wyoming.

1678. **Staffelbach, Elmer H.** Looking ahead financially. Department of research, California teachers association. Sierra educational news, 25: 27-32, June 1929.

Gives figures showing how much will be necessary for teachers in California to save monthly in order to insure an adequate income upon retirement.

TEACHERS' PERSONALITY

1679. **Coleman, Sara.** The relation of personal qualities to the successful teaching of social science. Master's thesis, June 1929. Colorado state teachers college, Greeley. 109 p. ms.

A study of 252 individual ratings of high school teachers employed in the social science departments of 28 accredited high schools. Of these ratings, 90 were based on personal qualities of teachers for general value and classroom efficiency. The other 162 ratings were based on classroom efficiency only. Twenty-eight competent school administrators and seven training school supervisors' opinions were used. Findings: (1) Opinions of school administrators indicate that there is more good teaching being done than poor; (2) the personal element is recognized as an essential factor in teaching success; (3) social science is not essentially a man's field, although a greater per cent of the superior teaching in that field is being done by men; (4) Interest in the teaching profession and in the field of social science, a broad knowledge of subject matter with the ability to impart that knowledge to others and a spirit of cooperation are the fundamental qualities of successful teaching; (5) this study revealed no personal qualities exclusively characteristic of the effective teaching of history and other social subjects.

1680. **Lide, E. S.** Personality traits of school administrators. Educational research bulletin (Ohio state university), 8: 141-43, April 3, 1929.

This article contains a table showing the evaluation of 25 judges in ranking administrative traits.

1681. **Murphy, Isobel Niven.** Qualities that adults admire in their teachers. California quarterly of secondary education, 4: 141-42, January 1929.

A study based upon 16 replies from an English class in the Los Angeles college of law.

1682. **Ryle, Florence.** Qualities that students admire in teachers. California quarterly of secondary education, 4: 82-85, October 1928.

Study based upon 48 compositions written by senior English classes in the Belmont high school, Los Angeles.

1683. **Shannon, John Raymond.** Personal and social traits requisite for high grade teaching in secondary schools. Terre Haute, Ind., State normal press, 1928.

The data are based on personal interviews with supervisors, students' estimates of teachers, analysis of rating scales, studies of why teachers fail, etc. The author finds that the primary traits that have most to do in influencing success in teaching in secondary schools are sympathy, judgment, self-control, enthusiasm, stimulative power, and earnestness.

1684. **Wood, Claude Rodolphus.** Does personality have a definite and consistent use in education? Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn.

Three hundred and fifty-seven teachers in eight Alabama cities were studied. Findings: Personality seems to have an indefinite but consistent use in education.

See also 519, 2167.

TEACHERS' SALARIES

1685. **Alexander, Carter.** A salary schedule for New Jersey state normal schools. Report made to the salary committee of the New Jersey normal school teachers association, 1928. 15 p. ms.

1686. **Carr, William G.** Recent statistics on California teachers salaries. Division of research, California teachers association. Sierra educational news, 25: 12-13, January 1929.

1687. **Clark, Bidgley C.** Critical analysis of principles involved in Connecticut teachers' salary schedules. Master's thesis, 1929. Yale university, New Haven, Conn. 101 p. ms.

1688. **Cook, Katherine M.** Salaries and certain legal provisions relating to the county school superintendency in the United States. Washington, United States Government printing office, 1929. 22 p. (U. S. Bureau of education: Rural school leaflet, no. 45, March 1929)

1689. **Cowles, LeRoy E.** Teachers' salaries in Utah: Salt Lake City, Utah education association, May 6, 1929. 18 p. (Utah education association. Bulletin, no. 18)

1690. **Cushman, C. L.** Teachers' salaries in Oklahoma City compared with other cities of a similar size. March 1929. Oklahoma City, Okla. Ms.

1691. **Davis, Calvin O.** Teachers' salary schedules and promotions. University of Michigan, Ann Arbor. High school teacher, 5: 54-55, 59, 61, February 1929.

A study made upon analyses of forms used by administrative officers and a perusal of official reports.

1692. **Elsbree, Willard S.** Teachers salaries in Yonkers. 1929. Institute of educational research, Teachers college, Columbia university, New York, N. Y. Yonkers, N. Y., Yonkers branch of the New York state teachers association, 1929. 49 p.

1693. **Ferguson, William Shauck.** A comparative study of the factors affecting the salaries of superintendents and principals of cities and exempted villages of Ohio. Master's thesis, 1928-29. Ohio state university, Columbus.

1694. **Gaumnitz, W. H.** Salaries and salary trends of teachers in rural schools. Washington, United States Government printing office, 1929. 54 p. (U. S. Bureau of education. Bulletin, 1929, no. 6)

The figures from this study would seem to indicate: (1) That there is a slight tendency to reduce the number of teachers receiving the lower salary amounts and to increase the number receiving the larger salary amounts; (2) median salaries of rural teachers were increased slightly and salary averages of rural school administrators show considerable improvement during the four years; (3) the largest salary increases achieved by rural teachers were achieved in the larger rural schools represented by consolidated and village schools; (4) wide differences obtain between the salaries of rural teachers and those of urban teachers, and indications are that these disparities are increasing.

1695. **Holy, T. C., and Green, R. E.** An analysis of the 1923 and 1928 salary schedules of Ohio cities and exempted villages. Educational research bulletin (Ohio state university) 8: 1-6, January 9, 1929.

Schedules classified according to size of city and tabulated to show, for years 1923 and 1928, minimum and maximum salaries, the number of years required to reach maximum and amount of increase allowed each year.

1696. **Illinois state teachers association. Department of research and statistics.** Salary schedules in Illinois. 1929. 15 p. ms.

Gives the salary schedules in effect in different cities in Illinois.

1697. **Jensen, F. H.** Development of a salary schedule. How Rockford, Ill., built a new teachers' salary plan. American school board journal, 78: 45-46, June 1929.

Tabulation of adopted salary schedule, according to years of experience and training of teachers with the final adopted salary schedule.

1698. **Kegerreis, Rachel Bernice.** A study of high school teachers salaries and salary trends in South Dakota during the past ten years. Master's thesis, 1929. University of South Dakota, Vermilion. 54 p. ms.

1699. **Kelly, E. L.** Salaries in state teacher-training institutions. Greeley, Colorado state teachers college, 1928. (Research bulletin no. 13)

A report of all salaries in all state normal schools and state teachers colleges, 1927-28.

1700. **McClimans, Jay Wilmot.** Salary, tenure, and teaching combinations of mathematics teachers in Missouri. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 64 p. ms.

547 secondary schools of Missouri were used in this study. Findings: (1) All mathematics teachers studied receive a mean salary of \$1,490 per year; (2) teachers of mathematics only receive a larger salary than combination mathematics teachers; (3) the men teachers in every group studied receive a better salary than the women teachers in the same group; (4) the mean tenure of combination mathematics teachers was found to be 2.49 years, while that of teachers of mathematics only was 4.36 years; women teachers of mathematics only have a mean tenure of 5.53 years—this exceeds the tenure of any other group studied; (5) science is combined with mathematics more than any other subject—social subjects and physical education come next in order of frequency; (6) more than one-half of the mathematics teachers in this study are administrators; and (7) combination mathematics teachers, on an average, teach in more than two fields.

1701. **Massachusetts teachers federation.** Salaries of teachers in the public day schools of Massachusetts. Common ground, 8: 133-43, January 1929.

1702. **Maurer, James M.** Methods used to compensate instructors for extension teaching. School and society, 28: 308-10, September 8, 1928.

A questionnaire study of methods of compensation for extension work employed in 77 universities and colleges having extension departments and suggestions offered for modification and improvement of such methods.

1703. **Myers, C. E., Thomas, M. W., and Garnett, W. E.** Montgomery county salary schedule. 1929. State board of education, Richmond, Va. 13 p. ms.

A study of the salary schedule and its relation to enrollment, attendance, teaching efficiency, professional zeal, school organization and supervision. Salary schedule was found to be based upon attendance, teacher preparation and administrative duties and measured teaching efficiency.

1704. **National education association. Research division.** Salary scales in city school systems in 1928-29. Washington, D. C., National education association, 1929. 68 p. (Research bulletin, vol. VII, no. 3, May 1929)

1705. ———— Tabulations I-A. Salaries paid teachers, principals and certain other school employees, 1928-29, 67 cities over 100,000 in population. Washington, D. C., National education association, 1929. 32 p.

1706. ———— Tabulations II-A. Salaries paid teachers, principals and certain other school employees, 1928-29, 170 cities 30,000 to 100,000 in population. Washington, D. C., National education association, 1929.

1707. ———— Tabulations III-A. Salaries paid teachers, principals and certain other school employees, 1928-29, 308 cities 10,000 to 30,000 in population. Washington, D. C., National education association, 1929. 37 p.

1708. ———— Tabulations IV-A. Salaries paid teachers, principals and certain other school employees, 1928-1929, cities from 5,000 to 10,000 in population. Washington, D. C., National education association, 1929. 36 p.

1709. ———— Tabulations I-B. Salaries paid school administrative and supervisory officers, 1928-1929, 67 cities over 100,000 in population. Washington, D. C., National education association, 1929.

1710. ———— Tabulations II-B. Salaries paid school administrative and supervisory officers, 1928-1929, 170 cities 30,000 to 100,000 in population. Washington, D. C., National education association, 1929.

1711. **Oklahoma City, Okla. Public schools. Research department.** Comparison of teacher salaries and salary schedules in Oklahoma City and other cities of a comparable size. [1929] 6 p. ms.

1712. **Pittsburgh, Pa. Citizens committee on teachers salaries.** The proposed Pittsburgh salary schedule and plans for its administration. American school board journal, 78:77, 80, 82, February 1929.

1713. **Reitell, Charles, and Rohrbach, Quincy, A. W.** The cost of living and teachers' salaries in Pittsburgh. Pittsburgh, Pa., Citizens' committee on teachers salaries [1928] 15 p. (Series I, Bulletin 9)

Compares trends since 1913 in teachers' salaries and in cost of living.

1714. ———— The personnel of the Pittsburgh public schools, Part IV: Services performed and salaries paid. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 16 p. (Series I, Bulletin 7)

Defines services performed, presents distributions showing salaries paid in various levels of Pittsburgh schedule.

1715. ———— Pittsburgh cost of living compared with other cities. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 11 p. (Series I, Bulletin 12)

Gives index of cost of living in 28 cities, with cost in Pittsburgh as base. Uses U. S. Bureau of labor figures.

1716. ———— Pittsburgh salaries compared with other cities. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 15 p. (Series I, Bulletin 10)

Gives distribution of actual salaries paid in Pittsburgh and certain other cities, to teachers and principals.

1717. ———— Salary increments. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 6 p. (Series I, Bulletin 3)

Discusses number and amount of increments in 19 cities; raises questions to be considered in establishing increments.

1718. ———— The salary schedules of Pittsburgh and eighteen selected cities. Pittsburgh, Pa., Citizens' committee on teachers' salaries [1928] 5 p. (Series I, Bulletin 2)

1719. **Rodman, Walter Sheldon.** A further report concerning salaries and salary scales at the University of Virginia, supplementing the resolutions of May 1, 1928. February 1929. University of Virginia, Charlottesville. 57 p.

A detailed statistical study of salaries at the University of Virginia for a period of years with suggested new scale for a more adequate remuneration.

1720. **Bohrbach, Quincy Alvin W.** Procedures in the preparation of the Pittsburgh salary schedule. *American school board journal*, 78: 41-42, May 1929.

Points out steps taken in making the Pittsburgh teachers' salary schedule. Enumerates the principles considered in making the study. Lists grades of salaries.

1721. **Rossmann, John G.** Salary schedules and return upon investment. *American school board journal*, 77: 37, 38, 115, December 1928.

A comparison of teachers' and clerks' salary schedules. Considerable data from a number of schools show salary schedules in relation to possible savings at present day prices of necessities.

1722. **San Diego, Calif. Public schools.** Status of teachers salaries in San Diego city schools. 1929. 23 p. ms.

A brief survey of the comparative status of salaries of teachers, principals and administrators in San Diego, compiled in graphic form, 1929.

1723. **Sheffer, W. E.** Study of salaries in the Manhattan public schools together with a proposed salary schedule and the financial effects of the proposed schedule. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 36 p. ms.

1724. **Thompson, Roger M.** Teachers' salaries 1928-29. Hartford, Connecticut state board of education, 1929. (Research letter 1—salaries 1928-29)

1725. **Whiting, John Martin.** Factors that should be considered in making a teacher's salary schedule and the weight that should be given each. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1726. **Whitney, Frederick L.** Teachers college employee's pay. 1929. Colorado state teachers college, Greeley. (Mimeographed report, January 1929)

A report on the compensation of employees outside of the faculties of representative state teachers colleges.

1727. **Wiley, Roy W.** Educational writers and their salaries. *University of Pittsburgh school of education journal*, 4: 61-67, January-February 1929.

Questionnaires addressed to 263 writers in October issues of 10 educational magazines over a period of five years indicates that salary advances are due to causes other than professional writing.

1728. **Willard, Arthur M.** The effect of a department of vocational agriculture on the salaries of superintendents in the schools of Iowa. Master's thesis, 1929. Iowa state college, Ames.

The data for this study were secured from records in offices of state superintendent of schools and state director of vocational agriculture. Findings: (1) The superintendents in Iowa schools having a department of vocational agriculture receive a higher salary than the superintendents in schools not having a department of vocational agriculture; (2) the average difference of salary in consolidated schools is \$295 per year; (3) the average difference in town schools is \$416 per year; (4) the average difference for all schools is \$327 per year; (5) these figures are consistent with the findings made by Angerer in Missouri, who found the average difference there to be \$314.14 in favor of superintendents in schools having vocational agriculture; (6) in the 200 schools which were studied for the nine-year period only 25 non-vocational schools showed a higher salary at any time than the schools having the vocational agriculture. At least 17 of these can be accounted for by a change of superintendent in the vocational school with which they were compared.

1729. **Womrath, George F.** A salary schedule versus the salary budget for public-school janitorial-engineering service. *School business administration—Ill.* *American school board journal*, 78: 45-47, 148-50, May 1929.

Details of the work and cost of the janitor's duties. Data apply to city of Minneapolis.

1730. **Wood, Harold B.** Salary schedules and teacher turnover in Ohio schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 120 p. ms.

In this study were incorporated reports from 171 school systems in Ohio, and turnover data for all teachers employed in Ohio over five-year period 1925-28. Findings: There is a correlation of .46 between these two factors; many reasons were found for turnover among Ohio teachers.

See also 72, 431, 1421, 1517, 1556, 1561, 1568, 1571, 1577, 1810, 1850, 1854.

HIGHER EDUCATION

1731. **Anderson, Ruth E.** A study of tuition fees in 271 endowed colleges and universities. *Association of American colleges bulletin*, 15: 285-332, May 1929.

Findings: (1) In general the independent institutions average higher tuition fees than the denominational institutions; (2) In the general distribution of institutions according to geographical division, they rank in descending order with regard to the average tuition fees as follows: New England, Middle Atlantic, Western, Middle Western, and Southern; (3) In general and in the denominational group the women's colleges average the highest tuition rates, the men's second, and the coeducational third; (4) in the three classes of enrollment, the largest institutions average the highest tuition fees, the second largest, the next highest, and the smallest institutions, the lowest; etc.

1732. **Armentrout, W. D., and Whitney, Frederick L.** The college hour. 1929. *Colorado state teachers college, Greeley*. (Research bulletin, no. 14)

1733. **Arnold, H. J.** Disabilities of college students in certain "tool subjects" and the relation of such disabilities to college standings. *Phi delta kappan*, 11: 169-74, April 1929.

Gives the results obtained from a series of diagnostic tests in certain "tool subjects" which were given to several groups of underclassmen (mostly freshmen) in a certain Ohio college.

1734. **Association of urban universities.** Proceedings of 15th annual meeting. Buffalo, N. Y., November 1928. 168 p.

Contains many papers on educational problems of urban universities.

1735. **Balyeat, F. A.** Trends in college-entrance offerings. *School review*, 37: 451-56, June 1929.

Data with regard to the situation at the University of Oklahoma for freshmen who entered that institution the first semester of 1907, 1917 and 1927.

1736. **Bear, Robert M.** Factors affecting the success of college freshmen. *Journal of applied psychology*, 12: 517-23, October 1928.

A paper read before the Kentucky academy of science, May 7, 1927.

The purpose of this study was to determine to what extent a student's success during the first half of his freshman year is determined by the following factors: His father's occupation and its social and mental implications; the course he elects; his relation to athletics; the location of his home relative to the college; and his age? The conclusion is that the five factors are not so direct in their bearing on student success as they may be the indication of or channel through which mental ability and purpose in study operate.

1737. **Blakeslee, Catherine S.** A comparative study of the college achievement of public, private, and public and private school entrants. Master's thesis, 1929. University of Chicago, Chicago, Ill. 72 p. ms.

A study of three classes (1926, 1927, 1928) at Mount Holyoke college, South Hadley, Mass.

1738. **Boynton, Paul L.** A study of the relationship between the intelligence and moral judgments of college students. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 49 p. (Contributions to education, no. 51)

This study was made from the test data obtained from the examining of 243 students, 120 girls and 123 boys enrolled in courses in the Department of psychology at the University of Kentucky. Lack of relationship between intelligence and moral judgment is probably the outstanding characteristic found by this study. In the case of no test was the relationship between intelligence and moral judgment sufficiently pronounced to have predictive or prognostic value.

1739. **Campbell, Helen Louise.** How college students study. Master's thesis, 1929. University of Denver, Denver, Colo. 210 p. ms.

135 college students of freshman, sophomore, junior, senior and graduate rank, were given a "study test" of 129 questions to answer truthfully just how they themselves studied. Then the records of these students were compared as to I. Q., average grade during college and rank of student. Findings: The test proved valid. Rank had very little to do with the study scale or intelligence. Intelligence and grades correlate. 67 per cent of the college students vary widely in methods of study. Best plans for the most part produce best results, but often inferior ones produce best results with intelligent students.

1740. **Carnegie foundation for the advancement of teaching, New York, N. Y.** College achievement test. Provisional charts and tables, 1928. 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. 24 charts and tables.

1741. **Carson, Floyd H.** Some factors influencing the academic success of first semester freshmen in the University of Pittsburgh. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1742. **Carter, H. L. J.** Relation of college grades to factors used in selection of students. [1929] Western state teachers college, Kalamazoo, Mich. 10 p. ms.

The purpose of the study was to determine from success of student in college what best predicts his success. Findings: High school marks decided aid; intelligence test very helpful; first quarter marks helpful.

1743. **Cooper, Lewis B.** A study in freshman elimination in one college. *Nation's schools*, 2: 25-29, September 1928.

A study of the factors surrounding the withdrawal of 871 freshmen from the University of Texas. Includes suggestions for improving conditions for university freshmen.

1744. **Cowen, Philip A.** College tuition fees. 1929. New York state education department, Albany. Albany, University of the state of New York, 1930. 25 p. (University of the state of New York bulletin, no. 941)

Analyzes the trends between 1910 and 1926. The tables and graphs can be used by any college or university to analyze its own trend with reference to other colleges which are comparable.

1745. **Crawford, Albert Beecher.** Incentives to study. A survey of student opinion. New Haven, Yale university press; London, Humphrey Milford, Oxford university press, 1929. 194 p. (Published on the Louis Stern memorial fund)

Gives the results of a personal study of Yale university. Analysis of the external factors has suggested that degree of orientation, economic status, professional aims or background, and probable purpose in coming to college exercise, in the order named, significant influences upon students' academic records. Students appear to do somewhat better work because of the secondary spur of extracurricular affairs. The primary and natural incentive offered by the course of study alone is evidently insufficient.

1746. **Douglass, Olive.** College student's budgets. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 36 p. ms.

1747. **Edwards, R. H., Artman, J. M., and Fisher, Galen M.** Undergraduates. New York, Doubleday, Doran and company, 1928. 366 p.

The Institute of social and religious research made a study of morale in 23 American colleges and universities, for the purpose of obtaining expressions of opinions regarding the conditions and influences affecting the character of undergraduates. Over 1,100 personal interviews were held. Student opinions are given concerning environment, athletics, honor systems, extracurricular activities, religious agencies, etc.

1748. **Eurich, Alvin C.** An analysis of a studiousness rating scale. 1929. University of Minnesota, Minneapolis.

The purpose of this analysis was to study the validity of self-ratings by college students on 100 studiousness traits. Findings: When the entire scale is taken, no significant differences are observed between the ratings of poor students and of excellent students. When each trait is analyzed significant differences are observed on nine of the 100 traits.

1749. ——— An experimental study of the reading abilities of college students. New York city, American association for the advancement of science, Sect. Q., December 27, 1928. 8 p. ms.

1750. **Flick, Walter Abraham, and Vannorsdall, Harry Hull.** A curriculum study of duplication of content in the Ohio state university. Doctor's thesis, 1928. Ohio state university, Columbus. 296 p. ms.

An examination of the curricula of the Ohio state university to determine whether there is duplication of content within the departments of instruction, between the departments, or between the colleges.

1751. **Franklin, E. Earle.** Age of graduation and the Ph. D. School and society, 28: 182-84, August 11, 1928.

From an analysis of the histories of all graduates of Johns Hopkins university granted the Ph. D. degree during the first 50 years of the University's existence it was determined that the average age for securing this degree was 27½ years, that the age has been increasing, and that it varies slightly with the field of specialization. The age of graduation and the field of specialization were found to be somewhat prognostic of success.

1752. **Freeman, Frank S.** Elusive factors tending to reduce correlations between intelligence test ranks and college grades. School and society, 29: 784-86, June 15, 1929.

An experiment to determine what factors tended to reduce the reliability of intelligence test as predictive of college success with two groups of college sophomores: (1) 42 who ranked in the upper 30 per cent on intelligence tests, but who averaged less than 75 in their freshman year courses, and (2) 26 who ranked in the lower half on the intelligence test, but whose freshman scholastic averages placed them in the upper 30 per cent of the class. Members of the first group were interviewed as to what they felt were the causes of their relatively poor scholarship; the second group, reasons for poorer performance. Reasons given are tabulated and summarized. Lack of interest given most often by first group; newness of conditions and nervousness during first days, by second group.

1753. **Garrison, K. C.** An analysis of the beliefs of college students. 1928-29. North Carolina state college, Raleigh. Ms.

The purpose of this study was to discover what types of activities people differ in their beliefs most, how beliefs vary in certainty and in type from college year to year, and sex differences in beliefs.

1754. **Greene, Edward Barrows.** The relative effectiveness of lecture and individual reading as methods of college teaching. Worcester, Mass., Clark university. 1928. p. 459-563. (Genetic psychology monographs, vol. IV, no. 6, December 1928)

A report of an experimental study carried on in the Columbia university psychological laboratories to determine the relative effectiveness of the lecture and individual reading as a method of college teaching. The subjects of this experiment were college students who were classified into quartiles by scores made on entrance examinations or by scholastic grades. The subjects were tested at the end of the experiment by completion tests to determine the relative effectiveness of the two methods. For "the two midmost quarters of students, the two methods of presentation were about equally effective." The highest quarter of students did a little better by the reading method; the poorest quarter of students slightly better by the lecture method.

1755. **Greenleaf, Walter J.** The cost of going to college, 1929. U. S. Bureau of education, Washington, D. C. 6 p. ms.

A study of the tuition, board and room, and other fees in the science and arts departments of 135 private nonsectarian institutions.

1756. ——— Self-help for college students. Washington, United States Government printing office, 1929. 136 p. (U. S. Bureau of education. Bulletin, 1929, no. 2)

1757. ——— Self-supporting college students. January 1929. U. S. Bureau of education, Washington, D. C. 5 p. ms.

1758. ——— Student loan funds. November 1928. U. S. Bureau of education, Washington, D. C. 7 p. ms.

1759. **Harmon, Darell Boyd.** Accounting in the small endowed college. 1928. Colorado college, Colorado Springs. 120 p. ms.

A simplified system of college accounting prepared from the viewpoint of the balance sheet recommended by the Carnegie foundation for the advancement of teaching.

1760. **Herrington, Lovic Pierce.** A study of the relationship between certain traits of personality and scholastic performance. Master's thesis, 1920. Stanford university, Stanford University, Calif.

1761. **Hill, Clyde M.** The publicity program of the small college. School and society, 28: 147-52, August 4, 1928.

A questionnaire study of 100 colleges concerning methods, extent, and types of publicity used, with conclusions drawn from results of such study as to desirability of the right type of publicity.

1762. **Hobbs, Jane Elizabeth.** Old Jefferson college. Master's thesis, 1920. University of Pittsburgh, Pittsburgh, Pa.

1763. **Holy, T. C.** A weighting scheme for freshmen grades. Educational research bulletin (Ohio state university), 8: 77-81, February 20, 1929.

1764. **Hoyt, A. C.** College information chart. Hartford, Conn., Board of education, 1929. 8 p.

Covers information concerning 60 colleges.

1765. **Hughes, J. M.** An analysis of instructional handicaps within a university. Journal of educational method, 8: 310-14, March 1929.

Increasing the effectiveness of instruction within a university by an analysis of the following handicaps: Personnel of class sections, misplaced instructional interests, inadequacy of physical equipment, miscellaneous causes, difficulties of supervision.

1766. **Ireland, Dwight B.** A personnel study within thirty-three colleges. Master's thesis, 1929. Ohio state university, Columbus.

Study included faculty personnel only. The colleges included in the study were under the control of the Presbyterian church, U. S. A.

1767. **Johnson, Palmer C.** Land-grant college survey of the University of Minnesota. 1928-29. University of Minnesota, Minneapolis. Ms.

1768. **Joseph, Alexander.** Effect of part time work on scholastic standing of college students. 1928-29. College of the city of New York, New York, N. Y. 13 p. ms.

A statistical comparison of grades of nonworking and working groups. Findings: The working group showed a 10 per cent decrease in grades as compared with a two per cent decrease for the central group.

1769. **Katz, Daniel.** Student opinion at Syracuse. Personnel journal, 7: 103-10, August 1928.

This study was designed to determine the extent and significance of certain attitudes, feelings and problems of students in Syracuse university. In making the study, an anonymous questionnaire was used. It was answered by 4,000 or 90 per cent of the students. It took two hours of each student's time to answer the questions which included reasons for attending college, academic freedom, attitudes on cribbing, sex segregation tendencies, fraternities, compulsory military training, religion, co-education and student self government. The findings are published by the School of citizenship and public affairs of Syracuse university.

1770. **Klein, Arthur J.** Higher education. Biennial survey, 1926-28. Washington, United States Government printing office, 1929. 42 p. (U. S. Bureau of education. Bulletin, 1929, no. 11)

Advance sheets from the Biennial survey of education in the United States, 1926-28.

1771. **Klontz, Vernon E.** Entrance requirements in colleges and universities of the United States, 1926-27. Master's thesis, 1929. University of Chicago, Chicago, Ill.

A study of 244 colleges and universities of the United States. Findings: (1) 15 units of high school credit is an almost universal requirement for entrance; (2) median number of prescribed subjects is 8.94; (3) 96.1 per cent of the 244 colleges of the study employ the certification form of admission; (4) colleges of the New England and Middle States association are more stringent in foreign language requirements than are colleges of the North Central, Southern and Pacific Northwest; (5) only 22.9 per cent of the colleges of the study have established minimum age requirements and only 31.5 per cent require health certificates; (6) vocational subjects of the curriculum are accepted in the North Central, Pacific Northwest and Southern associations but fewer are accepted in the Middle States and New England Associations; (7) in general, the entrance requirements of eastern colleges are far less flexible.

1772. **Knobe, Jay Carroll.** Orienting the student in college (with special reference to freshman week). Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. (To be printed)

This study undertakes to discover the origins, purposes, methods, trends and limitations of the process of orienting students to college life. It was found that the process of orientation divides itself into four major practices: namely, freshman week, the survey course treating only the fields of knowledge, the general orientation course dealing with the problems of college life and comprising lectures and conferences covering several weeks or months, and advisory systems which may either be associated with the three foregoing or be set up independently.

1773. **Kolbe, Parke Rexford.** Urban influences on higher education in England and the United States. 1928. American association for adult education. New York, The Macmillan company, 1928. 254 p. (Studies in adult education)

The result of a six months' study in England of the forces which have paved the way for the modern English urban university and moulded it to its present form. Portions of the study have appeared in School and society.

1774. **Kulcinski, Louis.** What is the comparative effectiveness of the formal, informal, and combination methods when instructing university freshmen in fundamental muscular skills. Master's thesis, 1929. University of Illinois, Urbana.

1775. **Lang, Harold A.** Study of university entrance requirements, methods of dropping students, average student load, passing grade and drop lists. Master's thesis, 1929. University of Washington, Seattle. 49 p. ms.

Makes some recommendations regarding the dropping of students, student load and grading systems in universities.

1776. **LaPoe, James L.** Pennsylvania's support of higher education. Educational research bulletin (Ohio state university), 8: 23-31, 42-44, January 23, 1929.

1777. **McCloy, Elizabeth Johnston.** Biographical directories of American colleges and universities; their reference value and use in college. Master's thesis, 1928. Columbia university, New York, N. Y.

1778. **McGee, R. A.** Interests, capacities, and socio-economic status of Minnesota university boys. Master's thesis, 1928. University of Minnesota, Minneapolis.

An attempt to collect data for laying a factual foundation for building special courses in industrial arts in the University of Minnesota high school.

1779. **Mosher, Esther N.** Baccalaureate degrees. Master's thesis, 1929. University of Akron, Akron, Ohio. 122 p. ms.

A study of the central states. Findings: All degrees have nearly the same requirements and offer nearly the same fields of specialization.

1780. **Naly, Josephine Olivia.** A study of the rôle of facial appearance and other traits in mate selection in college graduates. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1781. **National society of college teachers of education.** Current educational readjustments in higher institutions. Ed. by Stuart Appleton Curtis. Chicago, Ill., University of Chicago press, 1929. 178 p. (Yearbook XVII)

The purpose of this yearbook is to describe current efforts to improve instruction in higher institutions and to summarize the results of published studies relating to instruction in academic and professional schools.

1782. **Nolan, Aretas W.** Techniques used in dealing with certain problems of college teaching. Urbana, University of Illinois, 1929. 25 p. (University of Illinois bulletin, vol. XXVI, no. 40, June 4, 1929. Bureau of education research, Educational research circular, no. 52)

This study presents the techniques used by 80 college instructors in solving problems in classroom instruction and comments made by the instructors on the problems.

1783. **Oberteuffer, Delbert.** Personal hygiene for college students. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 121 p. (Contributions to education, no. 407)

A study of the curiosities, interests, and felt needs of college students in the subject matter of personal hygiene. The ranking of the various subjects showed that the topic of mental health is of the greatest importance to the body of students studied. Other subject divisions follow in this order: physical activity; the concept of health; nutrition; professional health service; prevention of disease; sex and reproduction; skin and hair; mouth, eye, and ear; elimination; circulation; respiration; tobacco and alcohol; rest and fatigue.

1784. **O'Brien, F. P.** Mental ability with reference to selection and retention of college students. *Journal of educational research*, 18: 136-43, September 1928.

The Terman group test of mental ability was given to more than 4,000 Kansas students in the junior or senior year of high school. 55 per cent of the high-school graduates entered college. 42 per cent of those eliminated from college ranked in mental ability above the average of all who entered.

1785. **Omwake, Mary Louise.** A study of some factors in college success. Master's thesis, 1929. George Washington university, Washington, D. C.

Relationship of high-school record, intelligence record, social intelligence record, age, sex, and type of preparatory school to college success in George Washington university. Findings: Abstract intelligence plus high-school record is best criteria of success. Social intelligence is a good criterion.

1786. **Otis, Willard B.** The problem of adjustment as it applies to out-of-town school freshmen. Master's thesis, 1928-29. Rutgers university, New Brunswick, N. J.

1787. **Payne, John W.** A comparative study of the grade of the undergraduate instructors of the University of Chicago, 1925-1928. Master's thesis, 1929. University of Chicago, Chicago, Ill. 119 p. ms.

A study to determine the distribution of the grades of the different departments and instructors in the departments and compare such with the university grade average.

1788. **Pressey, Luella Cole.** The permanent effects of training in methods of study on college success. *School and society*, 28: 403-04, September 29, 1928.

Presents a comparison of the college careers of a group of 50 students pursuing a course in study methods during their probation year with the careers of 50 students of equal intelligence and training with the exception of work in study methods. Results obtained indicate that such a course is justified.

1789. **Raines, Lester.** What a freshman wants to know. *School and society*, 29: 577-78, May 4, 1929.

A questionnaire study of what 125 college students say they would have liked included in the manual for freshman work. High-ranking items are: fraternities and sororities, faculty ability and relationships.

1790. **Rawls, Elizabeth Stoughton.** Scholarship administration. Master's thesis, 1929. Indiana university, Bloomington. Indianapolis, Ind., Shortridge high school, 1929. 49 p.

Questionnaires were sent to colleges with an enrollment of over 400. Tabulation of scholarship funds of 147 colleges showed that approximately 39 per cent came from private gifts or bequests, 27 per cent came from the schools themselves, 21 per cent were from public funds, provided through the legislature, and 13 per cent from organizations of different types.

1791. **Ready, Isaac Epps.** A prognostic statistical study of the 1928-29 freshman class of the University of South Carolina. Master's thesis, May 1929. University of South Carolina, Columbia.

1792. **Reeves, Floyd W., and Russell, John Dale.** The measurement of college excellence. Lexington, Ky., University of Kentucky, 1929. 41 p. (Kentucky. University, Bureau of school service. Bulletin, vol. 1, no. 4, June 1929)

The results of this study seem to indicate that certain of the commonly accepted standards are not particularly valid for the purpose of guaranteeing a satisfactory degree of excellence in institutions of higher education.

1793. ———— Some aspects of current efforts to improve college instruction. Lexington, University of Kentucky, 1928. 95 p. (Kentucky. University, Bureau of school service. Bulletin, vol. 1, no. 2, December 1928)

This bulletin may be considered as a supplement to the current Yearbook of the National society of college teachers of education. It deals with the uses made by colleges of intelligence test results, the prediction of scholastic success, selective admission of students, classifying students into ability groups for instructional purposes, the relation of class size to the effectiveness of instruction, measurement of the results of instruction, and diagnosis, remedial instruction, and educational guidance.

1794. ———— Standards for accrediting colleges. North central association quarterly, 3: 214-29, September 1928.

A study of 29 colleges showing the relationship between specific sources of income and cost per student, faculty salaries, faculty training, and rating of institutions upon basis of inspection. This report indicates that the present standards of the North central association are not yielding a satisfactory condition of excellence in every college. The necessity for seeking new bases for standards is one of the conclusions reached. Three factors are revealed in the data assembled, and suggested as worthy of consideration: (a) A minimum average faculty salary; (b) a minimum annual expenditure per student for strictly educational purposes; (c) enforcement of a satisfactory standard of faculty training.

1795. **Remmers, H. H.** A diagnostic and remedial study of potentially and actually failing students at Purdue university. Lafayette, Ind., Purdue university, 1928. 161 p. (Purdue university. Studies in higher education, IX)

Two hundred students of the 1926 freshman class at Purdue university were chosen for this study. Half of them were put in an experimental group, which received special direction in study; the rest of the students were in a control group which received no special treatment. The experimental group had 650 passing grades as compared with 526 for the control group.

1796. ——— A study of freshmen placement tests at Purdue university, 1926-1929. Lafayette, Ind., June 1929. 44 p. (Purdue university. Studies in higher education, XII)

The tables included in this bulletin give a summary of the extent to which the various tests have (1) predicted elimination of students by semesters, (2) predicted average grades, and (3) predicted grades in certain specific subjects.

1797. **Roemer, Joseph.** The report of the committee on college freshmen grades. In Association of colleges and secondary schools of the Southern States. Proceedings, 1928. p. 152-248.

The first part of the report deals with failures in the secondary school, the second part with failures in higher institutions. Findings. The failures for the public high schools are 14.2 per cent and 16.9 per cent for the private secondary school. Over a seven year period the percentage of semester hours failed are 16.5 per cent for the private secondary schools and 12.9 per cent for the public high schools. Practically one-half of the students in state universities and schools of technology, one-third in women's colleges, and one-fourth in teacher-training institutions fail one or more courses during the first quarter or first semester of their freshman year.

1798. **Rugg, E. U., and others.** Graduate credit for extra-mural group class work. 1929. Colorado state teachers college, Greeley. (Typed report, April 13, 1929)

1799. **Silverman, Yetta.** Age of entrance to college. Master's thesis, 1929. Clark university, Worcester, Mass. 75 p. ms.

A study of the attitudes of students who entered college at an early age toward the advisability of such early entrance.

1800. **Sims, Verner Martin.** The status of hazing in American colleges. School and society, 29: 201-204, February 9, 1929.

An investigation with reference to hazing in other colleges for the purpose of working out a possible solution of this problem for a particular institution. Data included were based upon questionnaire returns from 69 colleges selected on an enrollment basis of 500 to 2,000. The extent of hazing is ascertained and various methods of control and their results studied.

1801. **Stalnaker, John M., and Remmers, H. H.** The large college vs. the small. School and society, 28: 302-304, September 8, 1928.

Data, based upon a study of the size of colleges from which a group of outstanding scientists selected from "American Men of Science," and a group of successful men listed in "Who's Who in America" were graduated, seem to indicate that large colleges and universities have an advantage over small ones in proportion of graduates who become "leaders."

1802. **Stogdill, Zoe Emily.** A further study of the maladjusted college students results. Doctor's thesis, 1928-29. Ohio state university, Columbus.

1803. **Strang, Ruth.** Another attempt to teach how to study. School and society, 28: 461-66, October 13, 1928.

Describes an attempt to improve the study habits of a group of college freshmen failing in one or more subjects by substituting a "how to study" course for the subjects in which they were failing. Other purposes of the course were to determine what should be the content of a "how to study" course in such a situation, and, on the basis of the difficulties encountered to make recommendations for methods of reducing freshmen mortality the following year.

1804. **Terry, Ulmer Neal.** A study of the work load of University of Idaho freshmen. Master's thesis, 1928. University of Idaho, Moscow.

1805. **Thomas, Nelson E.** Who goes to college. Master's thesis, 1928-29. Howard college, Birmingham, Ala.

1806. **Thurber, C. H., jr.** A study of the development and a projection of the needs of the University of Buffalo. In Buffalo. University. Annual report of the chancellor, the treasurer, and the other administrative officers, 1928. p. 83-125. (University of Buffalo bulletin, vol. 16, no. 13, November 1928)

Pt. I, The growth of the University; pt. II, Population and secondary education; pt. III, The instructional staff of the University.

1807. **Toll, Charles H.** Scholastic aptitude tests in Amherst college. *School and society*, 28: 524-28, October 27, 1928.

Comparison of scores made on "scholastic aptitude" or "intelligence" tests given to five successive entering classes in Amherst college ranging from 157 to 232 men with their college grades to determine the practical utility of such tests.

1808. **Toops, Herbert A., and Edgerton, H. A.** Academic progress, a follow-up study of the freshmen entering the University in 1923. Columbus, Ohio state university press, 1929. 150 p. (Studies in administration no. 1)

1809. **Tvedt, Carl Walther.** An analysis of the master of arts theses in education at Leland Stanford junior university. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1810. **United States. Bureau of education.** Statistics concerning current incomes, salaries, attendance, and legislative budget requests of state universities and colleges. Washington, D. C. December 20, 1928. 32 p. ms.

1811. **Walters, F. C.** A brief study of the predictive value of the University of Porto Rico general ability test. February 1929. University of Porto Rico, Rio Piedras. 10 p. ms.

This study shows that high school credits are a somewhat better basis of prediction of college work than are scores on the University of Porto Rico general ability test; also, that the combined effect of the University of Porto Rico general ability scores and high school grades is superior to either alone. The correlation of the combined result of test scores and high school marks with university marks is .63.

1812. **Walters, Raymond.** Statistics of registration in American universities and colleges, 1928. *School and society*, 28: 737-46, December 15, 1928.

An analysis of statistics shown in reports from 216 colleges and universities of the United States and Canada for 1928 concerning registration and a comparison with similar statistics for 1927.

1813. **Weber, C. Oliver.** Methods and rewards of the correct selection of college freshmen. Wells college, Aurora, N. Y. *School and society*, 28: 516-19, October 27, 1928.

A demonstration that the comprehensive examinations required of entering freshmen at Wells college (four units of Latin, three of mathematics, three of English, and two of modern languages) are highly selective, as shown by the superiority of Wells matriculants in the New York college entrance intelligence tests and in the scholastic aptitudes test.

1814. **Wedertz, Gilbert C.** History of the origin and administration of public endowments of the University of California. Master's thesis, 1928. University of California, Berkeley. 149 p. ms.

The purpose of the study is to present the history of the origin and administration of public endowments of the University of California.

1815. **Whitney, Frederick L.** Municipal four-year colleges and universities. 1929. Colorado state teachers college, Greeley. 16 p. ms. (Mimeo-brochure no. 106)

A study of nine municipal colleges and universities; 30,000 students. Conclusions: (1) It can not be concluded that these nine municipal colleges show a trend in higher education, but they may be the first appearance of a pioneer movement into the municipal field; (2) the state is the logical and ultimate unit of administration for public education; (3) nine municipal colleges seem to have grown rather naturally out of local initiative and desire.

1816. **Wilkinson, W. A.** A study of the abilities of freshmen in the University of Delaware. 1928. University of Delaware, Newark. In Delaware notes. Newark, University of Delaware, 1928. p. 7-22.

1817. **Wilson, Lucile G.** Alumni associations as related to college development. Master's thesis, 1929. University of Kentucky, Lexington.

1818. **Wilson, M. O.** What the Chicago doctors of philosophy are doing. *School and society*, 29: 815-18, June 22, 1929.

Of 2,055 graduates who have received the Ph. D. degree from Chicago university, 68.28 per cent are teaching, 13.77 per cent are engaged in service similar to that of their major department.

1819. **Wiseman, C. R.** Methods of college teaching. *School and society*, 28: 433-34. October 6, 1928.

The report of a study of college students' reactions to certain methods and devices of college instruction based upon returns from 150 college students registered in courses in education.

1820. **Witty, Paul A., and others.** A report regarding certain abilities of selected college students. *University of Kansas Bulletin of education*, 2: 3-23, December 1928.

This report is based largely upon the four theses which are on file in the Library of the University of Kansas. If these studies may be considered indicative of the general trend, upper classmen in college write little better than freshmen; the quality of language usage in composition written by college students is deplorably poor; there is evidence of failure to improve skill in writing through reading, through hearing correct language in class room, and through such writing as is required in a college course; etc.

1821. **Zook, George F.** Triennial reports of accredited higher institutions. (Report of the secretary) *North central association quarterly*, 3: 468-536, March 1929.

An attempt to indicate through gathered statistics relating to 251 colleges, universities, and teacher training institutions, the extent to which these institutions are living up to the standards set for them by the North central association.

See also 11, 16, 22, 36, 127, 145, 147, 154, 251, 317, 334, 344, 361, 415, 469, 497, 1320, 1327, 1347, 1354-1355, 1357, 1365, 1371, 1450, 1456, 1474, 1487, 1525, 1529, 1535, 1599, 1611, 1644, 1649, 1664, 1668, 1719, 1834, 2064, 2130, 2141, 2152, 2165, 2185, 2206, 2208, 2210, 2215, 2219, 2255, 2257, 2271, 2281, 2387, 2397, 2401, 2406, 2408, 2415, 2419-2421, 2438, 2471, 2600, 2612, 2621-2622, 2632, 2638-2639, 2681, 2688, 2702, 2705, 2710, 2726, 2743, 2774, 2776, 2782, 2868, 2874-2875, 2885, 2895, 2898, 2904, 2910-2911, 3012, 3041, 3052; and under Junior colleges; Professional education; Special subjects of curriculum.

SCHOOL ADMINISTRATION.

1822. **Alexander, Uhlman S.** Special legislation affecting public schools. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 141 p. (Contributions to education, no. 353)

An examination was made of all the special laws of the states of New York, Pennsylvania, Ohio, North Carolina, and Florida. In addition, the educational statutes in the session laws of all the remaining states have been examined from the year 1900 to the present time. The results of the study show that special legislation has been widely used to control and direct public school systems and that in several states this type of legislation still abounds. The state of New York from 1777 to 1927 enacted 1,374 special laws directly affecting public schools; Pennsylvania enacted 982 such laws from 1851 to 1873; Ohio 1,457 from 1851 to 1900; North Carolina 1,594 from 1871 to 1925; and Florida 246 from 1900 to 1925.

1823. **Allison, Raymond Y.** School law as revealed by a survey of the Supreme Court decisions of Colorado, South Dakota, and North Dakota. Master's thesis, 1929. University of Chicago, Chicago, Ill. 155 p. ms.

The purpose of this investigation was to bring together and interpret the Supreme Court decisions of the states of Colorado, South Dakota, and North Dakota, relative to the public schools of these states. A summary of the legal principles which comprise the school law of the three states was studied.

1824. **Ayer, Fred C.** Administrative research in public-school administration. *Nation's schools*, 2: 13-18, September 1928.

A study of the opinions of 41 educators as to the relative advance in 14 fields of administrative research.

1825. ——— The duties of public-school administrators. *American school board journal*, 78: 39-41, February; 39-41, March; 39-41, April; 51-53, May; 58-60, June 1929.

Sets forth results of a nation-wide survey to determine the duties of public school administrators in the field of business management.

1826. **Baalson, G. A.** An intensive study of the organization and administration of the Northwood public schools, Northwood, N. Dak. Master's thesis, 1928. University of Minnesota, Minneapolis.

A survey of the activities carried on within a small school system in an attempt to develop a program for the improvement of instruction.

1827. **Bauernfeind, Howard K.** Business duties performed by city superintendents in Illinois. Master's thesis, 1929. University of Chicago, Chicago, Ill. 83 p. ms.

The study involved cities in Illinois ranging in population from 2,500 to 20,000. Conclusions: In almost all cities the superintendent performs the business duties for the Board of education. In the larger cities, the superintendents perform more of the important business duties than in the small cities. In the small cities more minor details are left to the city superintendent.

1828. **Blackburn, Wade F.** An analysis of reports made by school business managers. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1829. **Brubacher, John S.** State education department as administrative judicial tribunals. 1928. Yale university, New Haven, Conn. American school board journal, 77: 33-35, 78, 81, 82, December 1928.

A compilation of facts showing the development of judicial power which is vested in state departments of education.

1830. **Brumbaugh, Aaron J.** The authority of boards of education in the administration of pupils and teachers, as defined by the courts. Doctor's thesis, 1929. University of Chicago, Chicago, Ill. 376 p. ms.

This study is limited to principles of case law as they appear in court decisions.

1831. **Bryant, Hayden C.** The administrative and supervisory activities of the state departments of education of the South Atlantic states. Master's thesis, 1929. University of Chicago, Chicago, Ill. 95 p. ms.

The purpose of the study was to determine what departments are doing and whether there is a coherent, coordinated system for doing their work. Administrative machinery was found to be unrelated and not well integrated in all states except Virginia.

1832. **Childs, Ruston Clyde.** Requirements for administrative positions in the southern states. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 85 p. ms.

1833. **Clark, Harold Florian.** Index numbers in school administration. Bloomington, Indiana university, 1927. 35 p. (Indiana university. School of education. Bulletin, vol. III, no. 3, January 1927)

Although this study is dated January 1927, it was made in the summer of 1928, hence its inclusion in this list.

1834. **Clark, Harry Samuel.** A study of courses in school administration offered in the private colleges of the United States. Master's thesis, July 1929. University of Minnesota, Minneapolis.

1835. **Coatney, Elmer C.** The judicial decisions of Massachusetts relating to public and private schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 102 p. ms.

A study of the decisions of Supreme judicial court for the purpose of revealing common law principles of schools. Findings: Many principles of law run throughout all the decisions, and may be accepted as common law.

1836. **Coffey, Wilford L.** Legislative enactments and judicial decisions affecting the adoption, sale and use of books. Master's thesis, 1929. University of Michigan, Ann Arbor.

1837. **Cooper, Wm. John.** The ideal business manager of schools from the point of view of the superintendent. American school board journal, 78: 43-44, June 1929.

Names and explains six qualifications essential to the ideal business manager. Uses objective data and theories from many sources. References.

1838. **Corbally, John E.** The extent and importance of pupil mobility as an administrative problem in the public schools of the state of Washington. Doctor's thesis, 1929. University of Washington, Seattle.

The extent and causes of pupil mobility of Washington, its effect on pupil progress, provisions made for the mobile pupil, and suggested procedures to facilitate pupil adjustment.

1839. **Cushman, C. L.** The comparative growth of school enrollment and school support in Oklahoma City. March 1929. Oklahoma City, Okla. Ms.

1840. **Dawson, Howard A., Little, Harry A., and Floyd, George C.** Larger school units for Arkansas. 1929. Division of research and surveys, State department of education, Little Rock, Ark. 22 p. ms.

A study of the legal foundation of school districts in Arkansas, the advantages of consolidation, methods provided by law for consolidation, the county unit for schools, etc.

1841. **Dillon, Mabel Louise.** Administrative work in California high schools as a field for women. Master's thesis, June 1929. University of Southern California, Los Angeles.

1842. **Erickson, E. J.** An analysis of the procedures and practices involved in the administration of the Volga, S. Dak., public schools. Master's thesis, 1928. University of Minnesota, Minneapolis.

The application of survey techniques to a study of the public schools of Volga, with special reference to the development of a program for the improvement of instruction in the elementary schools.

1843. **Eyman, R. Merle.** Cooperative purchasing of supplies in the schools of Fairfield county, Ohio. Master's thesis, 1929. Ohio state university, Columbus. 114 p. ms.

A survey of present practices in cooperative purchasing of school supplies in Fairfield county, Ohio, and recommendations for the future. Findings: The schools of Fairfield county, Ohio, save annually \$1,150 by the plan of cooperative purchasing of supplies. With other supplies added to the cooperative list, a saving of \$5,000 could be realized.

1844. **Fleming, Paul.** The organization of the office of the superintendent of schools in California cities. Master's thesis, 1928. University of California, Berkeley. 28 p. ms.

A study of the actual situation in the school administrative staff in California cities of an estimated population of 15,000 to 150,000, and further limited to those responsible for the direction of both elementary and secondary schools. Contains job analyses of: (1) superintendent; (2) assistant superintendents; (3) business manager; (4) directors of research and service. Organization charts of cities studied, and chart of suggested organization are given.

1845. ———. What do the administrative helpers of the superintendent do? *Nation's schools*, 3: 55-61, May 1929.

An analysis of the duties of the administrative assistants in 21 California cities of from 15,000 to 150,000 estimated population. Offers suggestions as to the order in which certain administrative positions should be created.

1846. **Foster, Emery M.** Report of committees on uniform records and reports. Washington, United States Government printing office, 1928. 80 p. (U. S. Bureau of education. Bulletin, 1928, no. 24)

1847. **Fowlkes, John Guy.** The city superintendent's annual report. *Nation's schools*, 2: 62-67, September 1928.

After analyzing 35 reports, the author makes some observations as to general types and offers eight suggestions of principles in preparing annual reports.

1848. **Goldsmith, Harold D.** Guiding factors for prospective administrators. Master's thesis, 1928-29. Rutgers university, New Brunswick, N. J.

1849. **Grafton, Edwin Gullede.** Textbook legislation in Texas. Master's thesis, 1928. Southern Methodist university, Dallas, Texas. 172 p. ms.

A study of the development of legislation for uniformity in textbooks and for free textbooks in the different states; types of textbook legislation; history of the movement in Texas. Findings: Laws for uniformity and for free textbooks in Texas are based on laws tried out in other states; uniform free textbooks are likely to be permanent.

1850. **Greenawalt, William C.** Closing of schools on certain holidays; salary increases, November 1928. Superintendent of schools, Olean, N. Y. 5 p. ms.

Based on replies to questionnaire, received from 140 city school systems in New York. Gives practice as to closing school on November 11, Election day, Lincoln's and Washington's birthdays, and Good Friday. Reports on salary increases granted because of additional state aid.

1851. **Hall, Sam Z.** The law for creating and altering school districts in Texas. Master's thesis, 1928. Southern Methodist university, Dallas, Texas. 209 p. ms.

A study of the development and decline of the community system; legal provisions and court decisions concerning the various types of school districts in Texas. Findings: Tendency of legislation and court decisions to remedy original limitations on common school districts; court decisions in favor of schools; increasing need of more power in county board.

1852. **Hawkins, Charles W.** Evolution of the St. Louis superintendent as an administrative officer. Master's thesis, 1928-29. Washington, university, St. Louis, Mo.

