DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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THE RURAL JUNIOR HIGH SCHOOL

REPORT OF A SUBCOMMITTEE OF THE NATIONAL COMMITTEE ON RESEARCH IN SECONDARY EDUCATION
EMERY N. FERRISS, CORNELL UNIVERSITY, CHAIRMAN

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CONTENTS

LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., January 17, 1929.

SIR: Since their introduction in 1909 junior high schools have steadily advanced in the favor of school administrators, and they now seem likely to cause a revolution in the organization of American secondary education. Among many other advantages claimed for them, it is said that they afford easy transition from the classroom of the elementary school to the departmental teaching of the higher schools; that through them the introduction of the pupil to advanced methods of instruction is better timed with reference to his physical development; that they offer excellent means of exploration and of vocational guidance.

In rural areas the development of junior high schools has lagged, although it appears that such schools should be especially suited to rural conditions. Study of the situation is clearly needed. The creation of the National Committee on Research in Secondary Education offered exceptional opportunity for such study, and at the instance of Dr. John J. Tigert, then Commissioner of Education, a subcommittee of that organization was constituted for the purpose under the chairmanship of Dr. Emery N. Ferriss. The report of the subcommittee has been presented, and it is submitted herewith. I recommend that it be published as a bulletin of the Bureau of Education.

Respectfully submitted.

L. A. KALBACH,
Acting Commissioner.

The SECRETARY OF THE INTERIOR.

NATIONAL COMMITTEE ON RESEARCH IN SECONDARY EDUCATION

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E. E. Windes, assistant professor of secondary education, University of Virginia (characteristics and purposes of the junior high school, and important practices in organization and administration).

Walton B. Bliss, editor, Ohio Schools (reorganization of secondary education from the standpoint of State departments of education).

J. B. Sears, professor of education, Leland Stanford Junior University (legal provisions of the States for the organization and support of the junior high school).

W. H. Bristow, assistant director of secondary education, Pennsylvania (program of studies).

H. G. Hotz, professor of secondary education, University of Arkansas (provision for individual differences).

Jesse B. Davis, professor of secondary education, Boston University (pupil guidance).

W. A. Smithey, professor of secondary education, University of Virginia (rural junior high school buildings and grounds).

THE RURAL JUNIOR HIGH SCHOOL

CHAPTER I

Introduction, Purpose, and Method of the Study

Working toward our avowed purpose of universal secondary education in the United States for the age group approximately 12 to 18 years of age, the junior high school idea has been introduced into every State in the Union. The movement began in progressive urban centers and has spread so that in 1925 there were 2,368 secondary schools in the United States which were recognized by State departments of education as embodying the junior high school idea. This total included 1,181 schools located in centers of less than 2,500 population or the open country. Such territory is rural territory, according to the classification of the United States Bureau of the Census.

This group of rural junior high schools has developed during a period when no generally accepted standards were available as guides to practices in organization and administration. Such patterns of practice as were available were located in urban centers. These patterns were structures reared out of gropings by individual administrators in an effort to give expression to a somewhat vaguely defined ideal institution. Lacking specific standards as guides, and faced with variant patterns existing in situations which were not comparable, it is not surprising that the present group of rural junior high schools exhibits a wide array of practices as chosen means through which realization of the junior high school concept is sought.

The junior high-school movement has spread, under these conditions, to an extent that a survey of present practices may be expected to show rather definite trends.

Purpose of the study.—It is the purpose of this study to evaluate those trends against a criterion of accepted purpose which is available through analysis of professional opinion. In its development the following subsidiary problems have been set and considered:

1. What regulations in State laws and as formulated by State departments of education control and direct the junior high school movement?

2. What are the trends with reference to provisions through which a distinct educational unit is sought?

3. What are the trends with reference to provisions through which guided gradual transition from common integrating education to appropriate differentiated programs of study is sought?

4. What are the trends with reference to provisions through which maximal rates of progress in learning on the part of individual pupils is sought?

5. What are the trends with reference to provisions through which improvement of the school social situation is sought?

6. Under what conditions as to buildings and equipment is the work of the rural junior high school being carried on?

It is felt that making this material available will afford a better guide to practice for those who are directing the development of the junior high school in rural communities than has heretofore been available.

Method of the study and procedure in securing data.—The general method of the study is that of assembly and analysis of statistical data with a view to determining the trends of practice which are evaluated against a criterion of purpose also statistically determined. Data have been assembled to show the distribution of secondary schools which involve the junior high school grades by States and type of school for the United States as a whole. These data are supplemented by questionnaire studies for 135 rural junior high schools reporting in detail their practices in general organization and administration, extra-class activities, programs of studies, provisions for individual differences, guidance, and buildings and equipment.

The material forming the foundation of Chapter IV, relative to legal provisions of the States for the organization and support of junior high schools, was obtained directly from the laws and legislative acts of the different States. The data for Chapter III on activities and regulations of State departments of education with reference to junior high schools were gathered by the author of the chapter from a special questionnaire to such departments and from the other materials supplied by them.

For the purpose of securing the data for the United States as a whole, an addressograph list of schools reporting to the United States Bureau of Education as junior, junior-senior, or undivided five or six year type high schools on the form "Statistics of public high schools," for the school year 1923–24, was prepared. This list classified schools by population of district and plan of organization. The classification by population showed location in cities having total populations of more than 100,000, 30,000 to 100,000, 2,500 to 30,000, and location in rural territory, i. e., a center of fewer than 2,500 popu-

lation. The classification by plan of organization showed the years combined to form the junior and senior school units and the fact of segregation of the junior unit or its association with elementary and senior school units. These classified lists for States were then submitted to State departments of education, with a request that they be corrected for errors of classification and brought up to date for the school year 1925–26. All State lists were thus revised by State departments of education during the months of November and December, 1925. The data, therefore, represent a complete list, as of those dates, of schools recognized by State Departments as involving a junior school unit.

In securing the data concerning the details of practices in rural junior high schools, a letter was directed to the principals of the 1,181 rural junior high schools, requesting their cooperation in an intensive study of junior high school practices and advising them that cooperation would mean furnishing data called for on a comprehensive questionnaire. Replies agreeing to cooperate were received from 308 principals of schools. Duplicate copies of the questionnaire were mailed to these schools and usable replies were received from 135 schools. The distribution of the 135 schools used in the study, by States, is as follows:

Alabama	3	Nebraska	3
Arkansas	2	Nevada	1
California	7	New Hampshire	4
Colorado	5	New Mexico	1
Illinois	1	New York	3
Indiana	25	Ohio	5
Iowa	13	Oklahoma	4
Kansas	4	Pennsylvania	10
Kentucky	4	South Dakota	1
Maine	3	Vermont	7
Massachusetts	2	Virginia	1
Michigan	11	Washington	2
Minnesota	2	West Virginia	6
Mississippi	1	Wyoming	2
Missouri	3		
Montana	2	Total	135

The data made available through the sources mentioned have been analyzed with reference to the problems enumerated, and trends thus discovered have been evaluated against a criterion of purpose determined by an analysis of findings by Briggs, Koos, and the curriculum commission of the department of superintendence of the National Education Association, all of which give the frequency of mention of special purposes of the junior high school in educational literature dealing with the subject.

CHAPTER III

Characteristics and Purposes of the Junior High School

PREVIOUS STUDIES BEARING UPON THE GENERAL PROBLEM

Practices in organization and administration of rural junior high schools as a group have not been studied prior to this time.[1] Several statistical studies of practices in city school systems have been made and these studies have been supplemented with frequent detailed descriptions of individual schools or systems so that a fairly accurate body of information concerned with the present status of the junior high school in cities is available. Among these studies should be noted those by Briggs, Glass, Pratt, Smith, and the Denver Committee on Junior High Schools. These investigations show that the institution in cities is in process of being standardized as a distinct educational unit, including grades 7, 8, and 9, and featuring gradual transition from elementary to secondary education through continuation of common education, introduction of exploratory courses, provision for earlier subject election and systematic guidance, flexible promotion plans involving ability grouping, variable time of promotion and adaptation of instruction to individual differences, departmentalization of instruction, and special housing. With reference to specific provisions through which these general features are worked out the schools are yet far from standardized practices.

In addition to these studies several are available which deal with junior high schools in general, including both urban and rural situations. These are of two types—(1) statistical studies of practice and (2) statistical studies of professsional opinion concerned with purposes and provisions.

The available statistical studies of practice which have been found useful in the present study are those by Clement, Dvorak, Sealy, Davis, and Terry.

Clement[2] investigated the organization and administration of junior high schools in Kansas and Indiana in 1922, obtaining data on 40 schools in Kansas and 32 schools in Indiana. These schools occur in both urban and rural territory representing typical schools in the two States.

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[1] Spaulding, Francis T. The Small Junior High School. This is a splendid, constructive study of small junior high schools of Massachusetts.

[2] Clement, J. A. Current Practices in the Organization and Administration of Junior High Schools. School Review, 30: 110–117, February, 1922.

Dvorak [3] investigated in 1922 the provisions through which recognition of individual differences was sought in 86 junior high schools located in various parts of the United States. He reports on the size of classes, the number of sections by grade for grades 6 to 10, inclusive, the criteria used in dividing grades into sections, and adaptation of subject matter to the different ability groups.