1853. **Heed, Victor Arnold.** The regulation of private and independent schools in the United States. Master's thesis, June 1929. University of Minnesota, Minneapolis.

1854. **Heer, Amos L.** The present status of business executives in the public schools of the United States in cities of 25,000 and more inhabitants. Kent, Ohio, Kent state normal college, 1928. 170 p.

This study presents data on the legal status of business executives, their relations to the superintendent and the board of education, their qualifications, salary, term of office and tenure, and functions.

1855. **Hosman, Everett M.** Current practice survey for 1928-29. 1929. Research department, Nebraska state teachers association, Lincoln. 18 p. ms.

Deals with a number of practical problems in administration of schools in Nebraska.

1856. **Houle, Harold L.** A comparative study of the legal aspects of tuition charges in the public schools of the United States. Master's thesis, 1929. State university of Iowa, Iowa City. 160 p. ms.

1857. **Hunting, Walter Judson.** An administrative plan for the reorganization of Nevada's state public school system. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1858. **Jacobson, A. E.** A critical analysis of the organization and administration of the Swanville, Minn., public schools. Master's thesis, 1928. University of Minnesota, Minneapolis.

The application of survey techniques to the study of the organization and administration of the public schools, with special emphasis on the problems of transportation and the extracurricular-activities program for consolidated schools.

1859. **Jennings, Joseph.** Rules and regulations concerning the employed personnel of city school systems. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 128 p. (Contributions to education, no. 68)

1860. **Keesecker, Ward W.** Laws relating to compulsory education. Washington, United States Government printing office, 1929. 70 p. (U. S. Bureau of education. Bulletin, 1928, no. 20)

1861. **Lane, Fletcher.** Texas school laws in the light of case studies. Doctor's thesis, 1929. Teachers college, University of Nebraska, Lincoln. 250 p. ms.

1862. **Lemmel, William H.** Public high school tuition laws in the United States. Master's thesis, 1928. State university of Iowa, Iowa City. 71 p. ms.

1863. **Lesinger, E. M.** Some administrative aspects of the Cayuga Heights school. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 86 p. ms.

This study deals with enrollment, valuations, income, and costs as affecting the question of the future program of the district.

1864. **Ludeman, W. W.** A study of school boards. 1929. Southern state normal, school, Springfield, S. Dak. American school board journal, 78: 38, February 1929.

A study of the personnel of boards and the balance of power between boards and superintendent. Findings: Active business men were found on boards most often; boards are inclined to turn most power over to the superintendent.

1865. **McCluer, Virgil.** The application of the proposed education bill of Missouri to a specific county. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

1866. **McClure, Worth.** Duties of elementary school clerks. [1929] Assistant superintendent of schools, Seattle, Wash. 4 p. ms.

Exhibits used with a speech before the American educational research association, March 1929, as follows: salary schedule for clerks; rating scale; frequency table of duties of 62 clerks; bibliography.

1867. **McGinnis, William C.** School administration and supervisory organizations in cities of 20,000 to 50,000 population. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 103 p. (Contributions to education, no. 392).

A study of the present practices in cities of 20,000 to 50,000 population in regard to the administrative and supervisory organizations.

1868. **Mangel, Emil Henry.** The interpretation of Indiana school law by the State supreme court. Master's thesis, 1929. Indiana university, Bloomington. 174 p. ms.

The purpose of this study was to summarize the case law affecting the public schools at the present time as determined by the Supreme Court of Indiana, and to find how these decisions clarified and interpreted the Constitution and statutes.

1869. **Mathison, Reuben Malcolm.** School administrative positions in Alabama and Tennessee. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 63 p. ms.

1870. **Mickelson, Arnold J.** Decisions in law in New Jersey relating to education. Master's thesis, 1929. University of Chicago, Chicago, Ill. 132 p. ms.

The report covered all decisions of the Supreme Court, Court of errors and appeals, and of the Commissioner of education relating to public education.

1871. **Morrison, J. Cayce.** The city school superintendent—a professional leader. Nation's schools, 2: 57-63, October 1928.

A study of the legal status of the city school superintendent. The duties and qualifications in the different states are analyzed and discussed.

1872. **National education association.** Department of superintendence. Commission on articulation of the units of American education. Seventh yearbook: The articulation of the units of American education. Washington, D. C., National education association, 1929. 616 p.

Herbert S. Weet, chairman.

1873. **National municipal league.** Committee on federal aid to the states. Federal aid to the states. Report of the Committee, prepared by Austin F. Macdonald. New York, National municipal league, 1928. p. 619-59. (Supplement to National municipal review, vol. 17, no. 10, October 1928)

Part I of the report summarizes the origin, development, and present extent of federal aid to the states; Part II concisely discusses the federal-aid laws and appraises the manner in which they are administered; Part III is a critical estimate of the federal-aid system, with recommendations by the committee for needed improvements in administration by the federal and state governments.

1874. **Newton, C. W.** Comparison of the relative efficiency of eleven year school systems with twelve year school systems. Master's thesis, June 1929. University of Virginia, Charlottesville.

1875. **Parker, Darrell Russell.** A digest of the school laws of Arizona; with proposals for amendment. Master's thesis, 1929. Stanford university, Stanford Univeristy, Calif.

1876. **Philadelphia, Pa. Board of public education. Bureau of compulsory education.** Report for the year ended June 30, 1928. 138 p.

1877. **Reavis, William C.** Items of information collected by departments of public instruction of ten representative states. Elementary school journal, 29: 666-73, May 1929.

The results as regards the ten states studied show that in collecting data annually regarding schools no single item of information is collected by all the states. The information collected varies widely in the different states.

1878. **Reiman, Paul E.** A study of public school lands of Utah. Master's thesis, 1928-29. University of Utah, Salt Lake City.

1879. **Rivers, Paul Lon.** A study of the dual administration as practiced in union high schools in California. Master's thesis, 1928. Stanford university, Stanford University, Calif.

1880. **Sayre, William I.** The basis of selection of the superintendent of schools. Master's thesis, 1928. State univeristy of Iowa, Iowa City. 73 p. ms.

1881. **Seattle, Wash. Public schools.** The Seattle schedule of clerical service to elementary schools, 1928-29. 1929. 4 p. ms.

Contains a frequency table of classified duties of 62 elementary school clerks.

1882. **Seyfried, John Edward.** An analysis of New Mexico state school laws. Master's thesis, 1928. University of New Mexico, Albuquerque.

An analysis of the constitution and laws of New Mexico, pertaining to education in the line of court decisions, county reports and school survey reports.

1883. **Sheffer, W. E.** Present status of state departments of education. In Kansas state school code commission. Complete report ... January 15, 1929. Topeka, Kansas state printing plant, 1929. p. 56-76.

1884. **Snowden, Foster B.** Functional type of organization for small schools. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1885. **Snyder, George B.** State school reports. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1886. **Stull, Arthur Maurer.** Some political aspects of certain problems in high school administration. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1887. **Thiel, Richard B.** An analysis of the nature and frequency of Supreme Court cases in school law for the calendar year of 1927. Journal of educational research, 19: 177-82, March 1929.

In a study of the 231 cases relating to school law passed upon in 1927 by the Supreme Court there is an evidence of a greater frequency of cases in the western and southern states; 43 per cent of the total number of points of law concern matters of fiscal administration; the controversies affecting teachers and pupils, including conduct and discipline, were about 13 per cent of the total.

1888. **Toll, Michael S.** A study of compulsory education in Pennsylvania. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

1889. **Troxel, Oliver Leonard.** State control of secondary education. Baltimore, Warwick and York, inc., 1928. 232 p. (University research monographs, no. 4)

An investigation of certain phases of the control exercised by the several states over public secondary schools as expressed through State laws and regulations of state boards and departments of education. It is evident from the study that state responsibility for secondary education is universally recognized and accepted, that state legislatures and departments of education consider it their function to provide for, direct, and to regulate the public high schools. Evidence has been produced throughout the study to show that state control is a fact, that it is desirable and that it is effective.

1890. **Turowski, Florence.** A statistical study of the relative contributions to scholarship ends of the 6-3-3 and 8-4 plans in Youngstown, Ohio. Master's thesis, 1929. Ohio State university, Columbus. 145 p. ms.

The study compares 591 pairs of 6-3-3 and 8-4 pupils in their scholastic achievement during the 9th and 10th years in academic subjects. Findings: It was found that the difference which seems to exist is so slight as to be easily discounted by difference in standards of grading, etc. Moreover, it was found that there is a greater difference existing in the comparison of achievement in the different subjects within one school than within one subject between schools.

1891. **Weaver, Harold Newman.** Administration of the California state textbook plan, with special reference to history textbook adoptions in high schools. Master's thesis, 1929. University of California, Berkeley. 66 p. ms.

The purpose of this study was to find out what history textbooks from the prescribed list have been adopted by the high school and what supplementary materials are being used to aid in the teaching of the adopted history textbooks. Findings: (1) More textbooks in United States and World history were prescribed than in any other course; (2) one-third of all high schools have adopted Muzzey's *American History* in United States history; (3) only 20 high schools have adopted texts in English, ancient, Latin American, and California history; (4) 50 per cent have adopted *Early European History*, by Webster; (5) one-third of the high schools have adopted Webster's *Modern European History*; (6) history teachers in all courses, except California history, use Current Events and Literary Digest more frequently than any other periodicals; etc.

1892. **Weber, Lynda M.** Biological principles involved in legislation. Master's thesis, 1929. University of Chicago, Chicago, Ill.

1893. **Wenzel, Florida Eveline.** The legal status of the use of school property for other than school purposes. Master's thesis, 1929. University of Chicago, Chicago, Ill. 140 p. ms.

This study involved an examination of the state constitutions, state statutes, and court decisions.

1894. **Witherington, Aubrey Milton.** Bibliography of bibliographies of interest to administrators. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 152 p. ms.

A bibliography of bibliographies in the field of educational administration from the kindergarten through the junior college. This thesis contains a list of 554 bibliographies classified under 61 subjects arranged in alphabetical order. The bibliographies listed under each subject have been arranged in alphabetical order according to author.

See also 7, 35, 72, 102, 108, 115, 127, 153, 424, 455, 1304-1305, 1314, 1346, 1358-1360, 1366, 1399, 1404, 1411, 1425, 1429, 1450, 1504, 1680, 1972, 2640.

EDUCATIONAL FINANCE

1895. **Alexander, Carter, and Engelhardt, N. L.** School finance and business management problems. New York city, Teachers college, Columbia university, 1928. 526 p.

1896. **Allen, Hollis P., chairman.** Report of committee on equalization of taxation for secondary education. [1928] Director of research, Public schools, San Bernardino, Calif. 9 p. ms.

Compares ability of California counties and high school districts to support secondary education, as shown by taxable wealth per pupil; proposes four possible plans to remedy inequalities.

1897. **Burrus, L. D.** A study of finances of school districts under the present law. 1929. State department of education, Olympia, Wash. 46 p. ms.

Gives statistics covering millage under present plan of taxation for school purposes and that under a bill proposed by N. D. Showalter, State superintendent of public instruction, of Washington. Shows that the proposed legislation would have increased state aid and, therefore, would have more nearly equalized school opportunity and taxation for school purposes.

1898. **California taxpayers' association.** Report on Solano county, California. Los Angeles, California taxpayers' association, 1929. 103 p. (Association report no. 22)

An analysis of the governmental organization and expenditures of the county for the fiscal year ending June 30, 1928, together with a general study of the fiscal system for the eight-year period, 1921-1928.

1899. **Campton, Charles Edward.** Support of schools in railroad centers in Minnesota. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 34 p. ms.

1900. **Carr, William G.** Public expenditures in a California county. 1928. Division of research, California teachers association. Sierra educational news, 24: 8-11, December 1928.

Findings: In a typical California county, the leading newspaper reported that 62 per cent of taxpayer's dollar went for education. Really only 39 per cent of the Fresno county taxpayer's dollar went for education.

1901. **Castle, Lynn Ervin.** An analytical basis for a uniform financial accounting classification for schools. Master's thesis, 1929. State university of Iowa, Iowa City. 92 p. ms.

1902. **Childress, Leslie A.** Instruction costs in the 14 high schools of La Porte county, Ind., for the school year, 1926-27. Master's thesis, 1929. University of Chicago, Chicago, Ill. 77 p. ms.

A study of salary cost of instruction in grades seven to twelve, inclusive. Student-hour and class-hour costs were chiefly used. Findings: Student-hour costs in the same schools were three times as great as in others. Home economics had the high cost and English the low cost. One school paid more per capita for instruction in the junior high school than in the senior high school. The student-hour costs in the two cities were approximately half the costs in the county schools. The student-hour cost in the commercial subjects was six times as great in one school as in another. The size of the classes in the county schools was about two-thirds the size of the classes in the cities.

1903. **Clark, Harold F.** Index numbers in educational work. Teachers college record, 30: 453-60, February 1929.

Gives index numbers for cost of living for teachers, price of school buildings, price of school bonds, and the price of instructional supplies.

1904. ——— Index of school-bond prices. American school board journal, 77: 66, 151, September; 68, 128, October; 64, November; 59, 121, December 1928; 78: 90, 174, January 1929.

An analytical study of school bond sales from 1914 to 1927 showing average rate of interest. Compares prices by months between certain stocks and school bonds from September 1927 to August 1928.

1905. ——— Index of the price of school buildings. American educational digest, 48: 156-57, December 1928.

1906. ——— and **Fowlkes, John Guy.** Index numbers for school supply prices. Nation's schools, 2: 46-48, September; 64-67, October; 58-60, November; 58-60, December 1928; 3: 71, January; 77, February; 61, March; 81, April; 77, May; 77, June 1929.

A study of the trend of prices of school supplies, showing their fluctuations by months and years.

1907. **Clement, J. H.** Data on school finance in first and second class cities in Kansas. November 1928. Superintendent of schools, Independence, Kans. 17 p. ms.

Based on 34 replies to questionnaire issued in October 1928. Presents figures on valuation, levy, debt, and current expense; gives per cent distribution of current expenses; presents salary data and statistics on personnel.

1908. **Conner, Floyd.** The validation of a new unit for measuring cost of instruction. Master's thesis, 1928. State university of Iowa, Iowa City. 60 p. ms.

1909. **Cramer, R. V.** State support of public schools in Missouri. Doctor's thesis, 1928-29. University of Missouri, Columbia.

1910. **Crouch, Edward Gregory.** Cost of education per student in 277 small Iowa high schools. Master's thesis, 1929. Iowa state college, Ames. 34 p. ms.

The schools considered in this study were the four-year non-consolidated high schools located in Iowa towns of less than 10,000 population and having an enrollment of more than ten tuition pupils. Findings: (1) The records of the State department of public instruction do not furnish adequate data for determining

the depreciation of buildings; (2) the median for the average cost per pupil of 277 small Iowa high schools is \$101.57; (3) an inquiry is suggested in Table I by the wide variation in per pupil costs (range \$39.11-\$655.82); (4) in general the cost per pupil decreases as the enrollment increases; (5) the median enrollment for schools in this study was 93; (6) the per pupil cost figures of this study compare favorably with the findings of other school and state finance inquiries; (7) a large group of schools (33 per cent) do not charge \$12 per month tuition; (8) the tuition charge of \$12 per month apparently more than covers the per pupil cost in a large per cent (68 per cent) of schools.

1911. **Davis, Harvey Henry.** A technique for computing unit costs of subjects taught in high school. Doctor's thesis, 1928. State university of Iowa, Iowa City. 60 p. ms.

1912. **Domian, O. E.** An analysis of local tax payments in Minnesota. Master's thesis, 1928. University of Minnesota, Minneapolis.

A study of assessments and tax payments in various sections of the state to ascertain the degree to which the support of public education is equalized.

1913. **Douglass, Donald Dewey.** The sources and distribution of public school funds in the state of Illinois. Master's thesis, 1929. University of Illinois, Urbana.

1914. **Eelkema, H. H.** Bonding programs for public schools in South Dakota. Master's thesis, 1929. State university of Iowa, Iowa City. 155 p. ms.

1915. **Gartin, William.** Survey of financial conditions of Idaho schools. Master's thesis, 1928. University of Idaho, Boise.

1916. **Grimm, L. R.** New plan of state fund apportionment. 1929. Department of research, Illinois state teachers association, Springfield. Illinois teacher, 17: 132-35, 156-57, January 1929.

An analysis of workings of new plan for distribution of state school fund; trend toward equalization noted; state fund found inadequate. Recommends increase in state school fund.

1917. ——— State school fund crisis in Illinois. 1928. Department of research, Illinois state teachers association, Springfield. Illinois teacher, 17: 34-39, 60, October 1928.

An analysis of inequalities in educational opportunities in Illinois. Recommends that state assume responsibility of setting up mandatory standards and helping to finance them; many reasons for increased aid are given.

1918. **Halsey, Henry Rowland.** Borrowing money for the public schools. A study of borrowing practices in the administration of public schools in Florida. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

1919. **Hamtramck, Mich.** Public schools. Finance procedures: techniques in accounting, budgeting, and service of supplies of the Hamtramck, Mich., public schools. Hamtramck, Mich., Public schools, 1928. 162 p. (Research series, no. 3)

Contains chapters on the following subjects: the accounting code; the accounts; the internal accounting procedure; pay-roll procedure; subject cost procedure; service of supplies, textbooks, and equipment; budget procedure.

1920. **Hand, Franklin I.** The audit of public school accounts in Westmoreland county, Pa. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1921. **Hays, William L.** A study of fiscal trends in certain school districts of Washington county, Pennsylvania, for the years 1921-1925, inclusive. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1922. **Hill, Joseph Blackburn.** The relation between length of school year and elementary school costs. Master's thesis, 1929. Stanford university, Stanford University, Calif.

1923. **Holy, T. C.** Financial data for Ohio cities as of September 1928. 1929. Ohio state university, Columbus. 11 p. ms.

The data, as compiled, include enrollment, valuation, tax rate, bonded debt, and special levies and bond issues for 85 cities and 39 exempted villages.

1924. ——— The taxpayers' load—is it properly distributed? *Nation's schools*, 3: 33-36, April 1929.

Shows a few instances of inequality resulting from the use of assessed valuation of property as a measure of ability to support schools.

1925. **Hunt, H. S.** A comparison of two methods of school financing. *American school board journal*, 77: 46-47, November 1928.

A theoretical study of the question of the best methods in use in the financing of new school facilities: (1) The sale of bonds, and (2) the collection of sufficient tax money prior to construction. Figures utilized to explain discussion.

1926. **Idaho education association.** State-wide equalization tax. *In its Proceedings*, 1928.

1927. **Illinois state teachers association, Springfield, Ill. Department of research.** Some questions and answers on state school fund. February 1929. 11 p. ms. (Printed in condensed form in *Illinois teacher*, 17: 228-31, April 1929)

Shows purpose, need, and method of apportioning common school fund in Illinois.

1928. **Indall, Harold Adolph.** Cost of teaching high school subjects in South Dakota. Master's thesis, 1928. State university of Iowa, Iowa City. 87 p. ms.

1929. **Kansas state school code commission.** Inequalities in ability to support education and in expenditures for educational offerings. *In its Kansas state school code commission. Complete report . . .* January 15, 1929. Topeka, Kans., State printing plant, 1929. p. 18-26.

1930. **Kemmerer, Walter William.** School accounting by machine methods. Doctor's thesis, 1929. Teachers college, Columbia-university, New York, N. Y. (To be published)

The purpose of this study was to investigate the installations of machines used for keeping school financial accounts, to ascertain the advantages which can be secured by the use of mechanical accounting equipment, and to point out ways of securing the maximum utilization of mechanical accounting equipment.

1931. **Kraybill, A. E.** Summary of group A districts with enrollment of 5,000 or more. Summary of group B districts with enrollment less than 5,000. November 1928. Superintendent of schools, Asbury Park, N. J. Group A, 9 p.; group B, 19 p. ms.

Summary of financial data—assessments, tax rates, debt, expenditures, salaries—for New Jersey school districts.

1932. **Kroh, James H.** The financial possibility and effort in certain third class school districts of Allegheny county, Pennsylvania. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1933. ——— An objective millage rate for certain third class school districts of Allegheny county, Pa. *University of Pittsburgh school of education journal*, 4: 67-69, January-February 1929.

1934. **Landsberg, Irene Miriam.** An evaluation of the present methods of union high school support in Southern California for the years 1923-1927. Master's thesis, June 1929. University of Southern California, Los Angeles.

1935. **Leaman, Theodore B.** Budget procedure in school districts. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1936. **Lehman, Clarence O.** Legal status of state aid for special school projects in the United States. Doctor's thesis, 1929. Ohio state university, Columbus. 700 p. ms.

This study embraces the analysis and descriptive explanation of each statutory provision which pertains to state aid for special school projects in the 48 states. It also involves a comparative study of the amount of state funds which were expended for "special" and "general" purposes during the fiscal year, 1925-1926 in each state. The study also comprises a test as to the efficiency of state aid for special school projects as a

factor in the initiation and maintenance of such special undertakings. This test was applied to six type states. Conclusions: (1) In general, the states are more inclined to improve the administrative and instructional efficiency of the public schools than to improve the physical plants and the physical well-being of the pupils; (2) there is no unanimity in present practice with respect to the types of projects in which receive stimulation by means of special state aid; (3) apparently there are no guiding principles in use whereby it is determined when special aid should be abandoned or changed to the realm of general aid; (4) the data tend to indicate that state aid for special school projects has been effectual as a stimulant when tested in the six type states according to the proposed criteria. A procedure is proposed which involves the inauguration of state aid for new school projects by means of educational, social and economic evaluations; the formulation of guiding principles for the abandonment of state aid for any special activity; and the provision for an emergency stimulation fund.

1937. **Lewallen, Harry E.** A fiscal survey of the schools of Kosciusko county, Ind. 1928. University of Chicago, Chicago, Ill.

1938. **Linn, Henry H.** Safeguarding school funds. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

This study has attempted to determine reasons why school funds have been and are being lost and misused; to point out what are the fundamental safeguards that should be set up to protect the school funds; to point out the weaknesses of safeguards used at present; and to offer suggestions to remedy these weaknesses. It was found that large sums of school funds are being lost through embezzlement, graft, bank failures, failure to collect and account for all sources of income, excessive payments, poor investments and general mismanagement. Of all the financial safeguards, accounting is the most essential.

1939. **Lockhart, Milton P.** The evolution of school revenue in the state of Florida. Master's thesis, 1929. University of Chicago, Chicago, Ill. 80 p. ms.

An historical study. Conclusions: There has been no adequate financial policy in the state. The tendency has been toward county and local district support. There has been no adequate state fund.

1940. **McElhannon, Joseph C.** Accounting for the costs of capital in a school program. Peabody journal of education, 6: 108-15, September 1928.

A study of certain educational costs in nine counties of central Texas.

1941. **Marshall, Fred L.** Cost and practices of collecting local taxes in certain fourth class school districts of Allegheny county. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

1942. ——— Tax collection in certain districts of Allegheny county, Pa. University of Pittsburgh school of education journal, 4: 75-82, January-February 1929.

A five year study of borough and school taxes obtained through personal interviews and various statistical reports.

1943. **Moehlman, Arthur B., and Lovejoy, Phillip.** Financial procedures for Hamtramck public schools. Hamtramck, Mich., Board of education, 1928. 161 p. (Research study, no. 3)

A detailed study of cost accounting and subsidiary techniques.

1944. ——— Public school budget procedure. 1929. University of Michigan, Ann Arbor. Hamtramck, Mich., Board of education, 1929. 110 p. (Research study, no. 3)

A study of the development of functional budget for public school system, with particular application to Hamtramck, Mich.

1945. **Moore, B. C., and Grimm, L. E.** State school fund in Illinois. May 1929. Department of research, Illinois state teachers association, Springfield. 4 p.

A sample of educational publicity that was received favorably by the State Legislature.

1946. **Morgan, Bert E.** Cost per unit of teaching high school subjects in Iowa schools offering vocational agriculture. Master's thesis, 1929. Iowa state college, Ames. 160 p. ms.

In this study 103 Iowa high schools offering vocational agriculture were used, and data obtained from State department of instruction, Des Moines, Iowa. Findings: (1) The larger schools had the lowest cost per unit when compared with the smaller schools, (2) subject having the lowest unit cost was English, \$8.62, highest unit cost was vocational agriculture, \$41.71, the average for all subjects was \$13.95; (3) number of pupils in class seemed to be the greatest factor in determining the unit cost.

1947. **Mort, Paul B.** An analysis of the problem of distributing state subsidies to school districts. Report of the Commission of the commonwealth of Pennsylvania, Harrisburg, Pa., 1929.

1948. ——— A plan for providing equality of educational opportunity in Kansas—a basic inquiry made for the state school code commission. Topeka, Kans., State printing plant, 1928. 43 p. (Report of the State school code commission of Kansas. Supplement to Vol. II, October 3, 1928)

After a thorough study of the problems of school finance in Kansas, the writer makes suggestions for providing equality of educational opportunity.

1949. ——— A preliminary report on the reconstruction of the system of financing public schools in the state of Colorado. December 1929. Educational finance committee, Colorado education association.

1950. ——— State participation in the financing of junior colleges. New York city, Teachers college, Columbia university, May 1929.

1951. ——— Teachers college influence upon the financing of public education. Teachers college record, 30: 572-77, March 1929.

1952. **Myers, C. E.** Hopewell City school costs. March 28, 1929. State department of education, Richmond, Va. Ms.

1953. **National education association. Department of superintendence.** Educational research service. School building costs in 20 cities over 250,000 in population. Washington, D. C., National education association, 1928. 16 p. (planographed) (Educational research service circular, no. 10, 1928)

This study indicates the size, cost, and special facilities provided for 58 elementary, 5 special, and 32 junior and senior high school buildings. It is based on questionnaire issued in October 1927.

1954. ——— **Research division.** Can the Nation afford to educate its children? Washington, D. C., National education association, 1928. 48 p. (Research bulletin, vol. VI, no. 5, November 1928)

This bulletin treats of the educational lessons of the war and how we are profiting therefrom. It gives facts about school costs and our wealth and income.

1955. ——— ——— Can the states afford to educate their children. Washington, D. C., National education association, 1929. 44 p. (Research bulletin, vol. VII, no. 1, January 1929)

1956. **Nebraska state teachers association.** A plan for providing equality of educational opportunity in Nebraska. Lincoln, Nebr., Nebraska state teachers association, November 1928. 62 p. (Research bulletin, no. 3)

This bulletin gives the results of an extensive study made by the legislative committee of the association under the counsel and direction of Dr. Paul R. Mort.

1957. **Newell, Roy W.** Financial problems related to education in mining camp schools of Iowa. Master's thesis, 1928. State university of Iowa, Iowa City. 160 p. ms.

1958. **Noble, M. C. S., jr.** Current expense in the public day schools of the United States, 1925-1926. 1928-29. State department of public instruction, Raleigh, N. C. 30 p. ms.

This study gives comparative data on current expense in the United States, with special attention to current expense in North Carolina as compared with current expense in United States at large.

1959. ——— Public school finance in Delaware, 1928-29. State department of public instruction, Raleigh, N. C., 11 p. ms.

This is a statement as to local and state sources of revenue for public schools in Delaware, and comprises legal provisions, amount raised, methods of collection and distribution of local and state school funds as well as reference materials.

1960. ——— Public school finance in Maryland, 1928-29. State department of public instruction, Raleigh, N. C. 15 p. ms.

This is a statement as to local and state sources of revenue for public schools in Maryland, and deals with legal provisions, amount raised, methods of collection and distribution of local and state school funds as well as reference materials.

1961. **Noble, M. C. S., jr.** Public school finance in New Jersey, 1928-29. State department of public instruction, Raleigh, N. C. 11 p. ms.

This is a statement as to local and state sources of revenue for public schools in New Jersey, and deals with legal provisions, amount raised, methods of collection and distribution of local and state school funds as well as reference materials.

1962. ——— Public school support in South Carolina, 1928-29. State department of public instruction, Raleigh N. C. 15 p. ms.

This is a statement as to local and state sources of revenue for public schools in South Carolina, and deals with legal provisions, amount raised, methods of collection and distribution of local and state school funds, as well as reference materials.

1963. ——— Public school finance in Tennessee, 1928-29. State department of public instruction, Raleigh, N. C. 33 p. ms.

This is a study of the local and state sources of revenue for public schools in Tennessee, and deals with legal provisions, amount raised, methods of collection and distribution of local and state school funds, as well as reference materials.

1964. ——— Public school finance in Virginia. 1928-29. State department of public instruction, Raleigh, N. C. 6 p. ms.

This is a statement as to local and state sources of revenue for public schools in Virginia, and includes such items as legal provisions, amount raised, methods of collection and distribution of local and state school funds, as well as reference materials.

1965. ——— The support of public schools in Alabama. 1928-29. State department of public instruction, Raleigh, N. C. 28 p. ms.

This is a statement as to local and state sources of revenue for public schools in Alabama. The legal provisions, amount raised, methods of collection and distribution of local and state school funds, and reference materials are given.

1966. **Oklahoma City, Okla. Public schools. Research department.** A comparison of school enrollment and school support in the Oklahoma city public schools. [1929] 8 p. ms.

An analysis of the factors leading to increased school expenditures, and a statement as to needs in certain school departments. Calls attention to the fact that assessed valuation has increased 28 per cent during the past eight years, while school attendance has increased 64 per cent. A 15-mill tax limitation is curtailing the amount of money available for schools.

1967. **Perkins, F. E.** A critical study of the Crosby-Ironton, Minnesota, public schools with special reference to the financial aspects. Master's thesis, 1928. University of Minnesota, Minneapolis.

The application of survey techniques to the various activities carried on in the administration of the schools, with special reference to the financial problems.

1968. **Phillips, Frank M.** Per capita costs in city schools, 1927-28. Washington, United States Government printing office, 1929. 11 p. (Statistical circular, no. 12, January 1929)

1969. **Putnam, Rex.** Budgetary practices in union high schools of Oregon. Master's thesis, 1928. University of Oregon, Eugene. 51 p. ms.

51 union high schools of Oregon were studied, to find out the distribution of the budget dollar in varying situations, the per capita amounts allowed budget items in various situations, etc. A lack of proper budgetary practice was evident.

1970. **Reusser, W. C.** Equalization of educational opportunity and equalization of school support in Wyoming. Master's thesis, 1929. State university of Iowa, Iowa City. 332 p. ms.

A bulletin with the same title was published by the Wyoming state teachers association, as Research bulletin, no. 1, August, 1929. 52 p.

1971. **Rogers, Don C.** Why have Chicago school costs increased? Chicago, Ill., Public schools [1929] 15 p.

Graphic portrayal of depreciated purchasing power of money, growth in school membership, expanded curriculum, and increase in school buildings. Gives evidence as to ability of Chicago to support good schools.

1972. **Bondebush, G. E.** Some practical economies in school administration. American school board journal, 78: 41-42, June 1929.

Points out how a deficit amounting to 24 per cent of the annual budget was overcome in 3 months' time. Eight devices for reducing expenditures are listed.

1973. **Sangren, Paul V.** Unit cost study of instruction in Western state teachers college. 1929. Western state teachers college, Kalamazoo, Mich.

The purpose of this study was to determine the comparative cost of departments and types of instructional activity.

1974. **Shower, George N.** How Virginia finances its public schools. Master's thesis, June 1929. University of Virginia, Charlottesville.

1975. **Smith, Walter R.** The office of the school treasurer in certain counties in Pennsylvania. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1976. **Smittle, William Raymond.** What would be the financial status of the several school districts of Athens county were there a county organization for the collection and disbursement of funds? Master's thesis, 1928-29. Ohio state university, Columbus.

1977. **Staffelbach, Elmer H.** Looking ahead financially. Division of research, California teachers association. Sierra educational news, 25: 27-32, June 1929.

1978. **Stearns, Harry L.** A legal guide for issuing school bonds in Pennsylvania. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

1979. **Swetman, Ralph W.** A method of comparing educational opportunities in and financial obligations of the elementary school districts of California. Doctor's thesis, 1928. Stanford university, Stanford University, Calif.

Two indices are given, one of educational opportunity and one of financial ability, which will permit school officials in a single district to compare with greater accuracy than has been possible before the amount of educational opportunity the children are receiving with the ability of the district to furnish the opportunity.

1980. **Swift, Fletcher Harper.** Apportionment of state school funds—IV. The Delaware plan. American school board journal, 77: 37-39, September 1928.

A detailed analysis of the Delaware plan of financing education. Includes many relevant data showing various funds, their sources, and distribution. The article is presented under the following heads: "A State System," "State School Funds," "Apportionment of State School Funds," "Building Funds."

1981. ——— The apportionment of state school funds—V. American school board journal, 78: 43-45, February 1929.

The fifth of a series of articles in the American school board journal on the subject by Dr. Swift. This one describes in detail the Massachusetts plan of apportioning state school funds.

1982. ——— State system of taxation for public schools. American school board journal, 78: 61-62, 142, March 1929.

The first of a series of articles on the subject. This one describes in detail the Wisconsin plan of taxation for public schools. North Carolina's plan is described in the April number, Connecticut's plan in the May, and Montana's plan in the June number of this journal.

1983. **Thompson, Roger M.** Current expenses per pupil in average daily attendance, 1927-28. 1929. Connecticut state board of education, Hartford. 33 p. ms. (Research letter 2—ser. 1928-29)

1984. ——— Percentage of local tax receipts devoted to schools. 1929. Connecticut state board of education, Hartford, 8 p. ms. (Research letter 3—ser. 1928-29)

1985. **Tinglestad, Edwin.** Budgetary practice in Oregon district high schools. Master's thesis, 1928. University of Oregon, Eugene. 77 p. ms.

This is a study of budgetary practice in 51 Oregon high schools; relating these practices to a theoretically sound budget system; computing certain high school costs on a per capita basis according to average daily attendance; and comparing these costs with similar costs in a corresponding group of union high schools. Findings: Judged on the basis of instruction and debt services allowed, nonunion high schools are more efficient financially than are union high schools.

1986. **Tupper, Charles E.** How a research department may aid a bond campaign. Nation's schools, 3: 21-26, March 1929.

Although hardly a research study, this article illustrates one of the practical uses of research.

1987. **Turner, H. L.** Tentative standards for the distribution of expenditures in county school systems in the South. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1929. 81 p. (Contributions to education, no. 52)

1988. **Turner, Lloyd E.** Administration and supervision of high school student body finance. Master's thesis, 1929. University of Washington, Seattle. 210 p. ms.

A study of 385 financial systems of high schools throughout the United States.

1989. **United States. Bureau of education.** Report on the school expenditures of Huntington, West Virginia. [1929] 48 p.

This report is confined in general to the presentation of information regarding school costs in Huntington and in other cities between 30,000 and 100,000 population.

1990. **Vandegrift, Rolland A., Bennett, J. C., and Winter, Richard A.** Report of Santa Barbara county, Calif. July 1928. California taxpayers' association, Los Angeles.

An analysis of the expenditures of Santa Barbara county for the fiscal year 1926-27. Similar to the Kern and San Diego county reports. Special study of school cafeterias. The problem of transportation, consolidation, and the taxation of property not now taxed for school purposes are considered.

1991. **Whitney, Frederick L.** Departmental student credit hour costs, Colorado state teachers college, fall quarter, 1929. 1929. Colorado state teachers college, Greeley. (Typed report to President Frasier, March 1929)

1992. ——— Significant cost data in the public junior colleges of California, Texas, and Iowa. 1929. Colorado state teachers college, Greeley. (Typed report February 21, 1929)

1993. **Worthy, Haley Dewey.** Financial safeguards for current school expenditures. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 78 p. ms.

1994. **Yakel, Ralph.** The legal control of the administration of public school expenditures. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of this study was to determine what legal control is exercised over the administration of public school expenditure and to isolate, reveal and evaluate some of the most important legal principles which have been evolved by the courts and legislatures for the control of school expenditures. It was found that there has been a decided trend in the various states to increase the control of the state over matters of school administration; the legal control of expenditures is usually quite objective in the cases coming before the courts, and the decisions concerning such matters are numerous. In a proposed code developed in this study, the fundamental considerations of the proper province of administrative action and the institution of the necessary safeguards form the framework upon which the organization for the control of the administration of public school expenditures is built.

See also 70, 75, 90, 103, 107, 125, 127, 1305, 1429, 1434, 1436, 1493, 1517, 1746, 1750, 1759, 1776, 1810, 1863, 1873, 2148, 2492, 2513, 2531, 2652, 2739.

SCHOOL SUPERVISION

1995. **Devers, Nancy O.** Current practice in county school supervision in North Carolina. 1928-1929. State department of public instruction, Raleigh, N. C. 75 p. ms.

This study embraces: (1) Supervisory practices and accomplishments for a year, 1928-1929; (2) comparison of results in supervision over a period of five years, 1924-1929.

1996. **Ellithorpe, Clarence.** A study of supervision in North Dakota schools of from ten to twenty-five teachers. Master's thesis, 1928. University of North Dakota, Grand Forks. 52 p. Review printed in the School of education record (University of North Dakota), 14: 149-52, February 1929.

1997. **Engelhardt, Fred, and Melby, Ernest O.** The supervisory organization and the instructional program, Albert Lea, Minn. Minneapolis, Minn., University of Minnesota, 1928. 72 p. (Bulletin of the University of Minnesota, vol. 31, no. 51; College of education monograph, no. 17)

Results of a survey and reorganization carried on by a survey staff at the University of Minnesota working in close cooperation with the Albert Lea supervisors and teachers. Chapters as follows: Organization and the improvement of instruction; organization for supervision; meeting pupil needs; instructional activities and achievements; program for improvement of teaching. Tables, diagrams, charts.

1998. **Fitch, Harry Norton.** An analysis of the supervisory activities and techniques of the elementary school training supervisor in the state normal schools and teachers colleges. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

Three hundred fifty-five elementary school supervisors of student teaching, working in 45 state normal schools and teachers colleges of 28 states, rated the activities from the standpoint of three criteria. Every one of the 422 activities of the check list is performed by some supervisors. Only 14, however, are performed by all the supervisors.

1999. **Gambrill, Bessie Lee.** A critical review of researches in supervision. Educational administration and supervision, 15: 279-89, April 1929.

An analysis of over 7,500 pages of magazine material revealed the fact that about seven per cent of the pages were devoted to supervision. There were 15 articles on supervision classified as research.

2000. **Holmes, Jay William.** The administration of supervision in the junior high school. Master's thesis, 1928-29. Ohio state university, Columbus.

2001. **Hopkins, Sister Mary Neri.** The development of educational supervision in the Catholic schools of the diocese of Erie. Master's thesis, 1929. Catholic university of America, Washington, D. C. 47 p. ms.

2002. **Keyworth, M. R.** A program of appraisal under functional supervision in Hamtramck, Mich. Educational administration and supervision, 15: 290-300, April 1929.

The incomplete returns from this study indicate positively that the program of appraisal of supervision in Hamtramck is valid and successful. The inference may be made that the change in the rate of growth is a result of the supervision hereif presented.

2003. **Landis, Emerson W.** Supervision of instruction in junior high schools. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 17 p. ms.

2004. **Leslie, R. G.** The technique of visitation and conference. New Castle, Pa., Public schools, 1929. 14 p. (Educational monographs)
Contains a bibliography on the subject.

2005. **Lindquist, B. D.** The evaluation of supervision. Educational administration and supervision, 15: 301-10, April 1929.

The purposes of this study were to discover to what extent the principles and procedures set up by the supervisory group in the Oakland public schools are understood by teachers, and to what extent they meet with the teachers' approval; and to secure from teachers suggestions for the improvement of existing relationships. Conclusions: The teachers are in accord with the desire of principals to have meetings for small groups on specific and limited classroom problems, and to have the conference procedure prevail as the accepted technique. In general, the teachers feel that there are too many meetings. 82 per cent of the teachers studied wanted the supervisor to teach when she visits the class room.

2006. **Melby, Ernest O.** A critical study of the existing organization and administration of supervision. A study of current practice. Bloomington, Ind., Public school publishing company, 1929. 158 p. (Northwestern university. Contributions to education, School of education series)

This investigation seeks to inventory practices in the organization and administration of supervision in cities ranging in size from 10,000 to 20,000, and to evaluate these practices in terms of the judgments of supervisory officers, teachers, and educational specialists.

2007. ——— Supervisory organizations in cities of 10,000 to 20,000 population. American school board journal, 78: 57-58, April 1929.

Tabulation and discussion of data obtained from 171 cities of the size group indicated. Shows typical supervisory organization.

2008. **Miller, Ruby Amy.** The human element in supervision. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 29 p. ms.

2009. **Northeastern state teachers college, Tahlequah, Okla.** District supervisory program for northeast Oklahoma. Circular, no. 1-5, September-November 6, 1928.

2010. **Reed, Elizabeth Anne.** The development and needs of supervision in high school from the standpoint of the English teacher. Master's thesis, June 1929. University of Southern California, Los Angeles.

2011. **Ross, Hazel I.** Supervisory needs of beginning teachers in Ohio. Master's thesis, 1929. Teachers college, Bowling Green, Ohio. 144 p. ms.

This is an investigation of supervisory needs through inquiry sent to Ohio teachers and superintendents.

2012. **Simmons, G. Ballard.** Classroom supervision in the elementary division of the accredited public schools of Florida. Master's thesis, 1929. University of Florida, Gainesville. 107 p. ms.

2013. **Southall, Maycie Katherine.** Direct agencies of supervision as used by general elementary supervisors. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn.

2014. **Twitchell, Doris F.** An objective measure in supervision. Journal of educational research, 19: 128-34, February 1929.

A record form is offered as a possible aid in the supervision of teaching. Trial uses of the form have shown it to give, at a glance, a picture of the amount, type, and distribution of student participation in the classroom.

2015. **Webb, Everett S.** Study of supervision in small high schools. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 81 p. ms.

Data secured from 45 state departments of education, and other sources. Conclusions: State regulation of high school principal's load necessary to insure proper supervisory function.

2016. **Weston, Ralph F.** The status and work of the Fitchburg training supervisor. Master's thesis, 1929. University of New Hampshire, Durham.

The training and experience of the training supervisors at Fitchburg normal school, Fitchburg, Mass. Conclusions: Training was inadequate; work too heavy and too varied for satisfactory performance of major duties; inadequate provision for conference between supervisor and student teacher.

See also 72, 102, 174, 450, 673, 694, 715, 898, 1174, 1450, 1628, 1867, 2027, 2030-2031, 2038, 2114, 2123, 2387, 2499, 2511, 2614, 2738.

SCHOOL PRINCIPALS

2017. **Anders, R. G. and Johnston, Ha.** Analysis of the duties of a union school principal. 1928-29. Henderson county schools, Hendersonville, N. C. 25 p. ms.

A study into the more effective distribution of a principal's time.

2018. **Bouton, Christopher Bell.** An analytical study of the duties of the boys' vice-principal. Master's thesis, June 1929. University of Southern California, Los Angeles.

2019. **Burton, Frank Le Roy.** The financial problems of the high school principal. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2020. **Caldwell, A. B., and Shields, J. M.** Status of elementary school principals in North Carolina, 1928-29. Public schools, Winston Salem, N. C. 6 p. ms.

2021. **Coxe, Warren W.** Study of the elementary school principal in New York state. Albany, N. Y., New York state education department, 1929. 20 p.

Analyzes the training, teaching load, certification, experience, salaries of principals in elementary schools in New York state.

2022. ——— Study of the secondary school principal in New York state. Albany, N. Y., New York state education department, 1929. 24 p.

Analyzes training, certification, experience and salaries of high school principals in New York state.

2023. **Emswiler, Harold Winfield.** The junior high-school vice-principal. Master's thesis, 1928-29. Ohio state university, Columbus.

2024. **Eshleman, Reeder L.** The status of the principal of the small high school in Pennsylvania. Master's thesis, 1928-29. Franklin and Marshall college, Lancaster, Pa.

This study deals with the principal in the high schools enrolling from 34 to 234 pupils and reports on returns from 112 high schools. It deals with the qualifications of the high school principal, his salary and contract, his powers and duties, and the distribution of his time.

2025. **Foster, Frank K.** Status of the junior high school principal. Doctor's thesis, 1929. University of Washington, Seattle.

National survey of principals of schools with 7-8-9 grade organizations; personal status, academic and professional training, professional experience, administrative and supervisory organizations and duties, community contacts and professional interests.

2026. **Hubbard, Frank W.** Do school systems need a principals' handbook? Elementary school journal, 29: 590-93, April 1929.

Replies to letters sent to 425 cities do not show a systematic effort to supply principals with material on administrative practices of local school system.

2027. **Ives, Claude L.** A building principal's plan of supervision. Master's thesis, 1928. University of North Carolina, Chapel Hill.

An attempt to organize a constructive plan of supervision that will meet the most urgent needs of the school system. From this study it is evident that effective supervision is absolutely necessary for any school system to obtain the best results.

2028. **Jervis, C. F., and others.** Some attainable objectives in six supervisory activities in the elementary grades by principals of 11 grade schools. 1928-29. Buncombe county public schools, Asheville, N. C. 50 p. ms.

It was the purpose of this study of the Buncombe county public schools, to set up some attainable objectives in the supervisory activities of principals in the elementary grades. The study resulted in a clearer understanding by principals of the teachers' needs and wishes and increased ability to give the teachers definite and practical assistance in their problems and more time to supervision.

2029. **Koffman, Gladstone.** Academic and professional training of high-school principals in Kentucky. 1928. University of Chicago, Chicago, Ill.

2030. **McNeely, John G.** The activities of junior high school principals in California. California quarterly of secondary education, 4: 156-65, January 1929.

From a Master's thesis, University of Southern California, 1928.

Contains data showing amount of time junior high school principals give to inspecting buildings, supervision of instruction, extracurricular activities, routine office work, conferences, etc.

2031. **Maguire, Rev. William A.** The high school principal as supervisor. Master's thesis, 1929. Catholic university of America, Washington, D. C. 56 p. ms.

A study of the nature and extent of the supervisory activities of principals in 247 Catholic high schools distributed through 38 states. Findings are compared with those of similar studies of public high school reported by Koss and Roberts and Draper.

2032. **National education association.** Department of elementary school principals. Activities of the principal. Washington, D. C., National education association, 1929. 528 p.

This is the eighth yearbook of the Department of elementary school principals and is issued as Vol. VIII, no. 3 of the Bulletin of that Department. It consists of reports of activities of principals throughout the country.

2033. ——— **Research division.** The principal and progressive movements in education. Washington, D. C., National education association, 1929. 60 p. (Research bulletin, vol. VII, no. 2.)

2034. **Patterson, William R. H.** The basic problems of a high school principal in the relation of his school to other schools. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2035. **Reavis, W. C., and Woellner, Robert.** Office hours of secondary school principals. *School review*, 36: 656-64, November 1928.

Findings show that office hours of principals are largely unstandardized. An analysis of practices shows that principals of smaller schools excel in the organization of their office time. One explanation offered is that smaller schools are usually manned by younger principals, these principals having received more specific training in office administration.

2036. ———— The professional files of secondary-school principals. *School review*, 37: 96-106, February 1929.

A study of the methods used by 522 principals for filing educational magazines, bulletins, catalogues, etc. 55.4 per cent of the principals undertake to maintain some kind of files.

2037. **Stone, George Edward.** Status of the county high-school principal in Tennessee. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 39 p. ms.

2038. **Wilde, S. O., and others.** Investigations in teaching. 1928-29. Buncombe county public schools, Asheville, N. C. 50 p. ms.

A study in Buncombe county schools in order to set up some of the supervisory objectives which principals may reasonably attempt to attain in the time at their disposal and to determine those activities which may well be delegated to someone else in order to gain more time for supervisory activities.

See also 1360, 1591, 1625, 1693, 1705-1708, 2122, 2491, 3038.

SCHOOL MANAGEMENT

2039. **Anderson, Oscar Albin.** Better management in education. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2040. **Ashbaugh, E. J.** Parents and pupils' report cards. *Educational research bulletin (Ohio state university)*, 8: 143-46, April 3, 1929.

This article gives the results of an effort to ascertain what parents would like on report cards.

2041. **Bogan, William J., and McDade, James E.** Statistical bulletins, nos. 1-7. Chicago, Ill., Board of education, 1928-29.

Gives information by years and school divisions on pupil membership, pupils per teacher, number of teachers, age-grade distributions, retardation, acceleration, etc., for the city of Chicago.

2042. **Burr, Samuel Engle.** Suggestive rating scale for textbooks. [1929] Research department, Public schools, Lynn, Mass. 2 p. ms.

A point scale, providing for rating on each of the following main topics: authorship and general considerations; mechanical features and makeup; subject matter and technic; teaching helps and aids to instruction.

2043. **Butler, Frank Arthur.** Standard items to observe for the improvement of teaching in classroom management. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

2044. **Davis, H. H.** Corporal punishment and suspension. *School and society*, 28: 632, November 17, 1928.

A compilation of data at five year intervals from 1881-82 relating to number of cases of corporal punishment and suspension in a large city school system to show the trend from government by force or elimination to government by more refined and modern methods.

2045. **Fenton, Norman.** Training in the public presentation of a school exercise: a study in school morale. California bureau of juvenile research: Whittier state school, Whittier, Calif. *Journal of applied psychology*, 12, 417-25, August 1928.

2046. **Lenander, E. E.** A study of time given to other than regular teaching activities in public schools of St. Paul. Master's thesis, 1928. University of Minnesota, Minneapolis.

A study of the holidays and an analysis of each school day during 1927-28, to ascertain the proportion of time devoted to each type of activity carried on within the schools.

2047. **Mowls, John N.** The administration of attendance in the senior high school. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2048. **Muth, Harry Conrad.** The causes of pupil absence in the Roosevelt junior high school, Rockford, Ill. Master's thesis, August 1928. University of Chicago, Chicago, Ill. 46 p. ms.

The data presented in this study show that 63 per cent of all cases of absence were due to illness of the pupil; 2.3 per cent of the total absence was due to truancy, boys being truant seven times as much as girls.

2049. **Reed, A. A.** A study of attendance for a decade in certain accredited schools of Nebraska. Educational research record (University of Nebraska) 1: 49-53, December 1928.

2050. **Schwartz, Franklin Charles.** A study of current practices in reporting school achievement of pupils to parents. Master's thesis, June 1929. University of Minnesota, Minneapolis.

2051. **Turner, H. B.** Report: Department of attendance and research, year 1927-28. June 1928. Superintendent of schools, Warren, Ohio. 90 p. ms.

Discusses attendance, age-grade survey, distribution of marks, testing and guidance program, objective tests, and elimination from high school.

2052. **Whitney, Frederick L.** Report of student absence from classroom work, winter quarter, 1929. Colorado state teachers college, Greeley. (Typed report to Dr. W. D. Armentrout, May 1929)

2053. **Williamson, Riley S.** A score card for the location of and remedy for teaching difficulties. February 1929. Bureau of research, Department of education, Baltimore, Md.

This study should enable one to locate accurately causes of difficulty which arise in classroom management and to correct the cause if possible.

See also 1322.

CHILD ACCOUNTING

2054. **Bowen, Bess Margaret.** The educational use of a permanent census and scholarship record. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 38 p. ms.

2055. **Chapman, Alvin L., jr.** A study of child accounting in Alabama. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

2056. **Chapman, H. B.** Revision of child accounting forms used by vocational schools. May 1929. Bureau of research, Department of education, Baltimore, Md. 4 p. ms.

An attempt to devise a blank which would provide the statistical data like all of the other schools and at the same time be suitable for a type of school operating on a modification of the Dalton plan.

2057. **Clayson, Merrill D.** Child accounting in connection with the Provo city survey. Master's thesis, 1929. Brigham Young university, Provo, Utah.

2058. **Heck, Arch O., and Reeder, Ward G.** The uniform school accounting system. (For pupil personnel.) Bloomington, Ill., Public school publishing company, 1929. 37 p.

"In designing the forms the authors have kept in mind two guiding principles, namely, adequacy and simplicity." They have attempted "to meet the needs of all types of school systems, whether large or small. Every item of information on these forms has stood the test of usefulness."

2059. **Simmons, C. Roscoe, chairman.** National survey of methods of school census enumeration. Census survey committee, Public schools, Fordson, Mich. 20 p. ms.

Compiled by a committee of a class at Detroit teachers college, 1927-28. Questionnaire study; summarizes data for 14 cities and 36 states, furnished in reply to a questionnaire of 10 items.

2060. **Witham, Ernest C.** School census, Wilmington public schools, 1928-29. October 1928. Department of research, Public schools, Wilmington, Del. 20 p. ms.

Describes procedure in taking the school census, the last being taken in 1923-24. Gives number of children, ages 6-16 years, by race, age, wards, nationalities, and schools.

See also 106.

CLASS SIZE

2061. **Burton, A. J.** An experiment in class size in English literature. 1929. East high school, Des Moines, Iowa. 8 p. ms.

This experiment does not cover a broad enough field in English to warrant definite conclusions but it offers advantages, which added to the results of other experiments in this field, may lead to sound conclusions. 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.

2062. **Chapman, H. B.** Size of classes and teaching sections in elementary, junior high, senior high and vocational schools as of October 1928. April 1, 1929. Bureau of research, Department of education, Baltimore, Md. 32 p. ms.

2063. **Goodman, A. K.** A preliminary study of class size in the state teachers college. March 1929. Colorado state teachers college, Greeley. 92 p. ms.

Comparative data from Hudelson's University of Minnesota study and data from Colorado state teachers college. 91 comparative tables given.

2064. **Hudelson, Earl.** Class size conditions and trends at the college level. University of Minnesota, Minneapolis. *School and society*, 30: 98-102, July 20, 1929.

This is a nation wide study of conditions and trends in all types of higher institutions. Data are based upon 386 institutions.

2065. **Reading, Pa. Public schools. Department of research.** Comparative study of class sizes. 2 p. ms.

The information was obtained from 18 junior high schools, 14 of which are outside of Reading. Data were collected in 1927 and again in 1929. The comparative study indicates the trend of class size.

2066. **Smith, Dora V.** Effect of class size in ninth grade English with emphasis on large group methods. Doctor's thesis, 1928. University of Minnesota, Minneapolis. 545 p. ms.

Four ninth-grade English classes in the University of Minnesota high school, two of 20 pupils each and two of 50 pupils each, were taught by the same teacher during a period of two years. The large and small groups were mated in intelligence, chronological age, sex, and in five specific English abilities. The small class was found to be superior in letter writing and the large class in amount and variety of activities in reading and literature.

2067. **Stockard, L. V.** Relation of class-size to efficiency of instruction. 1929. Board of education, Dallas, Tex. *In Association of colleges and secondary schools of the Southern states. Proceedings, 1929.* p. 81-89.

A study to determine the effect of class-size on efficiency of instruction in the Dallas high schools. Data were compiled on all classes for sessions 1927-28 and 1928-29, and for special classes over a period of years. Findings: Class-size in itself has little effect on efficiency of instruction as shown by class marks and promotions.

2068. **Wasson, William Henry.** A controlled experiment in the size of classes. Master's thesis, 1929. University of Chicago, Chicago, Ill. 127 p. ms.

A study of two groups of 25 and 40 each in general languages and technical groups. Small classes were slightly better in each case.

2069. **Whitney, Frederick L.** Class size in the primary school. 1928. Colorado state teachers college, Greeley. *In National education association. Department of classroom teachers. Third yearbook, 1928.* Washington, D. C., National education association, 1928. Chap. 3.

A correlation study of 2,800 pupils in 125 classes using eight pupil and five teacher variables. Findings: The "size of group handled may have some relationship to school efficiency" but "the large group does not seem to be necessarily a detriment."

2070. ——— The study of class size in the primary grades. 1929. Colorado state teachers college, Greeley. *In National education association. Department of class-room teachers. Fourth yearbook, 1929.* p. 95-98.

The first four grades in the elementary school—four sizes of classes, less than 25, 26-35, 36-45, and more than 45—were studied. Classes were confined to large American cities, New Bedford, Mass., Spokane, Wash., Norfolk, Va., and Raleigh, N. C. One hundred twenty-five different primary classes were finally involved. Pearson product moment technic, bi-serial method and the mean-square-contingency method

were used. Correlations obtained by the two latter methods show a distinct correlation (.39 and .41) between educational efficiency and class size when groups of 62 and 41 classes and of 7, 41, 30 and 25 classes were used; and when seven first grade classes were examined in a separate computation a coefficient of mean-square-contingency of .75 was obtained. This seems to point toward the importance of the class size situation in the primary school, particularly in grade one. One may conclude, that when the problem of teacher load in the primary school is attacked by the correlation method the size of the group handled may have some relationship to school efficiency. On the whole, the larger group does not seem to be necessarily a detriment.

2071. **Whitney, Frederick L. and others.** A preliminary study of class size in the state teachers college. 1929. Colorado state teachers college, Greeley. (Mimeographed report, March 30, 1929)

See also 1005, 1436.

CLASSIFICATION, GRADING, AND PROMOTION

2072. **Boyer, Philip A., and Broome, Edwin C.** Per cents of pupils rated satisfactory, senior high schools and junior high schools, first report period, December 1928; second report period, January 1929. Division of educational research, Public schools, Philadelphia, Pa. 24 p. ms. (Bulletins 103-104, 106-107)

Per cents by subjects, grade-sections and schools, October 1927 and 1928, May and December 1928.

2073. ———— Promotion rates in elementary schools, term ended June 1928, January 1929. Division of educational research and results, Board of public education, Philadelphia, Pa. 7 p. ms.; 8 p. ms. (Bulletin, nos. 105, 120)

2074. ———— Report on subject promotion rates in junior high schools, June 1928, January 1929. Division of educational research and results, Board of public education, Philadelphia, Pa. (Bulletin, nos. 89 and 111)

Gives promotion rates by grade-section, schools, and subjects.

2075. ———— Report on subject promotion rates in senior high schools, January 1929. March 4, 1929. Division of educational research and results, Board of public education, Philadelphia, Pa. 7 p. ms. (Bulletin, no. 110)

2076. **Burr, Samuel Engle.** Promotion of pupils, by grades, revised. June 1929. Department of research, Public schools, Lynn, Mass. 6 p. ms.

The objective of this revision is to give greater provision for individual differences and for activities program.

2077. **Chapman, H. B.** Studies relating to pupil progress. In Baltimore, Md. Board of school commissioners. Annual report, 1928. p. 78-91.

An attempt was made to apply objective test findings to administrative problems by bringing the problems into the open through graphic presentation.

2078. ———— A study of September transfers in the senior and junior high schools. December 1, 1928. Bureau of research, Department of education, Baltimore, Md.

An analysis of all "transfers" reported for September.

2079. **Chase, Vernon E.** The age, grade and progress of pupils in the Fordson public schools. November 28, 1928. Bureau of research and statistics, Public schools, Fordson, Mich. (Bulletin, no. 22)

2080. **Clark, W. W.** An experiment in grading and classifying elementary schools. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif. 1929. p. 91-95.

2081. **Commins, W. D.** What is a B pupil? Elementary school journal, 29: 63-66, September 1928.

A study of 39 A pupils and 31 B pupils in the fifth grade in two small city schools. The writer concludes that the B pupil is one who differs more as to the kind of intelligence that he possesses than as to the degree.

2082. **Coxe, Warren W.** Grouping pupils for purposes of instruction. *Nation's schools*, 3: 47-54, May 1929.

2083. **Crosby, Leconia F.** A study of pupil progress in the Wm. Grant high school. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio

2084. **Daley, H. C.** Promotions in the elementary schools of Highland Park for the semester ending June 22, 1928. 1928. Public schools, Highland Park, Mich.

The purpose of this study was to compare the percentage of pupils promoted in the different schools of the Highland Park system and to make a comparison with the figures obtained in previous years. It was also undertaken for the purpose of determining the particular grades and the particular subjects in which there was the largest percentage of non-promotion.

2085. **Forbes, L. E.** Problem of the accelerated school child. Master's thesis, 1929. University of Washington, Seattle.

A study to determine if acceleration of better school pupils remains constant through college. Findings: Grade in which pupils are given double promotion has no significance. Only 10 per cent of the pupils receiving double promotion in the grades were able to maintain their relative standing in the university.

2086. **Fox, Richard.** A project in the improvement in grading. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

2087. **Greene, Harry A.** The effects of annual and semiannual promotions as revealed by pupil progress. *American school board journal*, 78: 67, 86-89, May 1929.

Records the results of examining progress of about 37,500 pupils in small Iowa schools using (1) age grade indices, (2) progress indices, and (3) relative failures and double promotions.

2088. **Kansas state teachers college, Emporia.** Bureau of educational measurements and standards. Report of Every pupil scholarship contest, January 8, 1929, April 5, 1929, and April 10, 1929. (Kansas state teachers college. Bulletin of information, nos. 67 and 70, February, May 1929)

Report of January 8, 1929, by E. R. Wood, 16 p.; April 5, 1929, by H. E. Schrammel, 8 p.; and April 10, 1929, by E. R. Wood, 6 p.

2089. **Keller, Frances.** Results of the classification program in grade 3A, May 1928. August 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 10 p. ms. (Bulletin, no. 22)

Compares results with classification tests previously given; shows medians of probable learning rates by districts and schools.

2090. ——— Results of the classification program in the first grade, May 1928. July 1928. Bureau of educational research, Public schools, Cleveland, Ohio. 10 p. ms. (Bulletin, no. 9)

Shows median scores and probable learning rates, by schools and districts.

2091. **Koos, Frank H.** Annual age-grade survey. 1928-29. Public schools, Winston-Salem, N. C. Ms.

2092. **Lewerenz, Alfred S.** Summary of a questionnaire on methods of classification existing in Los Angeles elementary schools. *Educational research bulletin* (Los Angeles, Calif.), 8: 10-12, September 1928.

Result of a questionnaire issued to elementary school principals in Los Angeles; 56.0 per cent of the classes have some type of ability grouping. Discusses bases for sectioning, and methods of organization; quotes opinions of principals.

2093. **Lynn, Mass. Public schools. Research department.** Revised grouping standards. A guide to classification and sectioning of pupils, grades 1 to 6, inclusive. June 1928. Public schools, Lynn, Mass. Revised, June 1929. 6 p. ms.

2094. **Mitchell, J. S.** A pupil classification survey of Fayette county schools. Master's thesis, 1929. University of Kentucky, Lexington.

2095. **Myers, Anna G.** Special report on transferred, dropped, and promoted for semester ending June 1929. Bureau of research, Public schools, Kansas City, Mo. 5 p. ms.

Gives the per cent of pupils promoted and not promoted in Kansas City elementary schools.

2096. **Philippine Islands. Bureau of education, Manila.** Age-grade census and progress study. January 1929.

A study of the per cent of under-age, normal-age, and over-age pupils, and of rapid-progress, normal-progress, and slow-progress pupils in 1928 as compared with the results in 1925.

2097. **Reading, Pa. Public schools.** Promotion rates—elementary schools and secondary schools. 1928-29.

2098. **Rutledge, R. E.** Elementary term progress report. December 1928, June 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif.

This study includes percentages of non-promotion by grades and by schools.

2099. ——— Junior high school term progress report. November 1928, June 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif.

Gives distribution marks by subjects and by schools.

2100. ——— Low 10th scholarship report for the term ending June 1928, December 1928, June 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif. 13 p. ms., each.

2101. ——— Senior high school term progress report for the terms ending June 1928, and June 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif. 10 p. ms., each.

2102. **White, Irma.** How honestly and how accurately do students grade their papers? Master's thesis, 1929. University of California, Berkeley. 67 p. ms.

This study was undertaken in order to determine whether or not any measurable correlation exists between general intelligence as measured by group intelligence tests and the degree of honesty and accuracy with which pupils grade their papers. Findings: There seems to be no correlation. While the most common motive for dishonesty in test correction is undoubtedly the desire "to do well in the test," this same motive must also lead to honest achievement. Along with this there must enter into the situation all the factors that go to make up the child's moral and intellectual nature. These factors include age, sex, and physical and emotional condition of the individual; economic and cultural conditions in the home; and influence of the teacher and associates in the school. It is impossible to measure these influences and hence no definite conclusion can be made, but any attempt to base accuracy and honesty of a pupil in grading his own work on his intelligence alone must lead to unsatisfactory results.

See also 73, 94, 125, 291, 445, 477, 1293, 1336, 2187, 2192, 2224, 2490, 2526; and under Individual differences.

CURRICULUM MAKING

2103. **Allen, Edith DeLancey.** A fourth grade course of study. A consideration of the relation of the conservative school to the new education and the practical solution of the problem in a particular school of the older type. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 118 p. ms.

2104. **Ancheater, Etta.** A study of two laboratory schools with reference to curricular for young children; the Frances Parker school and the Walden school. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 27 p. ms.

2105. **Ashbaugh, E. J.** Curricular offerings in the small high schools of Ohio. 1929. Ohio state university, Columbus. School life, 14: 133-35, March 1929.

A study of the subjects offered, considering both the type and the size of school.

2106. **Bagley, William C., and Kyte, G. C.** The California curriculum study. Berkeley, University of California press [1929]

Report of an extensive investigation undertaken in 1925 under a grant from the Commonwealth fund.

2107. **Beaumont, Tex. Public schools.** Revision of public school curriculum. 1928.

2108. **Bundy, Edgar E. and others.** Course of study suitable for a town rural high school. 1928-29. Perquimans county public schools, Hertford, N. C. 50 p. ms.

2109. **Burr, Samuel Engle.** Curriculum notebook for curriculum council, curriculum series, nos. 1-27. September 1928-April 1929. Research dept., Public schools, Lynn, Mass. 56 p. ms.

2110. **Douglass, Harl R.** Steps in curriculum constructions, *In Eastern commercial teachers association, Second yearbook, 1929.* Ch. V.

2111. **Good, Carter V., and Roberts Edward D.** Curriculum titles and curriculum constants in senior high schools. *School review, 36: 679-84, November 1928.*

This survey of 466 senior high school curriculums in 65 representative school systems offers usable suggestions to those confronted with curriculum problems.

2112. **Hermans, Mabel.** The procedure for the revision of the Los Angeles junior high school curriculum in English. *California quarterly of secondary education, 4: 249-64, April 1929.*

2113. **Herriott, M. E.** Organization of secondary-school curriculum development. *In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929.* p. 52-60.

2114. **Holloway, William J.** Participation in curriculum-making as a means of supervision of rural schools. New York city, Teachers college, Columbia university, 1928. 54 p. (Contributions to education, no. 301)

Teachers in six counties of Maryland were divided into two groups, an experimental group actively engaged in curriculum-making without supervision, and a control group, supervised but giving no attention to the curriculum building. From this study the following conclusions were reached: (1) Teachers in the experimental groups made equal progress in professional spirit, attitude, and teaching skill and did more professional reading than did the control group; (2) children taught by the experimental groups of teachers made slightly greater gains than those taught by teachers in the control groups; and (3) the communities in the experimental groups were brought into closer relationship with the work of the schools through the curriculum-making projects.

2115. **McConnell, T. R.** Program of studies in 78 small Iowa high schools (towns less than 2,000 population). 1929. Cornell college, Mount Vernon, Iowa. 4 p. ms.

Contents: Table I—Program of studies of 78 Iowa high schools, giving subjects, number of schools offering same, number requiring same, basic year in which same are offered; Table II—Number of units of instruction required by years in 71 four-year high schools; Table III—Distribution of the total enrollments of 71 four-year high schools; Table IV—Distribution of total enrollments by years in 64 four-year high schools.

2116. **Maryland. State department of education.** Curriculum making in problems of American democracy as applied to the unit—public opinion. Prepared by a committee of high school teachers of the social studies of Queen Anne's county. Baltimore, Md., 1928. 46 p. (Maryland school bulletin, vol. X, no. 2, September 1928)

The material here set forth and the teaching procedure described involve an attempt by the teachers of the subject themselves to reorganize the course in problems of American democracy and to modify their classroom procedure in such a way that the important objectives of the course might be more effectively realized than under the former more or less stereotyped methods of organizing and teaching the subject. The course is organized around learning units, of which one—public opinion and the press—is here presented.

2117. **Narain, Anugrah Hari.** Curriculum revision in American schools, with special application to the schools of India. Master's thesis, 1929. Smith college, Northampton, Mass. - 79 p.

2118. **Nash, H. B., and Van Duzee, R. R.** Industrial-arts curriculum building. *Industrial arts magazine*, 18: 93-97, March 1929.

2119. **North central association of colleges and secondary schools.** Report of the committee on standards for use in the reorganization of secondary school curricula. *North central association quarterly*, 3: 537-614, March 1929.

This report contains: (1) A statement of the goals of secondary education and facts upon which the selection and adaptation of materials should be made; (2) the classification of extracurricular activities into types, a general bibliography, an analysis of the respective types into specifics and an attempt to evaluate in terms of ultimate and immediate objectives; and (3) report on progress in developing practical courses in high school physics in which consideration was given to "every day life situations involving principles or laws of physics".

2120. **Smith, Herbert E.** The reliability and validity of teachers' judgments of difficulty in curricular material. Doctor's thesis, 1929. University of California, Berkeley. 84 p. ms.

An investigation to determine: (1) The validity of judgments made by three types of judges of the difficulty to test items in curricular material; (2) the degree of reliability of the judgments made by three types of judges; (3) the number of judgments which must be pooled in order to raise the validity and reliability of composite judgments to any desired level. Findings: (1) Obtained validity coefficients of judgment ratings of experienced teachers ranged from an average of 0.86 in arithmetic in a descending order through word meaning, physiology, history, geography, and literature, to an average coefficient of .45 in language usage; (2) average validity coefficients in arithmetic, word meaning, history, and geography, for experienced teachers, were significantly higher than the corresponding average for inexperienced teachers; (3) the average validity coefficients for the group of experts in test construction fell, with remarkable uniformity, between the coefficients for the experienced and the inexperienced teachers; (4) the reliability coefficients, obtained by computing representative intercorrelations among the sets of judgments in the different school subjects, ranged for experienced teachers from 0.83 in arithmetic to 0.44 in geography; and for experts in test construction from 0.79 in arithmetic to 0.42 in literature; etc.

2121. **Turrell, Archie Milton.** Organizing a study of curriculum revision in the senior high school. Master's thesis, 1928. University of California, Berkeley. 45 p. ms.

The purpose of this study was to draw up a plan for organizing the teaching staff of Fresno senior high school for the curriculum construction program. The plan involved the following procedures: (1) Meeting of principal's conference for selection of teachers and discussion of administrative details; (2) meeting of selected teachers and the principals to explain purpose and details of program; (3) meeting of subject committees for organizing, selection of chairmen, and selection of techniques of constructions appropriate to different subjects; (4) departmental meetings for the selection of members of the interlocking committees; (5) principals' conference for selecting and making arrangements for curriculum specialists; (6) classes for workers conducted by specialists. Each committee works out its courses of study and reports to interlocking committees; interlocking committee correlates related subjects, gathers information on texts and materials and courses of study in other schools. A reviewing committee criticizes the courses proposed; they are then revised by the subject committees and approved and mimeographed by the superintendent. Class test is given proposed course and revision is made in light of experience.

2122. **Virginia committee for research in secondary education.** Curriculum construction. Charlottesville, University of Virginia, 1928. 72 p. (University of Virginia record, Extension series, vol. XIII, no. 3, September 1928. Secondary education in Virginia, no. 3)

Contains: Trends in curriculum construction, by Edward Alvey, Jr.; Constructing a plane geometry test, by E. R. Hall; Adjusting the curriculum in mathematics to a particular situation, by E. E. Windsor; and The high school principal and the curriculum in the social studies, by R. E. Swindler.

2123. **Wetzel, William A.** Scientific supervision and curriculum building. *School review*, 37: 117-23, February 1929.

Concludes from a study of ratings of pupils that there must be a fact finding organization which will show promptly how well the courses are operating at different ability levels.

See also 75, 90, 141, 431-432, 447, 455, 1296, 1298, 1304, 1310, 1367, 1385, 1388, 1409, 1421, 1429, 1432, 1439-1440, 1445, 1448, 1450-1451, 1464-1465, 1495, 1498, 1514, 1872, 2242, 2308, 2352, 2368, 2386, 2401, 2405, 2415, 2566, 2590, 2597-2598, 2603-2604, 2609, 2625, 2627, 2658, 2660, 2707, 2734-2735, 2753, 2757, 2781-2782, 2788, 2803, 2808, 2830, 2981, and under Special subjects of curriculum.

EXAMINATIONS

2124. **Adams, C. L., and Wright, M. L.** Prognostic values of college entrance examinations. 1928-29. Eastern Carolina teachers' college, Greenville, N. C. Ms.

The purpose of the study was to discover if college entrance examinations as now administered in the North Carolina high schools possess predictive value in pre-determining success or failure in a teachers' college.

2125. **Barnes, Elinor Julia.** An attempt to measure the adequacy of oral examinations. Master's thesis, 1929. Ohio state university, Columbus. 74 p. ms.

The purposes of the investigation were: (1) To obtain some measure of the reliability of oral examinations; (2) to obtain some indication of the extent to which findings on oral examinations agree with marks in course work; (3) to determine causes of inconsistencies found by analysis of examinations. Findings: (1) The oral examination is a factor of great importance in the educational world. It is required in approximately 75 per cent of the institutions granting the M. A. degree and in 98 per cent granting the Ph. D. degree; (2) oral examinations on course work with each other show a low positive correlation (0.43); but a negligible correlation with final marks in the course (0.01); (3) four committees of two faculty members each, examining one candidate over the same material in two instances passed the candidate and in two instances failed her; (4) some suggestions are offered regarding the place of oral examinations in the total program.

2126. **Bird, Charles.** An improved method of detecting cheating in objective examinations. Journal of educational research, 19: 341-48, May 1929.

2127. **Brinkmeier, Mrs. Ina Hill.** A study in the technique of constructing objective examinations. Doctor's thesis, 1929. University of California, Berkeley. 369 p. ms.

It was proposed, first, to determine the nature and extent of the errors most commonly made by high school teachers in constructing informal objective examinations for their own classroom use, and, second, to suggest methods of improving the informal objective examination. Data used were derived from objective tests entered by teachers in the nation-wide contest in the construction of new-type examinations conducted by G. M. Ruch and G. A. Rice of the University of California. Conclusions: The errors in the technique of preparing 44,517 objective examination items amounted to 5,304 or 11.9 per cent. These errors may be summarized under two main categories, namely, those which involve the composition of the test items, and those which involve the mechanical composition of the tests. Seven per cent of the total number of items analyzed contained such errors of composition as are likely to affect the reliability of the test, and 2.5 per cent involved mechanical errors such as are likely to affect the reliability. Two per cent of the items contained errors which probably do not greatly affect the reliability of the test, but which are objectionable psychologically, inasmuch as pupils are unnecessarily confronted with erroneous or improper forms of expression. There are subtle factors in statements suggestive of the correct answer which also prejudice pupil's replies.

2128. **Condit, Philip M.** The prediction of scholastic success by means of classification examinations. Journal of educational research, 19: 331-35, May 1929.

From the data accumulated in this study it appears that a reliable achievement test yields as good results for classification purposes as does a psychological examination.

2129. **Erickson, Peter E.** The relative value of old and new-type examinations. 1928. University of Chicago, Chicago, Ill.

2130. **Hansen, George W.** An analytical study of Iowa placement examinations of the University of Iowa. Master's thesis, 1928. State university of Iowa, Iowa City. 76 p. ms.

2131. **Jones, Harold Ellis.** A comparison of objective examination methods. University of California, Berkeley. Educational method, 8: 273-75, February 1929.

An analysis of reliabilities, intercorrelations, and correlation with intelligence, of true-false tests and "controlled completion" tests. The true-false and the "controlled completion" tests are shown to possess the same reliability-per-unit-of-time. Actual-~~ratively~~ratively, the completion method is markedly superior. Comparative data on validity are not yet available.

2132. **Miller, Lawrence William.** An experimental study of the Iowa placement examinations. Doctor's thesis, 1929. State university of Iowa, Iowa City. 542 p. ms.

2133. **Odell, Charles Waters.** A selected annotated bibliography dealing with examinations and school marks. Urbana, University of Illinois, 1929. 42 p. (University of Illinois bulletin, vol. XXVI, no. 20, January 15, 1929. Bureau of educational research, Bulletin no. 43)

* A bibliography of 300 references dealing with examinations made by the teacher, school marks, and closely related topics. Standardized tests are not included.

2134. ——— Traditional examinations and new type tests. New York. The Century company, 1928. 460 p.

2135. **Bankin, Paul T.** The preparation and standardization of improved examinations in high school subjects. 1928. Public schools, Detroit, Mich.

The purpose of this study was to prepare, co-operatively with teachers and supervisors of the subject concerned, improved final examinations for use in Detroit high schools, and to secure norms and measures of reliability and validity on these tests.

2136. **Roberts, Hazel M., and Ruch, G. M.** Minor studies on objective examination methods. The negative suggestion effect of true-false tests. Journal of educational research, 18: 112-16, September 1928.

2137. **Talbott, Ernest Orwin.** Comparison of essay and objective examination from the standpoint of sampling. Master's thesis, 1929. University of California, Berkeley. 40 p. ms.

This study is a preliminary attempt at the evaluation of the worth of the traditional written examination as a device for sampling the student's knowledge of subject matter. Conclusions: (1) Essay examinations elicit less than one-half of the demonstrated knowledge of elementary and high school pupils; (2) the essay examination requires approximately twice as long as does the objective examination to sample a given portion of subject matter; (3) combining conclusions (1) and (2), it may be stated, that the objective test is roughly four times as effective as a device for rapid sampling; (4) on the average, essay examinations elicit from one-fourth to three-fourths of pupil's knowledge, averaging less than one-half; (5) the correlations between the essay and objective examinations employed average about .60, regardless of the order of administration; (6) the average value for r , .60, is not high, but it is nearly as high as the reliabilities will support. We may conclude that the two types of examinations measure roughly the same functions; (7) in view of all the evidence, it seems that the essay examination is less well adapted to extensive sampling in a limited amount of time than is the newer objective type of testing.

2138. **Washburn, Ruby.** Reliability of dictation and mimeograph methods of administering true-false examinations. Master's thesis, 1928. University of Colorado, Boulder. 38 p. ms.

True-false test was given to 127 students registered in "Tests and Measurements" at University of Colorado, Summer of 1928. Findings: Reliability coefficient of the dictation method was much lower than that of the mimeograph method (0.60 vs. 0.75). In every instance of comparison the mimeograph method of presentation was superior to the dictation method.

See also 812, 1028, 1136, 2764.

EXTRACURRICULAR ACTIVITIES

2139. **Barr, A. S.** The training of teachers for the direction of extracurricular activities. Educational administration and supervision, 15: 350-55, May 1929.

From 42 returns to a questionnaire received from presidents of teachers colleges, it is concluded that training for the direction of extracurricular activities is important, as a large percentage of teachers are required to direct extracurricular activities. This training is not very well systematized.

2140. **Bellingrath, George C.** Qualities associated with leadership in the extracurricular activities of the high school. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 57 p. (Contributions to education, no. 399).

The purpose of the study was to find to what extent certain qualities are present in pupils who have been elected to positions of leadership in the extracurricular activities and to what extent they are found in pupils who are not elected to leadership.

2141. **Chapin, F. Stuart, and Mehus, O. Myking.** Extracurricular activities at the University of Minnesota. 1929. University of Minnesota, Minneapolis.

A survey of student activities at the University of Minnesota for the year 1924-25. One third of the students reported that they did not participate in any extracurricular activities on the campus. About 40 per cent engage in two or more activities. The women are more active than men.

2142. **Condit, P. M.** A study of the scholastic records of 25 Colorado state teachers college campus organizations for the winter quarter, 1928-29. April 1929. Colorado state teachers college, Greeley. 46 p. ms.

In this study were considered 9 honorary fraternities, 10 social sororities, and 4 social fraternities besides at least 20 clubs, and other groups, on the campus. Twenty-five took part in this study. Conclusions: Results of study show Kappa Delta Pi, honorary educational fraternity for both men and women, attaining the first rank with a rating of 4.44. Phi Delta Kappa, men's honorary educational organization, obtained a rank of 4.25. Sigma Sigma Sigma was the lowest, 2.94. Thirty-one tables show ratings for each organization and average numerical rating. This study was also made for fall and spring quarters.

2143. **Crawford, Albert Beecher.** Extracurriculum activities and academic work. Personnel journal, 7: 121-29, August 1928.

This is an extensive personnel study conducted in Yale university of students who had achieved in or were competing for or were not engaged in extracurriculum activities. The study included undergraduates in four divisions: namely those (1) in activities and self supporting; (2) in activities and not self-supporting; (3) not in activities but self-supporting; (4) not in activities and not self-supporting. From the data at hand when the manuscript went to press students in activities made a superior showing both in studies and mental ratings. The findings will be published by the Yale university press under the caption Incentives to study.

2144. **Crawford, Clarence Elmer.** The effect of participation in extra-classroom activities on scholarship of high school pupils. Master's thesis, 1929. University of Illinois, Urbana.

2145. **Cushman, C. L.** A handbook of the extracurricular program of the Oklahoma City junior high schools. January 1929. Oklahoma City, Okla. Ms.

2146. **Cyr, Rev. Georges E.** The Sodality of Our Lady as an extracurricular activity. Master's thesis, 1929. Catholic university of America, Washington, D. C. 61 p. ms.

A study of the Sodality in Catholic secondary and higher institutions of learning, based largely upon original reports of the activities engaged in at these institutions.

2147. **Eckert, Dana Zug.** Leaders in the high school democracy. A study in the field of extracurricular activities. Doctor's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa. 162 p. ms. Curriculum study and educational research bulletin (Pittsburgh, Pa.), 4: 4-91, September-October, 1929.

Shows what traits high school pupils have in mind when they elect pupils as president of home rooms and clubs. Compares pupils elected to this position with pupils from the same groups who were never elected president of any extracurricular activity in high school. Comparison is made as to chronological age, I. Q., socio-economic status, personal traits, nationality (both pupils and parents), and scholastic achievement. Study shows that high school pupils do not agree with adults with respect to importance of traits of leadership; that certain traits maintain about the same degree of importance through the six years of high school; others increase or decrease in importance. There are significant differences between pupil-elected president and those not elected to this office. Elected pupils are superior. Clubs give evidence of being selective agencies in high school.

2148. **Eddleman, Samuel McKee.** Financing extracurricular activities. Master's thesis, 1928. University of North Carolina, Chapel Hill.

The purpose of this study was: (1) To discover the methods used by outstanding schools throughout the country in raising, distributing, and accounting for extracurricular finances, and (2) to work out methods and systems which, with very little adaptation, may be used by any school regardless of size, location, or the amount of money handled.

2149. **Finley, Elden D.** Evaluating extracurricular activities. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 32 p. ms.

2150. **Forester, John J.** A study of the administration of Hi-Y clubs in the United States. Master's thesis, August 1928. Colorado state teachers college, Greeley. 122 p. ms.

Questionnaires were sent to the Hi-Y clubs of the United States. Conclusions: (1) Average Hi-Y club consists of 20 to 30 members; (2) school administrators have not considered Hi-Y on a level with other clubs and activities as 80 per cent meet after school; (3) 33 per cent of clubs have difficulty in getting cooperation of school or community; (4) Hi-Y clubs are doing many worth while things and should be encouraged as an extracurricular activity.

2151. **Goodsell, Gilbert Oscar.** The housing of extracurricular activities in the senior high school. Master's thesis, June 1929. University of Southern California, Los Angeles.

2152. **Harmon, Darell Boyd.** Some phases in the administration of the non-educational activities of the small endowed college. Master's thesis, 1929. Colorado college, Colorado Springs. 198 p. ms.

A study of the business methods and finances of 171 small endowed colleges with some recommendations for their improvement.

2153. **Hayes, Wayland J.** Some factors influencing participation in voluntary school-group activity. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The results of a study of a school of 350 students showed that intelligence and participation are directly related. In the major number of cases higher intelligence is associated with greater amounts of participation; and lower intelligence, with smaller amounts of participation. By either measure of participation, girls take more part in activities than boys.

2154. **Hodges, Nathan.** The trend of extracurricular activities in the secondary school. Master's thesis, 1929, University of Akron, Akron, O. 100 p. ms.

This study was statewide. Findings: Many extracurricular activities were practiced by secondary schools; many were given full credit toward graduation.

2155. **Johnston, Edgar G.** Point systems for guiding, stimulating and limiting participation of pupils in extra-curricular activities. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

Results of a questionnaire sent to 600 high school principals. This study analyzes current practices in guiding, stimulating, or limiting pupil participation in extracurricular activities in senior high schools, and the formulation of principles for developing point systems for extracurricular activities.

2156. **Jordan, R. H.** Extra-classroom activities in elementary and secondary schools. 1928. Cornell university, Ithaca, N. Y. New York, Thomas Y. Crowell company, 1928. 312 p.

Survey of extra-classroom activities from elementary school through senior high school. Extra-classroom activities should be regarded as integral part of school curriculum subject to right educational guidance, and should be made a part of the social, civic, and individualistic training of every child.

2157. **Korona, Louis W.** The administration of extracurricular activities in the high school. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2158. **Lally, Ella.** A survey of auditorium activities in the Cincinnati public schools. Master's thesis, June 1929. University of Cincinnati, Cincinnati, Ohio.

2159. **Lutz, Frank A.** Extracurricular activities. Master's thesis, 1929. Grove City college, Grove City, Pa.

2160. **Lyseth, H. C.** Participation of students in-extracurricular activities in the Maine secondary schools. 1929. State department of education, Augusta, Me. 6 p. ms.

This study gives a list of the extracurricular activities in the high schools of Maine, together with number of students participating.

2161. **McClintock, R. D.** The administration of the high school club. Master's thesis, August 1928. Colorado state teachers college, Greeley. 202 p. ms.

An examination of literature in the field. A study of school clubs and their activities through 240 questionnaires sent to a selected group of senior and four year high school principals in 43 states; 121 were returned. Sizes of high schools ranged from 3,000 to 50. Conclusions: There are 19 conclusions given, some of which are: (1) School club life should be properly directed and organized rather than suppressed or eliminated; (2) plan heretofore has been too general rather than an attempt to correct and improve them; (3) club movement only in its experimental stage; (4) when the clubs are directed and controlled they are favored by school patrons; (5) present tendency is to have too many, rather than improve quality of a few; (6) clubs will not reach full possibilities until they have properly trained sponsors; (7) there should be adequate means for measuring and evaluating school club work; (8) they can not be accepted as part of curriculum work until they are greatly improved.

2162. **McDaniel, Leon Sayre.** The selective function of extracurricular activities in high school. Doctor's thesis, 1928. University of California, Berkeley. 116 p. ms.

An extensive analysis and classification of objective data bearing upon the selective function of extracurricular organizations in high school. The problem is limited to high schools in San Francisco and East bay region; to those high schools which have no grade restriction on membership in extracurricular organizations; to those high schools which have available intelligence quotient records. Conclusions: The activities of present extracurricular organizations are less well adapted to those with low intelligence. More intelligent students receive more benefit from participation in these organizations. School officials should attempt to approximate "every pupil participation" in extracurricular organizations.

2163. **Moffett, M'Ledge.** A determination of some criteria for the evaluation of extra-class activities in teachers colleges. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of this study was to develop some criteria for the evaluation of extra-class activities of students in teachers colleges, by an analytical study of the social background and contacts and activities of teachers college students. Some of the implications of the data collected were studied for the curricular and extracurricular policies of teachers colleges. It was found that the extracurricular activities as now administered in teachers colleges are not contributing materially to the personal or professional equipment of the average teachers college student. The benefits of leadership are confined to a few students, who are exploited for the sake of the organization, rather than the organization serving as a real laboratory for the development of leadership in many students.

2164. **Otness, Clara.** Student clubs in the high schools of Washington, Oregon and Montana. Master's thesis, 1928. University of Idaho, Moscow.

2165. **Patten, L. K.** A critical study of extracurricular activities and their relation to academic success in college. Master's thesis, December 1928. Emory university, Atlanta, Ga.

Analysis of data from Georgia school of technology, Emory college, and in lesser degree from Agnes Scott college, showing influence of various factors on college success as measured by grades.

2166. **Russell, R. D., and Booth, John M.** Extracurricular activities in high schools of the Pacific northwest. In Northwest Association of secondary and higher schools. Proceedings, 1928. p. 27-48.

Questionnaires were sent to 600 superintendents and principals in the four Northwestern states. The survey is divided into the following sections: Student clubs in high school, High school assemblies, High school publications, and Interscholastic athletics.

2167. **Sterrett, K. Fife.** Trait analysis of an activity sponsor in the junior high school. Journal of educational sociology, 2: 148-55, November 1928.

In this study an attempt was made to find the traits which are conspicuously possessed by successful activity sponsors and, which are conspicuously lacking in unsuccessful activity sponsors, and the relative importance of these traits.

2168. **Stevenson, Travis Brown.** Extracurricular clubs in the high schools of South Carolina. Master's thesis, July 1929. University of South Carolina, Columbia.

2169. **Sullivan, Ellen.** Psychology of the auditorium. Master's thesis, 1929. University of Akron, Akron, Ohio. 160 p. ms.

Findings: Development of a rational theory and technique of administration for the auditorium is one of the most urgent needs.

2170. **Thornhill, B. E., and Landis, Carney.** Extracurricular activity and success. School and society, 28: 117-20, July 28, 1928.

Traces the college careers of a group of alumni whose names appear in Who's Who of 1927 to determine to what extent the kind and amount of extracurricular activities engaged in are criteria of later success in life.

2171. **Tonge, Frederic McLanahan.** A program of extracurricular activities for the elementary schools. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2172. **Tremper, George Nelson.** The effect of participation in extracurricular activities on the scholarship of the participants in the Kenosha, Wis., Senior high school. Master's thesis, 1928. University of Illinois, Urbana.

2173. **Williamson, Frank F.** Pupil reaction to the selection of activities and to the activities offered by junior high school clubs. Master's thesis, 1928. University of Pennsylvania, Philadelphia.

See also 104, 159, 519, 1747, 1858, 2030, 2451, 2580, 2640, 2881.

FAILURES OF PUPILS

2174. **Alhambra, Calif. Public schools. Department of educational research and guidance.** Per cent of failures in the elementary schools at the end of the first semester, 1928-1929. Educational research and guidance bulletin, 1: 9-10, April 1929.

Points out the relatively high percentage of failure in grades 1 to 3; urges that ability grouping, special junior primary transition groups, and individual study of failing children be considered as means of reducing failure.

2175. ———— A possible cause for student failures. Educational research and guidance bulletin, 1: 8-9, November 1928.

Gives figures on the number of times pupils in grade 9B have changed schools; points out the effect of so many changes on school progress.

2176. **Bixler, H. H.** Analysis of failures by departments, junior high school, five year period, 1924-29 [1929] Board of education, Atlanta, Ga. 8 p. ms.

An analysis of failures by subjects showing comparison of four Atlanta junior high schools for the period 1924-1929. Conclusions: There is a great variation in standards, but this variation may be reduced by careful supervision and periodic reports.

2177. ———— Analysis of failures by departments, senior high schools, five year period, 1924-1929. [1929] Board of education, Atlanta, Ga. 3 p. ms.

An analysis of failures by subjects showing comparison of four Atlanta senior high schools for the period, 1924-1929. Conclusions: The senior high school failures in Atlanta appear to be excessive in certain departments. There is an obvious difference in standards which annual summaries and supervision have not materially reduced.

2178. ———— Report of subject failures and nonpromotions, white elementary schools, semester ending June 7, 1929. [1929] Board of education, Atlanta, Ga. 1 p. ms.

A statistical summary showing failures by subjects, number of nonpromotions, demotions, and extra-promotions by grades.

2179. **Boyer, Charles E.** Why high school pupils fail in English. Minneapolis, Minn., Public schools, 1929. 1 p. (School bulletin, no. 40a: 6-7, April 25, 1929)

2180. **Brogdon, Nettie E.** Causes for the failures of first year high school pupils at the end of the first semester. 1928-1929. Guilford county public schools, Greensboro, N. C. 30 p. ms.

A study to determine why first year pupils have failed.

2181. **Coleman, William Clifton.** A job analysis of the causes of school failure. Master's thesis, 1929. Ohio state university, Columbus. 88 p. ms.

The study covered the field in the English literature of magazines and periodicals published in the United States. Findings: There were discovered 113 type-causes distributed among 15 general groups of causes. These were made the basis of an analysis-check for the study of individual failure cases.

2182. **Connors, Joseph M.** Failure and its relation to mental health. Master's thesis, 1929. New York university, New York, N. Y. 68 p. ms.

2183. **Dean, Ray B.** Causes of failure in the Longview, Wash., high school. Master's thesis, 1928. University of Washington, Seattle.

Attempt to find causes of high school failure in order to eliminate it as much as possible.

2184. **English high school, Boston, Mass.** Reports of departments of instruction with suggestions for reducing the number of scholarship failures. 1928. 7 p. ms. (Head master's circular, no. 5, 1928-29)

During the school year 1927-28 instructors in all departments of this school made a study of scholarship failures. Students and teachers assigned reasons for failures. Over 1,600 cases were analyzed, the results tabulated, studied and remedies suggested for improvement of scholarship and a decrease in the number of failures.

2185. **Fee, Ruth Fuller.** A study of the difficulties of certain students failing in college freshman mathematics. Master's thesis, 1929. New York state college for teachers, Albany.

Detailed analysis of difficulties of a small number of students, with description of an attempt to help overcome the difficulties.

2186. **Jones, T. J., and Nash, H. B.** A study of failures and distribution of teachers' marks, grade 1B-12A. December 1928. Department of educational research, Public schools, West Allis, Wis. 15 p. ms. (Bulletin 9-4)

Data for second semester, 1927-28, by subjects, grades and schools. Reports efforts made to arrive at uniform basis for teachers' marks.

2187. **Klene, Vivian, and Branson, Ernest P.** Trial promotion versus failure. 1929. City schools, Long Beach, Calif. Educational research bulletin (Los Angeles, Calif.), 8: 6-11, January 1929.

An experiment made to determine progress made by two equated groups of potential failures in grade 2A-6A, one group being given trial promotion and the other group failed. The trial promotion group made greater progress during the succeeding term than did the repeating group. Children of normal ability gained more from trial promotion than did children of less than average ability; children in grades 4-6 profited more from trial promotion than children in grades 2-3. Gives suggestions for administering a plan of trial promotion.

2188. **Long Beach, Calif. Public schools. Department of research.** Per cent of failures. June 1928. 2 p. ms.

Distribution by school and grade. Reduction for city as a whole from 5.9 per cent of failure in 1923 to 12.5 per cent in 1928.

2189. **McMaster, David D.** Case studies of failing pupils in seventh year reading and arithmetic. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2190. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** A report on failure marks of Z-section pupils in the L-10th grade for the term ending June 1928. 8 p. ms.

2191. **Osgood, Ellen L., and Beall, Cornelia M.** Experimenting with the high school misfit. School review, 36: 779-86, December 1928.

A controlled experiment for the purpose of lessening high school failures.

2192. **Raybold, Emma.** A study of pupils in transition B1 classes, September 1927-June 1928. Educational research bulletin (Los Angeles, Calif.), 8: 2-5, February 1929.

The purpose of this study was to ascertain the number of non-promotions and percentage of failure in each grade in all the city schools of Los Angeles and to determine the main cause of non-promotions.

2193. **Ruple, Adeline.** A study of possible failure and failure notices. Educational research bulletin (Los Angeles, Calif.), 8: 12-14, December 1928.

A study made at Luther Burbank junior high school during the first quarter of the year 1928-29, showing the causes of failure.

2194. **Specht, Ida Louise.** A study of failure among high school students of superior intelligence. Master's thesis, June 1929. University of Southern California, Los Angeles.

2195. **Whitney, Frederick L., and Condit, P. M.** Contribution of Colorado state teachers college instruction departments to student failure. 1928. Colorado state teachers college, Greeley. 5 p. ms.

This study shows use of grades from 21 departments, Colorado state teachers college. Conclusions: A summary table of the information gathered was made. The grades were shown by departments and under the headings A, B, C, D, F, incomplete, withdrawn and total. The highest number of individual failures occurred in the following departments: Commercial education, 50; education, 57; biology, 59; English, 74; civilization, 84; physical education for women, 85; home economics and library science reported no failures while the following departments reported very few failures: Music department, 2; training school, 4; chemistry, 4; and educational psychology, 7.

See also 73, 94, 287, 853, 1314, 1795.

MARKS AND MARKING

2196. **Anthony, Cloyd.** The value of certain factors for predicting marks in the Bloomington senior high school. Master's thesis, 1929. Indiana university, Bloomington. 101 p. ms.
2197. **Arnold, Homer L.** Marking systems in teacher training insitutions. California quarterly of secondary education, 4: 244-48, April 1929.
A summary of the general status of the marking system in 100 teacher-training institutions in 34 states.
2198. **Bangs, Cecil Warren.** A program for the objectification of teachers' marks. Master's thesis, 1929. State university of Iowa, Iowa City. 75 p. ms.
2199. **Barnett, Neville Everett.** A comparison of marks based upon weighted and unweighted items in a new-type test. Master's thesis, 1929. University of Illinois, Urbana.
2200. **Branson, Ernest P.** Report of marks in elementary schools. September 1928. Department of research, Public schools, Long Beach, Calif. 8 p. ms.
Distributes marks according to subject, sex, and grade; compares platoon and non-platoon pupils. Highest average marks were found in spelling, lowest in arithmetical reasoning; girls average slightly higher than boys; non-platoon pupils slightly higher than platoon.
2201. ———. Supplementary report on teachers' marks in high schools and junior college, school year 1927-28. 1928. Department of research, City schools, Long Beach, Calif. 18 p. ms.
Shows marks received by each sex from teachers of the same sex and also of the opposite sex, total and by departments. Findings: Men mark boys higher than women teachers mark them; women teachers mark girls higher than men teachers mark them.
2202. **Bready, A. C.** A study of the high school marks of Montgomery county, Md. Master's thesis, 1929. University of Maryland, College Park. 24 p. ms.
This is a continuation of a sampling of the marking procedures of various representative counties of Maryland begun by Mr. Huffington in Prince George's county. (Reported in 1927.) The purpose of the whole series is broadly to illustrate the bases, trends, and status of marking as affected by known relevant factors.
2203. **Chew, Tobias O.** A comparison of the classroom, practice teaching and success marks of teachers. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.
2204. **Conrad, Loyal R.** The relation of the amount of sleep to marks in school subjects. 1928. Public schools, Pontiac, Mich.
A questionnaire was submitted to 1,200 children in grades IV, V, VI, asking them the time they had gone to bed the night before, what they had done in the interval between supper and bed time, the time at which they arose, and whether or not they were sleepy at the time they were asked to answer the questions. Along with this information, the marks obtained in arithmetic, reading, and language were ascertained from the pupils' last report cards. For the group as a whole, the coefficient of correlation between the time of retiring and the marks in arithmetic was 0.109; between the time of retiring and the marks in reading 0.177; between the time of retiring and marks in language 0.177; between the time of retiring and the average of the marks in arithmetic, reading, and language 0.079. These facts seem to indicate that some factors other than time of retiring are responsible for the marks received in the subjects under consideration.
2205. **Gellerman, Louis.** Experimental study of the factors which influence teachers' marks. Master's thesis, 1928. University of Washington, Seattle. 137 p. ms.
An investigation of the entire problem of school marks. Opinions of 65 high school students and 240 teachers were obtained. Findings: 50 different factors influence teachers' marks. The correlation of teachers' estimates indicate that the methods used in this experiment constitute a valid way to investigate the factors which influence school marks in practice.
2206. **Gillis, Ezra L.** A study of marking in higher institutions. In Association of colleges and secondary schools of the Southern states. Proceedings, 1928. p. 273-81.
A graphic presentation of facts obtained from the various studies made by a committee appointed to study marking in higher institutions is here given. The general conclusions are: (1) Individual instructors and different departments vary greatly in assigning marks; (2) variation in marking is due to teachers and not to subjects; (3) high grades given in a subject in one college seem to offer no basis for predicting that high grades will be given in that subject in another college; (4) instructors tend to give a larger percentage of low marks and a smaller percentage of high marks in elementary than in advanced courses, etc.

2207. **Hulse, Melvin L.** Relationship between intelligence scores and scholastic marks. Master's thesis, 1929. Cornell university, Ithaca, N. Y. 67 p. ms.

Study of correlations between intelligence test ranks and marks for four years of the class of 1928, Arts college, Cornell university. Correlations for first four terms, .475, P. E. .024; last four terms, .310, P. E. .041.

2208. **Leinbaum, C. C.** Predicting college marks. Master's thesis, August 1928. Colorado state teachers college, Greeley. 58 p. ms.

Results of Thurstone classification test given to 600 freshmen entering in 1926-27; also the scores from the Cross English test for same individuals were used. Conclusions: (1) Apparently the "Cross" test scores are two times as valuable as "Thurstone" test scores in predicting the average college grade for the first two quarters of the freshman year in the case of 214 college entrants considered in this study; (2) when only "Thurstone" test scores and "Cross" test scores are used to predict the average college grade for the first two quarters of the freshman year, the weights of the scores of the two tests are as 3 to 4; (3) when the "Thurstone" and "Cross" test scores are each used alone in predicting every fifth case of the 214 cases in our study, we get a much higher predictive value for the "Thurstone" test scores than for the "Cross" test scores. Differences between actual and predicted scores is .4875 for the "Thurstone" and .6812 for the "Cross"; (4) the scores of the two tests are much more valuable for predicting college grades when teamed in equation than when each is used alone, etc.

2209. **Ludlow, William Guy.** The correlation of certain standardized test scores and semester marks of high school pupils. Master's thesis, 1929. University of Chicago, Chicago, Ill. 61 p. ms.

A study of 25 schools, in five states, 2,326 pupils, approximately 50 pupils from each school. Semester marks and scores on Otis general intelligence, Chapman unspedeed reading comprehension and Inglis test of English vocabulary were studied. Findings: (1) Intelligence scores yield higher correlation coefficient than Inglis and Chapman scores when correlated with average of semester marks; (2) Inglis vocabulary test scores yield higher correlation coefficient with marks in English than do either the intelligence or Chapman scores; (3) by use of partial correlations it is shown that almost all the correlation that exists between marks and vocabulary scores and between marks and reading-comprehension scores is due to the common dependence of the two factors upon intelligence; (4) by use of multiple correlations it is shown that scores on intelligence tests, vocabulary tests, and reading-comprehension tests have little value for predicting success in school work as measured by school marks. However, their predictive value may be increased as more refined objective methods of measuring achievement are evolved.

2210. **Moon, George R.** The reliability of rating schemes. School and society, 29: 366-68, March 16, 1929.

A comparison of ratings given by high school instructors on personality rating cards, etc., with college ratings of certain groups of students. Two studies made with different groupings and rating sheets. The study concludes that such rating schemes, subjective as they are, are of certain value in judging applicants for admission to college. Used in connection with other factors they aid in giving a complete picture of the prospective student.

2211. **Nettels, C. H.** Teachers' marks. Educational research bulletin (Los Angeles, Calif.), 8: 5-14, 16, February 1929.

A questionnaire was sent to the research departments of some 20 city school systems in order to find out what progressive cities are thinking in connection with the question of teachers' marks. The answers show a wide variance in the current practices of marking.

2212. **Remmers, H. H.** The relationship between students' marks and student attitude toward instructors. School and society, 28: 758-59, December 15, 1928.

An investigation to secure objective data concerning the relation between students' marks and student attitude toward instructors giving the marks. It is based upon the ratings given eleven instructors by 409 students in 17 different classes according to the Purdue rating scale for instructors. Results indicate no noticeable tendency for students to vary their ratings of an instructor with the kind of marks received although there appears to be a tendency toward individual differences among instructors.

2213. **Rutledge, R. E.** Low 7th scholarship report for the term ending June 1928. September 1928. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif. 14 p. ms.

Gives percentage distribution of marks by schools and by subjects.

2214. **Turney, Austin Henry.** Factors other than intelligence that affect success in the high school as indicated by teachers' marks. Doctor's thesis, June 1929. University of Minnesota, Minneapolis. Minneapolis, University of Minnesota press, 1930. 135 p.

2215. **Underbrink, H. E.** Relation of high school marks to college success. Master's thesis, 1929. University of Chicago, Chicago, Ill. 85 p. ms.
The high school and college marks of 454 students were secured and a study of the relationships existing was made from data collected.

2216. **Wetzel, William A.** Summary of work for first and second rating periods. December 1928. Senior high school, Trenton, N. J. 14 p. ms. (Bulletin, no. 38)

Reports on rating of pupils, by levels of ability and by subjects of study. Points out the effect of reading ability on other phases of school work.

2217. **Wheatley, B. W.** Factors influencing teachers' marks. Master's thesis, 1928. University of Colorado, Boulder. 41 p. ms.