A committee on the junior high school [4] of the Southern Association of Colleges and Secondary Schools, under the chairmanship of R. M. Sealy, reports on the status of the junior high school in the Southern States for the school year 1924–25.

The results of this study indicate a rapid spread of the junior high school in the Southern States since 1921 and a decided tendency to adopt a 12-year program of elementary-secondary education dividing the period according to the 6–3–3 plan. The schools include both urban and rural schools.

Davis [5] investigated the provisions for broadening and finding courses in 25 Michigan high schools in 1926. Data were collected through questionnaires to show the frequency of occurrence of exploratory courses, the percentage of pupils enrolled in each course, the grades in which courses occurred, and the time allotment to the courses.

Terry [6] investigated the practices in housing junior high school pupils as reflected by data from 149 schools having enrollments varying from 200 to 1,750 pupils. His findings report the kinds of floor space provided by schools enrolling less than 500 and by schools enrolling more than 500. There were 55 of the smaller schools. Forty-three and eight-tenths per cent of these were housed in buildings constructed for the purpose. The remainder were housed in remodeled buildings.

His findings show relatively meager provisions for specialized work in the remodeled buildings. He concludes that boards of education should make every possible effort to erect new buildings specifically providing for the junior high school.

The studies of professional opinion are frequency studies of mention of specific provisions or purposes in educational literature dealing with the junior high school, or of approval of items as essential or desirable by educational leaders.

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[3] Dvorak, August. Recognition of Individual Differences in the Junior High School. School Review, 30: 679–685, November, 1922.

[4] Sealy, R. M. Report of Committee on Junior High Schools. Proceedings of the Southern Association of Colleges and Secondary Schools. Part IV. February, 1926, pp. 46–104.

[5] Davis, C. O. Broadening and Finding Courses in 25 Michigan Junior High Schools. North Central Association Quarterly, 1: 300–20, December, 1926.

[6] Terry, Paul W. Providing Adequate Housing Accommodations for the Junior High School. School Review, 32: 13–26, January, 1924.

Briggs,[7] Koos,[8] and a curriculum commission of the department of superintendence, National Education Association,[9] have made statistical analyses showing the frequency of mention of specific purposes of the junior high school in educational literature dealing with the subject. These analyses afford what is thought to be the best available criterion against which to evaluate present practices. They are, therefore, examined in detail in the following chapter which is concerned with junior high school purposes.

Briggs[10] followed his investigation of frequency of mention of junior high school provisions (of which purposes were an element) by submitting a detailed questionnaire to selected professional men prominently identified with the junior high school, which called for a rating, as essential or desirable, of a number of significant provisions dealing with organization, administration, methods of teaching, and the curriculum. This study of opinion is also used in detail in succeeding pages on purposes.

Glass[11] investigated the opinion of authorities in the junior high school field with reference to certain provisions of junior high schools in 1921. The investigation secured expressions of opinion from 64 individuals as favorable or opposed to provisions which were enumerated.

The data of this study show general agreement upon a 6-hour school day providing a 60-minute class hour divided into study and recitation periods so as to insure directed study.

Features of organization approved as desirable include provision for gradual transition from elementary to secondary education, exploration, guidance, flexible promotion plans, admission upon sixth grade completion, and participation in school government and socializing activities by pupils and faculty members.

It is seen from this review of available studies that a fairly dependable body of information concerned with general junior high school purposes and provisions is available. The facts of the present status of the junior high school and the degree to which the institution now conforms to generally accepted purposes and desirable provisions in rural communities, however, are not available. This study attempts to fill this gap in present literature.

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[7] Briggs, Thomas H. A Composite Definition of the Junior High School. Educational Administration and Supervision, 6: 181–86, April, 1920.

[8] Koos, L. V. The Junior High School. New York, Harcourt, Brace & Howe, 1920, pp. 13–85.

[9] The Fifth Yearbook of the Department of Superintendence, 1927, pp. 20–21.

[10] Briggs, Thomas H. What is a Junior High School? Educational Administration and Supervision, 5: 284–286, 1919.

[11] Glass, James M. Report of Committee on Junior High Schools. Proceedings of North Central Association of Colleges and Secondary Schools, Part I, 1922, pp. 56–59.

SPECIAL PURPOSES OF THE JUNIOR HIGH SCHOOL

A description of practices in organization and administration of junior high schools in rural and small school communities will be of greater value if made from the point of view of the accepted special purposes of the junior high school. Fortunately, statistical summaries of professional opinion as to junior high school purposes are available.

Koos [12] has summarized the peculiar functions of the junior high school through a statistical analysis of published statements of educational leaders which were available in 1920. Briggs [13] has published a similar analysis of literature covering the period 1905–1920, which lists 25 characteristics of the junior high school, inclusive of items advanced as purposes. The commission on the curriculum of the National Education Association,[14] department of superintendence, has published a similar analysis of statements for the period 1920–1927.

Table 1 shows the frequency of mention of 18 special purposes of the junior high school as determined by these three analyses. The table gives a basis for noting the frequency of mention of special purposes in professional literature dealing with the subject and of comparing the shift of emphasis from prior to 1920 to the period 1920–1927.

For the purpose of making up Table 1 the terminology used in the recent analysis by the National Education Association has been used, and through reference to the texts accompanying the analyses by Koos and by Briggs, purposes stated by them, which are essentially duplicates of purposes as stated by the National Education Association commission, have been assigned to the appropriate National Education Association statement. Three special purposes, as stated by Koos, involve elements which are not properly attributable to any single statement set up by the National Education Association and have been added in the terminology used by Koos, and two statements by Briggs which involve essentially identical elements were assigned to the appropriate statement by Koos. In distributing statements by Briggs to the statements of the other two classifications, statements not classified as statements of purpose by Briggs have been used. These statements are numbers 3, 4, 6, 11, 12, 14, 16, and 18. They relate to provisions in methods of teaching, curriculum organization, and general administration classified by Briggs as

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[12] Koos, L. V. The Junior High School. New York, Harcourt, Brace & Howe, 1920. pp. 13–85.

[13] Briggs, Thomas H. A Composite Definition of the Junior High School. Educational Administration and Supervision, 6: 181–186, April, 1920.

[14] Fifth Yearbook of the Department of Superintendence. Pp. 20–21, 1927.

means of realizing purposes as stated. In this study it is accepted as true that any particular term or phrase advanced as a special purpose or function is, at the same time, properly considered as a means or process. If thought is centered upon the term or phrase as an element of a more general category it becomes a means or process. If thought is centered upon the term or phrase as an end of value it becomes a purpose or function. For example, unit try-out courses as means are for the purpose of exploration; exploration as a means is for the purpose of guidance; guidance as a means is for the purpose of proper educational direction and vocational placement.

TABLE 1.—*Special purposes of the junior high school (analyses of statements in educational literature)*

Purpose	Frequency of mention		
	Koos [1]	Briggs [1]	National Education Association [2]
1. Meeting individual differences of pupils—enabling pupils to follow the lines of their interest and ability	95.0	64.7	92.4
2. Prevocational training and exploration resulting in wise choice of later school course and life work	75.0	22.1	88.5
3. Counseling or guidance—bringing pupils into contact with influences that should give direction and purpose to their lives	75.0	7.4	53.8
4. Meeting the needs of the early adolescent group	55.0	20.6	45.5
5. Bridging the gap between elementary and secondary schools—proper coordination between lower and higher schools		36.8	42.0
6. Development of qualities of good citizenship—preparation of pupils to play a larger part in the life of the community		10.3	39.2
7. Providing opportunity for profitable self-activity, early development of leadership, individuality, and initiative			32.0
8. Retention of pupils beyond compulsory school age	90.0	48.5	26.5
9. Continuation of common education or regular scholastic or academic training			13.9
10. Rounding out a complete unit of training beyond the elementary grades for those who must leave school early			12.6
11. Introduction of new subjects into the curriculum		39.7	6.3
12. Effecting economy of time in education	85.0	29.4	3.8
13. Stimulation of educational advancement	10.0		2.5
14. Beginning of definite occupational training	70.0	7.4	1.3
15. Giving opportunity for earlier preparation for college			1.3
16. Providing conditions for better teaching—departmental teaching	85.0	51.5	
17. Securing better scholarship	35.0		
18. Improving the disciplinary situation and socializing opportunities	70.0	16.2	

[1] Prior to 1920.
[2] 1920–1927, National Education Association, curriculum commission, department of superintendence.

It will be noted that the four special purposes occurring most frequently in the National Education Association analysis are common to the three analyses, and occur in significant frequencies in each. It is also evident that due to different formulations of statements of purpose in the three analyses, elements which are listed in a separate category in one are submerged in other categories by one or both of the others in certain cases. Where statements of purpose are essentially identical in the three analyses, we find those purposes which have been popularized during one or both of the periods of time involved. These common purposes are numbers

1, 2, 3, 4, 8, 12, and 14, of the National Education Association classification. The comparative ranks of these seven purposes common to the three analyses are shown in Table 2.