A study of the practices of 158 teachers enrolled in the University of Colorado, summer 1928 (representing 24 states). Findings: Objective methods of examination were used 33 per cent of time. These objective methods influence the final mark 17 per cent. Teachers consider ability to reproduce or use the information secured from the course as the most important single factor in the daily mark. Its value is 30 per cent. Other factors or traits which teachers consider in giving daily marks are: ability to give information beyond that given in the course, 5.4 per cent; ability to use grammatically correct English, 3.4; ability to think, 9.5; desire of student to carry out wishes of the teacher, 3; evidence of good study habits, 4; leadership, 2; promptness of doing assignments, 5.3; speed of learning, 2; reasoning ability, 10; personality of the student, 2.3; initiative, 3.5; attentiveness, 3.4; honesty, 2.8; effort, 8; behavior, 1.7; other factors, 1.

2218. **Winnetka, Ill. Public schools.** Department of reference and research. A study of individual teacher's grades with a comparison of grades given boys and girls by departments, second semester, 1927-28. 9 p. ms.
A study made in the New Trier township high school.

2219. **Wrinn, Louise G.** A comparison between college and high school subject interests and marks. Master's thesis, 1929. Yale university, New Haven, Conn. 50 p. ms.

See also 277, 296, 357, 399, 445, 647, 654, 713, 848, 1051, 1461, 1491, 1530, 2051, 2133, 2186.

RETARDATION AND ELIMINATION

2220. **Armstrong, C., and Danielson, C. L.** Classes for educationally retarded and slow learning children. In Third year book of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 44-48.

2221. **Baker, Harry J.** Educational disability and case studies in remedial teaching. Bloomington, Ill., Public school publishing company, 1929. 172 p.

An important aspect of this study is the process of coaching, the number of cases that can profitably be coached per teacher, the optimum time of removal of such cases from their regular classroom, and the method of cooperation with the regular teachers. In the subsequent history of the cases studied a large majority earned satisfactory marks in the later semesters, indicating that the results of coaching had ultimate, rather than immediate effects.

2222. **Carter, H. L. J.** An attempt to meet the needs of a group of misfit and retarded children. 1928. Public schools, Royal Oak, Mich.

This study attempts to segregate, diagnose and do remedial work with a group of emotionally misfit and retarded pupils in grades III to V, with ages ranging from 9 to 14 years and I.Q.'s from 91 to 105. The special room teachers with whom these pupils came in contact observed the following indications of more effective study habits: (a) greater ability to realize a problem; (b) more definite motive for its solution; (c) more effective study techniques; (d) more sustained effort.

2223. **Condit, Philip M.** A continuation of the mortality record of the 626 Colorado state teachers college freshmen of the class of 1930 over the year 1927-28. July 1928. Colorado state teachers college, Greeley. 21 p. ms.

A study of 626 entering freshmen, Colorado state teachers college, class of 1930. Conclusions: (1) 626 freshmen entered in September 1928. 439 (or 30 per cent) received credit for one year's work. Only 331 finished second year. Median intelligence score increased 6.10 points from September 1926 to June 1928, indicating elimination of students with low scores; (2) tabulations show increase in median achievement each quarter; (3) median scholastic ratings increase regularly from 2.77 to 4.22; (4) of those dropping out, about 60 per cent were in the lower half of the intelligence distribution and 40 per cent in the lower fifth. About 20 per cent were in the upper fifth of the intelligence scores; (5) four out of every ten students falling are in lowest fifth; six out of ten are in lower half; and only two out of ten are in upper fifth; (6) mortality loss was 47.1 per cent over two years' time; (7) insufficient data on mortality suggests need for follow-up work; (8) 144, or 23 per cent, of the entering number received life certificates after two years of work.

2224. **Cooper, William Mason.** Sociological aspects of promotion and retardation of elementary and high school pupils. Based on facts concerning negro elementary and high school pupils in North Carolina, 1925-26. 1928-29. State normal school, Elizabeth City, N. C. 50 p. ms.

The purpose of this study was to determine what sociological forces operate to help or hinder North Carolina elementary pupils in moving forward in their school careers at an optimum rate and what implications may be made to improve the situation. The following types of factors influencing the problem are enumerated and explained: Geographic, biological, technological, sociological. Principles leading to the rectification of existing conditions are given.

2225. **Cornell, Ethel L.** Why are more boys than girls retarded in school? New York state education department, Albany, N. Y. School review, 29: 96-105, October; 213-26, November 1928.

The study is based upon individual examinations of children in New York state which were made for the purpose of selecting members of special classes. Tentative conclusions are that girls have greater linguistic ability and poorer ability to handle concrete material than boys. School stresses those things which girls are best in, thereby, they are less retarded.

2226. **De Wees, W. O.** High school eliminations in Fort Worth. Master's thesis, August 1928. Colorado state teachers college, Greeley. 61 p. ms.

One hundred and sixty-eight high school eliminates in Fort Worth were interviewed to determine their social and hereditary background, as well as their economic status. Teachers of these students gave ratings. Conclusions: (1) "About one-fourth of the eliminates interviewed claimed to have withdrawn from school because of internal factors within the school such as dislike for required high school subjects, dislike for teachers, etc. These students were usually rated low on behavior and attitude by their teachers; (2) About three-fourths of the eliminates claimed to have withdrawn because of external factors outside the school, such as preference for work outside of school, ill health, marriage, etc. These students were usually rated high on behavior and attitude by their teachers; (3) It is suggested that many pupils who otherwise might withdraw would be held in school by such policies of school administration as the introduction of the junior high school organization, an efficient system of educational and vocational guidance, part time school attendance, and an extension of vocational training."

2227. **Dunlap, Helen.** Retardation study of rural elementary pupils of Edgecombe county, N. C. 1928-29. Edgecombe county schools, Tarboro, N. C. 60 p. ms.

The purpose of this study was to decrease overageness and retardation in the rural elementary schools of Edgecombe county, N. C.

2228. **Edgecombe county public schools, Tarboro, N. C.** Retardation, repeating. 1928-29. 16 p. ms.

A study to discover status of rural schools as regards retardation, repeating and causes.

2229. **Goldberg, Woolf.** A study of elimination in high school. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2230. **Hacker, I. D.** Retardation in the Woodlawn, Ohio, public schools. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

2231. **Hall, C. W.** A study of a group of early-leaving high school pupils. Educational research bulletin (Ohio state university), 8: 6-9, 14-18, January 9, 1929.

This study was made in an attempt to organize special courses in Cullinwood high school for groups of pupils who have no intention of graduating from a regular senior high school curriculum. The number of pupils included in this study who were quitting because continuance was absolutely impossible, is very small. Inability to do the work required, lack of interest on the part of the pupil, and antagonism or indifference on the part of parents suggest the advisability of an adjusted curriculum.

2232. **Hanna, Joseph V.** Student mortality in the junior college. Doctor's thesis, February 1929. New York university, New York, N. Y. 139 p. ms.

A study of the rate of student elimination in the junior colleges throughout the United States.

2233. **Hylton, Edward E.** A study of graduation, elimination, and failure in Garfield high school, Terre Haute, Ind. Master's thesis, 1929. Indiana university, Bloomington. 123 p. ms.

The results of this study show that the ratio of the number of graduates to the number of withdrawals in Garfield is slightly less than two to three; the percentage of graduates is higher among girls than among boys and higher among white than among colored children. Three-fourths of withdrawals leave high school before completing the sophomore year.

2234. **Johnson, George R.** Special schools for mentally retarded pupils. Division of tests and measurements, Public schools, St. Louis, Mo. Public school messenger, 26: 3-14, September 1, 1928. (Research and survey series, no. 5)

A study of the ability and achievement of 405 pupils in 11 special schools. Discusses problems of transportation; recommends that special schools be housed in two centralized buildings and that transportation be furnished. Summarizes the provisions made for special classes in 20 of the largest cities of the country.

2235. **Keith, Alton Yancey.** Some causes of high school mortality. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 79 p. ms.

A study to show by use of objective data some reasons why pupils left the high schools of Tippah county, Miss., during the school year, September 1, 1926, to September 1, 1927.

2236. **Lakenan, Margaret.** The case history of a child retarded in speech. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 56 p. ms.

2237. **Leonhardy, Alma.** Slow-learning groups in high schools. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 187-97.

2238. **Looper, Thomas Lee.** The causes of elimination of pupils in the elementary schools of Gastonia, N. C. Master's thesis [1929] University of North Carolina, Chapel Hill.

This study indicates that the leading factors contributing to elimination of pupils in the Gastonia schools are: (1) indifference on the part of pupil and parents; (2) failure of pupil and parents to see the economic and social values of an education; (3) over-ageness and retardation; (4) the pupil's mental inability to do the type of work required by our school system; etc.

2239. **Maclin, Gladys, chairman, and others.** Differentiation of curriculum for slow-learning children. 1928. Department of elementary education, Public schools, Denver, Colo. 35 p. ms.

Includes discussion of the following: General aims for slow-learning children; bases of classification of pupils for differentiation of curricula; adjustment of subject-matter; methods of teaching; adjustment of standards of attainment for slow learning children; organization of classes; desirable outcomes in citizenship, physical efficiency, and social independence.

2240. **Megargee, M. Laura.** Environment as a factor of retardation in an elementary public school. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2241. **Myers, Russell B.** Some significant aspects of acceleration and retardation in the Hammond high school. Master's thesis, 1929. University of Chicago, Chicago, Ill.

2242. **Nash county schools, Nashville, N. C.** Retardation survey—Nash county white schools—grades 1-11. 1928-29. Nashville, N. C. 60 p. ms.

A study to find existing conditions, repetition of grades, overageness and causes of retardation. 42 schools were involved in this study.

2243. **Palmer, Emily Godfrey.** Why pupils leave school; factors accompanying early elimination from school in Oakland, Calif. Doctor's thesis, 1928. Columbia university, New York, N. Y.

Findings: Of the group of pupils who leave school the following may be said: More boys than girls leave school before completing secondary-school course; half the pupils eliminated are of foreign, mixed, negro, or oriental parentage; pupils who leave school early were unsuccessful in school, over-age for their grade; the pupils eliminated are, on the average, from a lower social and economic level than the pupils of the same age in high school; pupils who leave school early do so for many reasons, but more than half leave school for reasons with which the school is definitely concerned and for which it must share the responsibility; etc.

2244. **Raffety, La Verne Ernest.** Quantitative measures of the effect of repeating a year's work. Master's thesis. 1929. State university of Iowa, Iowa City. 49 p. ms.

2245. **Biser, Clinton Ward.** Retardation and elimination of high school pupils in Chesterfield county. Master's thesis, July 1929. University of South Carolina, Columbia.

2246. **Rohlfing, Amelia W.** Causes of elimination in the schools of Gasconade county, Missouri. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 63 p. ms.

A case study of the pupils who dropped out of schools of Gasconade county, Mo., during the term 1926-1927. Letters were sent to the teachers and principals of rural schools and to the pupils themselves. Findings: The four outstanding causes of elimination are lack of encouragement from the parents, school work not interesting, work for family support, and too old for the grade. These causes are responsible for 54.45 per cent of the eliminations. 51.11 per cent of the pupils were eliminated at the ages of 14 and 15, 10 per cent at the age of 16, and 17.75 per cent at the ages of 12 and 13.

2247. **Santa Monica, Calif. Public schools.** Department of research. Study of retardation: old pupils vs. new entrants. October 1928. 6 p. ms.

2248. **Stantz, Guy.** A study of elimination from the Gerstmeyer technical high school. Master's thesis, 1929. Indiana university, Bloomington. 72 p. ms.

Findings: Only 25 per cent of the pupils withdraw because of absolute necessity; the pupils who withdraw have lower teachers' marks than those who graduate; there seems to be little difference in the intelligence quotient of those who graduate and those who withdraw; there seems to be no relationship between elimination and tardiness; those who withdraw have a lower career motive than those who graduate; there are more withdrawals at about the time the pupils become 16 years of age than at any other time; more pupils leave school in April than in any other month; etc.

2249. **Wadsworth, Cora E.** A curriculum for a slow moving fourth grade. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 31 p. ms.

See also 73, 316, 357, 531, 562, 1297, 1299, 1743, 2041, 2051.

STUDENT SELF-GOVERNMENT

2250. **Adams, Harold Wilson.** Survey of student participation in government. Master's thesis, 1928. University of Idaho, Moscow.

2251. **Curry, L. C.** Status of student participation in high school government. Master's thesis, 1929. University of Kentucky, Lexington.

2252. **Drewry, R. G.** Pupil participation in high school. New York, Harcourt, Brace and company, 1928. 220 p.

A study of present-day practices in pupil-self-government including an intensive study of the plans in use in 12 schools, four small, four medium-sized, and four large schools. Questionnaires were returned by 256 high schools. 14 criteria are set up by which one may judge a system of pupil self-government.

2253. **Frasier, George W., and Wrinkle, William L.** Experiments in teachers college administration. V. An experiment in student participation. Colorado state teachers college, Greeley. Educational administration and supervision, 14: 499-505, October 1928.

2254. **Geiger, John David.** The status of student participation in the government of city and exempted village senior and junior high schools of Ohio. Master's thesis, 1929. Ohio state university, Columbus. 122 p. ms.

A study of 219 schools—179 first grade city and 40 exempted villages. Conclusions: 54.2 per cent of the city and 30 per cent of the exempted villages were having some form of participation in 1928; student government should be an outgrowth of needs of school, introduced gradually, machinery simple, and provisions made for all pupils to participate.

2255. **Manahan, John L.** A study of student government in colleges. Nation's schools, 2: 45-51, July 1928.

A study of the organization and administration of student government in 55 colleges and universities. Presents advantages and disadvantages of student government and concludes that faculty-student cooperation in government is best form.

2256. **Morfing, James J.** Present status and tendencies of participation by students in student government in the public secondary schools in Pennsylvania. Master's thesis, 1928. University of Pennsylvania, Philadelphia. 109 p. ms.

2257. **Nankivell, David W.** Status of student government in colleges and universities. Master's thesis, 1929. University of Kentucky, Lexington.

2258. **Russell, R. D.** Student participation in government. In Northwest association of secondary and higher schools. Proceedings . . . 1928. p. 23-27. Three hundred and eighteen schools were included in this investigation, ranging in size from 17 to 2,400 pupils. Difficulties, disadvantages, or dangers in student body government were reported by 127 schools. See also 1747, 2014.

SCHOOL BUILDINGS AND EQUIPMENT

2259. **Altstetter, Michael Louis.** A study of the elementary training-school building. Doctor's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. Nashville, Tenn., George Peabody college for teachers, 1930. 103 p. (Contributions to education, no. 67)

2260. **Anderson, Homer W.** Principles underlying the organization of a school building. American school board journal, 78: 37, 38, 155, 156, January 1929.

Discussion based upon the fundamental principles: I. Those which have gained extended recognition: (1) expansibility, (2) flexibility, (3) economy; II. Those which have been less universally applied: (4) adaptability, (5) accessibility, (6) orientation, (7) noninterference, (8) association. Tables, diagrams.

2261. **Bell, Ellis H.** College of education buildings in state universities. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio. 60 p. ms.

2262. **Blom, Edward Charles.** Radio and electric power supply equipment for schools. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. (To be printed)

This study proposes to furnish school administrators with information to guide them in selecting equipment and in placing installations, and to inform the manufacturers of the needs of the school which their products must satisfy. Experience of educators who have used radio equipment in schools seem to indicate that centralized radio systems are more desirable than individual sets; classroom reception of radio programs is better for instructional purposes than the assembly hall reception; the maintenance problems are not significant; and that local broadcasting within the school system seems desirable. Gives the results of a study of power supply requirements for science rooms.

2263. **Brown, Wensel Langley.** The relationship of the superintendent and the architect to schoolhouse planning. Master's thesis, June 13, 1928. University of Illinois, Urbana.

2264. **Butsch, R. L. C.** A comparative study of the effects of different types of school building ventilation on the health of pupils. Doctor's thesis, March 19, 1929. University of Chicago, Chicago, Ill. 458 p. ms.

Comparison of open-air and mechanical ventilation in their effects upon health. Determination of relation between temperature, humidity, and air flow and health. Conclusions: There is less respiratory disease in open-air rooms. Temperature, humidity, and air flow of the room are not significantly related to respiratory disease.

2265. **Challman, Samuel A.** Standards for elementary schoolrooms. American school board journal, 77: 65, 122, 125, 126, 128, October 1928.

A compilation of the standard requirements in regard to elementary school rooms in the various states. Includes such items as equipment, area of windows, paint, etc.

2266. ——— Standards for stairways, corridors, and exits in elementary-school buildings. American school board journal, 78: 69, 144-46, June 1929.

An additional list (to those appearing in the October American school board journal) of state laws governing the standards of school buildings.

2267. **Chandler, H. E., and Guthridge, W. H.** Utilization of high school buildings. University of Kansas Bulletin of education, 2: 22-24, February 1929.

Review of a master's thesis on "A measurement of high school building utilization," by Wallace H. Guthridge, University of Kansas, 1928.

2268. **Dudley, L. Leland.** The location of city school plants. Cambridge, Harvard university press, 1929. 130 p. (Harvard bulletins in education, no. 14)

In this study the author aims to (1) analyze the factors involved in, and to set up criteria which should govern the location of school plants in cities; (2) to make applications of these principles to type cases in order to show how they apply under different conditions; (3) to set up a general method for locating schools in an ultimate city school plant.

2269. **Dundon, Roscoe C.** A critical study of the mathematical problems in a school building program. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2270. **Engelhardt, N. L.** School building programs in American cities. New York city, Teachers college, Columbia university [1929]. 560 p.

2271. **Evenden, Edward S., Strayer, George D., and Engelhardt, N. L.** Score card for college buildings. New York city, Teachers college, Columbia university, 1929.

2272. ———— ———— ———— Score card for physical plant of normal schools and teachers colleges. New York city, Teachers college, Columbia university, 1929

2273. **Fitzpatrick, Katherine L.** The junior high school building program for Bridgeport, Conn. Master's thesis, 1929. Yale university, New Haven, Conn. 75 p. ms.

A ten-year building program for Bridgeport, Conn., based upon a survey of growth and predicted educational needs.

2274. **Goldthorpe, J. H.** Evaluation of building standards as employed in the construction of composite school buildings. Doctor's thesis, 1928. University of Minnesota, Minneapolis.

A study of the application of building standards to a single unit planned to house all enterprises of a community's educational program. The study endeavors to develop adequate and proper standards for this type of structure through an analysis of judgments of superintendents, architects, and educational experts.

2275. **Graham, James Lovett.** State laws in the United States relative to the planning and construction of public school buildings. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 176 p. ms.

2276. **Grand Rapids, Mich. Public schools.** Survey of seating in Grand Rapids elementary schools. March 4, 1929. 23 p.

Findings: Seating too high for majority of pupils in all grades, particularly in kindergarten and primary chairs; seats in 23 per cent of desks and nearly all chairs are too deep from front to back; desks are generally too high and lack adequate clearance of knees.

2277. **Grosse Pointe, Mich. Public schools.** A survey of needs for elementary facilities in building district no. 4. [1929] 29 p. ms.

Gives a statement of the educational policy of the board of education. Presents facts as to character of community, economic conditions, transportation, type of school, vacant land, and other factors likely to affect the need for elementary school accommodations.

2278. **Grover, C. C.** Scale for rating junior and senior high school cafeterias. April 1929. Bureau of curriculum development, research and guidance, Public schools, Oakland, Calif. 12 p. ms.

Includes a point rating scale on administration and a sanitation scale; suggests minimum menus; recommends standard portions and prices for various foods.

2279. **Hall, Verne.** Sanitary equipment of secondary schools. Master's thesis, 1929. University of California, Berkeley. 48 p. ms.

The purpose of this study was to apply the test of use to the sanitary equipment placed in the secondary schools of California, and to establish a standard based on peak use. Findings: Over \$23,000 is invested in unused toilet fixtures in the 78 secondary schools used in making this study; the ratio of toilet fixture use to enrollment indicates that fixtures should be placed in California schools in the following ratio: boys water closets—1 fixture for 80 boys; boys urinals—1 fixture for 39 boys; girls water closets, 1 fixture for 32 girls; in no case should a school building be constructed with less than three boys water closets; 3 boys urinals; and 6 girls water closets.

2280. **Harvey, Clarence Wilmer.** State school building policy. Master's thesis, 1929. University of Chicago, Chicago, Ill. 110 p. ms.

Eighteen states were studied: Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, and Wisconsin. Conclusions: There is no settled policy among the States as to what should be the minimum standards for school buildings.

2281. **Helleloid, Alvin S.** The operation of school plants in Minnesota. Master's thesis, 1929. University of Minnesota, Minneapolis.
2282. **Holy, Russell A.** An evaluation of window ventilation in the University schools building. Master's thesis, 1928. State university of Iowa, Iowa City. 71 p. ms.
2283. **Holy, T. C.** School building survey and program for Chardon, Ohio. 1929. Ohio state university, Columbus. 61 p. ms.
2284. ——— School building survey and program for Worthington, Ohio. 1929. Ohio state university, Columbus. 87 p. ms.
2285. ——— A school building survey for Westerville, Ohio. May 1929. ms. (Available in Bureau of educational research library, Ohio state university, Columbus)
2286. ——— School buildings. Section E. An analysis of the seating facilities of the present school plant of Charleston, W. Va. Charleston, W. Va., State department of education, 1929. 39 p. (Reprint from Survey of education in West Virginia, vol. III)
Findings: Seats were too high for 84 per cent of kindergarten chairs and 56 per cent of elementary school desks; desks were too high for 87 per cent of the elementary pupils as seated; etc.
2287. ——— and **Green, R. E.** A school building survey and program for Sylvania township, Ohio. 1929. Ohio state university, Columbus. 81 p. ms.
A study of the present and future needs with an estimated cost of carrying out recommended program. Includes consideration of the ability of the community to finance proposed program and its attitude toward such an undertaking.
2288. **Jensen, J. H., and Glenn, Earl R.** An investigation of types of classrooms for chemistry and other sciences in small high schools. *Journal of chemical education*, 6: 634-64, April 1929.
2289. **Laird, Donald A.** Less noise for better educational results. *Nation's schools*, 2: 17-21, December 1928.
The question of the relation of outside disturbances to work and growth is discussed.
2290. **Lundberg, L. D.** A comparison of three types of seating for children of the kindergarten and primary grades. 1928. Public schools, Flint, Mich.
The problem was to determine the best type of seating in the kindergarten and primary grades by a critical comparison of fixed seats, tables and chairs, and movable chair-desks on the basis of some 20 separate factors or standards. The study resulted in finding that the use of tables and chairs in the kindergarten and first grade and of movable chair-desks in the second and third grades was recommended on the basis of the returns and analyses. The use of the movable chair-desk in the upper grades was also suggested.
2291. **McGowan, Howard.** An analysis of the state school building codes of the United States. Master's thesis, 1929. Ohio state university, Columbus. 400 p. ms.
Comprises all statutory requirements relating to the purchase, sale and use of sites and the specification in regard to construction. Findings: There is little conformity in requirements. Statutes appear to be created largely to meet only local problems.
2292. **McNaughton, James Edgar.** Extended use of school buildings and grounds. Master's thesis, 1928-29. Ohio state university, Columbus.
2293. **Milwaukee, Wis. Board of school directors.** A five year building and future sites program, as recommended by the special committee appointed by superintendent of schools, Milton C. Potter. Milwaukee, Wis., January 8, 1929. 104 p.
A report on the playground expansion program is also incorporated in this report.
2294. **Moehlman, Arthur B.** The evolution of the public school plant. *American school board journal*, 77: 62-63, 139-40, September; 44, 139-40, October; 45, 135-36, November; 62, 133, December 1928; 78: 114, 116, 120, January; 92, February; 88, 90, March; 112, April 1929.
Historical development and evolution of the public school plant in Detroit, 1838 to 1928.

2295. **Moehlman, Arthur B.** A plan for school plant organization in Southfield township (Mich.) 60 p. ms. May 1929. (Dr. Moehlman is professor at the University of Michigan, Ann Arbor)

2296. ——— School building types and efficiency. 1928-29. University of Michigan, Ann Arbor. 30 p. ms.

A study of the relative efficiency of different plan types, with buildings reduced to the single variable of shape. Findings: Development of a new formula for determining physical envelope-instructional space efficiency.

2297. **Neale, M. G., and others.** A school building program for Springfield, Mo. Columbia, University of Missouri, 1928, 95 p. (University of Missouri bulletin, vol. 29, no. 44, Education series number 27, November 21, 1928)

2298. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** Survey of practices affecting custodian service in city school systems in California. 1929.

2299. **Ouimet, Harold Kingsbury.** Obsolescence of elementary school buildings. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2300. **Pittenger, B. F.** Floor-placement of space provisions in junior high schools. *Nation's schools*, 2: 33-38, July 1928.

Continues article started in June, 1928, number of this magazine. Gives the results of a study of 39 junior high school floor plans.

2301. ——— How room space may be assigned in an elementary school. *Nation's schools*, 2: 45-49, October 1928.

A critical analysis of 70 elementary-school floor plans on the basis of use to be made of the various rooms.

2302. **Portable school survey, 1928.** Seattle, Wash., Izzard company, 1928. 21 p. ms.

Summarizes replies received from 32 cities, to questionnaire issued in April 1928. Of those replying, 24 cities report that they are using 2,051 portables. Gives data as to size, advantages, and needed improvements.

2303. **Pruett, Haskell.** Planning rural school buildings for Oklahoma. Master's thesis, 1928-29. University of Oklahoma, Norman. 280 p. ms.

A study of plans as furnished by all state departments of education, and the specifications. Study also of standards required. Conclusions: That for small buildings the plans should be prepared in units. Conclusions resulted in the changed form of presenting the plans and specifications to the school authorities planning new buildings.

2304. **Pugh, Jesse J.** Efficiency in the use of a school building. *Educational research bulletin (Ohio state university)*, 8: 89-94, March 6, 1929.

A study of a junior high school building planned to accommodate 600 pupils, showing way of attaining greater efficiency in the use of building without extending the length of the school day, first, by better occupancy of vacant rooms and second, by better utilization of rooms already occupied.

2305. **Ramsey, Josephine Reid.** The administration of locker systems in the secondary schools of California. Master's thesis, June 1929. University of Southern California, Los Angeles.

2306. **Rawlins, Robert Ernest.** The function of the superintendent in connection with the detailed activities in the construction of a school building. Master's thesis, 1929. State university of Iowa, Iowa City. 327 p. ms.

2307. **Rhode, Ellis Gray.** The school custodian. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2308. **Shambaugh, C. G.** How school planning reveals the trend of the curriculum. *Nation's schools*, 3: 33-36, March 1929.

A study of 58 floor plans for the purpose of showing the number and kind of space provisions, the increase in their number in the last decade, and the shifting of emphasis in the curriculum and school program as indicated by the floor plans. The analysis shows that the phases of teaching receiving increasing attention are those that offer training in vocations, health, and social developments.

2309. **Shelby, T. H., and Marberry, J. O.** A study of the building needs of San Antonio senior high schools. Austin, Texas, University of Texas, 1928. 52 p. (University of Texas bulletin, no. 2845, December 1, 1928)
Findings: Housing facilities of senior high schools were found to be inadequate in amount and quality and type to meet the needs of a rapidly growing city, with a large Mexican population.
2310. **Spohn, A. L.** Utilization of space in high school building plans. Master's thesis, 1929. University of Chicago, Chicago, Ill. 120 p. ms.
Twenty-four building plans were studied for each of the years 1907, 1917, and 1927. Conclusions: Changes and rapid development in 1927, especially in commercial, home economics, health and comfort, and office rooms were found; also large increase in miscellaneous provisions. Classrooms, library, auditorium, physical education rooms and shops showed less changes. High correlation was found with Koos' data published in 1919.
2311. **Stephens, Frank.** Survey of Marseilles public school plant. Master's thesis, 1928. State university of Iowa, Iowa City, 103 p. ms.
2312. **Strayer, George D., and Engelhardt, N. L.** Report of the survey of certain aspects of the school system of Chattanooga and Hamilton county, Tenn., with special reference to administration and school building program. New York city, Teachers college, Columbia university, 1929.
2313. **Thau, Mrs. Ray Singer.** A study of the office equipment in the public senior high schools and in the business-offices of New York city. Master's thesis, 1928. New York university, New York, N. Y. 46 p.
A comparative study of the office appliances and equipment found in all of the New York city senior high schools and those found in 50 representative business houses, large and small, in New York City.
2314. **Threlkeld, A. L.** The Denver school building program. Denver, Colo., Public schools, August 1928. 78 p. (Monograph, no. 13)
Deals with the building program from 1923 to 1927, involving approximately \$8,000,000. Following topics are discussed: summary of program; organization for carrying out the building program; school building policies and standards; characteristics of the Denver program, results of building and site program; furnishing the buildings; and the future of the building program. Many tabulations, diagrams, floor plans, and illustrations are given.
2315. **Turner, H. B.** A survey of the elementary building situation in Warren, Ohio. September 1928. Superintendent of schools, Warren, Ohio. 23 p. ms.
Presents statistics on growth in total and school population, enrollments, school debt, and capacity of existing school buildings. Urges the passage of a school bond issue.
2316. **Von Gruenigen, Ernest.** The housing of general science in the representative high schools of California. Master's thesis, June 1929. University of Southern California, Los Angeles.
2317. **Wagner, Clarence K.** Plans and layout for a high school science department. Master's thesis, 1928. University of Pennsylvania, Philadelphia. 232 p. ms.
Plans for science department of high school with enrollment of about 400 pupils.
2318. **Webb, Earl M.** Judicial decisions relating to contracts for school buildings. Master's thesis, 1929. University of Chicago, Chicago, Ill. 100 p. ms.
An analysis of Supreme court decisions of the United States to determine the principles of common law relating to contracts for school buildings.
2319. **Whiteneck, H. A.** Syllabus of building standards, elementary schools. May 1929. Department of research, City schools, Long Beach, Calif. 18 p. ms. plates.
Statements for architects, and tables and charts are given for both the traditional type of school and the platoon type.
2320. ——— Tentative report on building survey, elementary schools. January 1929. Department of research, City schools, Long Beach, Calif. 18 p. ms. plates.
The survey includes tables and charts of the population growth of California, Los Angeles county and Long Beach since 1890, with estimates to 1940, for the Long Beach city school district.

2321. **Whiteneck, H. A.** Tentative report on building survey, junior high schools. March 1929. Department of research, City schools, Long Beach, Calif. 15 tables, ms. and 14 plates.

A survey of population growth of California, Los Angeles county and Long Beach since 1890, with estimates to 1940, of the Long Beach city school district.

2322. **Witham, Ernest C.** A continuous rebuilding survey. American school board journal, 77: 49, 50, 51, 166, 169, 170, January 1929.

Shows how the city of Wilmington, Del., determined the rebuilding needs for schools. Elaborately illustrated with diagrams showing accessibility of buildings over a long period. Costs, population, etc.

2323. **Woellner, Robert, and Reavis, W. C.** Architectural plans of administrative offices in secondary schools. School review, 37: 37-43, January 1929.

A study of 522 representative secondary schools regarding various types of office arrangement. Thirty-eight did not report any office space for the principal; 57 schools provide only a single room; the large majority, however, have office facilities extending beyond one room.

2324. **Womrath, George F.** The selection of sites for school buildings. School business administration—III. American school board journal, 78: 47-48, June 1929.

Discusses the selection of sites under five headings. Includes some relevant data on size of buildings.

2325. **Workman, Velma.** The replacement value of laboratory equipment of the North central association. Master's thesis, 1929. University of Akron, Akron, Ohio. 100 p. ms.

See also 75, 115, 127, 1094, 1273, 1305, 1364, 1729, 1903, 1905, 1953, 2151, 2362, 2375, 2476, 2512, 2542, 2659, 2732.

HEALTH EDUCATION AND SUPERVISION

2326. **Bainton, Joseph H.** Heart disease and school life. American journal of public health, 18: 1252-58, October 1928.

Investigation of frequency of serious heart lesions and of what limitations should be placed on school activities in such cases.

2327. **Cahan, Jacob M.** Incidence of heart disease in school children. Journal of the American medical association, 92: 1576-79, May 11, 1929.

The examination of 10,333 children showed an incidence of organic heart disease of 0.91 per cent. The condition was more frequent in girls and slightly less common in both sexes in the younger age groups.

2328. **Cameron, Annie.** Orange county clinic and parents institute. 1928-29. Orange county public schools, Hillsboro, N. C. 50 p. ms.

This study was planned to help all children to enter school physically fit.

2329. **Carter, Leslie B.** The selection and validation of objective exercises based upon the overlap of five textbooks in elementary physiology and hygiene. Master's thesis, 1929. State university of Iowa, Iowa City. 260 p. ms.

2330. **Chappelear, Claude S.** Health subject matter in natural sciences. New York city, Teachers college, Columbia university, 1929. 108 p. (Contributions to education, no. 341)

The purpose of this study was: (1) To determine quantitatively the percentage of health content in the subject matter of general science, biology, chemistry, and physics, for secondary schools; (2) to determine the nature and scope of this health content found in the above natural sciences. Findings: A student taking a 36 weeks' course in high-school science receives the equivalent of 13 weeks' instruction in health subject matter if he takes biology; 11 weeks if he takes general science; three weeks if he takes chemistry; and one week if he takes physics.

2331. **Chen, Mei Yu.** Nutrition work with children in America. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 56 p. ms.

2332. **Colony, Lucile.** A proposed program for the teaching of health in elementary schools in India. Master's thesis, 1929. State university of Iowa, Iowa City. 86 p. ms.

2333. **Coombs, Mary S.** A report on experiments in health work for pre-school children. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 46 p. ms.
2334. **Coulter, Jane E., and Johnstone, Esther.** Standards of conduct: an experiment. *Journal of educational method*, 8: 39-42, September-October 1928. To develop a conscious relationship between physical education, health education, general education, and the making of plans. Elementary school children were organized into various teams for a contest to secure the most points in citizenship, health, lessons, planning, and conduct.
2335. **Daley, H. C.** Answers to questionnaire on physicians and nurses. June 1928. Public schools, Highland Park, Mich. 6 p. ms.
Information from 27 cities in the north central section, giving answers to seven questions on employment of physicians and nurses by boards of education; emphasizes length of working day and week, and salaries paid.
2336. **Denver, Colo. Public schools. Department of research.** Functions of medical and physical education departments. [1928] 4 p. ms.
Based on 19 replies to a questionnaire issued in September 1928. Summarizes replies to each question, gives information for individual cities on personnel employed, and on functions included in health program.
2337. **Eddy, Walter H.** Use of ultra-violet light transmitting windows. *American journal of public health*, 18: 1470-79, December 1928.
The window glass tested admitted enough ultra-violet in winter months to heal or prevent rickets if the weather is clear and exposure long enough, "but only that part of the room directly in the path of the ray receives this benefit."
2338. **Eggers, Johanna.** Observations on reactions of infants with reference to the beginnings of health behavior. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 53 p. ms.
2339. **Fish, Ada Z.** The dietary habits of some high-school girls. Master's thesis, 1928. New York university, New York, N. Y. 33 p.
In the William Penn high school, Philadelphia, a study was made to determine the adequacy of the dietaries in relation to quantity, balance, and use of protective foods. It was based on reports from 105 9A pupils as to their consumption of food for one week.
2340. **Franzen, Raymond.** Health education tests. A description of the tests used in the school health study, with norms for fifth and sixth-grade children, and direction for giving the tests. New York, American child health association, 1929. 70 p. (School health research monographs, no. 1)
The tests described in this book are prepared specifically for the fifth and sixth grades for pupils ranging in age from 9 to 13 years. Section IV contains directions for the administration of the tests, together with norms for interpretation and comparison.
2341. ———. Physical measures of growth and nutrition. New York, American child health association, 1929. 138 p. (School health research monographs, no. 2)
The facts in this report relate to 10, 11, and 12 year old American-born white children. Measurements were made of about 7,500 public school children of the fifth and sixth grades in 70 schools of as many cities scattered over 38 states.
2342. **Furrow, Daisy Dee.** Immunization against diphtheria and smallpox in the Colorado state teachers college training school. 1929. Colorado state teachers college, Greeley. Ms.
In this study 23 children were immunized for diphtheria at the school building free of charge to the child. Two hundred and six children were vaccinated for smallpox, free of charge.
2343. **Gangloff, Perry J.** A study of the health program in Syracuse, N. Y. 1928-29. Syracuse university, Syracuse, N. Y.
2344. **Hatfield, Elizabeth.** A study of the health of seventeen year old pupils at Merritt and University high school from the records of physical examinations. Master's thesis, 1929. University of California, Berkeley. 82 p. ms.
This study involved: (1) A comparison between all pupils born in 1911 enrolled in June 1928 at Merritt, the part time high school, and in January 1928 at University, a full time high school as to number, kind, and seriousness of physical defects; (2) an attempt to discover any relationship between defects and pupil's intelligence, school grade and factors of family life. Conclusions: (1) The incidence of physical defects is

greater among the Merritt pupils than among the University high school pupils; (2) the percentage of physical defects was greater among children with inferior intelligence than among children with normal intelligence; (3) the incidence of physical defects was high among pupils who were below the grade in which they would be expected to be found on the basis of their intelligence quotients; (4) the percentages of pupils who were overweight and of pupils who had defects of feet, ear, throat and lung were greater among the group of pupils from incomplete homes than among the general group of pupils.

2345. **Hoefler, Carolyn, and Hardy, Mattie Crumpton.** The influence of health education upon the physical and mental growth of normal children. 1929. Elizabeth McCornick memorial fund, Chicago, Ill.

A study of the influence of intensive health instruction upon the physical and mental growth of 409 normal children of Joliet, Ill., selected from grades 3B, 3A, 4B, and ranging in age from 8-11. The findings indicate a greater improvement in those who have received health instruction as against those who have not.

2346. **Knox, W. T.** A health program for a rural elementary school. Master's thesis, 1928. University of North Carolina, Chapel Hill.

A program of school health service developed for a seven-grade elementary school of 350 pupils, located in a village in southeastern Georgia. Among the significant results were the establishment of the habits of drinking milk and of personal cleanliness, the development of poise and self-confidence in the pupils, the improvement of school attendance despite epidemic diseases, etc.

2347. **Kofoid, C. A., and others.** Data collection upon the mental abilities of children infected by certain parasitic amoebae as compared with the abilities of uninfected siblings. 1928-29. Institute of child welfare, University of California, Berkeley.

In this study data were collected concerning amoebic infection and intelligence test rating from 68 individuals in 19 families.

2348. **Levene, Harry.** A study of the ability of high school pupils to treat physical phenomena inductively. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2349. **Levy, Harry H.** Vision survey among a group of pupils of Syracuse schools. American journal of public health, 18: 1273-81, October 1928.

Study of visual acuity of pupils at different ages; of relation of illumination to comfort of school child and relation of defective vision to scholarship. Author concludes that other factors influence scholarship as much or more than poor vision.

2350. **Liebmann, Lotta B.** Physical growth of children. Master's thesis, June 1928. University of Rochester, Rochester, N. Y.

2351. **Long, Harvey L.** What do school nurses do? Elementary school journal, 29: 296-302, December 1928.

Pt. I is an analysis of the nurses' daily-weekly reports covering selected periods; Pt. II analyzes the use nurses make of their time as revealed in daily diaries covering 50 half-days; and Pt. III is a comparative study of the field work nurses do and an evaluation of this essential activity.

2352. **MacNeil, John P.** A study of the health education curriculum in normal schools and colleges of physical education. Master's thesis, 1929. New York university, New York, N. Y. 49 p. ms.

2353. **Maple, Katharine N.** Chronological variations in the posture of children, ages one to seven and ten to thirteen. Master's thesis, 1929. Wellesley college, Wellesley, Mass. 71 p. ms.

A study of the measurement of scapular angle, pelvic tilt, body balance, position of head and neck, amount of lumbar curve of 158 children. Findings: Characteristics of four age groups described; 1-3 years, 4-5, 6-7, 10, 13. Recommends that different posture standards be applied according to age group concerned.

2354. **Miller, E. R.** Principles of organization of health and physical education. Master's thesis, 1929. University of Kentucky, Lexington.

2355. **National society for the prevention of blindness, New York, N. Y.** Eyesight of preschool age children in New York city. [1929]

Gives the visual findings among 982 children in New York city between the ages of 3 and 6 reached through kindergartens, day nurseries and community centers.

2356. ——— Philadelphia hospital and health survey. [1929] 96 p.

A special inquiry on eye care in prenatal and infant periods, preschool period, school and adult age. Information concerning miscellaneous agencies contributing to eye health is given.

2357. **Nichols, Marjorie P.** The relationship between improvement in the health of high school girls and their improvement in scholarship. Master's thesis, June 1929. University of Southern California, Los Angeles.

2358. **Parrott, Hattie S.** Report of district conference on child health education, held at Kinston, Greensboro and Asheville during February 1929. State department of public instruction, Raleigh, N. C. 74 p. ms.

This study gives program and proceedings of a series of conferences on health education in supervised counties.

2359. **Pavey, Gertrude A., and Boyd, Julian D.** The medical examination of preschool children. Iowa child welfare research station, State university of Iowa, Iowa City. Public health nurse, 21: 318-20, 1929.

A report of the findings in the routine medical examinations of the children in the preschool laboratories of the Iowa child welfare research station during 1927-28.

2360. **Pearce, Milton O.** The effects of the correction of physical defects. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2361. **Phelan, Anette M.** Health education in nine school systems of New York state. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y.

2362. **Pierce, D. H.** Provisional or tentative regulations or standards relating to the facilities through which to provide a healthful environment in school. Doctor's thesis, 1928. New York university, New York, N. Y.

A study of standards of facilities providing healthful environment in schools treated as to buildings; systems of operation, supply and maintenance; grounds, personnel, equipment; social aspects; health examination; treatment and control; physical education; plant housekeeping.

2363. **Portland, Oreg. School district No. 1. Department of research.** Health knowledge test. February 15, 1929. 17 p. ms.

A city wide health survey of grades 4A, 4B, 5A, 5B, 6A, 6B, 7A, and 7B.

2364. **Powers, S. R., and Laton, Anita D.** The psychology of learning applied to health education through biology. New York city, Teachers college, Columbia university, 1929.

2365. **Rogers, James Frederick.** School health work, 1926-1928. Washington, United States Government printing office, 1929. 18 p. (U. S. Bureau of education. Bulletin, 1929, no. 8)

Advance sheets from the Biennial survey of education in the United States, 1926-1928.

2366. **Rugen, Mabel E.** Organization of physical and health education training for non-specialized elementary grade teachers in teacher training institutions. Doctor's thesis, June 1929. New York university, New York, N. Y.

A study of: (1) Present training in physical health education; (2) what is being taught in elementary schools; (3) relations of 1 and 2 to state programs and requirements; (4) set up of adequate programs, both for elementary grade child and teacher training institutions based on needs of children; (5) suggestions of how program can be adapted to teacher training institutions curricula.

2367. **Schernel, Helene.** An attempt to measure the efficiency of school inspection in checking communicable disease. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 23 p. ms.

2368. **Simmonds, Dorothy E.** The construction of a course of study in first aid for elementary grades. Master's thesis, July 1, 1929. Tulane university, New Orleans, La.

The writer classified by month and grade (for five months) the accidents occurring in Lafayette school with 1,500 pupils. She used her findings for determining the type of first aid to be taught and the grade in which it should be taught.

2369. **Snyder, A. M., and Marguerite.** Eye preference tendencies. Journal of educational psychology, 19: 431-33, September 1928.

A test for eye preference was given to 410 students (129 were in high school, 135 in normal school and 146 were freshmen and sophomores at the University of Pittsburgh). The preliminary results seem to show that more than three-fourth of the students between the ages of 15 and 22 have a distinct eye preference.

2370. **Songer, Myrtle.** Some problems of health supervision of schools with special reference to the rural schools of Jefferson county, Colo. Master's thesis, June 1929. Colorado state teachers college, Greeley. 74 p. ms.

Records of the American Red Cross nursing service of Jefferson county, Colo., were used as typical of rural school conditions in general. Conclusions: (1) There is great variation in the manner of conducting physical examinations of children in our schools, and great differences shown in recording results of examinations. There is little uniformity either in giving the examination or in tabulating findings, which makes it impossible to secure a standardized health norm or average regarding the numbers of physically defective children in the schools of the country; (2) cities are far ahead of the rural districts in all matters pertaining to the physical well-being of the school children; (3) fewer physically defective children in the cities. Reason not determined.

2371. **Spangler, Thomas B. P.** The legal status of health education in the public schools of the United States with special reference to physical education and hygiene. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2372. **Stafford, George Thomas.** A program of health education for secondary schools. Master's thesis, 1928. University of Illinois, Urbana.

2373. **Steinhaus, Arthur, and Jenkins, Thomas A.** Weight control from the standpoint of exercise and body energetics. American physical education review, 33: 638-43, December 1928.

A discussion of the possibility of reducing by exercise. The study points out the need of attention to diet as an essential factor in reducing. Reducing merely by exercise is not advocated.

2374. **Turner, C. E.** Malden studies on health education and growth. American journal of public health, 18: 1217-30, October 1928.

Gives the comparative growth records of 273 children under the influence of a reasonably intensive health education program and of 202 children in a comparable control group without such special training. The rate of gain in height and weight was measurably greater in the special group.

2375. ——— and others. Hand-washing facilities in schools. New York, Metropolitan life insurance company, 1928. 11 p. (Monograph no. 3, School health bureau)

This study of the adequacy of hand-washing facilities in 404 typical schools located in 22 states and the Dominion of Canada was made under the direction of a special committee of which C. E. Turner was chairman, the detailed work being done by special students in the Department of biology and public health of the Massachusetts institute of technology.

2376. **Wellesley college, Wellesley, Mass. Department of hygiene and physical education.** Some investigations in the orthopedic field. American physical education review, 33: 627-30, December 1928.

Abstracts of three research studies: (1) A study of the feet of 100 girls of college age, with a critical analysis of subjective and objective methods of grading. This is a thesis submitted by Mirian Arrowmith in partial fulfillment of a master of science degree in hygiene and physical education at Wellesley college. The contribution of the paper lies in the conclusion that feet can not be graded by consideration of any one element of structure or function; (2) Pelvic obliquity, its measurement and importance in physical efficiency. This is a thesis submitted by M. Esther Show, in partial fulfillment of a master of science degree at Wellesley college. It is a study of 99 Wellesley college girls to determine a precise method of measuring the obliquity of the pelvis. (3) Determination of normal variation in posture with a suggestive method of grading. A summary of the work done by the holder of the Orthopedic fellowship for 1927-28 at Wellesley college under the direction of Dr. W. R. and Dr. R. R. MacAusland. The study leads to the conclusion that the measurement of sacral angles on the individual may be used in determining a posture grade of "Good," "Fair," and "Poor."

2377. **West, Bessie Brooks.** Report of an experiment in nutrition at the California school for the blind. California state department of education, Sacramento. Sacramento, California state printing office, 1929. 35 p. (Bulletin no. D-2)

2378. **Wilson, Charles A.** A community child health study. Merrill-Palmer school, Detroit, Mich. Child health bulletin, 5: 10-15, January 1929.

2379. ——— A review of recent research pertinent to the clinical aspects of child nutrition. Merrill-Palmer school, Detroit, Mich. (Mimeographed bulletin distributed from the Toronto conference, Child development committee, National research council, May 2-4, 1929)

2380. **Wright, Eva B.** A report of a study of local conditions in Okmulgee, Okla., as a basis for a program of health education. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 71 p. ms.

See also 106, 402, 1268, 1282-1283, 1285, 1331, 1367, 1399, 1783, 2264, 2389, 2395, 2424, 2442, 2492, 2926, 2937, 2950.

MENTAL HYGIENE

2381. **Gochenour, Alice C.** The mental health of the four year old child. Master's thesis, 1928-29. Howard college, Birmingham, Ala.

2382. **Jewell, Elizabeth.** Mental growth at the border line. Master's thesis, 1929. Rutgers university, New Brunswick, N. J. 104 p. ms.

2383. **Jordan, A. M.** Mental growth. 1928-29. University of North Carolina, Chapel Hill.

One hundred and eighty-three children were tested consecutively for six different times. The I. Q.'s were plotted and changes in I. Q.'s noted; mental ages also were used to compute mental growth curves.

2384. ——— Occupational influence on mental growth. 1928-29. University of North Carolina, Chapel Hill. Ms.

Mental levels were computed for various types of occupational groups. In order to discover, if possible, the differential influence of environment on mental growth.

2385. **Wilson, Loral Culbert.** A study of the mental content of the insane. Master's thesis, 1929. Ohio state university, Columbus. 68 p. ms.

The Goodenough drawing test was given to 100 unselected women patients at the State hospital; 25 tests were given to unselected normals as a control. Findings: The mental age and scoring of the insane was definitely lower than normals. The same incoherence of expression was found as is found in the speech of the insane.

See also 2182.

PHYSICAL TRAINING

2386. **American physical education association.** Report of the committee on the curriculum of the 139 institutions preparing teachers of physical education in the United States, 1929. 45 p.

J. H. McCurdy, chairman.

The purpose of this study is: (1) To make accessible to institutions giving such courses, the detailed analysis of the courses required in institutions giving four-year courses leading to a degree, also three-year courses and two-year courses; (2) to give a standard terminology for the various courses; and (3) to recommend the median requirements for each course.

2387. **Baker, Gertrude Margaret.** A study of the supervision of practice teaching in physical education in undergraduate institutions in the United States. Master's thesis, March 1929. University of Minnesota, Minneapolis.

2388. **Beall, Elizabeth.** Essential qualities in certain aspects of physical education with ways of measuring and developing the same. Special reference to tennis. American physical education review, 33: 454-63, September 1928; 516-20, October 1928; 582-85, November 1928.

2389. **Collins, Genevieve Scanlon.** A physical education program for health conditions found in Peabody students. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 147 p. ms.

2390. **Decker, Lois L.** The relation of physical education activities to elementary school projects or units of teaching. Master's thesis, 1929. New York university, New York, N. Y. 65 p. ms.

2391. **Fuller, Dewey T.** An analysis of the physical education program and facilities in the high schools of Allen county, Ohio. Master's thesis, 1929. Ohio state university, Columbus. 95 p. ms.

A study of the status quo of physical education in the high schools of Allen county, Ohio. Findings: Little uniformity exists in the physical education program and facilities in the high schools of Allen county, Ohio.

2392. **Gianque, Charles Dickens.** The absence of instruction in individual gymnastics in elementary schools as a weakness in the school program. Master's thesis, 1928-29. Ohio state university, Columbus.

2393. **Gorman, Fred Robert.** Legal status of physical education in the public schools of the United States. Master's thesis, 1929. Indiana university, Bloomington. 105 p. ms.

A study was made of the various state laws upon the subject of physical education; an analysis was made of the regulations and courses of study of the state departments of the various states; and a search was made of the court records. Findings: Physical education programs have been adopted in most states. Interest in these programs is increasing quite rapidly as evidenced by legislation and courses of study in the various states; there seems to be a distinct trend toward health instruction, games, drills, and athletics as the content of physical education; the official authority for the administration of the physical education problem is delegated to the state department of public instruction. The fact that there are so few court decisions on the subject of physical education indicates general acceptance of the authority of legislatures and state departments to make requirements on the subject.

2394. **Griffith, Mary Alice.** A study of physical education for girls in the junior high schools of California. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2395. **Jobe, Elsie Etta.** A program of physical and health education for one-room schools. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 89 p. ms.

2396. **McCloy, C. H.** Methods of research in physical education. American physical education review, 34: 10-16, January 1929.

A brief outline of the methods used in the field of research as they may be applied to physical education. The kinds of research discussed are: Bibliographical research; historical research; descriptive research; experimental research; philosophical research; comparative research; and research in methods of research. The study points out the fact that research in physical education is not an abstruse or difficult thing to do.

2397. **Metcalf, Harlan G.** The status of special adoptive corrective procedure in the larger colleges and universities. American physical education review, 34: 206-208, April 1929.

A detailed study of the methods of procedure for corrective gymnastics, in 29 of the larger colleges and universities. The information was collected by questionnaire method. The following trends are brought out. Special adoptive corrective procedures are a necessary part of the college program in physical education; the corrective programs carried on in the various women's departments of physical education are more effective and in more detail than in the departments for men; there is a marked tendency among the men's departments of physical education toward a well-rounded activity program chiefly of the game type which will produce amazingly fine results in posture.

2398. **Moodie, Edith Strickland.** The socializing value of physical education in the treatment of dementia praecox. 1928. New York university, New York, N. Y. 86 p.

The study is made up of three parts: Pt. I. Etiology, diagnosis, and prognosis of various types of dementia praecox; Pt. II. Aims, scope, and methods of physical education at New Jersey state hospital at Graystone Park under the writer's directorship from February 1923 to July 1927; Pt. III. Case studies.

2399. **Murphy, Katherine.** The adaptation of the results of physical fitness tests to the junior high school physical education program of the city of Albany. Master's thesis, June 1929. New York state college for teachers, Albany.