TABLE 2.—*Comparative ranking, from high to low frequency of mention, of the seven special purposes common to the three analyses*

Purpose	Rank		
	Koos	Briggs	National Education Association
1. Meeting individual differences of pupils	1	1	1
2. Prevocational training and exploration	4.5	4	2
3. Counseling or guidance	4.5	6.5	3
4. Meeting the needs of the early adolescent group	7	5	4
5. Retention of pupils	2	2	5
6. Economy of time	3	3	6
7. Vocational training	6	6.5	7

The comparative rank order shown in Table 2 shows a shift of emphasis from retention of pupils and economy of time as special purposes of the junior high school to purposes which are more definitely stated so as to define the type of training to be employed, i. e., prevocational training, exploration, guidance, and socialization. Essentially it is a shift of emphasis from statements of purpose in terms of generic outcomes to statements in terms of special processes, and is the result of a growing agreement upon the essential processes through which ends are sought.

When the lists of special purposes enumerated by the several investigators are carefully examined it becomes apparent that two orders of purpose are listed on a coordinate basis. Such statements as meeting individual differences, bridging the gap, meeting adolescent needs, and improving the disciplinary situation and socializing opportunities are obviously inclusive of such statements as prevocational training, exploration, guidance, continuation of common education, etc. The low frequency of certain statements may be due to failure on the part of some writers to particularize those purposes because of their inclusion in more general categories. Again low frequency for certain more general purposes may be the result of stressing by some writers of some, but not all, elements of the more general purpose stated by others. Without any attempt to establish an order of importance we may with profit examine purposes as stated with a view to overcoming the difficulties involved because of the admixture of general and more specific purposes in the several analyses.

Such statements as meeting the needs of the early adolescent group and recognizing the nature of the child at adolescence are

statements of a general and all-inclusive purpose. The fact that this purpose occurs in the statements of only 45.5 per cent of the recent writers considered can not mean that other writers do not recognize it as a purpose of the junior high school. Undoubtedly, those failing to state the purpose dealt with more specific elements. It seems desirable, therefore, to set up a classified statement of purposes in terms of processes as follows:

Special purposes of the junior high school.—Meeting the needs of the early adolescent group—proper provision for all normal children of approximately 12 to 16 years of age, through:

I. Provision of a distinct educational unit—assembly of a more representative early adolescent group into one organized student body.

II. Guiding through gradual transition from common integrating education to appropriate differentiated programs of study, involving: (1) Continuation of common integrating education. (2) Introduction of general survey, exploratory courses, exploring: (*a*) The organized fields of human knowledge; (*b*) the fields of vocational employment. (3) Systematic guidance. (4) Earlier partial differentiation of training related to purposes in life.

III. Better provision for maximal rates of progress in learning on the part of individual pupils, through: (1) Flexible promotion plans. (2) Reorganization of subject matter selecting that which is most efficient in stimulating the essential learnings. (3) Improving the teaching situation through: (a) Providing for specialization in teaching functions; (*b*) providing for special material equipment.

IV. Improving the school social situation through: (1) Emphasizing extraclass activities of various kinds. (2) Granting an increased amount of opportunity to pupils for participation in the social administration of the school. (3) Granting administration of discipline: (*a*) By some form of pupil self-government; (*b*) by advisory councils.

This statement recognizes the purpose of the junior high school to meet the needs of the early adolescent group as a general and all-inclusive purpose. Once this purpose is accepted there is obviously implied the purpose of extending secondary education downward to include the age group 12 to 14 years of age, and to so broaden its appeal to the public as to ultimately contemplate service to all normal children of the ages concerned. It contemplates as an ideal the complete democratization of secondary education through extension to all adolescents and equalizing for them educational opportunities.

Meeting adolescent needs, also, demands recognition of individual differences in interests, capacities, purposes, and present learning

status. To meet these differences there is need for developing further and in varying degree the skills in the use of the tools of learning; for more complete social orientation, through broad survey courses covering the fields of organized human knowledge and vocational employment; and for guided self-study with a view to discovering personal abilities, interests, and aptitudes. These matters are essential for an intelligent basis of choice of a field of occupational endeavor and a program of study designed to prepare for that field. They obviously imply also the earlier admixture of differentiating education with common integrating education, for they contemplate the beginnings of differentiation as soon as appropriate purposes in life have been determined. This earlier differentiation is particularly valuable for those who must leave school early and need a richer completion curriculum than can well be provided under elementary school conditions, and for those, who because of determined ability, interests, and known economic status assuredly face a program of formal training extending through college and higher levels of education.

This statement further contemplates (in III) provision of a situation which better provides for a rate of learning consistent with the ability of the child. As one means to this end, flexible promotion plans involving pupil classification according to ability, more frequent or variable periods of promotion, promotion by subject, and the use of maximum and minimum assignments are valuable. A second means is that of extensive reorganization and selection of subject matter, eliminating nonessentials and introducing materials better calculated to appeal to the child, and bring him more expeditiously to the learning ends sought than is possible under the curriculum limitations of the elementary school. Important phases of this adjustment are elimination of drill materials of little value and substitution of materials involving to a greater extent pupil activity in situations having broader social utility. A third means of seeking this end is afforded through the possibilities of improving the teaching situation by introducing specialization of teaching functions conforming to the broad fields of organized knowledge and of occupational endeavor. The purpose is to create a situation which will make it possible to introduce a greater degree of specialization in the professional training of teachers, in order that teachers may be developed who are more familiar with and more able to select and organize subject matter from a particular field of human knowledge or activity in accord with learning abilities and needs of early adolescents.

A further important element of improving the teaching situation is that of creating a condition that will make possible, without pro-

hibitive cost, the provision of the special material equipment needed for special types of learning activities. The essential factor involved is the assembly, through concentration of pupils from elementary schools, of larger groups of pupils having need for special types of training so that building and equipment provisions adapted to special types of work may be economically provided.

Provisions through which purposes are sought.—The extent to which special provisions in organization, curriculum, and methods of teaching were regarded as essential or desirable by representative educators in 1920, in order that these accepted purposes might be realized, are shown in Table 3.

The table has been formed by introducing under the appropriate purposes those items of a survey reported by Briggs[18] which are obviously implied by the purpose. This survey secured from representative leaders in education a marking of items obtained through an analysis of statements attempting to define the junior high school, appearing in educational literature from 1905 to 1920. All items mentioned were arranged in tabular forms and submitted to representative educators for marking as essential and desirable. The results are reported as percentages approving each item.

TABLE 3.—*Special purposes of the junior high school and provisions in organization, curricula, and methods of teaching approved as desirable or essential (1920)*

Purpose and approved provision	Per cent approving as—	
	Essential	Desirable
Meeting the needs of the early adolescent group; proper provision for all normal children of approximately 12–16 years of age, through	72.1	90.1
I. Providing a distinct educational unit	54.1	68.9
1. Separated in organization from the elementary grades	62.3	86.9
2. Separated in organization from the senior high school	41.0	65.3
3. Combining the school years 7 and 8	9.8	19.7
4. Combining the school years 7, 8, and 9	41.0	95.1
5. Combining the school years 7, 8, 9, and 10	11.5	31.2
6. Combining other school grades	4.9	9.8
II. Guiding through gradual transition from common integrating education to appropriate differentiated programs of study by:		
1. Continuation of common integrating education.		
2. Introduction of general survey, exploratory courses—		
(a) Exploring the organized fields of human knowledge	59.0	91.8
(b) Exploring the fields of vocational employment	49.2	88.5
3. Systematic guidance—		
(a) Educational	65.6	98.4
(b) Personal	68.9	96.7
(c) Vocational	57.4	98.4
4. Earlier partial differentiation of training related to purposes in life, through—		
(a) Curricula gradually increasing in differentiation	73.8	96.1
(b) Fully differentiated curricula as soon as probable future is known with reasonable definiteness	24.6	57.4
(c) Vocational training for those who must leave early	16.4	59.0
(d) Earlier preparation for college for those who certainly face a protracted period of formal higher education	41.0	82.0

[18] Briggs, Thomas H. What is a Junior High School? Educational Administration and Supervision, 5: 284–286.

TABLE 3.—*Special purposes of the junior high school and provisions in organization, curricula, and methods of teaching approved as desirable or essential (1920)*—Continued

Purpose and approved provisfon	Per cent approving as—	
	Essential	Desirable
Meeting the needs of the early adolescent group; etc—Continued.		
III. Better provision for maximal rates of progress in learning on the part of individual pupils:		
1. Through flexible promotion plans—		
(a) Classifying pupils into homogeneous ability groups	27.9	96.1
(b) Promotion by subject	73.8	93.5
2. Reorganization of subject matter selecting that which is most efficient in stimulating the desired learnings—		
(a) Unified curricula	85.3	96.8
(b) Including many projects	59.0	90.1
(c) Elimination of material justified only by tradition	80.3	98.4
(d) Elimination of material justified only by logical organization of subject matter	70.5	93.5
(e) Elimination of material justified only by deferred values	29.5	63.9
3. Improving the teaching situation through—		
(a) Providing for specialization in teaching functions—		
(1) Partial departmentalization	42.6	50.0
(2) Full departmentalization	29.5	52.5
(3) Gradually increasing departmentalization	45.9	65.6
IV. Improving the school social situation:		
1. Emphasizing extracurricular activities of various kinds	50.8	95.1
2. Granting pupil participation in the social administration of the school	52.4	90.1
3. Granting administration of discipline—		
(a) By some form of pupil self-government	24.6	78.7
(b) By advisory councils	26.2	85.2

While the degree of agreement upon the part of educational leaders in 1920, which is reported for the items of Table 3 by Briggs, does not afford a complete description of the desirable provisions in organizing and administering a junior high school, nor represent an entirely satisfactory criterion against which to evaluate present practices, it is the most significant criterion available at the present time. This study of present practices in organization and administration of secondary schools in rural and small school communities, therefore, makes an analysis of present practices with reference to the four major purposes stated in Table 3, and to certain of the more significant implied organization and administrative provisions reported as desirable in the survey by Briggs. Where it appears to be desirable the analysis goes beyond the detail afforded by the material offered by Briggs and such material as is available in current literature is drawn upon as appears desirable for purposes of evaluation.