2400. **Orion, Walter Harold.** Some aspects of physical education in Washington. Master's thesis, 1928. State college of Washington, Pullman. 115 p. ms.

This study includes a brief history, information concerning teaching personnel, equipment, activities, and compulsion. Findings: In schools having less than 100 boys, 40 per cent of physical education is handled by superintendent or principal; of 219 physical education instructors reporting 60 per cent have had professional training; 84 per cent of physical education instructors hold B. A. degrees; 196 out of 205 schools reporting have gymnasiums; 90 per cent of schools have playfields, most all of which are more than one acre in size; 65 per cent of fields adjoin school, 20 per cent are more than two blocks removed; 13 swimming tanks are reported, seven in schools of more than 200 boys and six in smaller schools; 113 schools have tennis courts; all schools report athletic instruction in one or more branches of sport; basketball leads among games; 23 per cent of schools report physical education compulsory; 72 schools give credit for physical education.

2401. **Peterson, Lloyd William.** Curricular requirements in physical education in state universities. Master's thesis, June 1929. University of Minnesota, Minneapolis.

2402. **Rath, Emil.** A program of physical education for boys in secondary schools of Indiana. Master's thesis, 1929. Indiana university, Bloomington. 172 p. ms.

The results of this study show that physical education programs in Indiana high schools are not yet thoroughly organized. The prevailing opinion is that four divisions of activities are sufficient; namely, medical examinations, physical examinations, corrective physical education, and general instruction.

2403. **Ready, Marie M.** Physical education in city public schools. Washington, United States Government printing office, 1929. 100 p. (U. S. Bureau of education. Physical education series, no. 10)

2404. **Reichart, Natalie.** Evaluation of types of swimming competition for high school girls. Master's thesis, 1929. New York university, New York. N. Y. 34 p. ms.

2405. **Robertson, Carita.** A curriculum in physical education for high school girls. Master's thesis, 1929. University of Illinois, Urbana.

2406. **Schott, Carl Peter.** Physical education in the colleges of the United Lutheran church in America. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A study of the Lutheran colleges reveals the fact that they give very little consideration to the physical education needs of the student body. This was borne out by the meagerness and inadequacy of the equipment and facilities. The practice of requiring medical examination upon entrance was quite general but little significance, apparently, was attached to the findings. Intercollegiate athletics is the dominant student activity in each of the colleges, but for the most part, the methods of administration employed by them are not in accord with sound business principles.

2407. **Schwendener, Norma.** Special methods in physical education for the elementary school. Master's thesis, February 1929. Teachers college, Columbia university, New York, N. Y. 37 p. ms.

2408. **Scott, Harry Alexander.** Personnel study of directors of physical education for men in colleges and universities. New York city, Teachers college, Columbia university, 1929. 90 p. (Contributions to education, no. 339)

This investigation reveals the duties, rewards, experiences, and social relationships of present-day directors of physical education in state, privately endowed, and denominational colleges and universities. The facts are so arranged that valuable information is made readily available to personnel officers and student advisers. Instructors of physical education already in the field should find in the study suggestions which should aid them in the professional advancement.

2409. **Shambaugh, Mary Effie.** The place of folk dancing in the program of physical education for elementary and secondary schools. Master's thesis, June 1929. University of Southern California, Los Angeles.

2410. **Sharman, Jackson R.** Physical education facilities for the public accredited high schools of Alabama. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The purpose of this study was to determine what facilities are necessary for carrying out in a satisfactory manner the program of physical education in the accredited public high schools of Alabama. A survey of the physical education facilities and programs in 38 per cent of the public accredited high schools of Alabama was made. Data concerning the present situation are given and a physical education program for Alabama high schools is outlined.

2411. **Smith, Harry A.** History and significance of tests in physical education. Master's thesis, 1929. University of Akron, Akron, Ohio. 82 p. ms.

Review of tests in physical education, their significance in the field and prognosis for future application.

2412. **Spencer, Charles E.** Suggestion for associated learnings in physical education activities. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 26 p. ms.

2413. **Staley, Seward Charle.** The program in physical education for the high school. Doctor's thesis, 1928. University of Illinois, Urbana.

2414. **Tenney, Rob.** Public education in physical education. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 57 p. ms.

2415. **Webb, Hulon Francis.** Relationship of corrective or medical gymnastics to the curriculum of college physical education. Master's thesis, December 1928. Colorado state teachers college, Greeley. 137 p. ms.

300 questionnaires were sent to colleges and universities. These were analyzed. Conclusions: (1) Class enrollments in the departments of physical education of the colleges and universities have direct relationship to the enrollment of the schools. California ranks high as an educational state, and shows that the four colleges represented in this study from California have 4,000 students in physical education classes; (2) in the best colleges, the physical education department is given equal importance with other departments; (3) classes in physical education classes vary. The freshman and sophomore groups have a larger frequency than the junior and senior classes; (4) average number of classes for all departments is 13; the time varying with the mean of 53 minutes per class; (5) many colleges and universities have included hygiene in their courses in physical education; should be the basis of corrective work; (6) physical efficiency tests are being used in many of the physical education departments; (7) the German system of gymnastics is the most used; most schools have specialists for corrective gymnastics; (8) study shows relationship between corrective gymnastics and curriculum.

2416. **Weidemann, C. C.** The duties of Nebraska high school directors of physical education and athletics. Educational research record (University of Nebraska, Lincoln), 1: 1-32, April 1929. (University of Nebraska publication, no. 58)

This study is limited to data relative to men employed as directors of physical education and athletics in Nebraska high schools.

2417. ——— Some important qualifications for the director of physical education programs in high schools. Educational research record (University of Nebraska, Lincoln), 1: 66-67, December 31, 1928.

2418. **Zwarg, Leopold F.** History, uses and values of apparatus in physical education. Doctor's thesis, 1928-29. Temple university, Philadelphia, Pa.

See also 150, 1460, 1499, 1654, 1670, 2336, 2352, 2354, 2366, 2371, 2420, 2867, 2874.

ATHLETICS

2419. Are college athletes low in scholarly attainments? Nation's schools, 2: 41-44, October 1928.

Quotes reports from two colleges, one unfavorable and one favorable to athletics.

2420. **Atkinson, Minnie.** Inter-collegiate sports and physical education. Master's thesis, 1928-29. University of North Carolina, Chapel Hill. Ms.

2421. **Bateman, Edward Allen.** The administration and cost of interscholastic athletics in the high schools of Utah. Master's thesis, 1929. University of Chicago, Chicago, Ill. 85 p. ms.

A study of 54 schools, showing the status of athletic facilities; number of athletic sports; status of the athletic coach; the extent or per cent of pupils participating in the interscholastic sports, the cost per athlete participating. Conclusions: Schools are well equipped, as compared with other states; coaches are well trained; about 40 per cent of boys in large schools and 15 per cent of boys in small schools participate in interscholastic sports; the costs vary a great deal—from \$13.00 to \$121.00. The finances, in general, are not well administered.

2422. **Bear, Herman Wilson.** Athletics in high school. Master's thesis, 1929. University of Illinois, Urbana.

2423. **Booth, John M.** An investigation in interscholastic athletics in Northwestern high schools. School review, 36: 696-706, November 1928.

The results of a compilation of 425 questionnaires to discover in one branch of extracurriculum activities: (1) what the objectives are; and (2) what the plan in general operation is.

2424. **Cole, Norman B.** Present day opinion regarding the relationship between athletics and the heart. *American physical education review*, 33: 571-77, November 1928.

Paper read before the Therapeutic section, national convention of the American physical education association, Baltimore, Md. The paper includes a discussion of the present day opinion that athletics do not harm the heart, along with brief reviews of research regarding athletics and the heart, and concludes with the suggestion that the supervision of athletic activities in school and college should include the history of the patient (especially that of acute fevers, and those of the rheumatic group). The author emphasizes the point that the defective heart should be protected.

2425. **Condit, Philip M.** The intelligence and scholarship of 27 football men for 1927-28. 1928. Colorado state teachers college, Greeley. (Report to Dr. C. B. Cornell, December 13, 1928)

2426. **Cozens, Frederick W.** The measurement of general athletic ability in college men. *American physical education review*, 33: 634-38, December 1928.

Abstract of a doctorate dissertation submitted to the Graduate school of the University of Oregon, July 1928. "It is the concern of this study to set up a battery of tests which can be used to classify college men according to their big-muscle efficiency and to diagnose their weaknesses, in order to better provide for the individual needs of the students."

2427. **Davis, Harold McDonald.** The junior college transfer in university athletics. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2428. **Delaney, Mary.** Age, height, weight and pubescence standards for the athletic handicapping of girls. *American physical education review*, 33: 507-509, October 1928.

A study of the athletic records of 833 girls (between the ages of ten and sixteen and a half years) attending the Balch school and the Buaroughs intermediate school, Detroit, Mich. The data presented in this study point to a sharp distinction between mature and immature girls. The results are not considered conclusive.

2429. **Dublin, Doctor.** (Metropolitan life insurance company, New York, N. Y.) Longevity of college athletes.

A paper presented at the 1928 meeting of the National collegiate athletic association.

2430. **Eells, Walter Crosby, and Davis Harold McDonald.** The junior-college transfer in university athletics. *School review*, 37: 371-76, May 1929.

Athletic records of junior college transfers to three large California universities analyzed during a five year period.

2431. **Estes, Guy Dan.** The effect of participation in organized athletics on school grades in Arkansas state teachers college. Master's thesis, 1929. University of Chicago, Chicago, Ill. 57 p. ms.

A study over a seven year period shows that athletes' grades are lower.

2432. **Hair, Jesse W.** Comparison of the rules and regulations of athletic associations in the United States. Master's thesis, 1929. State university of Iowa, Iowa City. 72 p. ms.

2433. **Herzog, Gertrude.** A survey of the athletics for girls in the suburban high schools of Philadelphia, Pa. Master's thesis, 1928. University of Pennsylvania, Philadelphia.

2434. **Hutchinson, Mark E.** College athletics and scholarship. *School and society*, 29: 151-52, February 2, 1929.

An abstract of a study made at Cornell University, Mt. Vernon, Iowa.

Compares scholarship attainments of 40 athletes and 67 nonathletes. Data based on too small number of students for any very significant conclusions to be made although there seems to be evidence that athletes are not lower in scholarship grades than non-athletes.

2435. **Jacobsen, John M.** Scholarship of university athletes versus that of non-athletes. Master's thesis, June 1929. University of Minnesota, Minneapolis.

This is a study of the mental ability, scholarship, degrees, etc., of one class at the University of Minnesota, studied over a period of five years. A general plan follows that set up as a model by the Carnegie foundation for the advancement of teaching.

2436. **North central association of colleges and secondary schools.** Athletic requirements of the North central association. Report of the committee on athletics to the Commission of higher education, 1928. North central association quarterly, 3: 167-69, September 1928.

Athletic standards outlined by the committee of the North central association institutions of higher education received with few exceptions the endorsement of 108 institutions responding to an inquiry. Activities and standards in athletics should be in harmony with the general educational purposes of the institutions. The basis of accrediting institutions which are in membership but not in good standing in connection with athletic activities is given under eight sections.

2437. **Olds, L. W.** Physiological effects of cross-country running on high school boys. American physical education review, 34: 16-19, January 1929.

A brief outline of an attempt to determine the physiological effects of a two mile cross country run made by 60 high school boys. The physiological procedure outlined by W. R. Bowen included the following: Age, height, and weight, the horizontal and vertical pulse test; the pulse rate recovery test; urine analysis; heart and lungs examination; and training period for the event. The results of the test indicate in a general way that the race is not too severe. In general at least six weeks of preparation are necessary. The experiment may be useful, in determining the effect of athletics as now carried on in high schools on the high school boy.

2438. **Petterson, Carl J.** Problems of administration and cost of high school interscholastic athletics in 120 high schools of West Virginia, 1928-29. West Virginia university, Morgantown.

2439. **Scannell, John A.** A program in intramural athletics for two years trade school. Master's thesis, 1929. New York university, New York, N. Y. 42 p. ms.

2440. **Smith, George M.** Boys' intramural athletics in public secondary schools. Master's thesis, 1928. University of Washington, Seattle. 157 p. ms.

This study aims to present standards and practices to guide the intramural director in organizing and administering his program. A survey of available literature on the subject is made. Certain recommendations are made concerning training of intramural directors.

2441. **Wheeler, Bruce E.** A study of physical and medical examinations of high school athletes in 30 Illinois schools. Master's thesis, 1929. University of Chicago, Chicago, Ill. 94 p. ms.

An investigation of the extent of participation in athletics and extent of physical and medical supervision of the schools. Findings: Much unsupervised athletics and very little physical and medical supervision was provided.

2442. **Willis, Walter.** Health procedure in a boy's junior high school athletic program. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 31 p. ms.

2443. **Wolfe, Emil.** An attempt at establishing standards of achievement in track and field events for boys in junior high schools in Philadelphia. Masters' thesis, 1928-29. Temple university, Philadelphia, Pa.

2444. **Wolfe, J. B.** Intramural athletics in the high school. Master's thesis, September 1928. University of Virginia, Charlottesville.

2445. **Woods, David S.** The effect of field day and athletic competitions on the examination results of pupils. Master's thesis, 1929. University of Chicago, Chicago, Ill.

See also 53, 1173, 1747, 2416, 2875.

PLAY AND RECREATION

2446. **Blakely, Mrs. Elsie J.** A study of the Camp fire girls organization. Master's thesis, 1929. Colorado state teachers college, Greeley. 152 p. ms.

A study of camp fire girls literature, personal letters from members and national headquarters, personal interviews with guardians training teachers and analysis of 150 term papers of Colorado state teachers college camp fire members. Questionnaires were sent to 250 guardians, 50 colleges offering courses covering the entire United States. Conclusions: (1) Camp fire is a national and international movement; (2) camp fire program is adapted to any institution attempting to train girls; (3) it tends to physically, spiritually,

and mentally develop the adolescent girl, and holds interest of girls because of progressive program; (4) values, principles, advantages, and aims are similar to other extracurricular activities, but obstacles and problems encountered are not wholly same as those met by other extracurricular activities; (5) much of material given in training courses for leaders is outlined by camp fire headquarters; (6) practices are based on psychological interest of the adolescent girl.

2447. **Boykin, Elizabeth.** Fatigue in camp. Master's thesis, 1929. New York university, New York, N. Y. 46 p. ms.

2448. **Farrell, Helen.** The effective radius of recreation centers in the District of Columbia. Master's thesis, 1929. Catholic university of America, Washington, D. C. 8 p. (National Catholic school of social service, Washington, D. C. Social science monographs, vol. 1, no. 2, September 15, 1929)

The relative attraction of various types of recreational facilities was studied by means of the median distance which individuals would travel from home in order to participate. Findings. As an index to the effectiveness of various types of recreation the median distance traveled is quite efficient.

2449. **Frampton, Iris Coldwell.** The psychology of the preschool child with reference to play. Master's thesis, 1928-29. Boston university, Boston, Mass.

2450. **Gorman, Edward J.** A comparative study of the scout and the non-scout. Master's thesis, 1929. Catholic university of America, Washington, D. C. 60 p. ms.

A comparative study of two groups of boys, scouts and nonscouts, in their home life and in their leisure time activities.

2451. **Hicks, Guy Turner.** An analysis of the educational values of secondary school socials, together with their application. Doctor's thesis, 1929. University of Colorado, Boulder. 168 p. ms.

The purpose of the study was to determine if our young people are being educated in the matter of social recreation. 1,000 write-ups from pupils of social participation were analyzed; eight social evenings made up and sponsored in high schools over two years were studied; analysis was made of writings in field of extracurricular activities for 24 values for rating; the 24 values were rated by 1,153 different people; questionnaires as to the extent to which the social dance has monopolized the evening were sent to 430 principals. Findings: Very definite objectives set up for social evenings. Values derived rate as good, medium, and poor. Where dances are permitted in connection with social evenings they have in 60 per cent of the cases monopolized the evening.

2452. **Karpovich, Peter V.** A study of some physiological effects of golf. American physical education review, 33: 533-41, 586-94, 651-59, October, November, December 1928; 34: 20-42, January 1929.

An account of special research regarding the physiological effects of golf, planned and directed by Dr. Frederick Brush, Medical director of the Burke foundation for convalescents, assisted by Dr. G. H. Meyer and Dr. J. H. McCurdy. A study was made of 120 patients. The October issue includes a discussion of the problem; descriptions of the golf courses used in the tests; effect of golf upon the heart rate; and effect of golf upon blood pressure. The November issue shows the effect of four explosion shots out of a difficult sand trap; Schneider's cardiovascular test; and changes in pulse pressure after playing golf. The findings presented in this article show that "if the subject belonged to a normal group, there was a greater percentage of normal relations; if the subject belonged to a cardiac group, there was just the opposite result." The November issue gives information regarding the effect of golf on certain individuals; decreases in weight of all patients; influence of atmospheric conditions upon the golfers; etc. Contains a special bibliography on the physiology of exercise. The January issue contains statistical data regarding each golf player and the results of the various tests, including blood pressure, pulse rate, and Schneider's test.

2453. **Lehman, Harvey C., and Doxey, A. Wilkerson.** The influence of chronological age versus mental age on play behavior. Pedagogical seminary and Journal of genetic psychology, 35: 312-24, June 1928.

Chronological age appeared to be more potent than mental age in influencing the play behavior of boys.

2454. ——— and **Witty, Paul A.** A study of play in relation to intelligence. Journal of applied psychology, 12: 369-97, August 1928.

The results of this study show that bright pupils participate in fewer activities of a motor type and more frequently in activities which require reading. They are less interested in religious activities, have a livelier sense of humor, and are less social in their play.

2455. **Luecke, Editha.** Play materials for children. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 39 p. ms.

2456. **Minger, Melissa Maude.** Rural school entertainments. Master's thesis, 1928. University of Idaho, Moscow.

2457. **Moore, J. P.** An analysis of the activities of junior and senior high school students outside of school. Master's thesis, August, 1928. Colorado state teachers college, Greeley. 81 p. ms.

Junior and senior high schools in every section of Ft. Worth were studied. Repetition of McMullen's study at Columbia. 1,000 diaries, also personal interviews with principals, were used. Conclusions: (1) 56 per cent of boys and 21 per cent of girls' time is spent in nonsectarian character building organizations; (2) 5 per cent of their time is spent in pursuit of musical and artistic activities; (3) 54.66 per cent of time is spent in some form of "fooling around" and "loafing at stores"; (4) less than 1 per cent spent in club life; (5) 18 per cent spent in reading, writing, studying lessons and other things; (6) church attendance and Sunday school occupy reasonable amount of time, but time spent in other church work is not marked; (7) the majority of pupils engage in large number of activities at home.

2458. **Raitt, Charles B.** A survey of recreational facilities in Rochester, N. Y. . . . The Rochester bureau of municipal research, inc. Made at the request of the Council of social agencies of Rochester, June 1929. 410 p.

This is a comprehensive survey following three general lines: (1) What can be accomplished immediately, with little or no additional cost; (2) What can be accomplished in the next five years of unused city-owned areas by minor acquisitions, by increased personnel, and by more intensive use of present facilities, and (3) What can be accomplished in the next 15 to 25 years, with major acquisitions of recreation areas, coming to the city as gifts from generous citizens or by direct purchase when and if funds are available.

2459. **Reid, Isa.** A study of differences in play interests. 1928-29. Institute of child welfare, University of California, Berkeley.

With the cooperation of the Department of psychology at Stanford university, data were collected upon the fundamental attitude of 10 boys and 10 girls between the ages of 17 and 19 months in relation to eight sets of play materials presented in experimental situations at weekly intervals.

2460. **Rentsch, Emeline Dean.** The organization and administration of the social activities of the secondary schools of South Dakota. Master's thesis, 1929. University of South Dakota, Vermillion. 95 p. ms.

2461. **Rogers, Cephas.** Suggested and selected play activities for small West Virginia city school systems. Master's thesis, 1929. New York university, New York, N. Y. 47 p. ms.

Gives principles and activities for a play program for the public schools adaptable for small West Virginia city school systems.

2462. **Sharp, Lloyd Burgess.** Education and the summer camp; an experiment. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 114 p. (Contributions to education, no. 390)

The purpose of this study was first, to set up a plan for the reorganization of Life's summer camps, based upon the hypothesis that camping should be essentially an educational enterprise and not merely a relief measure or a means of providing fresh air; and second, to operate these camps for a four year period, making such applications and recommendations as seem warranted basing them upon an analysis of the program in operation.

2463. **Stevenson, Elmo Nall.** Handbook of nature games. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2464. **Thompson, Charlotte Hortense.** Children's interest in games. Master's thesis, 1929. University of Denver, Denver, Colo. 71 p. ms.

Questionnaires of 118 questions were given to third grade children to be answered by "yes" or "no." Then children from the first grade through the junior high school were asked to "list ten games or sports you like best." Findings: Elementary boys: baseball, red light, football, hide and seek; girls also like hide and seek. Junior high boys list: Baseball, football, basketball, tennis, indoor sports and swimming. Girls vote for tennis and baseball. Among boys, football and baseball are the two favorite sports or games and these continue to be favorites through junior high school. With girls, the favorites change from elementary school games to games quite different in junior high school.

2465. **Weller, D. S.** The status of dancing in the larger Indiana high schools. School review, 37: 215-16, March 1929.

A summary of replies to 52 questionnaires sent to the largest high schools in Indiana.

See also 2293, 2492.

SOCIAL ASPECTS OF EDUCATION

2466. **Bliss, Ethel H.** Parent participation in school activities. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 43 p. ms.

2467. **Burdick, Edith Marie.** A group test of home environment. Doctor's thesis, 1928. Columbia university, New York, N. Y. New York, 1928. 115 p. (Archives of psychology, no. 101)

The present study develops a group test for determining the home background of children. The test here described endeavors to question the child concerning those things which he will know only if he has been subjected to certain sorts of environment.

2468. **Chase, Sarah E.** Differences in the experiences of children. Journal of educational method, 8: 62-73, 136-46, 194-98, November, December 1928, January 1929.

A study of the out-of-school activities of 200 children in grades four, five, and six.

2469. **Crofoot, Margaret Stimson.** How to foster wholesome racial attitudes in children. Master's thesis, 1928-1929. Boston university, Boston, Mass.

2470. **Crow, L. D.** A study of parent, teacher and student cooperation in high school. School and society, 29: 553-56, April 27, 1929.

Outlines the method of procedure and accompanying results of a questionnaire study of school and home relations in an attempt to improve the scholarship of a certain high school. It is concluded that while the facts brought to light by means of the questionnaires submitted to students, teachers, and parents, had no absolute and possibly little relative value, the study had a profound influence in focusing attention of all concerned upon school problems.

2471. **Gorton, Imogene N.** Parental education work in higher educational institutions. Master's thesis, June 1928. Occidental college, Los Angeles, Calif. 90 p. ms.

Presents a summary of the principal steps in the movement for developing parental education work in the higher educational institutions of the United States.

2472. **Heilman, J. D.** A revision of the Chapman-Sims socio-economic scale. Journal of educational research, 18: 117-26, September 1928.

2473. **Hendricks, Hazel, and McAlpine, Katherine.** Psychiatric social service adapted to public school conditions. In Third yearbook of psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 213-19.

2474. **Metz, Gustave Ernst.** The relationship between certain social factors and school progress among high school pupils in Charlotte, N. C. Master's thesis, 1928. University of North Carolina, Chapel Hill.

The data used in this study were secured from 1,771 questionnaires filled out by high school pupils in Charlotte, N. C. It was found that pupils in the upper grades of the high school came from higher occupational classes of society, lived in homes that had more rooms per person in them, and had more books, magazines, and boys' and girls' magazines in their homes than did students in the lower grades.

2475. **Michael, Matthew Arthur.** Sex instruction in the Catholic high school. Master's thesis, 1929. Catholic university of America, Washington, D. C. 76 p. ms.

2476. **Morgan, Herschel Seymour.** The utilization of the school plant with special emphasis on its use in South Dakota. Master's thesis, 1929. University of South Dakota, Vermillion. 73 p. ms.

2477. **Nevins, Thomas F.** Pupil efficiency and after-school employment. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y.

2478. **Rhyan, Ivah May.** Home problems for boys. Master's thesis, 1929. Indiana university, Bloomington. 152 p. ms.

2479. **Schandorff, Reuben C.** Teacher-community relationships. Master's thesis, 1929. University of South Dakota, Vermilion. 42 p. ms.

2480. **Schlörff, Paul W.** A study of the origin, measurement and manipulation of racial attitudes. Master's thesis, 1929. New York university, New York, N. Y. 55 p.

The present thesis takes up one phase of the study which is the preparation of an actual scale of social distance, a factor of considerable importance in race attitudes.

2481. **Sims, Verner Martin.** The socio-economic status of three school populations. *Journal of educational sociology*, 2: 83-91, October 1928.

This paper contains the results obtained giving the Sim's score card for socio-economic status to three school populations representing the city, town and country.

2482. **Sullenger, T. Earl.** Recipients of mothers' pensions. *School and society*, 29: 424-28, March 30, 1929.

Reviews the history of the movement for providing mothers' pensions, surveys legal provisions in various states and describes a five-year study of the operation of the Nebraska law in a county of that state. Cases studied, 356. Gives two main criticisms of mothers' aid systems as they exist in the United States to-day and makes some general recommendations as a result of the study.

2483. **Toops, Laura Chassell.** The measurement of success in marriage and in parenthood. A research program outlining the construction of tests and their use. *Teachers college record*, 30: 579-88, March 1929.

2484. **Towell, J. F.** The social and educational status of the pupils in a residential suburban community. *School review*, 37: 49-58, January 1929.

Study is based on data obtained from blanks filled out by pupils of the Lyons township high school district, La Grange, Ill., and by blanks filled out by parents of other persons in district between the ages of 7 and 21 years and from records in high-school office. The data were grouped according to the occupations of the fathers of the individuals studied, the I. Q.'s of the pupils in the high school, and the scholastic success in the high school in terms of teachers' marks.

2485. **Walker, Sydnor Harbison.** Social work and the training of social workers. Doctor's thesis, 1928. Columbia university, New York, N. Y. Chapel Hill, University of North Carolina press, 1928. 241 p. (University of North Carolina. Social study series)

See also 77, 88, 91, 93, 97, 126, 138, 144, 154, 227, 281, 283, 288, 348, 352, 464, 520, 690, 1055, 1259, 1266, 1272, 1319, 1341, 1376, 2451, 2460, 2696, 2865, 2956.

CHILD WELFARE

2486. **Gibbons, Charles E., and Stansbury, Chester T.** Child workers in Oklahoma: a study of children employed in Enid, Oklahoma City, and Lawton. New York, National child labor committee, 1929. 35 p.

Deals with the enforcement of the compulsory school attendance and child labor laws and the employment conditions of children who were at work either full time or before and after school hours.

2487. **Myers, C. E.** Baptist orphanage of Virginia. June 28, 1929. State department of education, Richmond, Va. Ms.

2488. **O'Connor, Kathleen.** The West Virginia children's home, Elkins, W. Va. Master's thesis, 1929. Catholic university of America, Washington, D. C. 33 p. ms.

Survey of the institution, including general description, laws, scope and method, equipment, statistical study of children, movement of population and daily routine.

2489. **Robinson, Claude E.** Child workers in two Connecticut towns—New Britain and Norwich. New York, National child labor committee, 1929. 44 p.

Deals with the school and work history of children between 14 and 16 at work in New Britain and Norwich, Conn.

RURAL EDUCATION

2490. **Alabama. State department of education.** Report of the survey of Elmore county schools (Alabama). Birmingham, Birmingham printing company, 1929. 123 p. (Research and survey series, no. 1)

This study includes general administration, the teaching staff, classification and progress of children, finance, transportation and roads, and a proposed building program.

2491. **Bascom, Arthur L.** The relative duties and responsibilities of superintendents and high-school principals in the rural schools of Ohio. Master's thesis, 1929. Ohio state university, Columbus. 80 p. ms.

In this study, all rural school officials in 11 representative counties of Ohio were consulted in attempting to determine what the relative status of the local officials is, what it should be, and how relationships can be improved. Findings: Only 52 per cent agreement median, between the two local officials as to their respective responsibilities, showing the want of any attempt at a common understanding, and much resultant waste and friction. In general, more authority in purely high-school matters should be delegated to the high-school principal. The investigation shows the need for a more careful study of the job of rural-school administrators, the formulation of definite guiding principles for the distribution of authority and responsibility, and the conscientious application of those principles to the local situation.

2492. **Bayne, T. H., and others.** Some aspects of rural education in Tompkins county, N. Y. Ithaca, N. Y., Cornell university, 1929. 30 p.

A study of achievement and progress, teachers, buildings, community relations, school libraries, health, recreation, and finance.

2493. **Beall, John J., and Schwall, Harry E.** A logical school districting program for Fulton county, Ohio. Master's thesis, 1929. Ohio state university, Columbus. 101 p. ms.

The purpose of the study was to determine the logical school districts for Fulton county, Ohio, the community lines and school districts to coincide. Findings: That the 21 existing districts should be reduced immediately to ten and later to seven, with the villages as centers.

2494. **Beard, W. P.** Secondary education of rural young people of Brookings county, S. Dak. Master's thesis, August 1928. University of Wisconsin, Madison.

2495. **Bennett, Omer H.** The status of county superintendents in Ohio. Master's thesis, 1929. University of Cincinnati, Cincinnati, Ohio.

2496. **Bolton, Frederick E., and Bibb, Thomas W.** Shall we elect or appoint the county superintendent? *Nation's schools*, 3: 21-26, February 1929.

From a study of 85 county superintendents, the conclusion is reached that "counties that appoint the superintendent are getting a higher type of service than those that elect him by popular vote."

2497. **Boyle, Lawrence J.** A study of the elementary one room schools of Oregon. Master's thesis, 1928. University of Oregon, Eugene. 61 p. ms.

1,495 one-room elementary schools for the year 1927-1928 were studied to determine actual inconsistencies and inequalities existing among the rural districts. Findings: Term from 32 to 40 weeks; salary from \$73 a month to \$185, median \$103; average daily attendance from 1 to 53, median 10.74; median yearly per-pupil cost, \$84.

2498. **Brettnall, Pearl.** A mental survey of a rural school. Educational research bulletin (Ohio state university), 8: 197-200, May 1, 1929.

Gives the result of mental tests given in a small rural school about 50 miles from Columbus by the Psychological clinic of the Department of psychology of Ohio state university.

2499. **Brogden, L. C.** More efficient supervision of rural schools and economic necessity, Raleigh, N. C., State department of public instruction, 1928. 4 p.

This study sets up some pertinent questions concerning our public schools and attempts to answer these in terms of school supervision. The importance of supervision as good business is made convincing and conclusive.

2500. **Campbell, Vernon Doyle.** A survey of Union township, Butler county, Ohio. Master's thesis, 1928-29. Ohio state university, Columbus.

2501. **Davis, Louise.** The growth and development of education in Greenwood county. Master's thesis, 1928. University of North Carolina, Chapel Hill.

Shows the growth and development of the schools in Greenwood county, S. C., from their beginning to the present time.

2502. **Evans, Mabel.** County school Chautauqua. 1928-29. Northampton county schools, Jackson, N. C.

The purpose of this study was to give a type of county school commencement that will eliminate the unhappy side of contests and produce the best for excellency's sake.

2503. **Gray, Howard A.** A mental, educational and social survey of the school children of Wheatland county, Mont. Master's thesis, 1928. State university of Montana, Missoula.

2504. **Grimm, L. R.** Square deal and the rural child. 1928. - Research department, Illinois state teachers association, Springfield, Ill. Illinois teacher, 17: 4-7, 30-31, September 1928.

A survey of educational opportunities in six counties. Rural schools were found to be very inferior to urban; several suggestions are made for improving rural education.

2505. **Gustin, Margaret, and Hayes, Margaret.** Activity work in North Carolina rural schools. 1928-29. Carteret county public schools, Beaufort, N. C. 25 p. ms.

A program of activity work for rural schools conducted in the Carteret county and Craven county schools.

2506. **Hapner, Leora M.** A testing survey in third class districts, Gallatin county, Mont. Master's thesis, 1928. State university of Montana, Missoula.

2507. **Harbaugh, John W.** The material aspects of one thousand one-teacher schools in southwestern Pennsylvania. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2508. **Hartman, Harry W.** A comparison of rural and town pupils in the ninth grade of high school. Master's thesis, 1928-29. University of South Dakota, Vermilion.

2509. **Hines, Arthur.** Duties of the county superintendent in various states. Master's thesis, June 1929. University of Cincinnati, Cincinnati, Ohio.

2510. **Homer, Ada Young.** A study of the types of educational programs carried on by county superintendents for the years 1927-29. Master's thesis, 1928-29. University of South Dakota, Vermilion. 88 p. ms.

2511. **Hurd, Florence.** The status of the rural supervisor in California. Master's thesis, 1928. University of California, Berkeley. 64 p. ms.

The purpose of this study was to find out the status of those who oversee instruction in the rural schools of California. Findings: On the whole there is lack of sufficient academic and professional training among the rural supervisors of California. Forty-one per cent of the supervisors have made no effort to train themselves in service, although many complained that this is a serious fault in the teachers under them. Salaries are not large enough to compensate for the amount of work done or cover the high cost of travel. Salaries are not paid with any regard to training, experience or number of schools and teachers supervised. Supervisors are handicapped in their work by lack of trained teachers, and having too many schools and teachers to supervise.

2512. **Illinois. State department of public instruction.** The rural one-teacher schools of Illinois. Buildings and equipment, standardization, daily program, demonstration schools. 1929. 96 p. (Circular, no. 234)

2513. **Jenness, S. M.** The development of public education in Cecil county. Master's thesis, 1929. University of Maryland, College Park. 69 p. ms.

A study of the history, geography, social conditions, etc. of the county; the academy movement; the primary schools before 1865; the county in the state school system; the high school movement; the education of colored people; the financial support of education.

2514. **McGrew, E. M.** A study of the migration to the city of the rural young people of Iowa. Master's thesis, 1929. Iowa state college, Ames. 106 p. ms.

The study is based on information furnished by presidents of township farm bureaus scattered throughout the state of Iowa. These presidents were asked for information concerning the young people who lived within a radius of two miles of their home who had left their rural homes during the five year period from 1921 to 1926. Findings: (1) Almost two out of every three of the rural young men of Iowa have migrated to the city during the five year period covered in this study; (2) a limited education did not prevent rural young men from migrating to the city during the period covered by this study; (3) a large number of the rural young men engaged in unskilled labor, but the results indicate that the further they continue in school, the fewer of them engaged in unskilled labor, with the exception of high school graduates. It is evident that the high school does not fit its graduates for occupations higher than unskilled labor; (4) there are other causes besides the school which caused the migration of rural young people to the city.

2515. **Mort, James B.** A survey of the white schools of Warwick county, Va. 1929. University of Virginia, Charlottesville.
2516. **Myers, C. E.** Montpelier District (Hanover county). March 1929. State department of education, Richmond, Va. Ms.
2517. ——— Sussex county survey report. April 12, 1929. State department of education, Richmond, Va. Ms.
2518. **Osborn, Wayland W.** A case study of low achievement in the one-room rural school. Master's thesis, 1929. State university of Iowa, Iowa City. 182 p. ms.
2519. **Peeler, Egbert Noll.** The status of the high schools of Rowan county. Master's thesis, 1928. University of North Carolina, Chapel Hill.
2520. **Post, Grace.** A comparison of vocabularies of rural and town children. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 33 p. ms.
2521. **Samuelson, Agnes.** Qualifications and tenure of county superintendents in Iowa. Master's thesis, 1928. State university of Iowa, Iowa City. 140 p. ms.
2522. **Sawyer, John E.** Survey of the Pamlico county schools. Master's thesis [1929] University of North Carolina, Chapel Hill.
The aim of this study was to find the actual present status of the schools of Pamlico county, N. C., in regard to buildings and equipment, work of the schools, and the teaching force.
2523. **Severin, Richard O.** Comparison of age grade tables among the rural schools of several counties in Nebraska. Master's thesis, 1929. University of Nebraska, Lincoln. 110 p. ms.
A compilation of age grade tables in several counties in Nebraska.
2524. **Tucker, Herman Arthur.** A comparative study of the achievement and persistence in Corydon high school, Corydon, Ind., of pupils from one-room rural schools and pupils from a town graded school. Master's thesis, 1929. Indiana university, Bloomington. 86 p. ms.
2525. **Van Wagenen, M. J.** Pupil achievement in rural, town and city schools. 1929. University of Minnesota, Minneapolis. Minneapolis, University of Minnesota press, 1929. 144 p.
This study shows measurement of mental age and attainment in ten phases of instruction of 4,000 rural pupils in grades 7 and 8; 8,000 town and city school pupils in grades 7 and 8, and 1,000 students within a half year of graduation from the teacher training department of the Minnesota high schools. Pupils in nine months schools surpass those of the same mental age in eight months rural schools. Pupils in town and city schools surpass those of the same mental age in nine months rural schools. Boys surpass girls of same mental age, in range of information and ability to deal with problems. Girls entering high school from the rural schools, especially the eight months rural schools, are at a serious disadvantage in comparison with the boys from the town and city schools. In ranges of information in the content subjects of American history and geography beginning rural schools teachers coming from the high school training classes are but little in advance of the average eighth grade pupils whom they expect to teach the next year.
2526. **Whitworth, Robin Harvey.** Rate of progress in the schools of Mississippi county, Ark. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 63 p. ms.
This study includes all the white schools in the county except one. The survey shows that the children in the more-than-four teacher schools have the best attendance, make the most rapid progress, and have the greatest chance of promotion.
2527. **Wickert, G. H.** The influence of education on the migration to the city of the rural young people of Illinois. Master's thesis, 1928. Iowa state college, Ames. 190 p. ms.
A questionnaire was sent to 1,127 township chairmen of farm bureaus in Illinois. 300 replies were received, giving information about 3,100 rural young people. The study covers the period from 1922-1927. Findings: (1) Over three-fourths of the rural young people of Illinois included in this study who have left their parental homes have migrated to the city; (2) almost twice as many young men as young women have left their rural homes in Illinois during the past five years; (3) there is very little difference in the numbers of

young people who have migrated from community high school, independent high school, and township high school districts; (4) the farmers feel that the chief cause of the present movement of young people to the city is present economic conditions; (5) with the present drain of the better educated rural young people to the city there can be little hope that the agricultural industry can be kept on a par with life in the city.

2528. **Young, Otis E.** The development of public education in southwestern Indiana, especially Posey county. Master's thesis, 1928. State university of Iowa, Iowa City. 92 p. ms.

See also 5, 9-10, 19, 27, 32, 50, 56, 75, 96, 104, 124, 142, 393, 403, 409, 450, 472, 477, 516, 556, 629, 1328, 1360, 1393, 1402, 1438, 1489, 1497, 1567, 1573-1574, 1694, 1703, 2108, 2114, 2227, 2803, 2346, 2370, 2395, 2456, 2651, 2662, 2679, 2753, 2854.

CONSOLIDATION AND TRANSPORTATION

2529. **Bergan, Knute Washington.** An analysis of practices and problems of transportation in the rural schools of Montana. Master's thesis, July 1929. University of Minnesota, Minneapolis.

2530. **Duncan, Neal.** Statutory provisions for school transportation. American school board journal, 78: 45-46, 138, March 1929.

A treatment of constitutionality of provisions for transporting pupils to school at public expense, whether the laws compel school officials to transport pupils, and various other interpretations rendered by courts.

2531. **Evans, Frank Otterbein.** Factors affecting the cost of school transportation in California. Doctor's thesis, 1929. University of California, Berkeley. 169 p. ms.

An attempt to evaluate the expenditures for transportation of pupils in the state of California. Findings: (1) Cost per day for one bus has a correlation of .497 with the distance the bus travels; (2) average number of children transported shows a correlation of .56 with the total cost per day; (3) cost of transportation by contract found to be eight per cent higher for small, and 14 per cent higher for large projects, than with school owned equipment; (4) busses for elementary school children are operated at \$1.50 per day less than high school busses of the same average load; (5) the policy of buying the cheapest possible equipment does not result in lower total cost; \$3,000 to \$4,000 seems to be the best standard for cost of bus; (6) in general, average cost per pupil in California is high compared to other states, and cost per mile is low.

2532. **Fowlkes, John Guy.** Court decisions affecting pupil transportation. Nation's schools, 3: 52-56, February 1929.

An analysis of the rulings of higher courts concerning the transportation of school children, especially as they relate to the establishment of the right of such transportation.

2533. ——— Statutory provisions for pupil transportation. Nation's schools, 2: 33-37, December 1928.

An analysis of the laws governing the transportation of public school children in the various states. Laws reported are those in force in 1928.

2534. **Geiger, Charles W.** Student transportation for union high schools in California. American school board journal, 77: 45, 46, 143, 144, October 1928.

A presentation of statistical data from typical union high schools in California to show the extent of pupil transportation in the state.

2535. **Hauser, L. J.** An intensive study of the organization and administration of the Mabel, Minn., public schools, with special emphasis on consolidation. Master's thesis, 1928. University of Minnesota, Minneapolis.

The application of survey techniques to the evaluation of the organization and administration of a consolidated school.

2536. **Inscoc, Linwood S.** County-wide plan for school consolidation—Nash county, N. C. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 61 p. ms.

2537. **Jones, Evan.** A history and the growth of the consolidation of schools in the state of Mississippi from 1908 to 1928. Master's thesis, 1929. University of Mississippi, Oxford.

2538. **Nebraska state teachers association.** The status of taxation in Nebraska. State aid for school transportation. Lincoln, Nebr., Nebraska state teachers association, November 1928. 18 p. (Research bulletin, no. 4)

2539. **Pettus, B. Page.** High school consolidation in Albemarle county, Virginia. Master's thesis, September 1929. University of Virginia, Charlottesville.

2540. **Punke, Harold H.** The law governing the transportation of pupils to and from school. Elementary school journal, 29: 16-26, September 1928.

This study is an attempt to determine the nature and the extent of the legal regulations governing the transportation of pupils.

2541. **Rogers, Ronald B.** The consolidation of the one-room and two-room schools in Hunterdon county, N. J. Master's thesis, 1928-29. Rutgers university, New Brunswick, N. J.

2542. **Simon, Clyde Maxwell.** A building program for the consolidated district of Cygnet, Ohio. Master's thesis, 1928-29. Ohio state university, Columbus.

2543. **Utah. State department of public instruction.** A study of transportation in the schools of Utah. Rev. ed. Salt Lake City, September 1928. 57 p.

Contains information on the transportation in the various states, the growth of consolidation and transportation, kinds of conveyance, and suggestions for overcoming some of the difficulties.

See also 1840, 1858, 2490, 2732, 2909.

COUNTY UNIT

2544. **Bryan, Hoyt Seymour.** A proposed county unit plan of public school administration for Pickens county, S. C. Master's thesis, July 1929. University of South Carolina, Columbia.

2545. **Butterworth, J. E.** The organization and the administration of education in the counties of New Jersey. 1929. Cornell university, Ithaca, N. Y. 125 p. ms.

A study of the effectiveness of present local school units; the supervising principalship; the county and the county superintendency; and transportation. 36 tables are included.

2546. **Idaho education association.** A study of the county unit. In its Proceedings, 1928.

2547. **Nuttall, L. John, jr.** Progress in adjusting differences in amount of educational opportunity offered under the county unit systems of Maryland and Utah. Doctor's thesis, 1928. Teachers college, Columbia university, New York, N. Y.

This study aims to determine whether argument for county unit (i. e. that such organization would tend to make the educational offerings in the various types of schools in the counties more nearly equal) is justified, as shown in the results obtained from Maryland and Utah. In general the results of this study point out a history of development and improvement in the degree of equality which exists in the educational offerings made in one-teacher, two-teacher, mixed and graded schools under the operation of the county unit plan of administration. The results show progress in equalizing educational offerings under the county unit system.

2548. **Stoddard, Edgar B.** The county unit plan of school organization with practical application to Jackson county, Iowa. Master's thesis, 1929. State university of Iowa, Iowa City. 61 p. ms.

2549. **Tink, E. L.** Certain phases of county educational organization, with special reference to Florida. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 103 p. (Contributions to education, no. 363)

This study treats of historical, legal and actual phases of county unit organization. The qualifications of the educational leadership secured by elective and appointive systems are contrasted. The study also presents objective evidence concerning the relation of special tax districts to the equalization of educational support and opportunity. The evidence presented supports the theory that the appointive system of selecting county superintendents secures the best qualified leadership. The evidence also shows that the special tax school district does not play a desirable part in the attainment of equalization of educational support and opportunity.

See also 1840, 1976, 1987, 1995, 2513.

MORAL EDUCATION

2550. **Armstrong, Walter.** A controlled experiment in the direct method of developing ideals. Master's thesis, 1929. University of Chicago, Chicago, Ill. 104 p. ms.

An attempt to develop ideals by direct teaching. Groups of eighth grade pupils were used. Conclusions: Some traits and ideals may be so developed, others may not.

2551. **Bazinet, John Lahaise.** Moral development in early childhood. Master's thesis, 1929. Catholic university of America, Washington, D. C. 42 p. ms.

2552. **Carlson, Harold S.** Factual information as a factor in producing certainty of opinion. Master's thesis, 1929. State university of Iowa, Iowa City. Prepared under the direction of the Institute of character research, State university of Iowa, Iowa City.

2553. **Cutler, Samuel Lucky.** The Junior craftsman league—an experiment in the motivation of manual training for character training. Master's thesis, 1929. University of New Hampshire, Durham. 100 p. ms.

The organization of the Junior craftsman league among junior high school boys and the utilization of unique devices to motivate their school performances. Scores of experimental groups were higher than control groups in character tests.

2554. **Cutright, Prudence.** A study of character traits in four selected elementary school groups. 1929. Public schools, Minneapolis, Minn.

A study of the scheme of emphasizing character education in each building. With these descriptions of the character education plans at hand the students were given a battery of character education tests of the practical type and opinion type. No attempt was made to evaluate the schemes of character education in use in the different buildings. The aim of this study was to gain some insight as to pupils' performance and knowledge in buildings where definite character training programs were in use.

2555. **Denver, Colo. Public schools.** Character education in the Denver public schools. Denver, Colo., 1929. 32 p. (Monograph, no. 14)

2556. **Detroit teachers college, Detroit, Mich.** The auditorium as a center for character education. Detroit, Mich., Detroit teachers college, 1928. 64 p.

This report was prepared by Marie I. Rasey. It is an account of the activities centered in the auditorium of the elementary school; an attempt to present both theory and practice incident to the development of sturdy character through vital and conscious living.

2557. **Downing, Roger Q.** Possibilities for character development in the Indiana public schools as revealed by an examination of the Indiana state adopted textbooks. Master's thesis, 1929. Indiana university, Bloomington. 70 p. ms.

2558. **Eckard, Elizabeth T.** Opportunities for moral education found in Philadelphia course of study of history. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2559. **Ellis, Samuel Robert.** Character building through literature. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

2560. **Fuda, Anna.** Suggested procedure for personality development in the elementary schools. Master's thesis, May 1928. New York university, New York, N. Y. 46 p.

A minor research into the possibility of teacher guidance in the solution of personality problems on an individual basis.

2561. **Grimm, L. B.** A compilation of ideas regarding objectives and means of ethical instruction. December 1928. Department of research, Illinois state teachers association, Springfield, Ill. 47 p. ms.

A survey of objectives and means of character education in schools of Illinois. A discussion of general problem, with references to scientific studies and current literature in the field. Findings: General life of school is major consideration in such character education as is possible for school to perform; the school part in the program is important but rather limited since heredity, and many environmental factors are also very influential.

2562. **Gustin, Margaret.** Character education. 1928-29. Carteret county public schools, Beaufort, N. C. 25 p. ms.

A study conducted in the Carteret county schools for the purpose of character improvement. Results: County honor school system has caused many improvements and many schools are kept in better condition.

2563. **Hartshorne, Hugh, and May, Mark A.** Studies in deceit. New York, The Macmillan company, 1928. Book I, 414 p.; Book II, 306 p. in 1 vol.

The first report of the Character education inquiry undertaken by Teachers college at the request of the Institute of social and religious research. Three types of deception were tested—cheating, lying, and stealing.

2564. **Hemelt, Rev. Theodore Mary.** Final moral values in sociology. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. 268 p.

2565. **Hightower, Pleasant R.** Biblical information in relation to character and conduct. Doctor's thesis, 1929. State university of Iowa, Iowa City. 87 p. ms.

The results of tests administered to 3,316 pupils, in grades 7 to 12, show that there is no relationship of any consequence between Biblical information and the different phases of conduct studied.

2566. **Horan, Ellamay.** The teaching of Catholic ideals: grade placement, grade emphasis and determination of curriculum material in the form of applications. Doctor's thesis, 1929. Loyola university, Chicago, Ill.

2567. **Lockhart, Earl G.** Attitudes of children toward law. Doctor's thesis, 1929. State university of Iowa, Iowa City.

Three thousand five hundred school children were compared with 150 selected adults. Children were in rural and city populations; adults included 50 lawyers of highest rating, 50 advanced graduate students and a civic club (Kiwanis). Findings: Children resemble adults closely; sex is not an influence; socio-economic status is not an influence; intelligence is an influence if mental age is low, otherwise not important; extremely high I. Q.'s in upper grade levels tend to be nonconformists. The twelfth grade shows clearly a tendency to pull away from the attitude expressed by adults. After the mental age of 14 or 15, degrees of intelligence appear to make no difference until we come to very highly intellectual groups in the high school. Many individual cases are discovered who manifest a rebellious attitude toward law, but these cases occur in all ages and at all levels of intelligence and socio-economic status.

2568. **McDonough, Sister Mary Rosa.** The empirical study of character. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C., Catholic university of America, 1929. 222 p.

Pt. I of this study, A review of empirical studies of character and personality, was published as vol. II, no. 3, of Studies in psychology and psychiatry (Williams and Wilkins company, Baltimore, Md.); Pt. II, The determination of general factors or fundamental traits of character and their relation, was published as vol. II, no. 4, of the same publication. Pt. I is a review of empirical studies of character, made by use of rating scales, questionnaires and questions, experiments, performance tests and observations, paper and pencil tests and by combinations of these methods. The methods used, the number of subjects, the reliability and validity of the measures and the results of the studies are presented. Pt. II deals with the intercorrelations of ratings on 34 character traits. The intercorrelations were analyzed by Spearman's tetrad difference method, by Dodd's technique and by a new method involving Kelley's method. The fundamental traits of will, sociability and emotionality were found. Types of character were noted.

2569. **Mager, Flora.** A study of moral values in the literature of the Philadelphia course of study in English, grades 1 to 6. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2570. **Mensing, Cyprian.** An activity analysis of the four cardinal virtues suggested by the writings of St. Thomas. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. 143 p.

This study has been limited to the making of a classified list of the moral virtues and opposing vices, together with a corresponding list of activities which exemplify their practice in the daily lives of individuals. By means of these activities it is hoped that the child will be directed into such channels as give promise of greatest development.

2571. **Merryfield, Glenn Bovard.** A study of the trend of giving a place to moral teaching in the high schools of California. Master's thesis, June 1929. University of Southern California, Los Angeles.

2572. **Parcels, Lillian Elizabeth.** Group education and character building. Master's thesis, 1928-29. Boston university, Boston, Mass.

2573. **Petite, J. Edward.** Developmental procedure in character education. Master's thesis, 1928. State college of Washington, Pullman. 122 p. ms.

A study of 99 pupils in an experimental school and 52 in a control school, to ascertain the results of developmental (project) teaching in experimental as compared with control schools. Equivalence of groups was established. Initial and final tests in character traits and in regular school subjects were given. Conclusions: The number of cases is too small and the study too limited to justify final conclusions; wherever a considerable gain was made the difference favors the developmental school; superior gains for the experimental (developmental) school in health, Stanford achievement tests, and honesty, were found; both schools lost in emotional control as measured; no corporal punishment was found in the developmental school (99 pupils), three cases in the control group (52 pupils); attendance was better in the developmental school; feeling of "good fellowship" was very marked in developmental school.

2574. **Priddle, Oamer Daniel.** Procedures in developing character controls through instruction. Doctor's thesis, 1929. University of Pennsylvania, Philadelphia. Philadelphia, 1929. 147 p.

2575. **Secor, Blanche L.** Significant movements in character education in the public schools of the United States. Master's thesis, 1929. Northwestern university, Evanston, Ill.

2576. **Seymour, Frank C.** Relation between intelligence, knowledge, character. Master's thesis, 1929. Massachusetts agricultural college, Amherst. 125 p. ms.

Tests of intelligence, Biblical and theological, and character ratings were administered to about 400 individuals. The relation between the factors considered was not highly significant.