It is recognized that this procedure has its limitations in that provisions are evaluated, not against a criterion of tested worth but against a consensus of opinion which is based primarily upon an educational theory. Evaluation against provisions of known effectiveness is, however, not possible at the present time, and the procedure adopted is thought to have value.

CHAPTER III

Reorganization of Secondary Education from the Standpoint of State Departments of Education

In response to a questionnaire with reference to the reorganization of secondary education replies were received from all 48 State departments of education. However, in 16 States such slight progress has been made in the direction of reorganization that there were few if any details to offer. Before summarizing the situation in general it is desirable to advert to these specific situations.

In Arizona the junior high school has just been recognized by statute. In Arkansas the State office records itself as favorable to the 6–3–3 and 6–6 plans, preferring the latter for village and rural schools. Encouragement to reorganization is given through department publications, a 49-page course of study being an example of this encouragement.

Idaho is not encouraging any particular movement along this line. The 8–4 plan prevails, although a large number of schools have the 6–2–4 organization with the work in the seventh and eighth grades departmentalized.

In Illinois the township high school system has tended to preserve the traditional organization. The township or community high schools serve and are supported by 6 to 10 local school districts which separately maintain their eight elementary grades.

Iowa reports the junior high school movement at a standstill. Some of the smaller schools in this State attempted reorganization and later went back to the 8–4 plan.

Louisiana is not encouraging the establishment of junior high schools or 6-year high schools.

Maryland follows the 7–4 plan except in Baltimore and two counties. The State department is not encouraging departmental teaching in the sixth and seventh grades by teachers trained for high-school work because of a belief in the superiority of elementary teachers for this work. The State superintendent thinks that the junior high school in the small communities can mean nothing except the extension of departmentalized instruction to these two grades and is unfavorably disposed toward it. Mississippi reports no prospect at present of development in this direction.

In North Carolina the junior high school has not been developed to any extent. The State high school supervisor reports that he has not encouraged the three and four teacher high schools in rural districts to attempt organization on a junior-senior basis. He feels

that the development in this State will be in the direction of a 6–2–3 organization.

The report from Oklahoma does not indicate very definitely the situation in that State except to say that the State department has made no attempt to standardize junior high schools.

In Rhode Island there has been no development of the junior high school.

South Dakota is without legal recognition of any mode of secondary school reorganization, but favors the 6–2–4 plan for village and rural schools. By general letters, by field counseling, and by subsidies the State department is encouraging the movement.

Tennessee does not have any junior high schools except one or two in Shelby County created by a special legislative act. There has been no effort on the part of the State office to develop schools of this type.

Texas has no plan for encouraging any type of secondary school reorganization and has no legal recognition of such reorganization.

The Virginia department has decided that the rural junior high school is not a practicable unit. There are about 20 in the State, but they are in reality only 2-year high schools of the conventional order.

Washington is not encouraging the movement, although choice of the 6–6 plan for village and rural schools is expressed.

Attitude toward specific types of reorganization.—There is no doubt but that the two commonly prevailing types of reorganization—the 6–3–3 and the 6–6—are dominant in the favor of the State departments. Eighty per cent of those answering the question as to type of organization encouraged favored these two arrangements. Twelve States indicated that they were encouraging both plans. Only two States encourage the 6–6 plan exclusively, but for village and rural schools the 6–6 plan is particularly in favor. The sentiment is shown in the following paragraph:

Types of reorganization favored by State departments.—I. *Both 6–3–3 and 6–6 plans.*—Alabama, Arkansas, California, Florida, Kentucky, Maine, Massachusetts, Michigan, North Dakota, Ohio, Wyoming, Wisconsin.

II. *6–3–3 plan.*—Colorado, Connecticut, Indiana, Kansas, Minnesota, Missouri, Nebraska, Nevada, New Mexico, New York, West Virginia.

III. *6–6 plan.*—Oregon, Pennsylvania.

IV. *6–3–2 plan.*—Georgia, South Carolina.[1]

V. *6–2–4 plan.*—Montana.

VI. *Both 6–2–4 and 6–3–3 plans.*—Utah, Vermont.

[1] South Carolina favors the 6–2–3 organization.

All the States in Group I favor the 6–6 plan for village and rural schools. Other States favoring this same plan for smaller systems are Connecticut, Indiana, New York, West Virginia, New Hampshire, Pennsylvania, and Washington—19 States in all, including those in Group I.

Delaware, Kansas, Minnesota, Missouri, and Utah prefer the 6–3–3 plan for village and rural schools. New Mexico is satisfied with either type. Montana, South Dakota, and Vermont choose the 6–2–4 organization. Georgia and South Carolina follow the same plans reported in Group IV. Nebraska indorses the rather unique 6–2–2–2 organization.

Methods of encouraging reorganization.—It is not necessary to list by States the methods chiefly relied upon to encourage the spread of secondary-school reorganization. The numerical summary covering 32 States is presented in Table 4.

TABLE 4.—*Methods used by State departments to promote reorganization*

Methods used	Number	Percentage of States (32)
Publications	21	65.6
General letters	14	43.7
Field counseling	30	93.7
State subsidies	5	15.6
State or regional conferences	13	40.6
Miscellaneous	6	18.9

Field counseling on the part of high-school supervisors and inspectors is by far the most prevalent method of stimulating local school authorities to reorganize their secondary-school programs. Publications and general letters come next in order. Minnesota, New York, Pennsylvania, Vermont, Wisconsin, and South Dakota report the use of subsidies as an encouragement. Six States listed methods other than those suggested in the questionnaire. Speeches were mentioned by California, Connecticut, and Massachusetts. During the teacher-training program, the approval of graduates for senior high school entrance, and letters to school heads following inspection are ways peculiar to Alabama, West Virginia, and Missouri, respectively. Three is the median number of the above methods used by any one State. Five States rely on but one method, which in four cases is field counseling and in the fifth, publications. New York uses the entire battery of five. Ten States use two methods each; eleven use three; and five use four methods.

Supervisory activities.—The question as to the purposes of State departments' supervisory activities in the junior high school field was productive of a considerable scattering of replies, with a tendency, on the one hand, toward generalities, and, on the other hand,

to specific itemizations which represented procedures rather than purposes. What is set down on paper as an aim is generally much less revealing than what is actually done in moving toward a goal. The test lies in the performance rather than in the hope. The substantial value in the question, therefore, seems to lie in an analysis of the methods used by the various State departments in carrying on supervisory activities in the junior high school field; only this portion will be presented here. However, one splendid statement of purposes, drafted by D. W. Rockey, of New Mexico, will be quoted:

1. To insure the curriculum has been carefully planned with a knowledge of the student's needs and abilities.
2. To determine if the school is developing in the true spirit of junior high school movement, or only with an eye to the outward administrative forms.
3. To score the tone and spirit of the school, and commend and advise on seeming deficiencies.
4. To advise on the equalization of expenditures between the elementary, junior high school, and senior high school on the basis of educational needs.
5. To keep in touch with the general progress without in any way suppressing initiative.

Twenty-four States responded to this section of the questionnaire. The prevailing supervisory methods in these States are the obvious ones—conferences and visitation. Seventeen States report the use of conferences and 16 of visitations. Table 5 gives the summary by States.

TABLE 5.—*Supervisory methods employed by State departments*

State	Visitation	Conferences	Correspondence	Publications	Reports	Addresses	Approval of courses
Alabama	X	X					
California		X				X	X
Colorado	X	X					
Connecticut	X	X	X				
Florida	X	X	X	X			
Indiana	X	X			[1] X		
Kansas	X						
Kentucky		X	X	X			
Maine	X	X	X				
Massachusetts [2]	X	X				X	
Minnesota [3]	X				X		
Missouri		X		X			
New Hampshire	X	X				X	
New Mexico	X		X		X		
New York [4]	X						
North Dakota	X						
Ohio	X			X			[5] X
Pennsylvania	X	X				X	
South Carolina		X					
Utah [6]		X					
Vermont	X	X	X	X			
West Virginia	X				[7] X		[8] X
Wyoming [9]		X					
Wisconsin		X	X	X			

[1] Reports from principals.
[2] School surveys also used as a method.
[3] State tests also utilized.
[4] Includes also the broader approval of chartering.
[5] Demonstration teaching is Utah's second method.
[6] Annual reports of conditions by schools.
[7] Withholding funds is also specified.

Standards for junior high schools.—Definite standards for junior high schools have been formulated by the State departments of California, Connecticut, Florida, Minnesota, Oregon, Pennsylvania, Utah, Vermont, West Virginia, and Wisconsin. Standards for six-year high schools have been set up in Michigan and Wyoming. The following States have provided standards for both types of schools: Alabama, Indiana, Kansas, Kentucky, Maine, Missouri, New Hampshire, New York, and Ohio. Massachusetts has issued recommendations covering the two types. The usual method is the printed bulletin; 19 of the 22 States named use this plan. California, Kentucky, and West Virginia have mimeographed regulations.

Standards for junior high schools were adopted by 1 State in 1916, 1 in 1917, 2 in 1919, 2 in 1920, 4 in 1921, 1 in 1922, 1 in 1923, 3 in 1924, and 5 in 1925. Oregon's standards are the earliest reported and continuing without modification, being adopted in 1917. Vermont's were adopted in 1916, but were revised in 1923.

Eight States have revised their standards since the original adoption. Vermont has already been mentioned; Alabama and Wisconsin made revisions in 1924; California, New Hampshire, New York, Ohio, Pennsylvania, and West Virginia revised their standards in 1925. From the double standpoint of original adoption and revision, 1925 seems to have been an active year.

A request was made for a brief statement as to the nature of the revision in each case. The replies are incomplete. New Hampshire (standards adopted in 1919, modified in 1925) introduced the principle of constants and variables into its revision. New York's changes (1925) were in the syllabus. Pennsylvania (standards adopted in 1922, modified in 1925) reduced the number of teachers necessary. Vermont (original adoption in 1916, revision in 1923) reports a thorough revision of curricular and general requirements. Wisconsin (original adoption in 1919, revised in 1924) made its requirements more flexible.

It is readily noted from Table 6 that 3 is the number of teachers most frequently set as the minimum for junior high schools and 4 or 5 for 6-year high schools. Fourteen States make specifications as to the curriculum in approved junior high schools; 12 States make such specifications for approved 6-year high schools. Seventeen States require schools to submit their curriculums to the State department for approval. Nine States require that extraclass activities shall be provided for; 16 encourage provision for extraclass activities. Only 9 States impose standards affecting the buildings in which junior high schools are housed.

TABLE 6.—*Important State requirements for junior high schools*

State	Nature of report as to standards						
	Minimum number teachers, junior high school	Minimum number teachers, 6-year high school	Curriculum specifications, junior high school	Curriculum specifications, 6-year high school	Must submit curriculum for approval	Extra-class activities	Standards as to building
Alabama	3	5				[2] E	
California			No	No	Yes	E	No.
Colorado [1]			No	No		R	Yes.
Connecticut			Yes	Yes	No	E	
Florida			No	No	Yes	E	
Georgia [1]	2	4-5				R	
Indiana	3	3		Yes	Yes	R	Yes.
Kansas	3		Yes	Yes	Yes	E	Yes.
Kentucky		3	Yes	Yes	Yes	R	No.
Maine	2	4			Yes	E	
Massachusetts			No	No	No	E	No.
Michigan	3	4	No	Yes	[3] No		No.
Minnesota	4			No	Yes	E	No.
Missouri		5	Yes	Yes	No	R	Yes.
Nebraska [1]	1	3					
Nevada [1]			Yes		Yes		
New Hampshire		3	Yes	Yes	Yes	E	No.
New Jersey [1]	4		Yes		Yes	E	Yes.
New Mexico [1]					Yes	R	No.
New York	4	6	Yes	Yes	Yes	R	Yes.
North Dakota [1]		6			No	E	
Ohio	3	5	Yes	Yes	Yes	E	
Oregon	8	16					
Pennsylvania	2	5		Yes	No	R	Yes.
South Carolina [1]	3		Yes		Yes	R	
Utah	3		Yes		No	E	
Vermont	3		Yes		Yes	E	
West Virginia	2	5	Yes	Yes	No		Yes.
Wyoming		4		Yes	No	E	No.
Wisconsin	3		Yes		Yes	E	No.

[1] Did not indicate that they had issued definite standards.

[2] E—elective; R—required.

Curriculum constants.—The reports on subjects that are prescribed as constants for all pupils during the seventh, eighth, and ninth years were somewhat meager. In some cases a citation was made to some accompanying bulletin or circular which did not yield a definite answer. As a result, reliable information was gained for only 12 States. In these States English is uniformly prescribed and social subjects and mathematics practically so. Science and practical arts were given as constants by some States. It was surprising to note that less than half make physical education or health a required subject. Perhaps this was an oversight in some cases due to thinking in terms of the conventional subjects.

Equipment and building requirements.—This section of the inquiry brought a paucity of detail. Equipment requirements seem in general not to be definite on the part of State requirements. Where indications are given that such requirements are imposed with respect to maps, science apparatus, books, practical arts equipment, etc., a common descriptive label is "adequate." This of course gives no definite information. In fairness it should be said that a number of States report that definite standards are being developed. There are only

6 States that list any tangible equipment requirements and these listings are in every instance partial. While only 9 States report standards affecting the building and general housing arrangements for reorganized secondary schools, 13 States indicate the requirement of certain facilities in the way of classrooms and other details. The general situation as to building requirements is indicated in Table 7. Here, again, only a limited number of States have set any definite requirements.

TABLE 7.—*Building requirements for junior high schools as reported by 13 States*

State	Gymnasium	Auditorium	Home economics room	Shop room	Laboratories	Library	Study hall	Music room	Art room	Club room
Alabama			X	X	X	X				
Indiana			X	X	X	X				
Kansas		X	X	X	X	X	X	X	X	
Kentucky					X	X	X			
Maine					X	X				
Minnesota					X	X	X			
Missouri		X			X	X	X			X
New Hampshire			X	X						
New York	[1] X	[1] X	X	X	X	X	X	X	X	X
Pennsylvania				X	X	X				X
Vermont			X		X					
West Virginia					X	X				
Wisconsin			X	X		X	X			

[1] There must be a gymnasium or a physical education room and either an auditorium or an assembly room.

Of the 13 States that have attempted to set up definite requirements the outstanding tendency is to require laboratories and a library. These are obviously the almost inescapable requirements if junior high schools are to be maintained. Next in frequency come rooms for home economics and for shopwork, both of which represent the usual first step in expanding the curriculum when reorganization takes place. A study hall is the third most frequent requirement; 6 States specify this requirement.

Indiana and Kentucky require that extraclass activities shall be provided for, but do not require that approved schools shall have a room for this purpose. Pennsylvania indicates that music and art as well as extraclass activities must be provided for, but combined rooms may be used in small schools. This State also insists upon a part-time home economics room. Four of the 13 States whose requirements are listed require that the building must be arranged for a segregation into junior and senior divisions in the case of 6-year high schools. Indiana, Kansas, and New York answer unqualifiedly in the affirmative on this item, but Pennsylvania makes the requirement only of large schools.

Summary.—The inquiry into the activity of State departments in the reorganization movement in secondary education shows the

reorganization to be in the throes of growth. In some States little is being done; in others the movement has made splendid progress. State standards while still far from being definite and inclusive are gradually being evolved.

CHAPTER IV

Legal Provisions of the States Relating Specifically to the Junior High School[1]

The problem of this chapter has been to determine how many of the States have made definite and specific provisions for junior high schools in their laws, and what the substance of these laws is.

To answer the problem the laws of the 48 States have been checked through, recording all legislation in which the term junior high school appears. No effort has been made to record the laws giving general powers to State boards of education or to the boards of education of independent districts, though in numbers of the States many and excellent schools have been organized under such general authority in States in which no specific laws appear on the statutes. Outstanding examples of such appear in the States of New York, Michigan, and Iowa.

Having checked through the laws so far as they were available in Stanford University libraries, a questionnaire was sent to each State superintendent over the signature of Doctor Sears. This form contained references to the laws so far as they had been found, and if no laws mentioning junior high schools were found, a note was made of that. The State superintendents were asked to check the accuracy of the findings for their particular States, and also to send any material that the authors seemed to have lacked or overlooked.

The replies came back promptly with some additional material, the State superintendent checking results, and in a number of cases calling attention to matters that had been overlooked.

The term "intermediate schools" has been used in some cases in the earlier laws, California being a notable example, but practically all States use "junior high school" at the present.

Laws relating specifically to junior high schools were enacted in the following States at the dates named: California, 1915; Vermont, 1915; Arkansas, 1917; Ohio, 1917; Alabama, 1919; Indiana, 1919; Maine, 1919; New Hampshire, 1919; Virginia, 1919; West Virginia, 1919; Wisconsin, 1919; Massachusetts, 1921; Minnesota, 1921; New

[1] This chapter is based upon portions of a master's study made in [illegible]6 at Leland Stanford, by Joseph Travelli Glenn under the direction of Dr. Jesse B. Sears.