2577. **Spangler, George P.** The legal status of moral and religious education in the public schools of the United States. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2578. **Steere, H. J.** The effect of character traits on scholastic achievement. School and society, 29: 707-708, June 1, 1929. ✓

A study made for the purpose of securing information as to the effect of character traits on scholastic accomplishment. Five hundred and seven pupils of the median school age of 9 years 3 months from the eighth, ninth and tenth grades of two New York schools were rated by carefully selected teachers on initiative, control of attention, persistence, trustworthiness and sense of accuracy, and these ratings evaluated with respect to scholarship ratings of the same pupils. On the evidence of the data given the inclusion of a more definite program of character development in connection with the regular school work will pay worthwhile dividends in terms of better school records.

2579. **Watson, Goodwin B.** Some factors related to happiness: a study of 400 students, indicating major differentiating factors between happy and unhappy. Chicago, Religious education association, 1929.

2580. **Wibbeler, Benjamin H.** The problem of clean mindedness among secondary pupils and some of the factors and methods involved in clean mindedness. Master's thesis, 1929. Indiana state teachers college, Terre Haute. 105 p.

The results of a questionnaire study of 793 pupils indicate that the school is helpful to the pupil achieving clean mindedness; that the teaching of clean mindedness is unsystematic, but that pupils derive many benefits from the school, from teachers, from books, and from extracurricular activities.

2581. **Wilson, S. L.** Character training in the public school. Master's thesis, 1928-29. Howard college, Birmingham, Ala.

2582. **Woodrow, Herbert, and Bemmels, Violet.** Overstatement in third-grade children. Journal of applied psychology, 12: 404-16, August 1928.

An overstatement test intended for third-grade children was devised and given to 271 children composing nine third-grade classes of city schools. In addition to the children's overstatement scores, the data include character markings, intelligence and achievement scores. The average reliability coefficient for the teachers' character rankings was +0.69. The average correlation between teachers' character rankings and M. A. was +0.25. The average correlation between character rankings and school achievement (calculated only for two classes) was +0.37.

2583. **Wrenn, C. G.** Factors determining a child's moral standards. *Education*, 49: 206-13, December 1928.

Eighteen moral problems were given to eighth-grade pupils for the purpose of studying the relationship between a child's moral standards, his intelligence rating, and certain home conditions. The relation of the moral-judgments score to the intelligence quotient was found to be relatively high.

See also 234, 261, 1738, 2624, 2970.

TESTS

✓ 2584. **Brown, F. J., and Shelmadine, Marguerite.** A critical study in the objective measurement of character. *Journal of educational research*, 18: 290-96, November 1928.

A conclusion drawn from this study is that where it is a question of honesty, at least 90 per cent of the children know what the right action should be.

2585. **Character education institution, Washington, D. C.** Five point plan for character education in elementary schools; High school advices for character education in high schools; Character graph. Washington, D. C., National capital press, June 1929.

Five point plan is complete plan for character education in elementary schools. It contains the "Children's morality code," which has been verified as the elementary morality of civilization, the Character graph, which is a list of the basic civilization virtues, character projects, classroom organization, and character motives and personal guidance. High school advices is a plan for character education in high schools, but is not verified. It is given merely as advices to teachers desiring to do something in high school.

2586. **Furfey, Paul Hanley.** Tests for the measurement of nonintellectual traits. Washington, D. C., Catholic education press, 1928. 35 p. (Catholic university of America. Educational research bulletins, vol. III, no. 2, October 1928)

A summary of standard tests for personality traits which shows that such tests are markedly inferior to our best intelligence and achievement scales. They are so far inferior in fact that few if any of them are perfect enough to be of practical use except to research workers.

2587. **Jones, Vernon.** Ideas on right and wrong among teachers and children. *Teachers college record*, 30: 529-41, March 1929.

A test of ethical choices was given to both pupils and teachers. The results show a lack of agreement among teachers and pupils about right and wrong.

2588. **Moore, W. J.** Can character be measured? Master's thesis, 1929. University of Kentucky, Lexington.

2589. **Washburne, John N.** An experiment in character measurement. *Journal of juvenile research*, 13: 1-18, January 1929.

RELIGIOUS AND CHURCH EDUCATION

2590. **Alexander, Frank Dewitt.** A study of courses in religious education. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 859 p. ms.

2591. **Alvarez, Ricardo B.** The child's idea of God. Master's thesis, 1929. Yale university, New Haven, Conn. 194 p. ms.

A general survey of the field to find out what other authors have discovered about this subject; a discussion as to how children arrive at their ideas of God; and an original inquiry by means of tests as to what children think about God.

2592. **Blaine, Harry Elmer.** Biblical knowledge of high school pupils. Master's thesis, 1929. University of Chicago, Chicago, Ill. 110 p. ms.

Approximately 300 high-school pupils of Joplin, Mo., were given tests in Old and New Testament. Results were studied by churches, students organizations and by classes, and compared with results of standard mental test, and with scholarship grades. Conclusions: Biblical knowledge was rather meager; wider investigation is needed.

2593. **Bowden, Henry J.** A study of the religious education programs offered in six negro churches in Harlem. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 39 p. ms.

2594. **Bragdon, Clara Dora.** Some problems involved in using the historical method of interpreting the Bible with children of school age. Master's thesis, 1928-1929. Boston university, Boston, Mass.

2595. **Brown, B. Warren.** Report of the survey of the educational work and responsibility of the Presbyterian church in the United States, 1928-29. Board of education, Presbyterian church, U. S. Louisville, Ky., August 1928. 88 p.
Whole work of this church in education.

2596. **Carulli, Virgil.** Religious education of Latin immigrants in New York and vicinity. Master's thesis, 1928. New York university, New York, N. Y. 61 p.

Describes the religious life of Italians in America, giving their historical background, showing their reactions to the attempts made to approach them, and suggesting recommendations for the future.

2597. **Case, Ralph T.** A study of the placement in the curriculum of selected teachings of the Old Testament prophets. Doctor's thesis, 1929. State university of Iowa, Iowa City. 57 p. ms.

A comprehension test was given to 3,000 school children from grades four to twelve in four representative school systems of Iowa, for the purpose of ascertaining the degree of comprehension of selected teachings of the Old Testament prophets by children of different ages. The conclusions show an increasing comprehension of the test as a whole with the percentage of right answers rising from level to level, beginning with 43 at mental age eight and attaining 88 at mental age sixteen. The girls show a distinct, though not great, superiority over boys at every mental age except eight. The factor of religious training seems to have little influence on comprehension.

2598. **Churchill, Urban M.** A suggested basis for the religion course in the first year of high school. Master's thesis, 1929. Catholic university of America, Washington, D. C. 113 p. ms.

A presentation of: (1) the chief complaints against the present methods of teaching religion in the Catholic schools; (2) the purposes and aims of courses proposed as remedies; (3) an outline of the nature and needs of the first year high school boy. In the light of the nature and needs of the pupils a tentative basis for a course in religion for first year high school pupils is developed.

2599. **Clarke, Martha Ann.** The contribution of Luther to religious education. Master's thesis, 1928-29. Boston university, Boston, Mass.

2600. **Cottrell, Donald P.** Instruction and instructional facilities in the colleges of the United Lutheran church in America. Doctor's thesis, 1929. Teachers' college, Columbia university, New York, N. Y.

A study of the instructional situation as it exists in 16 colleges and junior colleges of the United Lutheran church in America. Seven of the colleges report that the instructional program is in the direct charge of the president, two report that the assistant to the president holds this responsibility, and nine report that the dean is the officer in charge. Subject departmental organization exists in 11 colleges. In these 11 colleges a total of 154 departments is listed. The educational guidance of students was found to be cared for with little formality in all the colleges. Auxiliary facilities for educational work are not strongly developed.

2601. **Elliott, Robert H.** Magazines as a factor in religious education. [1929] Yale university, New Haven, Conn.

2602. **Fleming, Sanford.** Children in the life and thought of New England churches. Doctor's thesis [1929] Yale university, New Haven, Conn.

2603. **Flight, John W.** A course of study for young people on the modern approach to the Old Testament. Master's thesis, 1929. Yale university, New Haven, Conn. 171 p. ms.

A presentation, designed for young people, of the changing attitudes toward the Old Testament, tracing the long scholarly process culminating in modern historical-critical study; indicating the new approach and problems; showing results affecting value and use of Old Testament in Christian religion to-day.

2604. **Franklin, Harvey Benjamin.** Valid aims for a curriculum in religious education. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2605. **Garrettson, Aletta M.** Rise, development and present status of the training schools of the Woman's home missionary society of the Methodist Episcopal Church. Master's thesis, August 1928. Northwestern university, Evanston, Ill.

2606. **Graham, Mary Eleanor.** Educational activities of the Young woman's Christian association in the Mississippi district. Master's thesis, 1929. University of Illinois, Urbana.

2607. **Gumm, Glenn G.** The contributions of Horace Bushnell to the field of religious education. Master's thesis, August 1928. Northwestern university, Evanston, Ill.

2608. **Hanna, Claude Clark.** The effect of religious influence upon the conduct of high school students. Master's thesis, 1929. University of Chicago, Chicago, Ill. 88 p. ms.

Two high schools of approximately 700 enrollment each formed the basis of this study. Conclusions: Elimination of those who attend neither church nor Sunday school would eliminate a rather high percentage of disciplinary cases—but cases of discipline are by no means confined to those who have had no religious connections. Such religious training as young people have had was never given with the idea of affecting school conduct. If the religious influence of the church could be made to touch the lives of more high school students and could be made more effective, the disciplinary problems of the high school might be reduced.

2609. **Herman, Abbott Philip.** A curriculum of religious education for a student church. Master's thesis, 1928. University of Illinois, Urbana.

2610. **Holland, Rev. Jerome P.** The development and present organization of the diocesan system of Catholic education in the diocese of Brooklyn, N. Y. Master's thesis, 1929. Catholic university of America, Washington, D. C. 46. p. ms.

The history and development of the diocesan system of Catholic education in the diocese of Brooklyn is traced from 1853 up to the present time. The present organization is described and the functions of the various administrative and supervisory officers are analyzed and defined. A few of the unique features of this diocesan system are outlined and their principal characteristics discussed.

2611. **Hudson, H. C.** The influence of the Baptists on education in South Carolina. Master's thesis, 1928-29. University of North Carolina, Chapel Hill. Ms.

2612. **Kelly, Robert L.** The Episcopal colleges. December 1928. Council of church boards of education, New York, N. Y.

A survey of five Episcopal colleges, giving contribution to religious life of Episcopal church, faculty, finances, curriculum, etc.

2613. **Klosterkemper, Herbert A.** The accrediting system and its relation to Catholic high schools. Master's thesis, 1929. Catholic university of America, Washington, D. C. 65 p. ms.

2614. **Leary, Daniel Leo.** Educational supervision in Catholic schools. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 141 p. ms.

This study shows that on an average the community supervisors who contributed to this study visit each of their 175 teachers four or five times a year. Their time is mainly divided between supervision and clerical work, while a few supervisors devote some time to experimental work and a few also teach. The median per cent of time devoted to constructive supervision is 55 with a range from 12½ to 85.

2615. **Lilly, Rev. Edward Charles.** The Catholic religious vacation school. Master's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C., Catholic education press, 1929. 51 p. (Catholic university of America. Educational research bulletin, vol. IV, no. 3, March 1929)

The character of the religious vacation school is studied under four heads: the setting and aim; the organization and operation; the curriculum, and the recreational or health program. Findings: Catholic vacation schools were found to be operated in over 40 dioceses, not as a substitute for parochial schools but as an emergency measure to partially meet the need where there is no parochial school. A report is given of observation of two schools in operation. The results effected by religious vacation schools were shown to be beneficial to the children, to the parishes, and to the communities in which they operated.

2616. **McKibben, Frank M.** A study of the factors that condition efficiency in the church school. Doctor's thesis, 1928. Northwestern university, Evanston, Ill.

2617. **MacLean, Angus H.** The idea of God in Protestant education. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A study of 575 children of elementary grades to discover their ideas about God. 63 courses of study were read and 75 services of worship were examined to obtain a fair representation of theistic teaching. Findings: (1) There is practically a universal agreement among authors on general presuppositions such as the omnipotence, the omniscience and perfect goodness of God, but wide variations in teaching on more specific subjects; (2) wide variations occur within lesson systems; (3) except in the Episcopalian texts there is little evidence of any attempt to systematize teaching about God; (4) evasive practices in dealing with controversial questions are common in the more liberal texts; (5) there is at present a trend away from Bible-centered curricula, and, significantly enough, a trend towards the emphasis of personal and social morality in terms of modern problems; (6) liberalism, to the extent that it exists among children at all, is widespread, though the general central tendency leans to conservatism, etc.

2618. **McLeod, Margaret Lois.** A study of the pulling power of certain religious statements on high school students. Master's thesis, 1929. University of Denver, Denver, Colo. 97 p. ms.

Five hundred and six Denver high school students were asked to place in order of highest rank each of 24 tenets as "Against an angry man let him not in return show anger; let him bless, when he is cursed." Comparisons then were made for boys vs. girls, Christians vs. Jews, and high school students vs. college students. Findings: Sex is a determining factor; boys assigned a higher rank to the tenets than did girls; religious training makes a difference, as between Jews and Christians; education had little if any results on the reaction, as is shown by little differences between high school and college students.

2619. **Mott, S. M.** Religious education in the American democracy. Master's thesis, 1928. New York university, New York, N. Y. 93 p. ms.

The study of religious education in general in the various states under their laws; in specific, the study of religious education in the public schools of Indiana. Findings: (1) The parochial schools are excellent, but they meet only a small per cent of children; (2) the parallel church school is growing in popularity but is inferior to the public school if proved unsatisfactory; (3) the church under public school direction proves unsatisfactory because of denominational differences; (4) religious education in public schools with public school teachers is proving satisfactory in those neighborhoods which are congenial. The democracy needs religious education.

2620. **Nichols, Dorothy Louise.** The use of pictures in training children (aged six to twelve), in worship. Master's thesis, 1928-29. Boston university, Boston, Mass.

2621. **O'Rear, F. B., and others.** Survey of higher education for the United Lutheran Church in America. New York city, Teachers college, Columbia university, 1929.

2622. **Paye, Paul.** The religious beliefs of college students. Master's thesis, June 1929. Colorado state teachers college, Greeley. 242 p. ms.

A study of the student body of Colorado state teachers college, fall quarter, 1928; 630 questionnaires were used. Conclusions: (1) Boys are less orthodox in their beliefs than girls; (2) boys are more certain of their beliefs than girls; (3) students learn to interpret the Bible more liberally as their college life advances; (4) girls are influenced less by college than are boys; (5) students entering college in 1928 were less orthodox than those entering two or three years ago; (6) morality decreases with length of college life; (7) overwhelming belief in evolution among the students; (8) majority of students believe in prayer, tendency toward a psychological interpretation of it; (9) the majority believe in mortality; 25.39 per cent believe in heaven and hell; (10) belief in a personal God decreases as the length of college life increases. Eight other conclusions.

2623. **Powell, Wilfred E.** The meaning of religious education. Doctor's thesis, 1920. Yale university, New Haven, Conn. 274 p.

The study seeks to clarify the meaning of religious education from the Christian point of view. It examines the more general use of the term and its use in the stricter sense, considers the problems raised, and suggests a conception of Christian religious education.

2624. **Powers, Francis F., and Taylor, H. R.** Bible study and character. June 1928. University of Washington, Seattle, and University of Oregon, Eugene. Worcester, Mass., Clark university press, 1928. 9 p.

An investigation of the extent to which Bible study affects character ratings of an individual. Findings: Compulsory Bible study gets results in information, but defeats its avowed purpose in stimulating commendable behavior.

2625. **Richart, Lillian M.** The curriculum of the church school of the United States. Master's thesis, August 1928. Colorado state teachers college, Greeley. 116 p. ms.

Analysis of 10 books by frontier thinkers in religion in America to day. Conclusions: Finds little harmony between the material taught in the public school and that taught in the church school. Analysis of the 10 books shows that the authors are deeply interested in religion but they do not touch the problem of the curriculum in the church school with one exception, Dr. George A. Coe, who gives 50 pages to it. The writer feels that there is a problem in the church school, worthy of much time and thought. The fact that leading men are waiting for others to blaze the trail in this new field does not lessen the need, or the responsibility of the church. The fact that books on the curriculum in education are written, and scattering magazine articles on the need of revision of the curriculum in the church school, does not lend much help. Apparently there is theory enough without anything definite having been done by the leaders of religious thought.

2626. **Rives, Oscar Lee.** Week day church schools for southern Baptists. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 66 p. ms.

An inquiry into the desirability and feasibility of the southern Baptist convention. Findings. (1) The reasons for and the methods of developing week-day church schools do not involve principles contrary to the ideals of the denomination under consideration; (2) the week-day church school by furthering the aims of religious education, supplements the work of the Sunday school and is therefore desirable for the churches considered; (3) although certain administrative, curricular, legal and financial difficulties are involved, these difficulties can be overcome; (4) because of the desirability and feasibility of week-day church schools, the Sunday school board of the southern Baptist convention should officially promote these schools as a part of its educational program.

2627. **Roberts, Vienna Wren.** The curriculum in religion of the Disciples college. Master's thesis, 1929. Yale university, New Haven, Conn. 152 p. ms.

All courses in Bible, religious education, missions, etc., of every junior and senior liberal arts college affiliated with the board of education of the Disciple church were studied. Data were secured from catalogues and questionnaires and evaluated according to authorities in the field.

2628. **Rowland, Ann Graham.** The art method of teaching religion to primary children. Master's thesis, 1928-29. Boston university, Boston, Mass.

* 2629. **Rugh, Dwight.** American students and missions. Master's thesis, 1929. Yale university, New Haven, Conn. 191 p. ms.

This study included: (1) Historical sketch of missions in student Christian movement; (2) changing purposes, motives, practices of missions among students; (3) missions and modern educational philosophy and practice; (4) missions and Christian world citizenship; (5) possible trends of missions among students.

2630. **Samitz, Samuel.** Survey of Jewish education in Philadelphia. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2631. **Smart, Thomas.** History and characteristics of a specified list of Bible institutes in the United States. Master's thesis, August 1928. Northwestern university, Evanston, Ill.

2632. **Spacht, Grace Lucille.** The present-day attitudes of college students toward Christianity. Master's thesis, 1928-29. Boston university, Boston, Mass.

2633. **Strang, Ruth.** Religious activities of adolescent girls. Religious education, 24: 313-21, April 1929.

2634. **Stright, Hayden Leroy.** Teaching values of the legends and myths of Israel. Master's thesis, 1928-29. Boston university, Boston, Mass.

2635. **Thompson, James V.** The construction and use of standardized tests in religious education. Doctor's thesis, August 1928. Northwestern university, Evanston, Ill.

2636. **Tolman, Wilfred Reuben.** The development of secondary schools by the Seventh Day Adventists of North America. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 77 p. ms.

2637. **Vander Roest, Jan C.** Religious education and the Reformed church in America. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 42 p. ms.

2638. **Wheeler, Lester B.** Do college students know and understand the Lord's prayer? *School and society*, 28: 735-36, December 8, 1928.

Describes an experiment conducted in the East Tennessee state teachers college to determine the extent to which the college students knew and understood the Lord's Prayer. Results show that a much larger percentage of the students know and can repeat the Lord's Prayer than can interpret or understand the meaning. The conclusion is drawn that if these students who are prospective teachers do not know the meaning, there is not much hope of their teaching this passage to children, to whom by law they are required to teach it.

2639. **Wilson, Nellie.** An analysis of trends of thought in current religious education as shown in selected textbooks used in college in this field. Master's thesis, August 1928. Northwestern university, Evanston, Ill.

See also 16, 20, 48, 51, 54, 65, 147, 148, 281, 464, 1149, 1184, 1280, 1332, 1425, 1441, 1747, 1753, 1766, 2001, 2146, 2150, 2406, 2475, 2577, 2839, 2845, 2991.

MANUAL AND VOCATIONAL TRAINING

2640. **Ballard, Robert E.** Administrative problems relating to vocational courses of Iowa high schools. Master's thesis, 1928. Iowa State college, Ames. 82 p. ms.

A questionnaire was sent to 100 schools, having vocational work, selected at random. Conclusions: (1) Vocational courses offered in Iowa high schools present special problems to the administrators; (2) among the vocational courses offered in Iowa high schools we find the following: vocational agriculture, vocational home economics, normal training, vocational commercial, and trade and industry courses; (3) slightly more than one-half of the schools to which questionnaires were sent appear to exercise some care in selecting students for vocational courses; (4) the greater problems shown by the study are: (a) The exceedingly high cost of operation; (b) the difficulty in obtaining efficient instructors; need for closer cooperation between the schools and communities; (c) education of the public to see the benefit of vocational courses; (e) need of introducing courses to fit the community.

2641. **Bennett, Vernon G.** Vocational education of junior college grade. Baltimore, Md., Warwick and York, inc., 1928. 244 p. (University research monographs, no. 6)

Findings: The magnitude of the load of vocational education of junior college grade is expressible as follows: (1) The system must be prepared to graduate 190,000 persons annually; (2) to accomplish this, the system must be capable of providing for the enrollment of 471,000 students; (3) this would call for the maintenance of 22,000 classes; and (4) the raising of \$143,000,000 annually.

2642. **Blackwell, J. Davis.** The organization and supervision of vocational education in Maryland county high schools. Doctor's thesis, 1929. Johns Hopkins university, Baltimore, Md. Baltimore, Md., The Twentieth century printing company, 1929. 191 p.

2643. **Bryan, Forrest K.** Trade and industrial education in Colorado. Master's thesis, June 1929. Colorado state teachers college, Greeley. 111 p. ms.

A study of the definition and aims of the National vocational education act, plans of Colorado state board for vocational education, policies of the Federal board for vocational education, and report of the Committee for national aid to vocational education. Findings: Evening classes serve the greatest number of people and occupations. Ninety-four different subjects have been touched thus far. When we consider the multitude of industrial occupations and the segments of each that may be used for instructional purposes, it is reasonable to say that evening school work has scarcely begun. Part-time education shows a steady increase. Sixteen subjects have been offered during the period studied. Continuation and day-trade classes are much smaller in number of courses and enrollment. Evening classes cost most and continuation classes the least. "During the period studied, there have been 31,580 enrollments in trade and industrial classes. In some instances, individuals are counted two or more times depending upon the number of courses taken; but, in general, this number indicates the extent of service of this type of education. Based on results of returned questionnaires, instruction in trade and industrial classes averages 87 per cent efficient. Trade and industrial education presents in almost virgin field for study and research as evidenced by the dearth of contracts and comparisons made by this treatise with other studies in the field."

2644. **Davis, Edwin.** General industrial education in the secondary schools of Kansas. Master's thesis, July 1929. University of Minnesota, Minneapolis.

2645. **Epstein, D. T.** Correlation between shopwork and penmanship, 1928-29. College of the city of New York, New York, N. Y. 6 p. ms.

* Nineteen fifth-year boys were tested in handwriting and graded in shopwork. Findings: A coefficient (Spearman rho) of .68 was found.

2646. **Farish, Henry James.** National and state provisions for vocational training. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 157 p. ms.

2647. **Fleming, Joseph W.** An objective method for selecting potential automobile instructors. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2648. **Grinstead, Noel Bryan.** Industrial arts in the senior high schools of Ohio. Master's thesis, 1928-29. Ohio state university, Columbus.

2649. **Hill, George H.** The development of a pre-vocational junior high school in a small community. Master's thesis, 1928-29. University of North Carolina, Chapel Hill. Ms.

This study was the outcome of an experiment tried in a small Georgia consolidated school, the aim being to develop a program of curricula and extracurricular activities which should be in conformity with the seven principles of secondary education. Various measures, mostly subjective, tended to justify the program prepared.

2650. **Hogadone, Edwina Belle.** Situation cards for training non-selling workers. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2651. **Jenkins, H. L.** A survey of the status of manual training in the rural high schools of California. Master's thesis, June 1928. Humboldt state teachers college, Arcata, Calif.

2652. **Kleh, Walter Allen.** A cost accounting system for high school departments of industrial arts. Master's thesis, 1929. University of Illinois, Urbana.

2653. **Lytle, Charles W.** Forms for the administration of cooperative courses. In Association of cooperative colleges. Proceedings, vol. 1. New York city New York university, 1929. p. 95-114.

2654. **Milwaukee, Wis. Vocational school.** A study of the food habits of vocational school families. 1929. 66 p. ms.

This survey included a study of the expenditures for food and the kinds of food eaten by families of part time vocational school students. Six hundred families were studied.

2655. **Newkirk, Louis V.** Validating and testing home mechanics content. Master's thesis, 1929. State university of Iowa, Iowa City. 105 p. ms.

2656. **Osborn, L. G.** A study of printing as a high school subject. East St. Louis, Ill., Public schools [1929] 15 p. ms.

Questionnaires were sent to a number of schools in an attempt to gain some factual information about printing, its aims, its administration, the preparation of teachers of printing, necessary printing equipment, and supplies.

2657. **Pueblo, Colo. School district no. 1.** The fundamental aims of industrial education in grades and high school. [1928] 27 p.

Outline course of study.

2658. **Rees, Jenkins Bennett.** A course in vocational science for the San Jose high school. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2659. **Sink, Orville E.** Provisions for industrial arts equipment in laboratory schools. Master's thesis, 1929. Ohio state university, Columbus. 132 p. ms.

Twenty-two laboratory schools in 14 states were studied. Eighty per cent of teacher-training institutions have some form of laboratory school; 88 per cent of these include industrial arts in their program of studies; 85 per cent have a "general" shop; 21 different units of work are offered. Those most frequently found are bench work, electrical work, sheet metal work, mechanical drawing, machine shop, forge work, wood turning, printing, auto mechanics, and concrete construction. There are 13 different kinds of unit shops found in the schools studied. Those most frequently found are woodwork, drawing rooms, print shops, electrical shops, and sheet metal shops. Most of the shops are fairly well equipped. Most of the equipment is old. A larger variety of equipment could have been purchased, had smaller machines been purchased. In most shops the lighting is bad.

2660. **Skrivauk, Rudolf.** Construction of curriculum for radio service men. 1929. New York university, New York, N. Y. 30 p. ms.

A course of study for the training of radio service men, in connection with Radio manufacturer's association.

2661. **Smith, Nevin J.** A prognostic study in the trade school. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2662. **Stith, Forrest Grove.** Determining the basic projects for manual arts in rural high schools. Master's thesis, 1928. State university of Iowa, Iowa City. 55 p. ms.

2663. **Taylor, Don. H.** Intelligence of young printers. Personnel journal, 8: 29-35, June 1929.

The National junior personnel service, in a recent survey of the adjustment problems of employed youth in Greater New York, gave the Otis advanced examination to several occupational groups, including more than 1,200 young printers. Composing room workers seemed unselected on the basis of the ability measured by the test. Pressroom workers, on the other hand, showed a marked inferiority in the ability measured by the test. The results seemed sufficiently significant to warrant a more elaborate effort to determine the characteristics of successful workers in the trade. Such a study is in progress.

2664. **Thompson, Robert C.** A study of vocational education in South Carolina under the Smith-Hughes plan, 1918-1928. Master's thesis, June 1929. University of Chicago, Chicago, Ill. 105 p. ms.

Presents South Carolina's need for vocational education and traces the effort of the state to meet that need. Findings: Expenditures for agricultural, industrial and home economics education are influenced largely by amount of federal funds available, and the program as organized at present is reaching only a small percentage of the persons eligible for it under the terms of the Smith-Hughes act.

2665. **Thompson, Roger M.** Report of a study of Connecticut state trade schools covering a period of eight years, 1920-1928. January 1929. Connecticut state board of education, Hartford. 95 p. ms.

2666. **United States. Federal board for vocational education.** Bibliography of foreman training. Washington, D. C. [1929]

A selected and annotated list of references on recent books, pamphlets and magazine articles.

2667. ———— The organization of a program of foreman leader training in the city of Philadelphia. Harrisburg, Pa., Department of public instruction [1929?] 35 p. ms.

Foreman conference leader training. A report of a study of the facilities in this field of vocational education carried on at Philadelphia in cooperation with the State department of education, and the Philadelphia city board of education, September 1927, and May 1928

2668. ———— Progress in foreman training. Washington, D. C. [1929]

A study of the results of eleven leader training conferences conducted during the years 1926 and 1927.

2669. **Walters, Ralph Hawkes.** A manual of experiments in direct and alternating current electricity for the use of students who desire to enter the semi-professional occupations in electrical engineering. Master's thesis, May 1929. University of California, Berkeley. 215 p. ms.

The purpose of this study was: (1) To select certain occupations in electrical engineering that may be considered representative of the semi-professional level; (2) to obtain a list of experiments in direct and alternating current electricity with the view of writing a manual of experiments; (3) to prepare a manual from the list obtained above. A list of 50 experiments comprising the manual was submitted.

2670. **Waters, Eugene A.** The prognostic value of the Stenquist mechanical ability test. Master's thesis, July 1929. Kansas state agricultural college, Manhattan. 33 p.

Checks test scores with grades in shop courses for over 500 high school and college students. Finds no relationship.

2671. **Whitney, Frederick L., and Hadden, S. M.** Industrial arts objectives in the junior high school. 1929. Colorado state teachers college, Greeley.

Industrial arts courses offered in junior high schools located in the Colorado state teachers college placement area were tabulated.

2672. **Williams, Gladys Potter.** The educational service of the art museum to the industrial arts and to the schools, 1918-1928. Master's thesis, June 1929. University of Cincinnati, Cincinnati, Ohio.

2673. **Wolfe, Clifford Edwin.** Organization of industrial arts education in the senior high school. Master's thesis, 1928-29. Ohio State university, Columbus.

2674. **Wright, Mary Kathryn.** A training program for tea-room waitresses. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

See also 104, 516, 717, 1024, 1064, 1076, 1187, 1476, 1486, 1621, 2056, 2062, 2118, 2248, 2439, 2553, 2780, 2832, 2922; and under Agriculture.

EDUCATIONAL AND VOCATIONAL GUIDANCE

2675. **Alhambra, Calif. City schools.** Department of educational research and guidance. A study of the advisability of establishing a vocational bureau at the high school. February 1929. Educational research and guidance bulletin (Alhambra, Calif.), 1: 5-7, April 1929.

Results of an inquiry to business firms in the city. Replies tend to justify the establishment of a vocational bureau.

2676. ————— A study of the choice of occupations of 100 entering high school pupils. Educational research and guidance bulletin (Alhambra, Calif.), 1: 9-11, November 1928.

A sampling of the statements as to plans for life work shows that 27 per cent have no plans; 38 per cent of those reporting hope to enter professional service.

2677. **American council on education. Committee on personnel methods.** Personnel methods. Washington, D. C., American council on education, 1928. 68 p. (Educational record supplement, no. 8, July 1928)

Contains a report of progress of the Committee on personnel methods, the report of the sub-committee on personnel record cards, and report of the sub-committee on personality measurement, including a selected bibliography. A report on the experimental development of the personnel college record card.

2678. **Anderson, Roy N.** Rates of promotion in Army and Navy: personnel study of officers of highest rank. Personnel journal, 8: 36-46, June 1929.

The data here presented are of practical importance in showing a young man who aspires to a military career what may be his probable rate of advancement on the road to the top. They furnish a new example of the investigation of vocational histories as an aid in personnel work. Vocational ladders are made representing the histories graphically.

2679. **Bedford, James Hiram.** A study of the vocational interests of California high school students based on a survey of twelve rural high schools. Master's thesis, 1928. University of California, Berkeley. 97 p. ms.

A study to determine what educational readjustments are needed in order to meet the vocational interests of high school students on one hand, and the demands of the occupational world on the other hand. Findings: (1) The vocational interests of rural high school students bear no relation to the vocational opportunities open to them; (2) choice of vocations seems to be governed by tradition and sentiment rather than by study of qualifications of the individual; (3) 90 per cent of rural high school students profess to have made a definite choice of vocation; (4) only a little over half profess to know the training required for their vocation; (5) 90 per cent of rural high school students intend to graduate from high school, 50 per cent to go to college; (6) the vocational and special subjects are more popular among high school students (rural) than are the academic subjects; (7) very little evidence of vocational guidance is found in the rural high schools although greatly needed in the light of this study.

2680. **Bowen, Earl Thomas.** A survey of the vocational distribution of graduates from Winnebago county, Iowa, high schools. Master's thesis, 1929. Iowa state college, Ames. 124 p. ms.

In this study 413 graduates from the six Winnebago county high schools during the five year period ending 1923 were compared with the 622 graduates during the five year period ending in 1928. Findings: (1) Rural interests and needs deserve attention on the part of these schools; (2) since homemaking becomes the vocation of three-fourths of the girls, high school courses pertaining to homemaking should be emphasized; (3) since a large proportion of the rural boys remain on the farm after graduation the high schools should include courses in vocational agriculture; (4) commercial departments appear to be especially desirable in towns with a sufficient number of urban students to warrant them; (5) the high schools might lessen the tendency of the graduates to crowd into teaching and to a certain extent into the other professions.

2681. **Bragdon, Helen D.** Counseling the college student: a study with special reference to the liberal arts college for women. Doctor's thesis, 1929. Harvard university, Cambridge, Mass. Cambridge, Harvard university press, 1929. 162 p. (Harvard studies in education, vol. 13)

This is an analysis of the problems and process of counseling; particularly the problems arising from student interviews held during a given period by eight personnel officials in five colleges for women. Findings: Counseling problems are extensive and varied in scope; many agencies are involved in their solution; there is a tendency for many more critical problems to be presented first as educational guidance problems; and a necessity for coordination.

2682. **Buchwald, Leona C.** Study of graduates of junior and senior high schools, February and June 1928. December 1928. Bureau of research, Department of education, Baltimore, Md.

A follow-up study of occupations and success of graduates.

2683. **Cunliffe, R. B.** Why this career? Significance of vocational information in decisions of college students. Personnel journal, 7: 376-84, February 1929.

A study of the factors influencing vocational choices of 533 students showed: the most common factors to be "interest," "conditions of work," "income," "school subjects," "advice of parents or family," and "demand for workers." The least influential factors were "independence," "social position," "study of occupations," "school activities," and "desire for a professional career." Less than two per cent mentioned any deliberate study of occupations.

2684. **Dreese, Ira Mitchell.** Personnel studies of messengers in the Western Union Telegraph company. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

The results of this study showed that during the decade, 1919-1928, the rate of turnover in the messenger service of the Western Union Telegraph Service was almost 400 per cent annually. This turnover was due to dislike for the work, not enough pay, too much walking, and discharges for insubordination, etc. Hebrew boys do not remain with the company as long as other nationality groups. From this study the conclusion is reached that messenger turnover could be materially reduced by giving preference to the younger non-Jewish boys, with an education of ninth grade or less.

2685. **Dye, Vera E., and Unger, Edna W.** A technique for job analysis. Personnel journal, 7: 367-75, February 1929.

The authors report on a technique of job analysis which they applied in an analysis of 1,262 jobs. A working technique was developed for analysis of low level jobs for a selected group of individuals. Diagnosis of the group revealed that problems of low intelligence, little education, and behavior difficulties seriously complicate vocational adjustment.

2686. **Edgerton, A. H.** Evaluating the effectiveness of guidance practices. Nation's schools, 3: 38-42, June 1929.

After several years' investigation, involving 4,500 pupils, the author concludes that there is a tendency to place vocational guidance on a scientific research basis. He also concludes that the work is still imperfect and incomplete.

2687. **Eilar, Jesse Howard.** The Henry county experiment in vocational counseling in the township high schools. Master's thesis, 1929. Indiana university, Bloomington. 115 p. ms.

Results of a questionnaire sent to 370 pupils in the eighth and twelfth years of the township high schools. Findings: Rural pupils want occupational information, as shown by the voluntary action of pupils who sought it from the counselor; 30 per cent of the pupils were influenced in their preferences by the information and advice, although an effort was made not to influence them in that way; 64 per cent were more interested in the specialized offerings of the counselor than the textbook plan.

2688. **Foreman, Mildred L.** The occupations of Barnard college alumnae as compared with the occupations chosen by Barnard college students. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 27 p. ms.

2689. **Fraser, John Edward.** Instructional counselling in the senior high school. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2690. **Hamilton, Allen T.** An analysis of the planerman's trades. Master's thesis, 1929. Indiana university, Bloomington. 60 p. ms.

The purpose of this study was to determine all the jobs a man must be able to do and all the knowledge he must have in order to become a skilled stone planerman.

2691. **Hanna, J. V., Krugman, M., and Taylor, D. H.** Adjustment problems of employed young men. August 1928. National junior personnel service, New York, N. Y. 350 p. ms.

Study of adjustment problems of employed young men; their principal difficulties as they see them; the agencies they feel have served them best. * Comprises representative sampling of youth from a number of occupational groups.

2692. **Hartson, L. D.** Intelligence and scholarship of occupational groups. *Personnel journal*, 7: 281-85, December 1928.

The relative intelligence, scholarship and achievement of college graduates in several occupations were computed on the basis of three sources of data: the 1926 directory of occupations of the Oberlin college alumni; psychological tests given to seniors and freshmen since 1919; and the scholastic grades of members of classes 1920 to 1926, inclusive. In intelligence, the group of women in the college teaching profession shows a marked superiority, while those in the art and physical education groups showed the lowest test scores. In scholarship the college teaching group again ranked first with the business men and physical education groups at the bottom of the list.

2693. **Hasty, Emmett J.** Vocational selection of ninth grade boys as a basis for educational guidance. Master's thesis, 1928. State university of Iowa, Iowa City. 100 p. ms.

2694. **Higgins, Eugene O.** A study to determine the effect of choosing a vocation upon success in Knightstown high school. Master's thesis, 1929. Indiana university, Bloomington. 99 p. ms.

The results of this study show that, on the average, the groups that selected a vocation before entering high school, did the best school work, or at least, earned the highest teachers' marks. Those that selected a vocation while in high school, earned the next highest teachers' marks.

2695. **Holaday, P. W.** The long-time effect of freshman counseling. *School and society*, 29: 234-36, February 16, 1929.

An experimental study with two evenly weighted groups of college freshmen, selected from the lowest decile, one group being given careful coaching and personal attention. Results showed for the latter group a higher grade point average, fewer students leaving the university because of discouragement, and a more sincere effort on the part of the students to adjust themselves to university life.

2696. **Holloway, Mary.** A study of social conditions affecting Stowe junior high school girls with suggestions for a program of guidance. Master's thesis, 1928. University of Cincinnati, Cincinnati, Ohio. 65 p. ms.

2697. **Humphrey, George Clifford.** The apparent effect of vocational guidance and training on the subsequent careers of the high school pupils of Granite City, Ill. Master's thesis, 1929. Iowa state college, Ames. 65 p. ms.

The study was carried on in the Granite City high school with 2,482 pupils, graduates and nongraduates, covering the years from 1923-1929. Findings: (1) One of the most important steps in the vocational progress of the individual is the study of occupations and the problems of the occupational world; (2) high school students as a rule are too young to consider the needs of the community in choosing their occupations and can be guided by wise supervision to a proper selection; (3) it is clearly shown that the vocational training is an aid to retention, and that retention increases as vocational facilities are added to the school; (4) the reasons given by pupils for their choice of occupations show that they are capable of looking after their own interests but they have not much conception of service and community needs; (5) the table of earnings clearly sets forth the advantages of the graduates over the nongraduates in choice of position, chance of advancement, and average wage.

2698. **Hyde, Richard E.** The high school product and guidance. *University of Pittsburgh school of education journal*, 4: 43-47, November-December 1928.

An investigation conducted to discover evidences of vocational guidance in the high-school experience of freshman teachers' college students. In conclusion, the writer says that "On the whole, the evidence is conflicting, but certainly it is clear that there is much to be done by the secondary school in promoting the rationalization of vocational choice.

2699. **Jones, Lonzo.** A project in student personnel service designed to facilitate each student's achievement at the level of his ability. Iowa City, Iowa, Pub. by the University, 1928. 59 p. (*University of Iowa studies*, 1st ser., no. 166, November 1, 1928. *Studies in education*, vol. 5, no. 1)

Bibliography: p. 51-59.

2700. **Kaulfers, Walter.** The exploratory-guidance value of general language. California quarterly of secondary education, 4: 307-12, June 1929.

Data are given showing the effect of the exploratory-guidance course upon foreign language enrollment failure in foreign language classes, value in grading students with respect to their choice of particular languages.

2701. **Lehman, Harvey C., and Witty, Paul A.** A pre-test for courses in vocational guidance and some alleged values of its use. Vocational guidance magazine, 7: 145-52, January 1929.

2702. **Lloyd-Jones, Esther MacDonald.** Student personnel work at Northwestern university. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A survey of the first six years of the life of a department of student personnel at Northwestern university. The experience of this institution points to the conclusion that an educational institution profits much by establishing a centralized agency which is charged with the responsibility for looking after the welfare of its students.

2703. **Mangan, Catherine C.** The child and the job. Master's thesis, 1929. Catholic university of America, Washington, D. C. 44 p. ms.

A study of the vocational histories of 50 grammar school graduates during ten years following graduation to determine the relation of school training to their industrial adjustments.

2704. **Martens, Elise H., and Proctor, William M.** Six years' progress—the present status of counseling in the high schools of California. California quarterly of secondary education, 4: 296-306, June 1929.

The authors present data for 1923 and 1929 showing percentage of schools carrying on certain counseling functions, and how the responsibility of counseling is distributed among various officials of the school.

2705. **Michigan. University. Committee on vocational counsel and placement.** Vocational information. A bibliography for college and high school students. Ann Arbor, Pub. by the University, 1928. 236 p. (Official publication, vol. XXX, no. 15, October 13, 1928. Vocational series, no. 1)

Prepared by W. E. Parker and D. H. Moyer. Ninety odd occupations are considered in this bibliography which has been compiled primarily for the use of college students, both men and women. The aim has been to include information which is up to date, reliable, and inclusive of those factors in making a choice of a career which are of greatest value. 1,700 references have been chosen from some 5,000 references.

2706. **Milam, Otis H.** Vocational guidance in local high school. 1928-29. West Virginia university, Morgantown.

2707. **Murphy, Helen M.** Synthesis of materials for a high school course in the economics of transportation occupations. Master's thesis, June 1929. University of Southern California, Los Angeles.

2708. **Oakland, Calif. Public schools. Department of research and auxiliary agencies.** Follow-up report of high school graduates—classes of June 1927, June 1928, December 1928. June 1929. 12 p. ms.

2709. **O'Rourke, L. J.** Measuring judgment and resourcefulness—an interview technique. Personnel journal, 7: 427-40, April 1929.

The evaluation of certain essential qualities during the interview is made practical by the use of problems designed to bring out specifically the qualities to be rated. Both the development of these problems, involving anticipation of possible answers and preparation of follow-up questions, and methods for preserving uniformity in their presentation are illustrated.

2710. **Overton, A. M.** Vocational choices of college students of Agricultural and technical college. 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

In this study all students were taken into consideration, the purpose being to determine the effectiveness of the types of instruction that are being given to the students enrolled in the college. The choices were agriculture, 35; physical education, 3; auto mechanics, 12; building contractors, 7; blacksmith, 1; architectural engineering, 6; tailoring, 4; and professions, 30.

2711. **Pittsburgh principals' club, Pittsburgh Pa.** Report of the committee on guidance . . . April 9, 1929. Curriculum study and educational research bulletin (Pittsburgh, Pa.), 3: 191-214, May-June 1929.
A questionnaire was sent to 100 leading cities of the United States for information as to current procedure in regard to a guidance program. Replies were received from 42 cities. This report sets forth the practices in some of the cities and makes recommendations for Pittsburgh.
2712. **Private school teachers' association, Philadelphia Pa. Committee on research.** Educational guidance of pupils in private schools. Philadelphia, Pa., 1928. 24 p. (Pamphlet, no. 3)
A report on the distribution of mental ages and achievement scores in mathematics and reading in schools affiliated with the Private school teachers' association of Philadelphia.
2713. **Raffensperger, Charles I.** Occupations and salaries of the graduates of six rural high schools . . . in Adams county, Pa. Master's thesis, 1928. University of Pennsylvania, Philadelphia.
2714. **Rankin, Marjorie.** The evolution of educational occupations. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.
A quantitative study of the evolution of occupations in the field of education, as a basis for giving vocational guidance to prospective educators. From a study of 14 cities it was found that there are in all between 350 and 400 educational positions from which the young person may choose. After choosing the general subject there are still many forms of specialization within that subject.
2715. **Reider, Gus X.** Experimental test in vocational guidance and information. Master's thesis, 1929. College of the city of New York, New York, N. Y. 28 p. ms.
Construction and use of a vocational-informative test with two hundred and odd pupils in the 7th and 9th grades. Conclusions: (1) A negligible difference was found between the average scores of the 7th and 9th grade pupils; (2) twenty-one per cent chose industrial pursuits whereas 90 per cent of the adult population is engaged in these occupations; (3) forty-two per cent chose artistic and professional fields whereas 5 per cent of adults are engaged in those vocations; (4) the scores of those who had taken one of several elective courses in vocations showed no superiority over the other pupils due probably to the fact that those courses did not include vocational information.
2716. **St. Louis, Mo. Public schools.** Vocational counseling series, no. 2. Public school messenger, 26: 1-63, December 1928.
Contains suggestions for young persons as to choice of vocation; gives brief descriptions of 18 occupations.
2717. **Sheehy, Maurice S.** Problems of student guidance. Doctor's thesis, 1929. Catholic university of America, Washington, D. C. Philadelphia, The Dolphin press, 1929. 264 p.
A study of the methods employed by 30 Catholic colleges in treating problems of student guidance, and an attempt to construct an ideal program.
2718. **Smith, J. Warren.** Current practices in educational and vocational guidance in North Carolina. 1928-29. North Carolina education association, Raleigh. 7 p. ms.
This study shows the scope and nature of educational and vocational guidance in the AA-I and A-I high schools of North Carolina.
2719. **Streit, Josephine.** The paper-box industry in Cincinnati. Cincinnati, Ohio, Vocation bureau, Public schools, 1929. 43 p.
A simply written and non-technical description of the occupations in the paper-box industry and the economic conditions pertaining thereto prepared for pupils of junior high school grades.
2720. **Thisted, Moses N.** A student information blank as an instrument of student guidance. Master's thesis, 1929. State university of Iowa, Iowa City. 63 p. ms.
2721. **Toops, Herbert A.** A suggested program of pre-college guidance for high schools. Columbus, Ohio state university press, 1929. 35 p.
2722. **Touton, Frank C.** Continuity of lower division enrollment in relation to the selection of scholastically able students. In Southwest educational research and guidance association. Yearbook, 1929.

2723. **Tozer, George Edward.** A statistical prediction of high-school success for purposes of educational guidance. Master's thesis, June 1929. Colorado state teachers college, Greeley. 63 p. ms.

One hundred and forty-five students in grades 9 to 12, year 1927-28, Windsor, Colo., high school, were used for this study. High school achievement was measured by averaging teachers' grades in all subjects for students' high school education. Conclusions: (1) Dependence upon intelligence tests alone in predicting high school success in the academic curriculum is very unwise and unscientific; (2) status of the home as measured by the socio-economic scale seems to have practically no value in predicting the performance of a high school student in the academic course; (3) ability in English and average high school grades correlate high, but in the final regression equation for the sophomore-freshmen group ability in English is not given much weight. It is given more weight in the senior-junior group; (4) results of this study show that the largest determining factor for high school achievement is the possession of desirable school habits, attitudes, or character traits, which are largely the result of home training, community life, school life, and the reaction of the student to these influences; (5) study shows that the development of regression equations to be used in predicting success in the special curricula is needed.

2724. **Treat, Katharine.** Tests for garment machine operators. Personnel journal, 8: 19-28, June 1929.

The purpose of this experiment was to see if the aptitude of subnormal girls for power machine operating could be measured by a series of tests. It was found that psychological tests do discriminate between probable successes and probable failures.

2725. **Turner, Lawrence C.** Vocational guidance in the home. Master's thesis, 1929. University of Akron, Akron, Ohio. 52 p. ms.

Ninety cities in the United States were studied. It was found that home is the place to begin guidance and that it can do much more than it has done.

2726. **Van Oot, B. H.** College vocational and educational guidance. Nation's schools, 2: 58-61, July 1928.

An analysis of vocational and educational guidance in 93 colleges. Enumerates the things attempted, but says complete systems of guidance are rare.

2727. **Walton, Maud Smith.** The correlation of teacher ratings in vocational exploratory courses with test scores of mechanical ability. Educational research bulletin (Los Angeles, Calif.), 8: 2-4, October 1928.

The MacQuarrie test of mechanical ability was given to all the boys of the entering B7 class at the Central-junior high school in Los Angeles together with enough A7 class to make 146 in all. The coefficient of correlation between the teacher rating of 50 selected boys in the junior high school in five exploratory courses chosen because of their obvious connection with mechanical ability, and the scores of these same boys on the MacQuarrie test of mechanical ability is in four cases out of five, so low as to be insignificant.

2728. **Wilson, Malcolm G.** Practices in guidance of high school students in election of advanced mathematics courses. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2729. **Workman, Birdie Lee.** Present occupations of Lewis county, Tenn., school children of 1917. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 31 p. ms.

2730. **Wykoff, Marguerite.** The policeman in Cincinnati. Cincinnati, Ohio, Vocation bureau, Public schools, 1929. 44 p.

A simply written description of the duties and economic conditions of the policeman's occupation in Cincinnati, including a brief historical sketch and giving the inter-relation of the various types of work and the organization of the department, prepared for pupils of junior high school grades.

2731. ———. The printing industry in Cincinnati. Cincinnati, Ohio, Vocation bureau, Public schools, 1929. 50 p.

A simply written and non-technical description of the occupations in the printing industry and the economic conditions pertaining thereto prepared for pupils of junior high school grades.

See also 4, 73, 156, 1399, 1595, 2850, 2868, 2870, 2884-2885, 2896, 2901.

AGRICULTURAL EDUCATION

2732. **Bankston, Marvin Stewart.** Comparison of white agricultural and consolidated high schools in Mississippi. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 87 p. ms.

The white agricultural high schools and the white consolidated high schools in Mississippi were compared as to: (1) teachers; (2) course of study; (3) class organization, and (4) equipment.

2733. **Barker, Paul I.** A record system for high school departments of vocational agriculture. Master's thesis, 1929. Iowa state college, Ames. 174 p. ms.

The study is based on a survey of vocational agricultural supervisors of various states, a survey of all vocational teachers in Iowa, and a survey blank sent to the two mentioned groups which included the combined ideas of the first two groups. Findings: For the welfare of vocational agriculture in Iowa it would seem that much emphasis should be placed on establishing good record systems in all the departments of vocational agriculture in the state as soon as possible; (2) there is need shown for another study along this line; (3) a very good method is suggested for putting the record system into Iowa vocational departments; (4) there is need for an adequate system of records for farm shopwork; (5) a record and filing system has been worked out under the three heads, permanent file, temporary file, and reference.

2734. **Brigham, Boyd Lyscum.** A course of study including lesson plans for teaching the farm sheep enterprise in the department of vocational agriculture. Master's thesis, 1928. University of Idaho, Moscow.

2735. **Byram, Harold M.** The use of judgments of master farmers in constructing the curriculum in vocational agriculture. Master's thesis, 1928. Iowa state college, Ames. 76 p. ms.

Data were secured from 175 master farmers in ten mid-west states. These men were chosen by farm journal publishers in the various states. Conclusions: (1) A study of master farmer experiences and judgments is a reliable method of approach in the construction of a curriculum in vocational agriculture; (2) master farmers believe that the average boy of today needs to be agriculturally trained in school in order to succeed at farming, for those above average the training will be beneficial, but not absolutely necessary; (3) a reorganization of our agricultural curricula will be necessary if we are to realize these objectives in the departments which we have established. This will mean that more emphasis must be placed upon the managerial phases of farming; upon lowering of production costs; upon cooperation in marketing and other work; and upon the development of these traits which will make interested, keen, and aggressive crusaders for the cause of better agriculture.

2736. **Cannon, J. C.** Type learning units in vocational agriculture. Master's thesis, May 1929. Alabama polytechnic institute, Auburn.

Representative units in each type of teaching enterprise and in each type of teaching unit in high school vocational agriculture.

2737. **Dowdell, Joseph Aloysius.** Growth of agricultural instruction in the public school system of California. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2738. **Field, A. M.** An evaluation of certain phases of theory and practice in the supervision of instruction in vocational agriculture with a suggestive program for improvement. Doctor's thesis, 1929. Cornell university, Ithaca, N. Y. 354 p. ms.