Jersey, 1921; Pennsylvania, 1921; Maryland, 1922; Colorado, 1923; Florida, 1923; Georgia, 1923; Nevada, 1923; North Carolina, 1923; Arizona, 1925; Kansas, 1925; Mississippi, 1925; Tennessee, 1925; Michigan, 1927. It will be noted that most of the junior high school laws are of recent origin, the laws being more than 10 years old in only four States.[2]

With the single exception of the State of Washington there seems to be no disposition on the part of the States to discourage junior high school organization. In the School Code of the State of Washington, 1923, there appears an opinion of the attorney general to the effect that there are several items in the law which indicate that the junior high school organization can not properly exist in the State. It is possible that this opinion has been reversed, or if not, it appears to be ignored, for several junior high schools are reported in the State.

TABLE 8.—*Topics included in laws of certain States relating specifically to junior high schools*[1]

State	Definition	Provision for certification of teachers	Financial provision	Authority given to districts to establish
Alabama	X			
Arizona				X
California	X	X	X	
Colorado		X		
Florida	X			
Georgia				X
Indiana	X	X		X
Kansas	X			X
Maine	X		X	
Minnesota	X		X	
Mississippi	X			
Nevada	X			
New Hampshire	X			
New Jersey	X		X	
North Carolina	X			
Ohio	X			
Pennsylvania	X			
Tennessee	X			
Vermont	X	X	X	
Virginia	X			
West Virginia	X	X		
Wisconsin	X		X	

[1] It is to be understood that reference here is only to specific laws upon junior high schools. In most of the States general laws cover these topics.

It will be noted that of the States that have laws specifically for junior high schools, all but three include a definition in the law, and in several States the law includes little more than this.

Three States provide for certification of teachers for the junior high school. In four States definite and specific authority is granted to districts to organize junior high schools. In six States some reference is made to finance, but this is largely a matter of the regulation of the payment of tuition by one district for pupils attending a junior high school in another.

[2] In this connection see Bureau of Education Bulletin, 1924, No. 29, Legislation on the Junior High School, by Paul W. Terry and William J. Marquis.

Minnesota and Wisconsin offer slight inducement in the way of State aid for junior high schools, but we feel that in no case does the State provide for support adequate to encourage materially junior high schools.

In California the law provides that the junior high school shall be organized under the control of the high-school board, but the State apportionment is made for the ninth grade only on the high-school basis, and the elementary-school fund allowed for the seventh and eighth grade is not only not adequate, but it must be transferred to the high-school board's control in the form of a payment for tuition.

The following is a summary of the financial provisions made specifically for junior high schools by the laws of certain States:

FINANCIAL PROVISIONS IN CERTAIN STATE LAWS

California.—Trustees of one district lacking junior high school may contract for payment of tuition of pupils in a district that has such a school.

Maine.—Provision for the payment of tuition of pupils in a junior high school by trustees of a district where no such school exists.

Minnesota.—State aid for junior high schools, $300. State aid for 4-year high schools, $400. State aid for district having both junior and senior high schools, $600.

New Jersey.—State aid for junior high schools the same as for senior high schools, viz, $300 per teacher.

Vermont.—Cost of vocational education in junior high schools to be refunded to the district by the State.

Wisconsin.—State aid for junior high schools on same basis as for elementary and graded schools, $300. Such junior high schools must employ at least three teachers.

INFERENCES

It appears that the junior high school movement is so new that little more than half the States have seen fit to include specific mention of it in the school laws.

It appears also that some of the States that have no specific junior high school laws have made remarkable progress in the matter of organizing good junior high schools.

There are those who contend that the junior high school is but one stage in the reorganization of secondary education, and that the 6–4–4 plan is bound to succeed the 6–3–3. To such it may seem fortunate that many of the States have not put definite junior high school laws on their statute books.

Just as it has taken years to secure adequate legislation for the traditional high school, so it seems probable that it will require years before the sentiment in favor of the junior high school becomes

crystallized into satisfactory laws for the organization and support of such schools.

In the meantime it is gratifying to any one who studies the matter to note how much progressive leadership is found in the offices of the State departments of education, and one has no hesitation in predicting that in due time satisfactory school laws for the junior high school will be found on the statute books of a great majority of the States.

CHAPTER V

Practices in Organization and Administration

PROVISIONS OF A DISTINCT EDUCATIONAL UNIT

Provisions for a distinct educational unit involve the association, or lack of association, in organization and administration between the junior and elementary or senior school units. They involve also the years or grades combined to form the junior unit. These practices are examined through an analysis of data for all schools of the United States, recognized by State departments of education as secondary schools which involve the junior high school grades in a secondary school unit, and more detailed data for 135 schools in 30 States having a definite school unit called a junior high school.

Table 9 shows the distribution of all secondary schools of the United States, which include the junior high school grades, by type of school and by States. A total of 2,368 schools are so distributed. Of these schools 99 are 5 or 6 year undivided type secondary schools. That is, they make no effort in any way to organize the school into junior and senior units. These schools are found in three States only, and 89 of them are in the State of Indiana. The table also shows a total of 880 segregated junior high schools, and 1,389 schools where the junior and senior units are recognized as distinct but associated in a single institution.

In order to group together in Table 9 all schools providing a junior unit of 1, 2, 3, or 4 years, schools combining different grades to provide the same length of the junior school period have been grouped as follows:

1. The total of 150 two-year segregated junior schools includes 136 schools combining grades 7 and 8, and 14 schools combining grades 8 and 9.

2. The total of 677 three-year segregated junior schools includes 658 schools combining grades 7, 8, and 9, and 9 schools combining grades 6, 7, and 8.

3. The total of 696 junior-senior schools providing a 2-year junior unit, includes 657 schools combining grades 7 and 8 for the junior unit, and 9, 10, 11, and 12 for the senior unit; 21 schools combining grades 7 and 8 for the junior unit, and 9, 10, and 11 for the senior unit; and 18 schools combining grades 8 and 9 for the junior unit, and 10, 11, and 12 for the senior unit.

4. The total of 690 junior-senior schools providing a 3-year junior unit includes 676 schools combining grades 7, 8, and 9 to form the junior unit and 10, 11, and 12 to form the senior unit; and 14 schools combining grades 7, 8, and 9 to form the junior unit and 10 and 11 to form the senior unit.

TABLE 9.—*Distribution of secondary schools which involve the junior high-school grades, by type of school and by States, 1925*

State	Total	Number of schools, by States and type								
		Segregated junior				Junior-senior				Undivided 5 and 6 year
		2-year	3-year	4-year	Combined	2-4 and 2-3	3-3 and 3-2	1-2	Combined	
Alabama	49		6	6	12	4	35		39	
Arizona	13	4	4	1	9	2	1		3	①
Arkansas	43		4		4	11	28		39	
California	94		73		73	1	20		21	
Colorado	58	4	9	1	14	22	22		44	
Connecticut	19	1	9		10	3	6		9	
Delaware	3					3			3	
District of Columbia	8		8		8					
Florida	18		5		5	3	10		13	
Georgia	20	1	9	1	11	2	7		9	
Idaho	14		2		2	8	4		12	
Illinois	26	8	8		16	9	1		10	
Indiana	250	12	20		32	75	54		129	89
Iowa	167	8	13		21	115	31		146	
Kansas	72	12	30		42	18	12		30	
Kentucky	28	3	2		5	15	8		23	
Louisiana	1		1		1					
Maine	30	2	3	4	9	7	5		12	9
Maryland	16	1	14		15	1			1	
Massachusetts	93	11	63	1	75	9	9		18	
Michigan	136	4	25	5	34	32	70		102	
Minnesota	60	2	13		15	14	31		45	
Mississippi	39	1		2	3	29	7		36	
Missouri	43	3	13		16	15	12		27	
Montana	14	1	2		3	9	2		11	
Nebraska	30	3	8		11	4	15		19	
Nevada	4		1		1		3		3	
New Hampshire	44	11	3	5	19	25			25	
New Jersey	33	3	22		25	3	5		8	
New Mexico	8	1	3		4	4			4	
New York	92	2	34		36	30	26		56	
North Carolina	8		3		3	4	1		5	
North Dakota	25	1	1	1	3	11	11		22	
Ohio	158	10	46		56	36	66		102	
Oklahoma	138	4	8		12	72	54		126	
Oregon	14	6	6		12	2			2	
Pennsylvania	190	11	84	13	108	24	58		82	
Rhode Island	2			1	1	1			1	
South Carolina	1		1		1					
South Dakota	16		6		6	3	7		10	

TABLE 9.—*Distribution of secondary schools which involve the junior high-school grades, by type of school and by States, 1925*—Continued

State	Total	Number of schools, by States and type								
		Segregated junior				Junior-senior				Undivided 5 and 6 year
		2-year	3-year	4-year	Combined	2-4 and 2-3	3-3 and 3-2	1-2	Combined	
Tennessee	18	4	2	1	7	8	3	.....	11	.....
Texas	21	3	16	.....	19	.....	2	.....	2	.....
Utah	20	.....	7	1	8	.....	9	3	12	.....
Vermont	41	2	1	4	7	16	18	.....	34	.....
Virginia	33	2	18	.....	20	1	12	.....	13	.....
Washington	21	7	.....	.....	7	4	10	.....	14	.....
West Virginia	78	.....	50	1	51	25	2	.....	27	.....
Wisconsin	42	1	20	2	23	8	11	.....	19	.....
Wyoming	17	1	1	3	5	10	2	.....	12	.....
United States	2,368	150	677	53	880	696	690	3	1,389	99

From these data it is seen that the typical junior school unit is a 2-year school combining grades 7 and 8, or a 3-year school combining grades 7, 8, and 9. Where the junior unit is one unit in a junior-senior school there is an approximate even division between 2 and 3 year junior school units. Where the junior high school unit is segregated the 3-year junior school occurs with a frequency of approximately 4 to 1 as compared with the 2-year school, and 12 to 1 as compared with the 4-year school.