This study deals with problems of supervision in agriculture, training of supervisors, amount of supervision done and improved program. Findings: Supervisors were well trained by experience and professional preparation. Time does not permit of much actual supervision.

2739. **Fife, Ray.** The organization and financing of vocational education in agriculture for Ohio. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. (To be published)

A study of the present status of the vocational agricultural program in Ohio, and the administrative changes which have occurred during the ten year period, 1918-1928, as to organization of work, number of communities served, types of students served in all-day, part-time and evening courses and the distribution of the vocational agriculture teacher's time. In order to find out the needs of a state agricultural education program for Ohio, a study was made of number of farmers needed annually, the number of boys in high schools now available for all-day instruction, number of young men on farms available for part-time instruction and the number of adult farmers available for evening instruction.

2740. **Ford, Charles J.** A vocational agricultural community survey of the Olive Hill township of Person county. 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

This study revealed that the farmers are largely tenants. Only 20 per cent own their land. Six and two-thirds of the farmers and their wives are high school graduates, 18 farmers did not take any newspapers or periodicals. All farmers were Baptists. Thirty farmers were studied.

2741. **Gaines, Howard Bixon.** Managerial ability as a factor of success in horticulture. Master's thesis, 1929. University of California, Berkeley. 30 p. ms.

The purpose of this study was to make an adequate analysis of managerial ability as a vital factor in the farmer's success; and to secure a set of concrete and practical suggestions to help the teacher in his job of developing managerial ability in boys. Conclusions: (1) Managerial ability as exercised in the production of horticultural products may be analyzed into a number of concrete actions or habits of thought; (2) the development of managerial ability in the boy must come through training in the habitual exercise of these various elements; (3) the teacher in trying to develop these desirable habits in boys must first be keenly cognizant of the importance of managerial ability to the success of the future farmer; he must then use every effective means to interest the boy in good management as the key to success. He will find help in a knowledge of the laws of habit formation in putting over the teaching job; (4) among the list of teaching devices suggested will be found excellent methods that may be used in development of the habits desired. The teacher should be continually inspired to find new methods.

2742. **Hamlin, H. M.** Measurement of the effect of school instruction through changes in community practice. Journal of educational research, 18: 315-17, November 1928.

This is an attempt to measure one of the important out-of-school results of the instruction in agriculture in the schools in six small central Iowa communities.

2743. **Hauptert, Gregg D.** What the state of New Jersey owes to the land-grant college acts. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2744. **Hrudka, Ladimir Milos.** Education of farm boys and girls in Wisconsin, as determined by a study of four counties; LaFayette, Manitowoc, Polk, and Dane. Doctor's thesis, 1928-29. University of Wisconsin, Madison.

2745. **Lemasson, Lena.** The development of the agricultural high school in Mississippi. Master's thesis, June 1, 1928. Tulane university, New Orleans, La.

2746. **Little, Gevera R.** Facts concerning vocational agricultural students. 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

The purpose of this study was to determine the effectiveness of vocational agriculture and to what extent the boys who studied vocational agriculture are engaged in farming after leaving school. Twenty-six departments of vocational agriculture were studied. The results show that students are gradually learning the importance of vocational agricultural education and that a small percentage of boys trained in agriculture go to college.

2747. **Martin, J. F.** A history of vocational agriculture in Iowa. Master's thesis, 1929. Iowa state college, Ames. 76 p. ms.

The historical approach is used in the study, as well as the present practice in the vocational agriculture movement in the state of Iowa. Findings: (1) The growth in enrollment and number of agricultural schools in Iowa has compared favorably with that of other states; (2) methods have been developed to measure the results of instruction in Iowa schools; (3) much stress is placed on shows, exhibits and contests over the state; (4) scientific farming is in its infancy and is going to be more thoroughly investigated in the future; (5) the outline of plans for vocational education is being improved each year by state department, standards of teachers are being raised and the attitude of patrons and authorities is growing more favorable toward the work; (6) the superintendents of the smaller town schools seem to be in favor of more extensive agricultural work in their schools; (7) during the last few years, the agricultural work in evening and part time schools has been very successful, apparently.

2748. **Nelson, Arvid.** A program for the agricultural development of the Woodward, Iowa, community. Master's thesis, 1929. Iowa state college, Ames. 105 p. ms.

The Iowa type survey was used as a means of getting definite information for the Woodward, Iowa, community for the years 1926 and 1927. Conclusions: (1) A program of community improvement is recommended that covers each phase of the survey; (2) until the farm records are kept, the element of guess will be present, and this lack of definiteness and accuracy reflects on the value of the work; (3) care must be taken to make the survey cover a large enough number of farms to be representative, and yet plan to avoid conflicts with unsympathetic farmers; (4) effect of climatic conditions may be mistaken for results in vocational education.

2749. **Pettit, Hazen C.** The feasibility of combining the superintendency of schools with the teaching of vocational agriculture. Master's thesis, 1928. Iowa state college, Ames. 45 p. ms.

Includes places in ten mid-west states where the superintendency is combined with vocational agriculture. Based on comments made by presidents of school boards and county superintendents. Conclusions: (1) The future of the combination of superintendent of schools with vocational agriculture teacher will probably depend on the rejection or acceptance of these men by local communities; (2) 96.1 per cent of the presidents of the school boards, making definite comments as to the success of the combination, said it was successful in their schools. Those consulted with regard to the success of the combination men as superintendents placed only three per cent below average, while 58.8 per cent were placed above average.

2750. **Reese, Sue E.** Planting walnut trees: 1928-29. Rowan county public schools, Salisbury, N. C. 60 p. ms.

The aim of this experiment was to reforest Rowan county by having every child in the county plant a walnut tree. Forestry primer was used as a supplementary reader.

2751. **Rucker, Herbert Judson.** The development of agriculture in the high school. Master's thesis, 1928. University of Illinois, Urbana.

2752. **Rutherford, Dwight M.** An analysis of the relationships existing between the Smith-Hughes agricultural program and the agricultural extension service. Master's thesis, 1929. University of California, Berkeley. 61 p. ms.

This study aims to develop recommendations which should govern the relationships of the two organizations (United States Department of agriculture and the Federal board for vocational education) in California. This has been done by a descriptive analysis of the legal status of the two agencies, and an original study of the relationships as they exist in the field. Conclusions: (1) There is a great need for educational service on the part of rural people; (2) Smith-Hughes and Smith-Hughes forces are entirely independent. Therefore cooperation should be undertaken on a basis of equality; (3) confusion lies in the laws themselves. Both provide for agricultural education in the same areas to adults and youth. However, one may base a division of functions upon parts of the laws; (4) a study of the provisions of both laws and the administration of each act in California should be a part of the training of men entering the employ of either agency.

2753. **Sather, Arnold A.** What should be the nature of a course in cooperative marketing given to students of vocational agriculture in rural high schools. Master's thesis, 1929. Iowa state college, Ames. 106 p. ms.

The study is based on questionnaires returned by 46 teacher-trainers and directors and supervisors of agricultural education, 29 managers and directors of cooperative organizations in the United States and Canada, 45 agricultural economists and marketing experts connected with agricultural colleges.

2754. **Scott, Watters A.** What should be included in the farm mechanics curriculum. Master's thesis, 1929. State university of Iowa, Iowa City. 119 p. ms.

2755. **Smith, Zora Mayo.** The work of the teacher of vocational agriculture. Doctor's thesis, 1929. Indiana university, Bloomington. 254 p.

Data for this study were secured through questionnaires, achievement and mental tests, official records of the Indiana Department of public instruction, state and federal reports and bulletins on vocational education, etc. It was found that the teacher of vocational agriculture who measures up to the responsibilities of his position must meet high standards with respect to innate ability, natural aptitude, scholastic preparation, actual farm experience, a genuine sympathy with rural life, a will to labor in helpful service, and an intelligent grasp of the problems involved in assisting boys in their efforts to become prepared for useful and profitable employment on the farm.

2756. **Spriggs, James Llewellyn.** Factors influencing the financial income from-farm projects of Smith-Hughes classes. Master's thesis, 1929. University of California, Berkeley. 66 p. ms.

This study is concerned solely with those factors which are associated with the financial returns of farm projects as indicated by the data found in the summarized final report of each agricultural instructor in California for 1925-26 and 1926-27. Findings: (1) The distribution of the total project income as a whole shows a marked skew toward the lower end of the scale; also an extremely wide range; (2) very little difference exists between the freshmen and sophomores in their ability to handle vocational agricultural work; (3) measured by the financial success of the project, the data would show that it makes little or no difference whether the project is in line with the course taken in high school; (4) there is a general relationship between the hours spent on the project and the total project income. The correlation (.21 plus or minus .032) between these two variables is surprisingly low. Projects large enough to absorb over 200 hours of labor appear to produce the larger incomes more consistently; (5) the number of times the project is visited by the instructor seems to have no great effect on the total project income.

2757. **Staley, F. Marcellus.** Suggestions for curriculum-making in agriculture for the Negro agricultural and technical college of North Carolina and the experiences of teachers of agriculture. Master's thesis, 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

The purpose of this study was to interpret and evaluate the agricultural status with reference to the formulation of suggestions in curriculum making in agriculture. Recommendations were made which have been helpful in preparing the courses of study which are now in operation in the Agricultural and technical college of North Carolina.

2758. **Sutherland, Sidney S.** The relative importance of different phases of farm mechanics in high school courses in vocational agriculture. Master's thesis, 1928. Iowa state college, Ames. 42 p. ms.

This study was based on questionnaires sent to teachers of vocational agriculture in Iowa, Nebraska, and Montana. Returns were received from 82 teachers. A summary of the farm mechanics projects completed in South Dakota during 1925 was also used. Findings: (1) The majority of farm mechanics teachers in the four states studied include at least 13 types of shop work in the courses they teach; (2) woodwork receives more emphasis than any other phase of shop work; (3) types of farm mechanics work requiring more than average room or equipment are omitted by the majority of shop teachers; (4) there is a striking similarity both in the emphasis given various types of shop work and the kind of projects taught between the four states included in this study, indicating that farm shop courses are rapidly becoming standardized.

2759. **United States. Federal board for vocational education.** Factors to be considered in locating departments of vocational agriculture in the high schools of North Carolina. Washington, U. S. Government printing office, 1929. 13 p. (Monograph no. 7, June 1929)

Prepared by James K. Coggin.

A summary of a study of the status of vocational departments of agriculture in North Carolina, which have survived a certain number of years, as an indication of the factors valuable for consideration in establishing new departments.

2760. ———— A method of determining courses of study in vocational agriculture based on an analysis of the business of selecting farmers in Kentucky. Washington, D. C., U. S. Government printing office, 1929. 22 p. (Monograph no. 6, June 1929)

Prepared by Forrest G. Burd.

A summary of a detailed study of the work of selected farmers in Kentucky as it relates to selection of teaching content for courses of study in vocational agriculture.

2761. **Widner, Samuel Roy.** The knowledge of physical principles needed to read intelligently farm journals. 1928. University of Chicago, Chicago, Ill.

2762. **Winter, Thurston P.** A teaching program for farmer training in the Moor Haven district. August-1929. University of Florida, Gainesville.

2763. **Wiseman, C. R.** Factors in discontinuation of vocational agriculture departments in Minnesota. Doctor's thesis, 1929. University of Minnesota, Minneapolis.

Comparison of departments of agriculture continuing and discontinuing in Minnesota and several other states. Findings: The several factors found serve as guiding principles for the location and placement of departments of vocational agriculture.

See also 1092, 1455, 1624, 1728, 1767, 1946, 2710, 2848, 2913.

HOME ECONOMICS

2764. **Bedell, Florence Jasa.** The relative difficulty of different kinds of examinations in college clothing classes. Master's thesis, 1929. University of Colorado, Boulder. 153 p. ms.

A study of three year period of examinations on 298 cases in clothing classes at University of Colorado, to find (1) difficulty at various levels of intelligence with each type examinations; (2) difficulty at various levels of intelligence and between examinations as a whole. Findings: Recall is more difficult than recognition; true-false type is nearest pure recognition; multiple choice type requires some recall; completion is mostly recall. Essay is most purely recall of all.

2765. **Bedell, Grace Davida.** The relative value of required science courses to the teaching of foods in senior high schools. Master's thesis, 1929. University of Colorado, Boulder.

An analysis of 30 state and city high-school courses of study for home economics and information concerning content of course, texts used, methods of use, and time spent, from catalogues and teachers in 41 colleges and universities. The writer finds that 77.9 per cent of the content of the science courses required of home economics majors in colleges is of little or no direct value to the student preparing to teach food courses in senior high schools.

2766. **Beeman, Mary.** A study of interests of senior high school girls in home activities. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 82 p. ms.

2767. **Brady, Berniece.** Objective standards for certain machine construction processes in clothing classes at Iowa state college. Master's thesis, 1928. Iowa state college, Ames. 65 p. ms.

The experimental part of this problem was carried on in 20 clothing classes at Iowa state college. There were 284 students in the classes. Each student made a sample hem, French seam and felled seam. These seams were graded on tension, stitching, construction, finish, end finishes and length of stitch.

2768. **Brashear, Mrs. Vivian Jordan.** Beginning course in household equipment based on the problem method. Master's thesis, 1928. Iowa state college, Ames. 83 p. ms.

A course of household equipment was developed. This included objectives and problems by which these are to be realized. This course was used with five equipment classes at Iowa state college. A survey of 149 homes was made as a basis for determining objectives and problems. Conclusions: Objectives for a course in household equipment may be developed after a study of the needs of the homemaker has been made. Problems should be selected from real life situations to develop these objectives. The members of the experimental class reported a gain in the ability to do independent thinking. Two pupils in the class did not report a gain in the ability to do independent work.

2769. **Cloyd, Mrs. Louise Turner.** A study of low cost dietaries. Master's thesis, 1929. University of Kentucky, Lexington.

2770. **Dyer, Annie R.** The administration of home economics in city schools. New York city, Teachers college, Columbia university, 1928. 143 p. (Contributions to education, no. 318)

The aim of this study was to investigate some present practices in the administration of home economics in city schools, and to determine the measure of desirability of these practices.

2771. **Ellis, Carina Raidt.** A dietary study. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 63 p. ms.

An intensive study of the food intake of 53 students of George Peabody college for teachers for 17 consecutive days. Findings: That the diet from the standpoint of both the average calorific and mineral intake of the group as a whole was adequate; a high correlation exists between the per cent of underweight women and the percentage number of inadequate dietaries; the average nutritive ratio indicates that the protein intake falls between the minimum and maximum allowance as given by nutrition specialists.

2772. **Faulkner, Mary.** Foods and cookery for instruction in home economics education—elementary grades 5 and 6. Baltimore, Md., Department of education, 1929. 51 p. (Second revised edition)

2773. ——— Foods and cookery for instruction in home economics education—junior high schools. Baltimore, Md., Department of education, 1929. 83 p. (Second revised edition)

2774. **Gordon, Pauline, and O'Leary, Zoe.** The effect of home economics training in high school upon college achievement in home economics. Master's thesis, 1928. Iowa state college, Ames. 215 p. ms.

Personal interviews were held with 100 senior girls. A check was made with each student on the kind and amount of home experience she had had; the method of teaching used in her high school course in home economics; and the attitude and interest of the home economics high school teacher. The intelligence test grade and scholastic average of each student was used for comparative purposes. Conclusions: The investigation seems to indicate that intelligence of the students and their home experience influence college achievement in home economics more than high school work in home economics.

2775. **Gray, Ruth Ann.** Opportunities for home-economics trained women. Master's thesis, 1929. University of Colorado, Boulder. 74 p. ms.

A survey of the type of work open to those trained in various occupations and industries. Findings: Teaching is most popular, salary \$1,400; extension work, salary, \$2,350; dietetics, salary, \$1,700. Other openings include business of their own, journalism, etc.

2776. **Harrell, Maud J.** Home project work in home economics throughout the United States. Master's thesis, 1929. Indiana university, Bloomington. 126 p. ms.

The purpose of this study was to discover the actual practice throughout the United States relative to the use of home project work as a method of instruction in classes in home economics, organized under the National vocational education act.

2777. **Judy, Helen E.** An analytical study of home management in higher institutions in order to ascertain trends and to formulate policies. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

A study of land-grant colleges, state teachers colleges, state universities and women's colleges in order to ascertain trends by securing information in regard to the past, present, and desired practices of placement, time allotment, prerequisites, credit, aims and objective content, and method of presenting the work. Findings: Home management is shown to be a course which should preferably be given in the fourth year. It is felt that it requires a good background of subject-matter courses not only in home economics, but in related fields. There is a definite tendency to increase the number of hours given to the course. However, there is a lack of agreement in regard to aims and objectives for the course; etc.

2778. **Keller, Louise.** A study of the honor point ratios of home economics students to determine their prognostic value. 1929. University of Minnesota, Minneapolis. 83 p. ms.

In this study were used University of Minnesota registrar's records of 2,200 home economic students, (1918-1928), psychological test ratings, and ratings in student teaching for 237 students in four institutions. Findings: (1) Honor point ratios of freshmen are an efficient basis for predicting future achievement in college; (2) 56 per cent of entering freshmen do not graduate, (3) low scholarship is not the only important factor in student mortality; (4) transfer students maintain a better record than do those who take all their work in the University of Minnesota; (5) intelligence test ratings have little value in predicting student teaching success ($r = .15$) while scholastic achievement has considerably more predictive value ($r = .54$).

2779. **Konegni, Ada L.** A comparative study of the home economics work in Smith-Hughes high schools in South Dakota during the past ten years. Master's thesis, 1929. University of South Dakota, Vermillion. 81 p. ms.

2780. **Lee, Ata.** Minimum science principles for required subject matter in vocational home economics in Kentucky. Master's thesis, 1929. University of Kentucky, Lexington.

2781. **Massachusetts. Department of education, Boston.** Suggested basic course of study in home economics for junior high schools or grades 7, 8, and 9, in Massachusetts. (Three parts)

Part I. Foods in relation to health including general introduction to course, 23 p. ms. Part II. Clothing, 31 p. ms. Part III. Home management including child care, home nursing and first aid, 27 p. ms.

2782. **Matschoss, Charlotte.** Content and schedules of home economics curricula of 50 leading colleges and universities. Master's thesis, 1929. Iowa state college, Ames. 105 p. ms.

This investigation was confined to the study of college catalogues and to personal interviews with official representatives of the colleges and universities included in the study. A chart was made showing the required courses for the four year college work of various home economics curricula. Conclusions: In the schools included in this study, English, foreign language and the natural sciences are stressed in the first two years. The amount of the required work in physics is small. A balance is maintained between foods and nutrition, textiles and clothing, and applied art. Fewer schools are requiring courses in child care. In the junior and senior year the greater part of the work is elective. This is so arranged that a major sequence in a special department may be elected.

2783. **Mayes, Katherine Evans.** The family: its social and economic problems and how they may be studied in home economics. Master's thesis, 1929. University of Colorado, Boulder.

This study was undertaken to determine the extent to which home economics education may function in conservation of the family. The findings were that radical cultural transitions which accompanied the Industrial Revolution had a disintegrating influence upon the family. The forces then set in motion have

expanded with such rapidity, and reached such complexity that the family is quite bewildered. Old ideas are not satisfying; new ones, not yet formed. Unrest and insecurity reign. To obviate these cultural lags it is urged that home economists stress the importance of analyzing family problems to find psychological maladjustments and form definite standards.

2784. Mencke, Minnie. A study of the relative importance of factors affecting the retention of some facts in home economics. Master's thesis, 1928. Iowa state college, Ames. 42 p. ms.

Fifty college girls, all freshmen, were interviewed to find out what factors seemed effective in helping them retain ten facts taught in high school home economics classes. Conclusions: Retention with understanding, 74 per cent; retention without understanding, 38 per cent; retention with interest, 65 per cent; retention without interest, 39 per cent; retention with drill, 66 per cent; retention without drill, 47 per cent; retention where course is well organized, 65 per cent; retention where course is poorly organized, 51 per cent; retention with subsequent use, 60 per cent; retention without subsequent use, 53 per cent; retention with memorization, 59 per cent; retention without memorization, 56 per cent; retention where there was laboratory work, 59 per cent; retention where there was not laboratory work, 56 per cent.

2785. Miles, Wilma S. Publicity in home economics, present status and problems. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 24 p. ms.

2786. Minschwaner, D. E. The value of new type tests in elementary school home economics. Master's thesis, 1928-29. Rutgers university, New Brunswick, N. J.

2787. Moser, Susan. Objective standards for certain machine construction processes in beginning college clothing courses. Master's thesis, 1928. Iowa state college, Ames. 75 p. ms.

The experimental part of this problem was carried on with 423 students in beginning college courses. Each student made a simple hem, French seam, and fell seam. These seams were graded on tension, stitching, construction, end finishes, and length of stitch.

2788. Pennsylvania. Department of public instruction. Home economics in secondary schools (Courses of study) Harrisburg, Pa., 1928. 101 p. (Revised reprint. Bulletin 9-B)

This bulletin is intended primarily for the use of home economics supervisors and teachers in setting up objectives, in organizing instruction, in deciding on methods, and in measuring results of instruction.

2789. ———— Home economics in secondary schools (Bibliography) Harrisburg, Pa., 1928. 19 p. (Bulletin 9-C)

This is a revision of an earlier bulletin. It is intended primarily for home economics supervisors and teachers in the selection of text and reference books for the use of home economics classes, and in the choice of reading material for professional improvement.

2790. Portland, Oreg. School district no. 1. Department of research. Home economics. March 11, 1929. 4 p. ms.

A city wide survey of home economics in grades 8A and 8B.

2791. Reeve, Ethel Blanche. Achievement scales for foods and household management based upon accomplishment of grade 8a pupils in Minneapolis schools. Master's thesis, July 1929. University of Minnesota, Minneapolis.

2792. Ringle, Marie P. The effect of speed upon quality of work in certain clothing construction processes. 1928. Iowa state college, Ames. 132 p. ms.

Sixty-one junior high-school girls were tested upon quality of work in relation to the amount of time required for the completion of certain construction processes. Conclusions: The results of this experiment seem to indicate that junior high-school girls can be speeded by using proper methods without adversely affecting the quality of work. In fact, evidence seems to show it may better the quality of work.

2793. Root, Addie D. The status of home economics in the secondary schools of Rhode Island. Master's thesis, 1928-29. Brown university, Providence R. I. 99 p. ms.

This is a review of the practices in vogue in home economics education in Rhode Island and comparison with practices in the country at large. Findings: This study tends to show that home economics in Rhode Island secondary schools is up-to-date in Dyer's meaning of that term, that is to say, a balance is struck between progressive and traditional methods.

2794. Bous, Irmadele. Trends in the teaching of foods in high school. Master's thesis, June 1929. University of Southern California, Los Angeles.

2795. **Scott, Ruth.** Course in clothing selection for high school based upon a survey of clothing selection reports in the home. Master's thesis, 1928. Iowa state college, Ames. 87 p. ms.

Miss Scott visited 60 homes and obtained through personal interviews with mothers, a list of the difficulties they encountered in the selection of clothing. Objectives for a unit in clothing selection and problems to develop these objectives are given. Conclusions: The mothers interviewed considered that the ability to select good material; the choice of economical clothing; care of the clothing should be the major objectives for a clothing course. It is believed that these objectives can best be realized through real problems.

2796. **Spickard, Ronella.** Home economics in Kentucky high schools, its place and contact. Master's thesis, 1928. Iowa state college, Ames. 98 p. ms.

The total drop-out for girls in the Kentucky high schools was computed for a period of five years. A survey of the needs of high-school girls was made. A total of 2,757 high-school girls and 963 mothers contributed information. Conclusions: The investigation indicated that the same course of study for home economics could not be equally well suited to rural, semi-rural, urban and city high schools. Some basic factors may be the same but the needs of the four groups are different. The investigation indicated that home economics to be available for the largest number of girls in high school in the state of Kentucky should be placed in the first and second years of the high school course.

2797. **United States. Bureau of education.** Circumstances surrounding the election of home economics in the senior and regular high schools. Washington, D. C., June 1928. 14 p. ms. (Home economics letter no. 4)

2798. ———— The kind of home economics heeded for high-school girls. Washington, D. C., September 1928. 32 p. ms. (Home economics letter no. 5)

2799. **White, Bernice Jeannette.** A report of my experience in teaching home economics to boys, through a bachelor's home economics club. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 28 p. ms.

2800. **Williams, Maude McCraw.** A survey of home economics in the high schools of South Carolina. Master's thesis, July 1929. University of South Carolina, Columbia.

See also 73, 2674.

COMMERCIAL EDUCATION

2801. **Anderson, Elizabeth Jane.** Commercial subject difficulty as correlated with intelligence quotients. Master's thesis, 1928-29. Temple university, Philadelphia, Pa.

2802. **Boatman, Myrtle O.** Specialized fields in salesmanship and content material appropriate for the secondary schools of Colorado. Master's thesis, 1929. Colorado state teachers college, Greeley. 96 p. ms.

Questionnaires were sent to school superintendents and distributed from commercial departments to merchants. 16 cities (1,429 individuals) took part in the investigation. Job analysis was made of merchandising field of occupational surveys, and department store training. Conclusions: (1) More than 50 per cent of all commercial workers are sales people; (2) training has to be given by firms themselves when not provided by educational agencies; (3) sufficient need in business world for the introduction of special salesmanship courses; (4) technical training should be provided for preparation of students along technical lines of selling; (5) merchants show willingness to cooperate with secondary-school graduates as long as they are fitted to perform their work efficiently.

2803. **Book, Harry D.** Adjusting the high school commercial curriculum to the needs of the community. A report with recommendations, made by the Commercial curriculum committee of the New Castle, Pa., public schools. 1929. Public schools, New Castle, Pa. Cincinnati, New York [etc.] South-western publishing co. [1929] 29 p.

A report on adjusting the commercial curriculum of the senior high school to the vocational need of the community. Need for salesmanship training brought out; also needs for office practice.

2804. **Botsford, Frances R.** Proposed plan for acquainting secondary school administrators with recent trends in commercial education: Master's thesis, 1929. State university of Iowa, Iowa City. 80 p. ms.

2805. **Burns, Edward G.** A study of the non-vocational business transactions performed by the consumers of a Metropolitan district. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2806. **Calvin, Elizabeth.** Training in departmental display. (Retail training) Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2807. **Colvin, Ambrose O.** Commercial education in the secondary schools of Colorado. Master's thesis, June 1929, Colorado state teachers college, Greeley. 127 p. ms.

Questionnaires were sent to 140 Colorado high schools (or 75 per cent) that have departments of commercial education. 100 returns were received. Conclusions: (1) Commercial program offered in secondary schools of Colorado is almost wholly restricted to training highly specialized workers to become bookkeepers, stenographers and typists; (2) program and subjects not extensive enough to meet requirements of modern business field, nor to serve best interests of high school pupils who want to major in commercial education; (3) no definite commercial curriculum in operation in high schools of state, all commercial subjects are elective; (4) data show no attempt on part of high school to adapt the commercial offerings to local conditions. Program in small towns about same as in large cities, (5) some of most remunerative and desirable fields of commercial specialization open to high school pupils are neglected in commercial offerings in high schools; (6) no uniformity in grade placement of commercial subjects; (7) considerable variation in time given to each of the commercial subjects; both in number of semesters and length of period; (8) pupil load of commercial teachers heavier than other high school teachers; (9) median salaries: A. M. degree, \$2,500; A. B. \$1,650; B. S. and B. C. \$1,500; Life certificate \$1,375. 44 per cent of the commercial teachers in high school have A. B. and A. M.; only 5 per cent have A. M.

2808. **Connor, William L.** Course of study in general clerical service, report of progress. Bureau of educational research, Public schools, Cleveland, Ohio. (Bulletin no. 53, March 1929)

2809. **Davis, N. Evelyn.** A study of junior business training needs in the George Washington junior high school of Pasadena. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2810. **Decker, Dorothy Dola.** The objectives, content and methods of retail merchandising education in the secondary schools of California. Master's thesis, June 1929. University of Southern California, Los Angeles.

2811. **Dirstine, Frances Wilhelm.** Teaching typewriting for improvement. Master's thesis, 1929. State college of Washington. Pullman. 221 p. ms.

This study includes three phases: Pt. I. Aims and objectives in teaching typewriting, a questionnaire study; Pt. II. A course in typewriting by semesters; Pt. III. Important standards in teaching typewriting. Findings: (1) No set method was used in teaching the keyboard; (2) tendency to avoid use of nonsense syllables; (3) more time used in teaching keyboard than necessary; (4) little appreciable difference in results shown regardless of time spent; (5) daily records, graphs, etc., generally well used; (6) wide variations in computing grades; (7) little evidence of adjustments to individual differences; (8) many teachers give no speed tests during first semester; (9) a student is required to become as skilled in one semester in some schools as he would become in three semesters in some other schools; (10) there is much need of standardizing typewriting teachers; (11) 20 types of tests are outlined; (12) the present tendency is to give a maximum and minimum assignment allowing erasures but making accuracy the aim.

2812. **Fuller, Florence D., and Bullock, Albert E.** Evaluation of book-keeping textbooks. March 1929. Psychology and educational research division, Public schools, Los Angeles, Calif. 67 p. ms.

Detailed analyses of texts on each of the following topics: outstanding characteristics of the text; manner of development of the texts; training and experience of the authors; illustrations and mechanical make-up; content of the text summaries, tests, reviews, aids and prices; sets and business forms; order, methods and presentation.

2813. **Holsopple, James Quinter, and Vanouse, Irene.** A note on the beta hypothesis of learning. School and society, 29: 15-16, January 5, 1929.

An experiment conducted with a typewriting class of 40 students just beginning to transcribe from their short-hand notes, to test the feasibility of correcting errors in spelling through practising the error. Supervised practice of a selected list of misspelled words, both as correctly spelled and as misspelled, showed 80 errors after practice by the first method and no errors after practice by the second method.

2814. **Hughes, Anna Celestine.** The moral, intellectual and cultural value of commercial education. Master's thesis, 1928-29. Marywood college, Scranton, Pa. 50 p. ms.

2815. **Karnahan, Hazel Clare.** Training in textile information. (Retail training) Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2816. **Kneeland, Natalie.** The interview in training salespeople. Techniques for instruction based on errors, ratings, and service shopping reports. *Personnel journal*, 8: 47-52, June 1929.

The possibilities of the personal interview as a method of training have been neglected. Miss Kneeland here describes the development of a technique for handling such interviews and for training interviewers in retail stores, as worked out by the Research bureau for retail training, University of Pittsburgh.

2817. **La Dow, Robert.** The function of commerce in the junior college. Master's thesis, 1929. State university of Iowa, Iowa City. 73 p. ms.

2818. **McLaughlin, Mary W.** A proposed battery of tests in stenography. Master's thesis, 1929. State university of Iowa, Iowa City. 50 p. ms.

2819. **Martin, Mary Margaret.** A study of the value of substitution tests for diagnosis of success in shorthand. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2820. **Miller, M. Alice.** Relation of the I. Q. to success in learning typewriting. Curriculum study and educational research bulletin (Pittsburgh, Pa.) 3: 135-40, January-February 1929.

An experiment with beginning typewriting classes in Schenley high school, Pittsburgh, January 1928, to determine the correlation between the I. Q. of a group of high school pupils and their ability to acquire skill in typewriting as measured by standardized tests and semester grades.

2821. **Nelson, H. Chester.** A study in bookkeeping prognosis in the high school. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 35 p. ms.

2822. **North, Mrs. Frances D.** The effect of maturity upon the learning of beginning typewriting by girls. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

2823. **Nyquist, Reuben E.** Analysis of duties of bookkeepers. Master's thesis, 1928. State university of Iowa, Iowa City. 61 p. ms.

2824. **Ogle, Irené.** Training on personality traits through group meetings and individual conferences. (Retail training) Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2825. **Ringo, Fredonia Jane.** An executive training course. *Personnel journal*, 7: 269-73, December 1928.

The results of a course maintained for four years by the Research bureau for retail training and five cooperating Pittsburgh stores are described. The personnel of the group, with its bearing on graduation from the course; the proportions of graduations to enrollments; the promotion among the graduates and non-graduates; the chief causes which led members to drop out before finishing their work; and certain suggestions for steadily raising the standard of the course are briefly described.

2826. **Rosenblum, Irving.** Criteria for the selection of pupils for the junior high school bookkeeping course. Master's thesis, 1929. College of the city of New York, New York, N. Y. 16 p. ms.

A comparison was made of marks in the 7th and 8th grade school subjects and of scores on the sub-tests of the Terman group test of mental ability in predicting bookkeeping success. Findings: The school subject marks in general showed higher correlations with bookkeeping ability than did scores on the intelligence tests; the class marks on bookkeeping correlated .72 with a standardized bookkeeping test (Carlson); chronological age correlated minus .47, yielding better prediction than the total score of the Terman test.

2827. **Rulon, Dorothy Overfelt.** An experiment with two different procedures in the practice periods in typewriting. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2828. **Schmid, Bertha Emily.** Material on special training in salesmanship. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

2829. **Scudder, Kenyon J.** The predictive value of general intelligence tests in the selection of junior accountants and bookkeepers. *Journal of applied psychology*, 12 : 1-8, February 1929.

This study emphasizes the fact that success in junior accountancy and bookkeeping depends to a large degree upon the mental capacity of the individual and that a minimum Terman group test score of 100 for bookkeepers and 125 for junior accountants is, in most cases, essential to such success.

2830. **Sioux City, Iowa. Public schools.** Tentative course in commercial education. 1928-29.

Junior and senior high schools.

2831. **Wakefield, Alice.** A technique for the development of the trait of resourcefulness in typing. Master's thesis, 1929. State university of Iowa, Iowa City. 173 p. ms.

2832. **Wilson, Marion.** A study of the demands of employers of elementary business training and the educational requirements of commercial teachers. 1928-29. Syracuse university, Syracuse, N. Y.

2833. **Wright, William Hardcastle.** Vocational commercial education in the junior college. Master's thesis, 1929. University of California, Berkeley. 87 p. ms.

Conclusions: (1) The junior college movement has developed to such an extent that it has made for itself a place in our educational system; it must offer two curricula: (a) For students going on to college, (b) for those whose formal education culminates with junior college; (2) about half of the students who enter the college of commerce in our universities do not go beyond the second year. This is bad because the first and second years are set up in preparation for the last two years, and students leaving in the middle are not trained. The field in which the junior college can excel is that of offering two-year terminal courses for students who plan to enter the semi-professional commercial occupations. This thesis does not make recommendations as to high school preparations for junior college commercial work.

2834. **Young, Della A.** A survey of commercial education in secondary schools of Montana. Master's thesis, June 1929. Colorado state teachers college, Greeley. 142 p. ms.

One hundred and thirty-two questionnaires were sent to 97 high schools of Montana; 109 answered. Field of literature was also surveyed. Findings: (1) 38.9 per cent of Montana high school pupils registered in commercial subjects; (2) 79.3 per cent of schools offered typewriting, bookkeeping and shorthand, offering it one semester, usually in the eleventh or twelfth grade; (3) 69.5 per cent of typewriters were Underwoods; (4) no consensus of opinion on textbooks in these subjects; (5) 74.1 per cent of commercial teachers are women; 25.9 per cent, men; (6) median initial salaries of men are \$1,420; women, \$1,375. After three years' experience, men received \$1,700; women \$1,500; (7) 71.5 per cent hold degrees; 23.8 are undergraduates; (8) 79.6 per cent of teachers had had 1.5 median years experience and 84.3 per cent of the women had had teaching experience; 92 per cent of the men had had teaching experience.

2835. **Young, Harry Stanley.** The development of commercial education in the public high school of the United States. Master's thesis, 1928. University of Illinois, Urbana.

See also 297, 624, 965, 1024, 1451, 1469, 1551, 2313, 2865.

PROFESSIONAL EDUCATION

2836. **Andrews, Alexander B. chairman.** Legal education and admission to the Bar. Committee report to North Carolina bar association. Asheville, June 1928. 31 p.

2837. **Brayton, James H.** Development of medical education in Indiana. Master's thesis, 1929. Indiana university, Bloomington. 164 p. ms.

The history of each of the state's regular medical colleges was traced from source material and then related in chronological order. The problems of medical legislation, sectarianism and academic control were found to be closely related and vital to the development of medical education.

2838. **Committee on the grading of nursing schools.** Nurses, patients and pocketbooks. Report of a study of the economics of nursing by the Committee on the grading of nursing schools. May Ayres Burgess, director. New York city, 1928. 618 p.

A report on a nation-wide study of supply and demand in nursing service. This is the first of three volumes contemplated by the committee.

2839. **Grant, Edward Donald.** An investigation of missionary courses in selected Protestant theological seminaries. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 68 p. ms.

2840. **Herriott, M. E.** Why "honor" engineering students think they succeed in college. *School and society*, 28: 829-30, December 29, 1928.

An evaluation of a list of reasons for success given by a group of 25 honor students in engineering and ratings of these reasons by a similar group of 23 honor students.

2841. **Hoad, Hortense.** The profession of medicine. Ann Arbor, University of Michigan. Committee on vocational counsel and placement, 1928. 68 p. (American council of education. Vocational monograph series, no. 1, August 1928)

This monograph presents the essentials of training, and some of the methods by which one may enter the field of medicine.

2842. **Hurd, A. W.** Achievements of students in engineering. 1929. University of Minnesota, Minneapolis. ms.

2843. **Kelsey, Hugh Espy.** Theological seminaries in the middle west. Master's thesis, 1928-29. Ohio state university, Columbus.

2844. **Mann, Claire Victor.** "New type" tests in general engineering drawing and descriptive geometry. Doctor's thesis, 1929. State university of Iowa, Iowa City. 374 p. ms. (in 2 vols.)

2845. **Montgomery, Riley B.** The education of ministers of Disciples of Christ. Doctor's thesis. [1929] Yale university, New Haven, Conn.

2846. **Nolde, O. Fred.** The Department of Christian education in the theological seminary. Doctor's thesis, 1929. University of Pennsylvania, Philadelphia. Philadelphia, 1929. 169 p.

An investigation leading to the determination of the offerings that are essential for the Department of Christian education in the Lutheran theological seminary, at Philadelphia. It suggests and illustrates a procedure that may be employed to determine the offerings that are essential for any department of a theological institution.

2847. **Rappleys, Willard C.** Third report of commission on medical education. Supplement to third report. October 1928, May 1929. New Haven, Conn., Commission on medical education, 1928-1929. 70 p., 82 p.

In this third report the commission endeavors to present what it believes to be the most important principles that should be emphasized in medical training.

2848. **Remmers, H. H.** The measurement of interest differences between students of engineering and of agriculture. *Journal of applied psychology*, 13: 105-19, April 1929.

This study reports an attempt to develop an instrument for discriminating between students with interests predominant in engineering and those with interests predominant in agriculture. For this purpose, the reactions in a school of agriculture and a school of engineering to a list of items related to these vocational fields were obtained. The conclusion is drawn that a means can be devised which will show the difference in interests between students enrolled in agricultural courses and those enrolled in engineering courses.

2849. **Sadler, McGruder E.** A comparative personnel study of ministerial, medical and law students. [1929] Yale university, New Haven, Conn.

2850. **Strong, Edward K. jr.** Interests of engineers—a basis for vocational guidance. *Personnel journal*, 7: 441-54, April 1929.

Engineers as a group have a definite pattern of interests that is distinct from the interest patterns of most occupations and professions. With the use of the vocational interest test, it is now possible to determine the extent to which a man's interests approximate the interest patterns of 26 occupations. Such data have genuine value since first, there is agreement between the actual careers of adult men and the recommendations as to careers resulting from the test scores; and second, as far as can be ascertained within a period of two years, the interest tests have prognostic value in the case of college men.

See also 1081, 1781.

CIVIC EDUCATION

2851. **Bowdlear, Charles L.** The elements of sportsmanship. *Journal of educational method*, 8: 408-13, April 1929.

Developing citizenship attitudes through sportsmanship. Gives a table comparing the elements of citizenship as expressed in textbooks, magazine articles and state courses of study with the elements of sportsmanship as listed by boys' gymnasium classes.

2852. **Bradt, Mary E.** A study of the knowledge of government that pupils bring to the high school from the eighth grade. Master's thesis, 1929. New York state college for teachers, Albany, N. Y.

A survey of all children beginning study of civics in a city high school, second semester.

2853. **Hession, Wilma A.** My study book in community civics. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 315 p. ms.

2854. **Konkle, Alcyone F.** Survey of material available for teaching eighth grade community civics in the rural schools of Delaware county, Pa. Master's thesis, 1929. University of Pennsylvania, Philadelphia.

This study is an analysis of responses to multiple choice and completion tests and comparison with existing tests to formulate improved methods of teaching and testing vocabulary.

2855. **Nebraska state teachers association.** Vitalizing the teaching of the state and federal constitutions. Lincoln, Nebr., Nebraska state teachers association, October 1928. 31 p. (Research bulletin, no. 2)

2856. **Remland, Benjamin S.** The contents of civic texts used in the high schools. Master's thesis, 1928. New York university, New York, N. Y.

The thesis is concerned with the classification of the contents of 59 representative high school civics texts now available.

2857. **Singleton, Gordon G.** Georgia civics supplement, 1929. State department of education, Atlanta, Ga.

2858. **Stabler, Dewey A.** The relationship between the civic information possessed by ninth grade pupils and their practices in citizenship. Master's thesis, February 1929. University of Chicago, Chicago, Ill.

This study is to determine: (1) The kind and extent of citizenship deficiencies which ninth grade pupils have in their civic practices in the junior high schools of South Haven, Mich.; (2) the character and extent of civic knowledge possessed by the pupils; (3) to study the relationship between the civic deficiencies of the pupils and their civic knowledge.

2859. **Stephenson, Orlando W.** The special vocabulary of civics. *Journal of educational research*, 18: 297-304, November 1928.

From an analysis of ten civics textbooks a vocabulary list in civics was compiled.

2860. **Stewart, Edna.** An experimental study of subjects that develop attitudes and ideals of civic behavior. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 52 p. ms.

2861. **Taylor, Frances P.** Problems of American democracy as a high school subject. Master's thesis, 1929. University of Chicago, Chicago, Ill. 104 p. ms.

The development of the course from the year 1916 (when first proposed) to the present; its status in all state courses of study. The findings of the study indicate that the subject is growing in importance each year in spite of certain of its limitations.

See also 106, 361, 1123, 1144-1145, 2116, 2334, 2900.

MILITARY EDUCATION

2862. **Gault, Francis Noble.** The national defense act and military training. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2863. **Gibbs, W. T.** Psychology of military training in the high school. 1928-29. Agricultural and technical college, Greensboro, N. C. (Published in *Infantry Journal*, May 1929).

The purpose of this study was to show that the present high school program does not cover this phase of boys' training; to stress its importance as a feature of training for citizenship, and to show that the ideals and attitudes of the citizen-soldier toward military service are just as essential as his health.

[2864. **Vandervort, Charles Thomas.** Military training in the secondary schools of the United States. Master's thesis, 1929. Stanford university, Stanford University, Calif.

See also 2678.

EDUCATION OF WOMEN

2865. **Cavan, Ruth Shonle.** Business girls—a study of their interests and problems. Chicago, Ill., Religious education association, 1929. 104 p. (Religious education monograph, no. 3, June 1929)

This study includes such problems as home and family life of working girls, their intellectual abilities and interests, recreational interests, friends, vocational problems, etc.

2866. **Ebersbach, Alice L.** A case study of freshman woman refused re-registration. Master's thesis, 1928-29. University of Pittsburgh, Pittsburgh, Pa.

2867. **Frost, Loraine H.** The relationship between variations in the antero-posterior curves of the spine and scoliosis. Master's thesis, 1929. Wellesley college, Wellesley, Mass. 88 p. ms.

In this study, measurements as indicated in the title were made of 100 college women undergraduates. Findings: Variation in the anteroposterior curves occur in individuals with scoliosis probably because the same conditions are active in producing both variations. There is no positive correlation, however, between the exact location of the variations in the antero-posterior curves and those of either the lateral deflection, or rotation, although they were found to coincide with respect to at least one factor in the scoliosis in 50 per cent of the cases studied.

2868. **Gaw, Esther Allen.** Occupational interests of college women. Personnel journal, 7: 111-14, August 1928.

This study was made by means of the **Freyd** occupational interests blank for women in Mills college in 1925 and 1926. Its findings proved the conclusions reached by other research students that "The interests of a homogeneous group remain characteristic from year to year regardless of wide fluctuations of interest among members of the group."

2869. **Green, Mrs. Geraldine.** A study of the problems of discipline which the deans of women in teacher training institutions are handling. In National association of deans of women. Proceedings of the sixteenth regular meeting. . . . Cleveland, Ohio, February 20-23, 1929. p. 137-42. (Headquarters: 1634 Eye street, Washington, D. C.)

Thirty-three institutions were represented in this study. During one month 255 cases of discipline were handled by the deans of women in these institutions. Thirty-three handbooks were examined with reference to regulations. The results of the study are given in this address by the chairman of the committee.

2870. **Henderson, Stella Van Petten.** Characteristics of certain occupations open to girls in Joliet. Master's thesis, 1929. University of Chicago, Chicago, Ill. 135 p. ms.

Eight occupations in which girls in the occupations classes were most interested, were studied to determine their important characteristics.

2871. **Hutchinson, Emilie.** Women and the Ph. D. Greensboro, N. C., Institute of women's professional relations, 1929. 126 p.

Data on 1,025 women who have taken the Ph. D. degree in United States universities; why taken, how, when; opinions of its value, results in earnings, occupational histories.

2872. **Jacobsen, Alta T.** The causes of absence among girls in a suburban high school. Master's thesis, 1929. University of Chicago, Chicago, Ill.

2873. **Jepson, Lydia P.** Educational work of women's clubs in Iowa. Master's thesis, 1929. State university of Iowa, Iowa City. 135 p. ms.

2874. **Keyser, Leah Lucinda.** Relation to college success of certain factors in the women's physical examination. Master's thesis, 1928-29. Ohio state university, Columbus.

2875. **Kling, Virginia M.** The relationship between physical capacity and athletic ability among college women. Master's thesis, 1929. Wellesley college, Wellesley, Mass. 110 p. ms.

This study is an application of "Rogers test" to college women undergraduates. Findings: Athletic ability of college women not correctly measured by Rogers test. Martin strength index gave as high correlation with athletic criterion as did Rogers test.

2876. **Mitchell, Fannie S.** A survey of the position of dean or adviser of girls in North Carolina high schools. 1928-29. North Carolina educational association, Raleigh. 6 p. ms.

This study shows number of schools having deans of girls, the variation of title given to person serving in said capacity, together with experience, salaries, training and service rendered.

2877. **Pressey, Luella Cole.** The women whose names appear in "American Men of Science" for 1927. School and society, 29: 96-100, January 19, 1929.

A study of birthplace, age, education, major interest, and present location of 687 women, active in scientific work, whose names are included in "American Men of Science" for 1927.

2878. **Prosser, Mame Rose.** A study of the scholastic performance of freshmen women at the State university of Iowa. Doctor's thesis, 1928. State university of Iowa, Iowa City. 268 p. ms.

2879. **Shook, Mary S.** Study of Peabody women graduates. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 55 p. ms.

Four hundred and seventy-two women graduates of George Peabody college for teachers were studied. Findings: (1) 98 per cent have entered the profession for which they were trained; (2) there is very little lapse of time between graduation and employment; (3) 93 per cent of the graduates are employed in the south; (4) 84 per cent were employed in educational work at the time the study was made; (5) a decided majority were employed in the field in which they did their major work; (6) the graduates were keeping in touch with advancing standards in their profession by post-graduate work; etc. (7) approximately one in six of the graduates were married, 49 per cent of the latter were engaged in teaching; (8) the average number of children per marriage is only .8; (9) one-half of the graduates reporting occupations of their husbands married professional men; (10) there is a relation between the occupation of the husband and that of the wife.

2880. **Sturtevant, Sarah M., and Hayes, Harriet.** A partial bibliography for deans of women and girls. New York city, Teachers college, Columbia university, 1929. 35 p.

2881. ——— and **Strang, Ruth.** Activities of high school girls—a study of the daily schedules of 152 pupils. Teachers college record, 30: 562-71, March 1929.

From this study it was found that the average girl student spends nine and a half hours in sleep, one hour in physical activity, one and one-half hours in eating, two and a half hours in study, one half hour in extra-classroom activity, one and one-half hours in social activity and one half hour "fooling around," one hour in home duties, one hour in recreational reading and music.

2882. ——— ——— A personnel study of deans of girls in high school. New York city, Teachers college, Columbia university, 1929. 150 p.

2883. ——— ——— A personnel study of deans of women in teachers colleges and normal schools. New York city, Teachers college, Columbia university, 1928. 95 p. (Contributions to education, no. 319)

The schools selected for this study were the public state-supported normal schools and teachers colleges in the United States. 77 per cent of the schools studied have a woman officially appointed to supervise the various phases of college life among the women students; 85 per cent of the teachers colleges have created the office of dean of women, whereas 56 per cent of the normal schools have done so. Information concerning duties, experience and training, and salaries, is given.

2884. **Test, Mrs. Edna.** Occupation for women in Akron. Master's thesis, 1929. University of Akron, Akron, Ohio. 62 p. ms.

The scope of study was local. Findings: Akron offers occupations for women where they can grow and develop while being employed; personality seems to be the first requisite with personnel directors.

2885. **Woodhouse, Chase Going.** Married college women in business and the professions. Reprinted from The Annals of the American academy of

political and social science, May 1929. 14 p. (Reported by Institute of women's professional relations, Greensboro, N. C.)

Results of this study show that women without children had median earnings of \$1,800 and a maximum of \$8,000. There were 4.6 per cent of them earning \$4,000 or above. The women with children reported median earnings of \$1,975 and a maximum of \$20,000, while 11.1 per cent of them earned \$4,000 or over.

See also 28, 39, 53, 66-67, 143, 155, 770, 1345, 1499, 1654, 1670, 1841, 2339, 2357, 2394, 2404-2405, 2428, 2433, 2446, 2605-2606, 2633, 2681, 2688, 2696, 2724, 2766, 2822, 2910, 2922, 2955, 2978, 2982, 2995.

EDUCATION OF RACIAL GROUPS

2886. **Bell, Reginald.** A study of certain phases of the education of Japanese in Central California. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2887. **Butzbach, Arthur Graham.** The segregation of Orientals in the San Francisco schools. Master's thesis, 1928. Stanford university, Stanford University, Calif.

2888. **Garth, Thomas R., Smith, Hale W., and Abell Wendell.** A study of the intelligence and achievement of full-blood Indians. *Journal of applied psychology*, 12: 511-16, October 1928.

Paper read before section Q of the American association for the advancement of science, December 28, 1927. This study is an attempt to measure intelligence as influenced by factors of nurture in the case of 1,000 full-blood Indians.

2889. **Holcombe, Walter Merton.** An inquiry into the length of recitation of Mexican school children. Master's thesis, 1929. University of Denver, Denver, Colo.

Tests were given to 195 Mexican children in the third, fourth, seventh and eighth grades in the public schools of San Antonio, Texas, in order to ascertain if Mexican pupils have a tendency to become fatigued with continuous study, the effect of the rest period and the difference between Mexican and white children. Pupils added columns of numbers, spending two minutes on each page. They worked for 28 minutes, then rested 5. Older pupils (seventh and eighth grades) worked for 42 minutes. Findings: (1) Tendency toward fatigue is plain; (2) rest period made for improvement; (3) practically no difference between the ability of the two races was found.

2890. **Jamieson, Elmer, and Sandiford, Peter.** The mental capacity of southern Ontario Indians. *Journal of educational psychology*, 19: 536-51, November 1928.

Jamieson, who carried out this investigation under Sandiford's direction, is an Indian who has resided on the Six Nations Reserve from birth and can speak the Mohawk dialect. Although the Indian children tested had a knowledge of English, it is certain that every one of them suffered from a language handicap. The results of the study showed that Indian pupils do not perform nearly as well as whites on the Ayres-Burgess silent reading test, they rank below the whites in writing and spelling ability, and both their educational quotients and their accomplishment quotients are below normal on the average.

2891. **Patterson, Margaret.** Inter-racial education in the primary department. Master's thesis, February 1929. Teachers college, Columbia university, New York, N. Y. 36 p. ms.

2892. **Schwartz, Mrs. Morris.** A history of education among the Cherokee Indians of Oklahoma. Master's thesis, 1929. University of Texas, Austin.

NEGROES

2893. **Blose, David T.** Statistics of education of the negro race, 1925-1926. Washington, United States Government printing office, 1928. 42 p. (U. S. Bureau of education. Bulletin, 1928, no. 19)

2894. **Brown, Charles C.** The history of negro education in Tennessee. Master's thesis, 1928-1929. Washington university, St. Louis, Mo.