Table 10 distributes the total frequencies for each type of school of Table 9 by population of district, and shows the per cent of schools of each type, for the population classes set up. The percentages computed in all cases represent the per cent of the total number (2,368) of schools that is included in the group to which the per cent refers.

TABLE 10.—*Distribution of secondary schools which involve the junior high school grades by type of school and population of school district*

Type of school	Number of schools by population of district											
	100,000 or more population		30,000 to 100,000 population		2,500 to 30,000 population		Combined urban		Fewer than 2,500 population		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Segregated junior	227	9.6	190	8.0	290	12.2	707	29.8	173	7.3	880	37.1
2-year	6	0.2	23	0.9	106	4.4	135	5.7	15	0.6	150	6.3
3-year	220	9.3	161	6.7	177	7.4	558	23.5	119	5.0	677	28.4
4-year	1	0.0	6	0.2	7	0.2	14	0.5	39	1.6	53	2.2
Junior-senior	32	1.3	40	1.7	405	17.1	477	20.1	912	38.5	1,789	58.7
1-year junior	.....	.....	.....	.....	2	0.1	2	0.1	1	0.0	3	0.1
2-year junior	15	0.6	24	1.0	202	8.5	241	10.2	455	19.2	696	29.4
3-year junior	17	0.7	16	0.7	201	8.5	234	9.8	456	19.2	690	29.0
All junior schools	259	13.5	230	9.6	695	29.3	1,184	50.0	1,085	45.8	2,269	95.9
1-year	.....	.....	.....	.....	2	0.1	2	0.1	1	0.0	3	0.1
2-year	21	0.9	47	1.9	308	13.0	376	15.8	470	19.8	846	35.7
3-year	237	10.0	177	7.5	378	15.9	792	33.4	575	24.3	1,367	57.8
4-year	1	0.0	6	0.3	7	0.3	14	0.6	39	1.6	53	2.2
Undivided 5 and 6 year	1	0.0	.....	.....	2	0.1	3	0.1	96	4.0	99	4.1
Total	260	10.9	230	9.6	697	29.4	1,187	50.1	1,181	49.9	2,368	100.0

It is seen from the totals for each population group that 10.9 per cent of the schools involved occur in places of 100,000 or more population; 9.6 per cent occur in population centers of 30,000 to 100,000; 29.4 per cent occur in population centers of 2,500 to 30,000; 50.1 per cent occur in all urban centers combined; and 49.9 per cent occur in population centers of less than 2,500, or rural territory. Approximately 80 per cent of all high schools occur in rural territory[1] compared with 49.9 per cent for schools of the junior-senior type. It is obvious, therefore, that the junior high school occurs in urban territory in a higher comparative frequency than in rural territory.

Comparing urban and rural territory as to type of school it will be noted that the segregated junior schools in urban territory constitute 29.8 per cent of the total while they constitute only 7.3 per cent of the total in rural territory. With respect to the junior-senior school the comparative percentages for urban and rural territory are 20.1 and 38.5, respectively. It is thus obvious that the junior high school tends toward complete segregation in urban centers but toward association with the senior unit in a junior-senior school in rural territory.

Considering the relative frequency of the 2, 3, and 4 year junior units and the undivided type of school, in urban and rural territory, it will be noted that the 2-year junior schools constitute 15.8 per cent of the total cases in urban territory as compared with 19.8 per cent in rural territory; 3-year schools constitute 33.4 per cent of the total cases in urban territory, and 24.3 per cent of the total cases in rural territory; 4-year schools constitute 0.6 per cent of the total cases in urban territory and 1.6 per cent of the total cases in rural territory. It is, therefore, clear that the 3-year junior unit occurs with a higher comparative frequency in urban territory. This is due to the fact that the greatest percentage of urban schools are segregated schools which tend strongly toward the 3-year type. In both urban and rural territory, where the junior-senior school occurs, the chances are about even that it will be either a 2 or a 3 year unit. If the data for the several urban groups are examined it becomes evident that the junior-senior school occurs rarely in centers of more than 30,000 population but becomes more common in urban territory, including centers of 2,500 to 30,000 population. Undoubtedly, the junior-senior schools occur more frequently in the smaller centers of this territory representing an institution that tends to appear where the school population is served by a single secondary school.

Actual practice in the United States with respect to years combined to form the junior unit tends strongly toward the 3-year school

[1] See Statistics of Public High Schools. United States Bur. of Educ. Bul., 1925, No. 40, p. 8.

combining grades 7, 8, and 9, and is, in this respect, in accord with the consensus of expert opinion as reported by Briggs. In the larger centers the junior unit tends strongly toward segregation from elementary and senior units, but as the size of the school community decreases to fewer than 30,000 population, this tendency becomes less pronounced and is completely reversed in rural territory, the junior-senior school occurring with a frequency of approximately six to one as compared with the segregated junior school.

Turning our attention to the group of 135 schools used as a sample of junior high schools in rural communities data are available through which the practices concerned with creating a distinct school unit may be analyzed further.

Table 11 shows the practice of combining years for the sample schools.

TABLE 11.—*Distribution of 135 rural junior high schools on basis of grades included*

Grades included	Twelve-grade systems		Eleven-grade systems	
	Number	Per cent	Number	Per cent
7 and 8	50	37.3	1	100
7, 8, and 9	75	56.0		
6, 7, and 8	1	0.7		
7, 8, 9, and 10	3	2.9		
6, 7, 8, and 9	1	.7		
8 and 9	1	.7		
Not specified	2	1.5		
Total	134	100.0	1	100

The dominant tendencies shown by Table 10 for grouping grades 7 and 8 or grades 7, 8, and 9 to form a 2 or 3 year junior unit are shown also for the sample schools. In this respect the schools are fairly representative.

Table 12 shows the degree and kind of segregation of the junior school unit from the elementary and senior school units for the group of 135 schools.

Recognition of the desirability of some degree of segregation of the junior school unit is evident. That all of these schools show some provision for segregation is due to the fact that only such schools were selected as the basis for this study. In making this selection, available returns from eight 6-year schools which made no provision for any segregation of pupils from senior high school pupils were excluded. The only cases, however, where a completely distinct junior school unit has been achieved are included in a group of seven schools having no administrative relationship to elementary or senior school units except through a local superintendent. This group of schools constitutes 5.2 per cent of the total.

Among those junior schools which make provision for partial segregation, 3.7 per cent are housed separately though they do not have a distinct administrative or teaching staff; 18.5 per cent have a separate principal; 31.1 per cent restrict some teachers to the junior unit while assigning others to teaching duties in both elementary and junior units; and 63.7 per cent restrict some teachers to the junior unit while assigning others to teaching duties in both junior and senior units.

TABLE 12.—*Degree and kind of segregation of junior unit from elementary and senior school units*

Degree and kind of segregation	Number of schools	Per cent of schools
Complete segregation:		
(a) Not related administratively	0	0
(b) Related administratively through local superintendent	7	5.2
Partial segregation:		
(a) Separate principal	25	18.5
(b) Housed separately	5	3.7
(c) Some teachers restricted to junior unit; some assigned to elementary and junior units	42	31.1
(d) Some teachers restricted to junior unit; some assigned to junior and senior units	86	63.7

Table 13 shows the frequency of association of the junior-school unit with elementary and senior school units by size of enrollment in the junior unit.

TABLE 13.—*Distribution of schools by type and size of enrollment in the junior-school unit*

Number enrolled	Elementary-junior school		Elementary-junior-senior school		Junior-senior school		Segregated junior school		All types	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1-49	1	8.3	23	33.3	8	17	1	13.3	33	24.1
50-99	8	66.7	31	44.9	17	36.3	2	28.6	58	42.9
100-149	1	8.3	8	11.6	8	17	2	28.6	19	14.1
150-199	0	0	3	4.3	7	14.9	0	0	10	7.4
200-299	0	0	0	0	3	6.2	2	28.6	5	3.7
300-499	0	0	1	1.4	0	0	0	0	1	.7
Not specified	2	16.7	3	4.3	4	8.5	0	0	9	6.7
Total	12	8.9	69	51.1	47	34.8	7	5.2	135	100.0

The prevailing junior high school of this group enrolls fewer than 100 pupils. An enrollment up to 100 includes 67 per cent of all schools. The most frequent size of enrollment is included in the interval 50–99, which includes 42.9 per cent of the cases. Schools enrolling above 200 pupils in the junior unit are rare. The fact of complete segregation appears, on the basis of the few cases involved, to be independent of size of enrollment. It is clear, however, that the tendency to associate the junior-school unit with an elementary-

school unit alone is rare and found only where the junior-school enrollment is comparatively small. Seventy-five per cent of the cases of such association occur where the enrollment in the junior unit is fewer than 100. Only 8.9 per cent of the total number of schools show such association.