2895. **Cooper, Peter.** An investigation of racial differences of college students in respect to personality traits. 1928. Talladega college, Talladega, Ala.

In this study 28 men and 28 women, negro students, were given the Allport ascendance-submission reaction test. Also a comparison was made between the subjective judgments of two teachers on these

56 students are the objective results as revealed by these tests. Results: The negro students showed practically the same central tendencies as are indicated by the Allports among white students. There are wide individual differences within both white and negro groups, but an inappreciable difference between the means and medians of the two races. Among the men the range of differences within the group extends from plus 25 to minus 29; in the case of the women from plus 45 to minus 13. But in comparing the means of the two races there is a difference of only 1.4 among the women and 1.6 among the men. Before the tests were given two teachers ranked the students in the order of ascendance and submission. A comparison of these rankings with those gained through the tests showed positive correlations of .36 and .37.

2896. **Covington, Floyd C.** Occupational choices in relation to economic opportunities of negro youth in Pittsburgh. Curriculum, study and educational research bulletin (Pittsburgh, Pa.), 3: 133-34, January-February 1929.

This work is based on a study of 434 negro boys and girls enrolled in Fifth Avenue, Schenley, Westinghouse, and Peabody high schools.

2897. **Evans, John W.** A study of the development of the facilities for negro education in St. Louis from 1858 to 1928. Master's thesis, 1929. State university of Iowa, Iowa City. 131 p. ms.

2898. **John F. Slater fund.** Reference list of private and denominational southern colored high schools and colleges. 4th ed. 1928-29. 16 p. (Occasional papers, no. 20)

2899. **Lehman, Harvey C., and Witty, Paul A.** The negro child's interest in writing poetry. Education, 49: 346-54, February 1929.

2900. **McGee, Alice E.** The views of colored students and laymen respecting the duties and difficulties of a good citizen. Master's thesis, 1929. University of Chicago, Chicago, Ill. 45 p. ms.

This study gives: (1) the opinions of 1,000 pupils in the colored high schools of St. Louis, Mo., and of 40 colored citizens of St. Louis, respecting the duties and difficulties of citizenship; (2) a comparison with a study of representative citizens of the United States. Findings: There are some problems in citizenship that are common to all citizens and some that are common to specific groups. A need of differentiated objectives is suggested.

2901. **Mebane, E. A.** Vocational choices of secondary students in the negro accredited high schools of North Carolina. 1928-29. Agricultural and technical college, Greensboro, N. C. Ms.

The purpose of this study was to assemble and classify vocational choices in order to furnish a scientific basis for vocational guidance. Thirty-eight schools were surveyed. The most popular choice was professional. Trades and business occupational groups were proportionally small in comparison with the professional group. The clerical group was second in choice among the girls and trade was third.

2902. **Payne, E. George.** Negroes in the public elementary schools of the North. 1928. New York university, New York, N. Y. 9 p.

The study includes a determination of the educational status and opportunity of the negro in the northern states and the elementary schools. It includes a study of segregation and its significance, the nature and extent of conscious discrimination and in general the weaknesses of the public school as an agency of negro adaptation and social adjustment.

2903. **Peterson, Joseph, and Lanier, L. H.** Studies in the comparative abilities of whites and negroes. Baltimore, Williams and Wilkins company, 1929. 156 p. (Mental measurements monographs, no. 5, February 1929)

2904. **Price, Joseph St. C.** Measurement of intelligence of freshmen in negro colleges. June 1929. Collegiate institute, Institute, W. Va. 20 p. ms.

This study includes group, verbal, intelligence tests of freshmen in the following negro schools, together with those of freshmen in a number of white educational institutions: Atlanta university, Fisk university, Hampton institute, Howard university, Lincoln university, Morehouse college, Morgan college, North Carolina state college, Spelman college, West Virginia college, Wilberforce university.

2905. **Reedy, Sidney Joseph.** The educational significance of negro magazines. Master's thesis, 1928. State university of Iowa, Iowa City. 27 p. ms.

2906. **Royster, Lawrence T., and Hulvey, C. N.** A study of the ratio of weight-height-age, in negro children. Read before the American pediatric

society, St. Louis, Mo., May 20, 1929. (Pub. in American journal of diseases of children)

A statistical study of over 8,000 measurements of negro children, in connection with similar measurements of white children. The study reveals the fact that the various ratios, height to weight, height to weight for age, height to age, etc., in negro children differ materially from similar ratios in white children.

2907. **Shaw university, Raleigh, N. C.** Studies by the Pestalozzi club. 1928-29. Shaw university, Raleigh, N. C. 40 p. ms.

This is a compilation of papers by college students dealing with the following topics: Non-standard negro high schools, development of private negro education in North Carolina, comparative study of negro and white education in North Carolina, and other minor papers.

2908. **Smith, L. H., jr.** A study of the accredited negro high schools of North Carolina over a period of four years to determine number of graduates entering college. 1928-29. Agricultural and technical college, Greensboro, N. C.

In this study 24 schools responded. The general trend in the number of high school graduates was slightly upward. The trend in the number of students entering college was markedly upward during the three first three years of study. In the first year, less than half of the high school graduates entered college. During all the other years more than 50 per cent entered college.

2909. **Stringer, S. L.** A survey of two types of school systems for negro education, a semi-consolidated school system without transportation in Coahoma county, Miss., and a consolidated system with transportation in Forrest county, Miss. Master's thesis, 1929. University of Mississippi, University.

2910. **Towns, Grace.** The emotional attitudes of negro girls in high school and college. Master's thesis, 1929. Ohio state university, Columbus. 76 p.

Purposes of the study were: (1) To discover the nature of emotional attitudes of negro girls in high school and college; (2) to compare with white girls of same ages; (3) to compare with feeble-minded girls. Pressey X-O tests were used. Conclusions: (1) Emotional age apparently is not related to mental age; (2) emotional age apparently is not related to chronological age; (3) In most individuals development in two of the three age scales is usually rather closely related; (4) certain changes in emotional response at different chronological ages are found; (5) a difference in the emotional attitudes of negro and white girls is found; (6) results cannot be taken as significant for either social group due to circumstances involved in the investigation; (7) little that is similar appears in a comparison of the negro and feeble-minded groups.

2911. **United States. Bureau of education.** Survey of negro colleges and universities. Prepared in the Division of higher education, Arthur J. Klein, chief. Washington, United States Government printing office, 1929. 964 p. (Bulletin, 1928, no. 7)

2912. **Varney, W. Drew.** A comparative study of intelligence of negroes and whites. Master's thesis, 1929. University of Rochester, Rochester, N. Y. 160 p. ms.

This study is a summary of other studies to date, a person study of two groups—negro and white—review of inequalities of educational opportunities of the two races, analysis of other social and economic factors. Findings: Other studies have not adequately recognized inequalities of opportunity for the two races; granted equal opportunity, the apparent differences in intelligence tend to decrease.

2913. **Wilson, Henry A.** Development of Smith-Hughes agriculture for negroes in Arkansas. Master's thesis, 1929. Ohio state university, Columbus. 101 p. ms.

An objective analysis and tabulation of data which are taken directly from reports of the vocational instructors in negro schools of Arkansas. Reports were available for all years 1920-1927 inclusive, except 1924. Findings: Substantial gains were made during the period covered by the study in all-day, evening, part time and day unit classes.

See also 411, 1455, 1481-1482, 1560, 2224, 2513, 2593, 2757.

EDUCATION OF BLIND AND DEAF

2914. **Abernathy, Edward Robert.** A tone-intensity comparison of the hearing of deaf brothers and sisters. Master's thesis, 1929. Ohio state university, Columbus. 78 p. ms.

This study is a comparison by intensities on 20 tones of the hearing of 34 families of deaf brothers and sisters. Conclusions: There is a tendency for congenitally deaf brothers and sisters to have the same amount of hearing in the same tones.

2915. **Caldwell, Floyd Franklin.** A comparison of blind and seeing children in certain educational abilities. Doctor's thesis, 1929. University of California, Berkeley. 68 p. ms.

An attempt to compare the abilities of blind and seeing children by means of the results obtained on the Stanford achievement tests. (Reading tests I, II, and III, Forms A and B were used. The groups tested were the junior high school students at the California school for the blind, and low seventh pupils of Oakland high school). Conclusions: The achievement of the blind compares very favorably with that of the seeing when ample allowance is made for the speed handicap. Taking the ages of the two groups into consideration, however, the blind are found to be five years and six months older than the seeing children used in this experiment. From the evidence cited it seems logical to conclude that the blind children have required about three years longer to reach that level of achievement indicated on the tests than the seeing children have required to reach approximately the same level.

2916. **Craig, Samuel B.** Status of education for the deaf. 1928. George Washington university, Washington, D. C.

An historical survey.

2917. **Fowler, E. P., and Fletcher, Harvey.** Deafened school children. *Journal of the American medical association*, 91: 1181-83, October 20, 1928.

Study is devoted to the results of testing hearing with the audiometer. The authors find that there are large numbers with a hearing loss between 6 and 9 sensation units "who would derive great benefit from proper treatment." While a considerable number in this group will show improvement without treatment a large number will show a definite decrease in hearing ability from year to year. This class should surely be given medical attention.

2918. **Knotts, Josephine R., and Miles, W. R.** The maze-learning ability of blind compared with sighted children. *Pedagogical seminary and Journal of genetic psychology*, 36: 21-50, March 1929.

Two groups each containing 20 blind and two groups each containing 20 sighted pupils were studied. Blind and sighted were carefully matched in chronological and mental age. One group of blind and one of sighted (40 subjects in all) were used with each maze. The blind show median scores indicating somewhat better success than the sighted in number of trials, total errors, and total time for both mazes. The blind show wider ranges of scores than the sighted. The raised maze traversed by the finger was found much easier for both blind and sighted than the similar stylus maze which did not afford direct cutaneous contact.

2919. **Laurer, Frank A.** Hearing survey among a group of pupils of Syracuse schools. *American journal of public health*, 18: 1353-60, November 1928.

Tests of hearing were made by means of the audiometer. The amount of impaired hearing varied greatly, by this test, in different schools. The author believes that a language handicap may be responsible for some of the findings.

2920. **Mansfield, Helen L.** A case of congenital auditory aphasia complicated by amentia. Reprinted from *Training school bulletin (Vineland, N. J.)*, January 1929. 5 p.

A case study of a boy 12 years of age, who apparently has had auditory aphasia from childhood.

2921. **Pintner, Rudolf.** Speech and speech-reading tests for the deaf. *Journal of applied psychology*, 13: 220-25, June 1929.

This is a study in the development of objective measures for the determination of abilities in speech and speech-reading among the deaf. The implications of this study point to the possibility of the construction of speech and speech-reading tests which will have a fair degree of reliability and validity for determining the ability of the deaf individuals relative to speech and speech reading.

2922. **Thompson, Hazel N.** Vocational training for girls in schools for the deaf. Master's thesis, 1928, George Washington university, Washington, D. C. *American annals of the deaf*, 73: 393-419, November 1928.

A questionnaire study of opportunities and practices in vocational training in schools for the deaf in the United States and Canada. Findings: Pre-vocational and vocational subjects are offered in most of the schools for the deaf; almost one-half of the girls enrolled in schools for the deaf in America are pursuing vocational training, over one-half of the schools for the deaf report vocational courses planned with relation to vocational opportunities, outlined with definite objectives, and allotted the same credit as academic courses, etc.

2923. **Upshall, Charles C.** Day schools vs. institutions for the deaf. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

New York city, Teachers college, Columbia university, 1929. 104 p. (Contributions to education, no. 389)

Records from over 4,000 pupils in institutions and day schools for the deaf were available for study. One of the problems which the author attempts to solve is "How real is the difference between the pupils in the day schools and in the institutions with respect to chronological age, mental ability, educational achievement, residual hearing, years spent in schools for the deaf and in schools for hearing pupils, age of starting school and age of becoming deaf." It is concluded that there are 99 chances out of 100 that the day schools are accomplishing more educationally than the institutions.

See also 2377.

EXCEPTIONAL CHILDREN

2924. **Armstrong, Caroline.** Creative work in ungraded rooms. Los Angeles school journal, February 25, 1929.

2925. **Astrachan, Irving.** Juvenile delinquency. Master's thesis, 1928. New York university, New York, N. Y. 90 p. ms.

2926. **Brenfleck, Mrs. Elvira.** Mental status of tuberculous children. Master's thesis, 1929. University of Akron, Akron, Ohio. 50 p.

Findings: That the average I. Q. was lower than normal at second testing; trend of the average I. Q. was lower although extremes approached the middle.

2927. **Bryne, May E., and Shoemaker, Ward A.** The academic achievement of the mentally deficient. 1929. Board of education, Minneapolis, Minn. 100 p. ms.

The study is of the academic performance in reading, spelling and arithmetic fundamentals of over 500 special day class pupils ranging between 50 and 80 in I. Q. Findings: (1) Special class pupils with I. Q.'s ranging from 50 to 85 make about 65 per cent of the reading progress of normal children according to the median performance of 562 such children on the Thorndike-McCall reading scale in comparison with the standards of the test; (2) special class pupils make about 54 per cent of the spelling progress of normal children according to the median performance of 526 children on the Morrison-McCall spelling scale in comparison with the standards of the scale; (3) special class pupils make about 40 per cent of the arithmetic progress of normal children according to the median performance of 565 children on the Woody-McCall fundamentals test in arithmetic in comparison with the standards of the test.

2928. **Calhoon, C. H.** A follow-up study of 100 normal and 100 subnormal delinquent boys. Journal of juvenile research, 12: 236-40, September-December 1928.

"From the data collected on these two groups of boys, we may conclude (1) that the intelligence of children who are behavior problems must be carefully considered when a treatment is outlined, and (2) that normal intelligence does not necessarily mean good social adjustment. The possession of normal intelligence by delinquent children is not in itself a sufficient justification for expecting a better adjustment than may be predicted for those of lower mentality."

2929. **Coleman, Sister Mary Bernard.** Legislation in Minnesota for children needing special care. Master's thesis, 1929. Catholic university of America, Washington, D. C. 70 p. ms.

A descriptive study of the Minnesota code (1917-1929) for dependent, defective and delinquent children. The conclusion is drawn that Minnesota's code for children needing special care is one of the best in the United States.

2930. **Coxe, Warren W., and Ross, Eleanore.** Special classes in New York state. Educational administration and supervision, 14: 574-79, November 1928.

2931. **Cuthbertson, Daisy.** The exceptional child in the elementary schools of North Carolina. Master's thesis, 1929. North Carolina college for women, Greensboro. 36 p. ms.

Results of reading and questionnaire on what is being done in North Carolina with recommendations. Further attention to exceptional children seems justified by results already obtained.

2932. **DeLong, Howard H.** An analysis of the researches on gifted children. Master's thesis, 1928-1929. University of Pittsburgh, Pittsburgh, Pa.

2933. **Doll, Edgar A.** The special class as a clearing-house. Educational research bulletin (Ohio state university), 7: 295-303, October 17, 1928.

This article was given as an address before the special education section of the eighth annual Ohio state educational conference. The author reviews the cases of 15 problem children who were examined as prospective candidates for admission to a special class.

2934. **Dvorak, August, and Rae J. J.** A comparison of the achievement of superior children in segregated and unsegregated first-grade classes. *Elementary school journal*, 29: 380-86, January 1929.

This experiment supports the theory that when the methods and the materials of instruction are adapted to the abilities and the educational needs of homogeneous groups, the results are positive, but the mere segregation of bright pupils into homogeneous groups without these adaptations produces negative or indifferent results.

2935. **Eisenmann, Marguerite Mary.** A study of the physical and educational care of a group of crippled children. Master's thesis, 1929. Catholic university of America, Washington, D. C. Washington, D. C. National Catholic school of social service, 1929. 6 p. (*Social science monographs*, vol. I, no. 2, September 15, 1929)

A study of the educational experience and physical care of fifty crippled children in a large city. Findings: There was very little effort to coordinate the physical and educational care of the children in the group.

2936. **Epstein, Max.** A comparative study of the intelligence of children of foreign parentage. Master's thesis, 1929. College of the city of New York, New York, N. Y. 105 p. ms.

Comparison of intelligence test scores (National intelligence scale) of children of foreign parentage in grades four through eight of a metropolitan school. Findings: (1) There is a positive association between social status and literary on the one hand and intelligence test scores on the other; (2) there are marked linguistic differences between the children of American parentage and those of foreign parentage; (3) the order in mental test score of the various groups was found to be: Russian-Jewish, American, Lithuanian, German, Irish, Polish and Italian; (4) the range of variation within any group is marked by greater than the difference between the averages of any two groups in mental test score.

2937. **Glassburg, John A.** Is the treatment of speech disorders a medical problem? *Journal of the American medical association*, 92: 958-62, March 23, 1929.

Author concludes that the treatment of speech disorders is a medical problem which requires the cooperation of the pedagogue, the psychiatrist and rhinolaryngologist. Teachers should work under the supervision of a medical director.

2938. **Haefner, R. H.** The educational significance of left handedness. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. (*Contributions to education*, no. 360)

A study of 68 left-handed children in grades four through seven mated with an equal number of right-handed children of the same chronological age, sex, and grade. Conclusions: Left-handed children appear to be slightly inferior to right-handed children in paragraph reading and arithmetical computation. In other school subjects there are no differences between the two groups. Left-handed children do not differ significantly from right-handed children in interests, school adjustment or type of worries. Left-handed children, in terms of the present study, are somewhat inferior to right-handed children in weight and physical strength.

2939. **Hilleboe, Guy L.** Finding and teaching atypical children. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1930. 177 p. (*Contributions to education*, no. 423)

The aim of this study was to classify atypical children, to determine approximate numbers of each type and the relation of such numbers to the state's minimum program of education, to evaluate methods for their selection, diagnosis and assignment to places in the school organization, and to indicate the procedure necessary for effective follow-up. It was found that 11 per cent of the school population deviate so markedly as to make necessary provision for their education in special classes.

2940. **Jensen, Dortha Williams.** The evaluation of literary juvenilia. Doctor's thesis, 1929. Stanford university, Stanford University, Calif.

This study deals with intellectually superior children evidencing exceptional ability, as child writers, and with the most meritorious of their writings.

2941. **Judge, Sister Katherine.** The problem child in education and what we are doing for him. 1928-29. Syracuse university, Syracuse, N. Y.

2942. **Keesecker, Ward W.** Digest of legislation for education of crippled children. Washington, United States Government printing office, 1929. 13 p. (U. S. Bureau of education. Bulletin, 1929, no. 5)

2943. **Keller, Helen Bass.** The teaching of non-readers. *In* Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 52-60.

2944. **Knox, Elmer E.** Follow-up of 103 Whittier state school boys ten years after admission. *Journal of juvenile research*, 12: 261-69, September-December 1928.

The results of this study show that 58.2 per cent of the boys for whom data were available have made successful adjustment to society. An additional 3.8 per cent are still within the possibility of ultimate successful adjustment. 38 per cent have failed in meeting social requirements and have become definitely delinquent. Age at entrance to the institution shows no definite relationship to life success, etc.

2945. **Lincoln, Edward A.** The later performance of under-aged children admitted to school on the basis of mental age. *Journal of educational research*, 19: 22-30, January 1929.

The findings of three studies point to the conclusion that children admitted on the basis of mental age are not only able to maintain their scholastic accomplishment on equal terms with their classmates, but are decidedly superior in some phases of the work.

2946. ——— Some clinical examinations and their implications. *Educational administration and supervision*, 14: 461-68, October 1928.

A report upon the examination of 502 problem children who have been referred during the past few years from the schools of a single city to the Psycho-educational clinic of the Harvard graduate school of education. These children ranged from 4 to 17 years of age and were found in every grade from kindergarten to sophomore year in high school. The median I. Q. of the entire group was 75.

2947. **McClure, William E.** Characteristics of problem children based on judgments of teachers. Juvenile adjustment agency, Toledo, Ohio. *Journal of juvenile research*, 13: 124-40, April 1929.

This study covered 26,364 grade school children in Toledo, attending 40 schools. Findings: 533 problem children were reported by teachers, 447 boys and 86 girls. The mean I. Q. was 90.

2948. **McNichol, Margaret H.** Survey of pupils of superior scholastic achievement in a Philadelphia junior high school. Master's thesis, 1928. University of Pennsylvania, Philadelphia, Pa.

2949. **Matheson, Robert Gordon.** A survey of the special classes in the public schools of South Carolina. Master's thesis [1929] University of South Carolina, Columbia.

2950. **Molle, Caroline.** Problem children—their behavior difficulties in relation to their health habits and practices at school and at home. Master's thesis, 1929. New York university, New York, N. Y. 57 p. illus.

An investigation into 50 problem and 50 normal children in sixth year. Procedure: Haggerty intelligence test no. 2; health habits, practices according to Payne health scale; study of home conditions, according to West Virginia scale; use of leisure time—letters and reports of pupils.

2951. **Mosseman, A. M.** Adjustment A classes. *In* Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 61-68.

2952. **Newcomb, Theodore M.** The consistency of certain extrovert-introvert behavior patterns in 51 problem boys. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 123 p. (Contributions to education, no. 382)

Fifty-one problem boys were observed over a period of five weeks at a summer camp, to determine whether consistent behavior patterns existed of such a kind that extrovert and introvert types could be distinguished on the basis of objective observation. Consistent behavior of the kind expected according to the introversion-extroversion hypothesis was found to so slight an extent in these boys that the distinction does not appear to be of promise for therapeutic work with problem boys.

2953. **Ojemann, R. H.** Study of the relation of handedness to speech with emphasis on the technic of testing handedness. Doctor's thesis, June 1929. University of Chicago, Chicago, Ill. 242 p. ms.

Technics of testing unimanual and bimanual handedness were worked out and a study of the relations of handedness to speech was made using data from 1,500 pupils. Conclusions: (1) By using several tests a satisfactory technic of testing handedness has been worked out; (2) the customary procedure in interpreting bimanual tests is in error; (3) handedness is a bimodal characteristic; (4) no effect upon the speech function of training left-handed individuals to write with the right hand was found.

2954. **Olsen, Arden B.** The evolution of the juvenile court in Utah. Master's thesis, 1928-29. University of Utah, Salt Lake City.

Beginnings of juvenile court in Utah, its administration and cost.

2955. **Otis, Margaret.** Improvement of feeble-minded girls over 16 years of age. *Journal of applied psychology*, 13: 301-15, June 1929.

This is a report of an experiment in reading work for feeble-minded girls. A reading club was organized and an attempt made to arouse the interest of girls in reading and to develop ability for reading. The experiment resulted in the improvement in the reading ability of the girls and the improvement of the I. Q. of the individuals in a number of instances. It is stated that training in reading and book work affects the results of Binet-Stanford tests.

2956. **Pritchett, Henry L.** Social backgrounds of the unadjusted child. Doctor's thesis, 1928. New York university, New York, N. Y.

A study of the significance of the social backgrounds of 100 cases of "unstable" or "psychopathic" children. The cases are chosen from the files of the Child guidance clinics of the National committee for mental hygiene from various clinics established in cities in the United States.

2957. **Pyle, W. H., and Snedden, G. H.** An experimental study of bright and dull pupils. *Journal of educational psychology*, 20: 262-79, April 1929.

A study of 31 bright pupils and 12 dull pupils. The author concludes that if the brightest pupils are compared with the dullest, in some types of work including certain forms of learning, some members of the dullest group will excel some members of the brightest group.

2958. **Sanguinet, E. H.** What modifications in the technique of instruction should be made for superior children? *Educational administration and supervision*, 15: 58-66, January 1929.

Gives the findings of a number of studies made of gifted children, for the purpose of determining the characteristics of gifted children and modifying school procedure to meet their needs.

2959. **Schmitt, Clara.** Analysis of 100 maladjusted high school cases. *Educational research bulletin* (Los Angeles, Calif.), 8: 7-9, April 1929.

2960. **Shea, James A.** Juvenile delinquency, 1928-29. Syracuse university, Syracuse, N. Y.

2961. **Shoemaker, Ward Almon.** The academic achievement of children who are mentally deficient. Master's thesis, July 1929. University of Minnesota, Minneapolis.

2962. **Smart, Mary Elizabeth.** Provisions in the North Carolina public schools for the mentally handicapped child. Master's thesis [1929] University of North Carolina, Chapel Hill.

The information and data for this study were obtained by means of a questionnaire, which was sent to the superintendent of schools in 100 cities in North Carolina.

2963. **Smith, C. Wilson.** Growth in height of feebleminded children. *Pedagogical seminary and Journal of genetic psychology*, 36: 330-41, June 1929.

Subnormal children are found to grow more slowly than normal children, and cease growing at about the age of 17 or 18. They are distinctly shorter as a group than normal children.

2964. **Stein, Elizabeth Clark.** Comparative study of fifty boys with unstable behavior. Master's thesis, 1929. University of Akron, Akron, Ohio. 80 p. ms.

The study was state wide. Findings: That remedial work could have been done from the standpoint of habit formation and physical defects.

2965. **Wallin, J. E. Wallace.** Mentally maladjusted school children. May 1929. Bureau of research, Department of education, Baltimore, Md.
A survey undertaken for the Department of education of Ohio.

2966. **Walter, Ort Leroy.** A study of some of the characteristics of mentally superior high-school seniors. 1928. University of Chicago, Chicago, Ill.

2967. **Webb, Lloyd W.** An analysis of the statutory provisions concerning truancy and delinquency in the United States. Master's thesis, 1929. Ohio state university, Columbus. 86 p. ms.

A study of the laws of the 48 states and of current literature on the subject of truancy and delinquency in schools. Findings: All states have compulsory education laws; only four states define truancy and but 46 define delinquency.

2968. **Wisconsin. Department of public instruction.** Special education for handicapped children. [1929] p. 57-75.

2969. **Woods, Elizabeth L.** Personality traits of children of superior intelligence in special classes and in regular classes. In Third yearbook of the psychology and educational research division, City schools, Los Angeles, Calif., 1929. p. 102-109.

2970. **Yeomans, Arthur James.** An inquiry into human opinions concerning the probable causes of certain forms of wrong-doing among boys of fifteen to twenty years of age. Master's thesis, 1928. University of Idaho, Moscow.

See also 102, 244, 328, 385, 445, 572, 709, 899, 919, 1133, 1252, 1317, 1377, 1552, 2081, 2085, 2194, 2382, 2724.

EDUCATION EXTENSION

2971. **Alderman, L. R.** Helps for teachers of adult immigrants and native illiterates. Washington, United States Government printing office, 1928. 68 p. (U. S. Bureau of education. Bulletin, 1928, no. 27)

2972. **Beattie, Margaret Jean.** An investigation of the permanence of the adult writing vocabulary. Master's thesis, 1929. State university of Iowa, Iowa City. 144 p. ms.

2973. **Briles, Charles Walter.** Cooperative part-time education. Master's thesis, 1929. George Peabody college for teachers, Nashville, Tenn. 107 p. ms.

2974. **Casselberry, William Sturgeon.** Some factors in the adjustment of part-time pupils. Master's thesis, 1929. Stanford university, Stanford University, Calif.

2975. **Chapman, H. B.** [Revision of student accounting reports for use in night schools] May 1929. Bureau of research, Department of education, Baltimore, Md. 5 p. ms.

Forms are designed to facilitate cost accounting of night school program.

2976. **Clark, Willis W.** Vacation school survey, 1928. Educational research bulletin (Los Angeles, Calif.), 8: 5-6, September 1928.

Survey tests in reading and arithmetic given to vacation school pupils showed an average gain of 3.2 months in four weeks' work. In 1927 an average gain of 2.5 months was made.

2977. **Dellone, Augusta.** A study of adult language needs as revealed by parents' letters to schools. Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

This study is based on a collection of 10,000 such letters. Types of errors are noted and checked against present day courses of study in representative sections—states, counties and cities—of the country.

2978. **Ely, Mary L.** A traveling-teacher experiment. 1928. American association for adult education, New York, N. Y.

The study is the outcome of two years of experimentation in the organization and teaching of classes for women workers by traveling teachers sent from New York to small industrial towns of New England and Pennsylvania. The demand for classes was the result of interest generated by the summer school conducted by the National league of girls' clubs at Miller's Place, L. I., and by the Bryn Mawr summer school for women workers in industry.

2979. **Farrell, Louise.** Report of an investigation of the value of follow-up work in continuation schools. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 9 p. ms.

2980. **Frasier, George Willard, and Bell, John Randolph.** Experiments in teachers college administration: IV. Extension service. Colorado state teachers college, Greeley. Educational administration and supervision, 14: 415-20, September 1928.
2981. **Hackenberg, J. L.** Survey of adult deficiencies in culture, with respect to the revision of the school curriculum to offset these deficiencies. Master's thesis, 1929. Pennsylvania state college, State College. 44 p. ms.
This study surveys deficiencies and correlates them with another similar study, also correlating them with actual achievements in an information test of a similar nature. Findings: Correlations between self ratings and ratings by other persons are extremely high, .85. Also correlations between ratings and actual testing are very high, .85 to .90. A wide gap existed between estimates of present efficiency and reasonable expectation in sections that pertain to culture, etiquette and enjoyment of leisure time.
2982. **Hill, Helen D.** The effect of the Bryn Mawr summer school as measured in the activities of the students. New York city. Affiliated summer schools for women workers in industry and American association for adult education [1929]. 133 p.
Statistics in regard to recruiting students for the school, as well as records of their reading and student activities after attendance at the school.
2983. **Hughes, Alfred L.** A comparative study of mental ability and achievement by extension-course students. Master's thesis, 1928-29. Ohio state university, Columbus.
2984. **Johnson, Edith Dexter.** Making the museum an educational asset. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 61 p. ms.
2985. **Jones, J. W.** A study of extension work in Indiana state normal school. August 1928. Indiana state normal school, Terre Haute.
A study of various means of earning credit and the students' taking advantage of such means.
2986. **Jordan, Clarence Lee.** A study of public evening schools in Illinois, 1928-1929. Master's thesis, 1929. University of Chicago, Chicago, Ill. 134 p. ms.
A study of all public evening schools in Illinois, 1928-1929, their organization, administration, teaching staffs, student personnel, records and reports, plans for publicity, etc.
2987. **Kilzer, L. R.** Why high-school pupils attend summer school. School review, 37: 132-35, February 1929.
Data were obtained in the high schools conducted during the summer of 1928 by two middle western universities. In each class the pupil was asked to state, in writing, his reason for taking the course in which he was enrolled. Of 420 responses 116, or 27.6 per cent wanted to complete the four year's work in less than four years. In only 30 cases, 7.1 per cent, were the pupils taking the course because they had failed. In all, 19 different reasons were given.
2988. **Larson, Arthur Harry.** Comparison of class extension correspondence and residence students, University of Kentucky. Master's thesis, 1929. University of Kentucky, Lexington.
2989. **Lewerenz, Alfred S.** Vacation school follow-up report, February 1928. Educational research bulletin (Los Angeles, Calif.), 8: 8, November 1928.
Figures seem to indicate that the 1927 summer school promotions were almost as effective as regular promotions.
2990. **McDonough, Mary Shields.** Adult education, its necessity and opportunities. Master's thesis, 1929. Marywood college, Scranton, Pa. 50 p. ms.
2991. **McEniry, Rev. John Benedict.** Adult education with particular reference to the work of a parish priest. Master's thesis, 1929. Catholic university of America, Washington, D. C. 100 p. ms.

2992. **Marberry, J. O.** Extension teaching in the University of Texas as viewed by the student. Austin, University of Texas, 1929. 65 p. (University of Texas bulletin, no. 2910, March 8, 1929)

In this study the author has given a very detailed and somewhat critical study of class extension teaching as viewed by the students who have experienced this class of instruction in the University of Texas. The quality of instruction was rated as good or excellent in nearly all courses reported. In comparing extension teaching with similar courses in residence, a higher rating was given extension teaching in more than one-third of the courses reported and about the same in more than one-half the total.

2993. **Read, Faye.** Report on study of summer schools, made for the National league of teachers' associations. In National league of teachers' associations. Year book, 1929. p. 13-15.

Contains a table, showing institutions having summer schools, length of course, date of opening, 1929, and reasons for opening date.

2994. **Schmid, Calvin F., and others.** Special investigation of the part-time school and junior worker in the city of Seattle. Olympia, Washington state department of education, 1929. 50 p. (Bulletin, no. 4, Trade and industrial series, no. 2)

This study reveals the necessity and importance of the part-time school in our educational system.

2995. **Smith, Hilda Worthington.** Women workers at the Bryn Mawr summer school. New York, N. Y. American association for adult education, 1929. 316 p.

A study of the students of the summer school (all women workers in industry) during the first five years, 1921-1926, and the effect of the school, in so far as it could be traced, on these students' activities in their own communities.

2996. **Stoddard, Paul Wakelee.** The place of "The Lyceum" in American life. Master's thesis, October 1928. Teachers college, Columbia university, New York, N. Y. 39 p. ms.

2997. **Weisel, Deborah D.** The development of the Springfield art museum from the art museum of State teachers college, Springfield, Mo. Master's thesis, June 1929. Teachers college, Columbia university, New York, N. Y. 100 p. ms.

2998. **Wilcox, Jerome K.** The adult education work of the United States government. Master's thesis, 1929. University of Illinois, Urbana.

2999. **Wingard, Jesse Oliver.** Correspondent courses. Master's thesis, July 1929. University of South Carolina, Columbia.

See also 132, 1501, 1613, 1681, 1702, 1768, 2615, 2643, 2653, 2702.

LIBRARIES AND READING

3000. **Adams, Mary H.** Instruction in the care and use of books as work tools in elementary schools—a joint responsibility of teacher and librarian. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

3001. **Barger, Justus Wheeler.** The county library in Montana. Master's thesis, 1929. Stanford university, Stanford University, Calif.

3002. **Bayles, E. E., and Custer, R. E.** High school libraries and study-halls. University of Kansas Bulletin of education, 2: 9-13, February 1929:

A review of a master's thesis on "A study of libraries and study-halls in 27 Kansas high schools," by Raymond E. Custer, University of Kansas, 1928.

3003. **Beggs, Berenice B.** Recent books aid in vitalizing high school subjects. Journal of educational method, 8: 94-99, November 1928.

3004. **Boyington, Gladys, and others.** Social studies material for high school libraries in North Carolina. 1928-29. North Carolina educational association, Raleigh. 15 p. ms.

This is an analysis of the number of books and types of books to be used for social science work in the high schools. Books were ranked through the questionnaire method on the basis of the frequency with which they were found in high school libraries. The study embraces ancient, medieval, modern and American history.

3005. **Bruner, Herbert B.** Determining basic reading materials through a study of children's interests and adult judgments. *Teachers college record*, 30: 285-309, January 1929.

3006. **California school library association.** Junior high school libraries in California. *California quarterly of secondary education*, 4: 329-34, June 1929.
A survey showing by size of school for 57 junior high schools in California, the training of librarians, number of books, periodicals, size of library room, etc.

3007. ———. A survey of California senior high school libraries. *California quarterly of secondary education*, 4: 271-75, April 1929.
Data by high school size regarding number of books and periodicals, seating capacity, training and experience of librarians, etc.

3008. **Campbell, Clara Evelyn.** A study of children's reading in the Larchmont (N. Y.) public library. Master's thesis, 1928. Columbia university, New York, N. Y.

This thesis is reviewed in the *Elementary English review*, 6: 1-2, 27-28, January 1929.
It is an investigation of the voluntary reading of books, belonging to the public library of the village of Larchmont, N. Y., by 753 children. Some of the important findings are: Ages of the 753 children ranged from 4 to 17 years—339 were 10 years of age or under and 414 were from 11 to 17 years; a large number of the juvenile borrowers are the most intelligent children in the community, the number of "average children" registered is large and children of D and E intelligence are to some degree enjoying books; more girls than boys borrow books and the girls excel in the amount of reading done; fiction, biography and fairy tales are the types of books children like best; children in the sixth grade and below read more biography than children in the seventh grade or above.

3009. **Cole, Herbert A.** A study of the high school libraries in the first-class public high schools of Missouri. Master's thesis, 1928-29. Washington university, St. Louis, Mo.

3010. **Cowley, W. H.** The profession of librarianship. Washington, D. C., American council on education, 1928. 57 p. (Vocational monograph series, no. 2, November 1928)

This study sets forth the training, duties, and salaries in the profession of librarianship.

3011. **Cox, Fannie.** Teaching outlines for biography and periodical indexes and bibliographies for a first year course in reference work. Master's thesis, 1928. Columbia university, New York, N. Y.

3012. **Cundiff, Ruby Ethel.** The stimulation of cultural reading; a college and university library problem. Master's thesis, 1928. Columbia university, New York, N. Y.

3013. **Cutright, Prudence, and Brueckner, Leo J.** A measurement of the effect of the teaching of recreational reading. *Elementary school journal*, 29: 132-37, October 1928.

A study made in the Minneapolis schools to ascertain the number of pupils in grades three to six who had library cards and the activities carried on by the teachers to create interest in recreational reading.

3014. **Eells, Walter Crosby.** What professional magazines do prospective educators read? *School and society*, 29: 446-48, April 6, 1929.

Classifies over 2,500 articles chosen from 28 professional journals for supplementary reading by 115 members of a class in Introduction to the Study of Education and compares the list with two other lists of professional periodicals selected from different standpoints.

3015. **Elder, Vera, and Carpenter, Helen S.** Reading interests of high school children. *Journal of educational research*, 19: 276-82, April 1929.

A survey of the reading interests of the girls in the Julia Richman high school, of New York city, by the school librarians. If the findings for a survey of one large high school may be accepted as typical of the reading interests of girls of adolescent age, certain definite conclusions may be drawn. It seems safe to say that girls of this age read more fiction and like it better than anything else. It is also true that there is a definite development in reading taste from the simple love story and mystery story to the characteristic stories and realistic stories.

3016. **Fargo, Lucile F.** The library in the school. Chicago, American library association, 1928. 360 p. ms. (Library curriculum studies, prepared under the direction of W. W. Charters)

3017. **Farr, Helen Esther.** Childrens literature in teachers colleges and normal schools; some investigations and recommendations. Master's thesis, 1928. Columbia university, New York, N. Y.

3018. **Finch, Howard Montague.** The relationship between the age-grade status of high school pupils and the amount of reading material in their homes. Master's thesis, 1928. University of North Carolina, Chapel Hill.

The data for this report were secured from questionnaires filled out by 2,078 pupils in the high schools of North Carolina. Conclusions: (1) Considering the three factors (newspapers, magazines, and books), the clearest relationship existed between the number of books in the home and the age-grade status of the children; (2) of the nine groups into which the magazines were classified, a favorable relationship existed more clearly between the age-grade status of the children and the presence in the home of each of the following groups: "women's magazines," "literary magazines," and "magazines selected by girls only."

3019. **Fitzgerald, Mary A., and Brunson, Grace.** Returns from the questionnaire on recreational reading sent out by grammar grade department of the North Carolina educational association, Raleigh, N. C. North Carolina educational association, 1928-29. 3 p. (Proceedings of 5th annual North Carolina conference on elementary schools)

This study shows provisions made for recreational reading during the school term, during the school day, and during vacation, and includes a list of 25 of the most popular books for grammar grade boys and girls, with a list of new fiction and a list of selected magazines for grammar grade children.

3020. **Foster, Richard A.** School life in American literature. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y.

This study includes the school master in literature only as he is related to the school and its activities. School life was taken to mean not merely the educational life within the schoolroom, but the relations of students to each other and to the teacher at work and at play.

3021. **Geiser, Cynthia B.** A survey of the junior and senior high school libraries in Hawaii. Master's thesis, 1929. University of Hawaii, Honolulu. 132 p. ms.

3022. **Gibson, William W.** The selection of basic library books for certain courses in junior colleges. Master's thesis, 1928. State university of Iowa, Iowa City. 142 p. ms.

3023. **Gilmore, Carrie F.** A comparative study of children's reading lists. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

3024. **Grace, Alonzo G.** The reading interests of adults. Journal of educational research, 19: 265-75, April 1929.

Gives the results of a study made of 3,289 adults to discover whether or not the reading material being used in evening schools for adults meets the interests, needs, and desires of the participants of these classes and groups.

3025. **Gray, William S.** The reading interests and habits of adults. New York, The Macmillan company, 1929. 305 p. (Studies in adult education)

The study consists of two major parts; first, a summary of the results of about 150 published investigations relating to the reading interests and habits of adults and, second, reports on approximately 300 case studies of adult reading habits made in Hyde Park, Chicago, North Evanston, Ill., and Cleveland, Ohio. The results show that about 95 per cent of adults read newspapers, 75 per cent read magazines, and 50 per cent read books.

3026. **Groves, Cozette A.** A study of the factors that influence independent reading among high school pupils. Master's thesis, 1929. University of Chicago, Chicago, Ill. 111 p. ms.

3027. **Hackworth, Lector.** Comparison and analysis of ten book lists for children's reading. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 94 p. ms.

This study purposes to find, by means of comparison, the books that are common to ten outstanding graded book lists for children's reading; and to analyze for interest factors the content of such books as are found to be common five times or more to ten lists. Findings: The results of the study indicate considerable disagreement as to what titles should be recommended for the eight grades of the elementary school. No title is found to be common to all of the book lists. Of the 8,408 titles listed, 48.9 per cent are duplicates. The highest per cent of duplications is for the third grade, while the lowest per cent is for the first grade.

3028. **Halvorson, G. P.** Certain aspects of a supervisory program in recreational reading. Master's thesis, 1928. University of Minnesota, Minneapolis. An attempt to work out a satisfactory technique for determining the comprehension difficulties of reading materials and to apply this technique experimentally as an aid in proper grade placement of reading materials.

3029. **Hathaway, Gladys M.** Purposes for which people read: a technique for their discovery. Master's thesis, 1928. University of Pittsburgh, Pittsburgh, Pa. (Abstract in University of Pittsburgh school of education journal, 4: 83-89, March-April 1929)

A suggested technique for the discovery of purposes for which people read through the use of the vocabulary of the English language.

3030. **Heinlein, Virginia K., and Ervin, Sophia H.** The voluntary and independent use of reference books in the Wheeling, high school. School review, 37: 142-46, February 1929.

Contains data on use of reference books in the preparation of lessons when not required—subjects, books used, time spent, etc.

3031. **Herney, Helen Mary.** An analysis of junior high school literature and reading. Master's thesis, 1928-29. University of Chicago, Chicago, Ill.

3032. **Howard, Clara Eliza.** Public library branches in public school buildings. Master's thesis, 1928. Columbia university, New York, N. Y.

3033. **Huggins, Maloy Alton.** High school libraries in North Carolina. A study of their origin, development, and present status. Master's thesis [1929] University of North Carolina, Chapel Hill.

A careful examination was made of many original sources, including reports of the United States Commissioner of education, the State superintendent of public instruction in North Carolina, the proceedings of educational bodies, and the Public laws of North Carolina.

3034. **Irwin, Manley.** The status of libraries in the North central association high schools. 1928. Public schools, Detroit, Mich.

A study in which the Research department of the Detroit public schools cooperated with the North central association committee, Mr. E. L. Miller, chairman. The investigation is based upon the results collected by means of a school library score card which was prepared by a committee of the American library association and revised for the survey by the Research department, Detroit public schools. The score card of 59 items, included such items as qualification, status, and duties of the librarian; service through use to the pupils, to the teachers and to the school, through extracurricular use; number, range, and annual acquisition of books and periodicals; maintenance, control, and administration of library; and the location, size, equipment, furniture, and supplementary rooms of the library.

3035. **Jennings, Joseph.** Leisure reading of junior high school boys and girls. Peabody journal of education, 6: 333-47, May 1929.

The study lists the leisure reading actually done by the junior high school boys and girls of Knoxville, Tenn., during one week, beginning May 9, and ending May 15. The questionnaire, upon which the study is based, was prepared by the research department of the city schools of Knoxville, Tenn., assisted by the junior high school teachers of the city.

3036. **Johnson, Helen M.** What effect does the use of the library as a co-ordinating agency have upon pupils of the Canton platoon school (experimentally determined). Master's thesis, 1929. Johns Hopkins university, Baltimore, Md.

3037. **Jordan, Alice M., Overman, Ruth Anne, and White, Mrs. Elizabeth Riddell.** Bibliography of children's books and reading—1927-1928. Elementary English review, 6: 112-15, April 1929.

Prepared by members of Book evaluation committee, 1927-28, Children's librarians' section, American library association. Annotated and arranged under subject headings by members of the junior course in library work with children in Western Reserve University.

3038. **Kelly, E. Lowell, and Whitney, Frederick L.** Educational magazines read by 500 elementary school principals and classroom teachers. Colorado state teachers college, Greeley. Elementary school journal, 29: 176-80, November 1928.

This study embraces reports received from 250 elementary principals and 250 elementary classroom teachers, primary and intermediate teachers being about equally represented. Schools were located in

156 cities, in 40 states; a form letter and two check lists were sent. Conclusions are given in three tables. Six magazines are found in the lists of two of the groups of school officers studied: Elementary school journal, Journal of educational method, Journal of educational research, Journal of the National education association, Normal instructor and primary plans, and Primary education-Popular educator.

3039. **Lewerenz, A. S.** A comparative study of four elementary school dictionaries. April 1929. City schools, Los Angeles, Calif.

3040. ——— Educational status of children patronizing the public library. 1929. City schools, Los Angeles, Calif.

3041. **McClusky, Howard Y.** An experimental analysis of the influence of certain conditions on the reading of college students. Doctor's thesis, 1929. University of Chicago, Chicago, Ill. 396 p. ms.

This study investigated the influence of various conditions on the reading of college students. The conditions were: varying content, different degrees of meaningful background, different attitudes, and training. Findings: The reading of prose and poetry passages by college students was conditioned by different content, different degrees of meaningful background and by different attitudes. The data regarding these various influences suggested the concept of control as the true objective of training in silent reading. The efficient reader should have a wide range of possible adjustment in order to respond effectively to the diverse types of content-attitude situations. He should therefore read with control. The investigation also indicated that the comprehension of difficult material was hard to improve at the college level. The results indicated that training in a specific type of skill in comprehensive with special incentive would probably be more effective in the reading of difficult material than training of a general type of analysis.

3042. **Miller, Edwin L.** The library in North central association high schools. Report of the Association's special committee on libraries. North central association quarterly, 3: 252-88, September 1928.

The results of the study of high school libraries in 1,115 schools representing 53 per cent in the Association are shown in 19 tables by which the special committee on libraries draws such conclusions as the following: That through the survey school officials may be aided to measure and strengthen the weak places in the library service of their respective schools by comparing their facilities with those of other schools of the same size. Analysis of one table showed that service is better to teachers than to children and that pupils are not using the library in order to read for pleasure.

3043. **Monroe, Walter S., and Hull, Mabel B.** A critical review of book reviews. School and society, 29: 521-26, April 20, 1929.

Five hundred forty-eight reviews of 100 books in the field of education published between 1922 and 1925 were examined for the purpose of ascertaining their significant characteristics and the trustworthiness of their evaluations. Conclusions drawn from the study are that book reviews are inadequate and non-critical.

3044. **Montgomery, Wilda Lea.** An investigation of the uses of recreatory reading. University of Pittsburgh school of education journal, 4: 90-91, March-April 1929.

An account of a study of the uses of recreatory reading made by adults.

3045. **Norris, Ruth-Elizabeth.** A comparative study of children's magazine interests. Elementary English review, 5: 241-45, 248, October 1928.

A study of the interests of children in nine representative children's magazines; carried on in a platoon school in which the nine magazines were in the school library, and a non-platoon school, in the same city that had no library. The study shows that the nine magazines were favored by 82.2 per cent of the children in the platoon school and by 28.64 per cent of the children in the non-platoon school.

3046. **Orange county public schools, Hillsboro, N. C.** Increasing our reference libraries by pupil effort. 1928-29. Hillsboro, N. C. 50 p. ms.

Object of this study was to increase reference materials in schools, poor financially.

3047. **Page, Ross.** Supplementary reading material in the first six grades. Master's thesis, 1929. Stanford university, Stanford University, Calif.

3048. **Rasche, William F.** Methods employed to stimulate interests in readings. School review, 37: 29-36, 124-31, 204-14, 293-303, January-April 1929.

A survey of the methods which teachers, school librarians and public librarians employ to stimulate, make permanent, and elevate interests in reading.

3049. **Rich, Frank N., chairman.** A descriptive list of books and magazines for class room libraries in intermediate grades. [1929] Public schools, Paterson, N. J. 30 p. ms.

Lists 120 books and three magazines, with brief annotations; separate lists for grades four, five, and six. Grading based on demonstrated speed and comprehension of pupils reading for themselves. In tentative form.

3050. **Richter, Charles Lowe.** A compilation study of junior high school outside reading books. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 87 p. ms.

This study aims to determine what books should be prescribed for outside reading in junior high school English; to discover which books are more frequently prescribed by courses of study; and to evaluate the suitability of these books for this work. Book lists from 34 state and 16 city courses of study of recent publication were examined.

3051. **Roberts, C. R., and Davis, Robert A.** Reading interests of teachers. Educational administration and supervision, 15: 102-16, February 1929.

A study of 240 elementary and secondary school teachers. The median number of hours per week of reading per teacher was 14.48. 29.8 per cent of this time was spent in the field of literature; 35.1 per cent in current publications, and 7.1 per cent in biography. 96.7 per cent were engaged, to some extent, in professional reading.

3052. **Severance, Henry O.** History of the library of the University of Missouri. 1928-29. University of Missouri, Columbia. (University of Missouri bulletin, Library series, no. 15)

3053. **Shang, Chung I.** A method of selecting foreign stories for the American elementary schools, applied to the evaluation of stories translated from the Chinese folk literature by the author. Doctor's thesis, 1929. Teachers college, Columbia university, New York, N. Y. New York city, Teachers college, Columbia university, 1929. 46 p. (Contributions to education, no. 398)

In this study, 1,030 stories were gathered from original Chinese sources. 30 stories were selected from this list for American children in elementary schools.

3054. **Sisler, Ruth.** Annotated bibliography of magazine articles on library work with children. Master's thesis, 1928. George Peabody college for teachers, Nashville, Tenn. 28 p. ms.

This bibliography covers the years 1921 to 1927, and consists only of those articles which are available in the library of George Peabody college for teachers. The list is classified and annotated and the subject headings used are those used by the American library association and the Library of Congress.

3055. **Stone, Charles Randolph.** Study of the withdrawal of books from a school library during a period of years. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

3056. **Stratiff, John K.** A study of the platoon school libraries in the city of Pittsburgh, Pa. Master's thesis, 1929. University of Pittsburgh, Pittsburgh, Pa.

3057. **Thurber, Mrs. Evangeline.** The library of the land-grant college, 1862-1900; a preliminary study. Master's thesis, 1928. Columbia university, New York, N. Y.

3058. **Troth, Dennis G.** A ten-minute observation in the library. School and society, 29: 336-38, March 9, 1929.

Records the results of ten-minute observations made by a group of 100 prospective teachers of an equal number of students at work in a library, to discover study habits and causes of distractions.

3059. **Tully, Timothy Martin.** Methods in the development of the habit of reading in boys. Master's thesis, 1928-29. Boston university, Boston, Mass.

3060. **Vandiver, Maude, and Melcher, William.** The effect of library reading. Educational administration and supervision, 15: 190-201, March 1929.

A study of library certificates issued in the Montrose, Colo., schools. Information is given concerning the number of certificates issued, the reading quotients, the intelligence of pupils receiving certificates, the number of books read, the number of children having library cards, etc.

3061. **Virginia. State board of education.** List of books approved for public school libraries in the State of Virginia. Richmond, State board of education, 1928. 264 p. (Bulletin, State board of education, vol. XI, no. 1, September 1928, Supplement no. 4)

Prepared by C. W. Dickinson, jr.

3062. **Washburne, Carleton W., and Vogel, Mabel.** What children like to read. Chicago, American library association, 1926; Chicago, Rand McNally company, 1928. 286 p.

36,750 children indicated on ballots their enjoyment of all books read during the year. Reading score was indicated on the ballots. The complete data on reading grade, age, etc., are given for 796 books read and enjoyed by 25 or more children.

3063. **Welch, Eleanor Weir.** The training school library of the state teachers college; need and administration. Master's thesis, 1928. Columbia university, New York, N. Y.

3064. **Wheeler, Joseph L.** Educational books of 1928. School and society, 28: 801-15, December 29, 1928.

A complete list of publications of this country and such English publications as were available by purchase in this country for 1928 on teaching, school administration and educational research, arranged by subjects and giving publisher and price of book. Some comparisons with a similar list for 1927 are made to show trends of national interest in education.

3065. **Whittington, Emma.** The administration of senior high school libraries in Los Angeles. Master's thesis, June 1929. University of Southern California, Los Angeles.

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