Clearly the most frequent type of association is described by the term elementary-junior-senior school. This type of association includes 51.1 per cent of the cases. Apparently this type of association is also somewhat influenced by size of enrollment, as 78.2 per cent of schools of this type, compared with 67 per cent of all schools, enroll fewer than 100 pupils. The junior-senior type of association is second in order of frequency of occurrence. Thirty-four and eight-tenths per cent of all schools are of this type and there is a tendency toward larger enrollments in the junior units of these schools. Only 53.3 per cent of these schools enroll fewer than 100 pupils compared with 78.2 per cent of elementary-junior-senior schools and 75 per cent of elementary-junior schools.

The distribution of schools by type of school district may profitably be examined here. This distribution is shown in Table 14.

TABLE 14.—*Distribution of schools by type of district*

Type of district	Number and type of schools									
	Elementary junior		Elementary junior-senior		Junior-senior		Segregated junior		All types	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Not specified	0	0	3	4.4	0	0	0	0	3	2.2
Township or New England town	6	50	14	20.3	15	31.9	1	14.3	36	26.7
Consolidated	1	8.3	27	39.1	12	25.5	2	28.6	42	31.1
Union high school	0	0	2	3	5	10.6	1	14.3	8	5.9
County	1	8.3	0	0	1	2.1	0	0	2	1.5
Rural community	0	0	5	7.2	4	8.5	1	14.3	10	7.3
City or village	4	33.3	18	26	10	21.3	2	28.6	34	25.2
Total	12	8.9	69	51.1	47	34.8	7	5.2	135	100

As shown by Table 14, the junior high school in rural districts occurs most frequently in the consolidated school district. The township type of district, the city or village type of district, the rural community district, the union high-school district, and the county district follow in order of frequency. When the relative frequency of occurrence of these types of districts is considered, it is probably true that the consolidated, township, and city type districts provide the conditions which are favorable to the reorganization movement in secondary education. The small rural school district commonly affords only an elementary school. Legal provisions defining high-school education as a 4-year period obstruct reor-

ganization in many union high-school districts, and county-unit districts occur most commonly in the Southern States, where reorganization has lagged due to the 7–4 division of elementary and secondary education. There seems little tendency for any particular type of district to give rise to any particular type of association between the junior and elementary or senior-school units, except for a tendency for the elementary-junior-senior school to occur most frequently in consolidated districts.

If we return now to Table 12 we have a more adequate basis for interpretation of the practices looking toward segregation of the junior unit. An enrollment of more than 150 pupils in the junior unit in rural-junior high schools is comparatively rare. The prevailing school enrolls fewer than 100 pupils in the junior unit.

The junior high schools occur most frequently in consolidated township and village districts which are most conveniently served by one school centrally located. Rarely are the elementary, junior, or senior units of such size as to justify separate school plants and administrative staffs. The distribution of pupils by grades is such that, commonly, only one recitation section for any given grade group is desirable. Administrators are therefore faced with the necessity of choice between departmentalization of instruction and assignment of teachers to teaching duties in more than one school unit, or grade organization of instruction and restriction of teachers to one unit. Their choice is commonly that of departmentalization and assignment of teachers to teaching duties in both junior and senior school units. The fact that the junior unit is most frequently associated with both elementary and senior units, while teacher assignment to duty is most commonly to junior and senior units, indicates a decided preference for association with the senior rather than the elementary unit in the organization of instruction.

All of the schools included in this study do recognize in some way a distinct junior cycle. At the least they have introduced partial departmentalization and made certain adaptations of the elementary-school curriculum and recognize two or more grades as constituting a junior high school unit.

PROVISION FOR MAXIMAL RATES OF PROGRESS IN LEARNING

Better provision for maximal rates of progress in learning on the part of individual pupils contemplates more rapid grade progress and more rapid educational progress. More rapid grade progress involves flexible promotion plans. More rapid educational progress involves subject-matter reorganization—selection and enrichment—and teaching service.

Promotion plans.—Junior high schools in general are given an important place in organization and administrative practice to pro-

visions which seek to overcome the faults of mass instruction through permitting pupils to advance through the grades at a rate which is normal to their abilities to learn. These practices concern themselves with bases of admission to junior high school, pupil classification, and bases of promotion.

TABLE 15.—*Bases of admission reported by 135 junior high schools*

Bases of admission	Schools	
	Number	Per cent
Completion of 6 elementary grades only	98	72.6
Certificate only	2	1.5
Six elementary grades and other bases	30	22.2
Not specified	5	3.7
Certificate and other bases	10	7.4
Mental age and other bases	12	8.8
Chronological age and other bases	10	7.4
Educational age and other bases	9	6.6
Total frequency	176	.....

Table 15 shows the bases of admission to junior high schools. Completion of six elementary grades is the only basis of admission reported by 72.6 per cent of the schools. It is reported as one of two or more bases of admission in 22.2 per cent of all schools. It is, therefore, a recognized basis of admission in 94.8 per cent of all schools. Only two schools of those reporting do not recognize completion of six elementary grades as a proper basis of admission. They report a practice of admission on certificate only, which may or may not represent completion of the six elementary grades. Other bases of admission are relatively infrequent. Use of mental age, chronological age, and educational age as one of two or more bases of admission are reported in approximately the same frequencies. While the results show the beginnings of a policy to admit pupils to the junior high school on the basis of age, it is evident that in practice the institution is yet serving those who complete grade 6 rather than an age group. So long as this practice obtains the junior high school must continue to fail in its purpose of serving all early adolescents.

Bases of pupil grouping.—The effort to group pupils into homogeneous ability groups for purposes of instruction has received wide attention in educational literature and in actual practice. Table 16 shows the frequency of use of specified bases of grouping in rural junior high schools. Efforts to group homogeneously are made in 48.9 per cent of all schools. The most frequent basis used is a composite of several factors. Grouping on the basis of teachers' estimates or marks alone is practiced by 17.7 per cent of schools. The intelligence test score alone is used in 3 per cent of the cases and the

achievement test score alone in 0.7 per cent of cases. Table 16 shows the bases of pupil grouping in current use.

TABLE 16.—*Bases of pupil grouping*

Bases of grouping	Number of schools	Per cent
No attempt to group homogeneously	65	48.1
Attempting to group homogeneously	66	48.9
By teachers' estimates or marks	24	17.7
By intelligence-test score	4	3.0
By achievement-test score	1	.7
By composite of several factors	37	27.4
Not reported	4	3.0
Total	135	100.0

The use of several measures of ability where homogeneous grouping is attempted is the common practice. This composite factor consists of any one of the three independent measures in combination with one or both of the other measures. The practices of combining these measures and the relative weight given to each is highly variable.

It is not surprising that no attempt to group homogeneously is made in approximately one-half the cases. It has been shown in Table 13 that 67 per cent of these schools enroll fewer than 100 pupils. Where an enrollment of fewer than 100 is distributed over the junior high-school grades it is seldom feasible to form more than one recitation section for each grade group. Ability grouping is usually restricted to schools where two or more recitation sections per grade group can be formed. Undoubtedly the practice of grouping by ability in these rural schools is rather general where more than one recitation section per grade can be formed. Data available on the use of maximum and minimum assignments show that actual differentiation of content in accord with ability is made for individual pupils in approximately 65 per cent of the schools. It is therefore evident that ability grouping has been conceived as a process to be applied for the segregation of recitation sections.

Differentiation of work assignments in accord with ability where groups have not been segregated has not been reported as a practice of grouping. This latter provision serves the essential purposes of ability grouping. It is a process that can be applied regardless of size of enrollment, and failure to make such provision may fairly be charged to lack of purpose to make such provision.

Bases of promotion.—Grouping by ability affords a possibility of varying requirements for promotion and of rate of promotion. It implies the use of other criteria of promotion than that of accom-

plishment with reference to uniform subject matter. Table 17 shows the criteria of promotion in actual use.

TABLE 17.—*Criteria of promotion*

Criteria	Number of schools	Per cent
Attendance	2	1.5
Subject completion based on teachers' marks	45	33.3
Grade completion based on average of subject marks	25	18.5
Teachers' estimates of ability to do work	3	2.2
Standard achievement-test scores	3	2.2
Intelligence-test scores	2	1.5
Composite of several factors	45	33.3
Not specified	10	7.4
Total	135	100.0

Particular interest attaches itself to the extent to which the junior high schools have substituted subject for grade promotion and a composite of several measures of ability for teachers' estimates or marks.

Subject completion based on teachers' marks is a criterion of promotion in 33.3 per cent of the schools. Comparison with a requirement in 18.5 per cent of schools of a given average mark in all subjects of the grade shows that grade promotion which is characteristic of elementary schools is a minority practice. It is somewhat surprising, however, that 18.5 per cent of all schools should hold to grade completion as a basis of promotion. The first three practices noted in Table 17 represent uniformity of time requirement for all pupils. The practices of promoting on the basis of teachers' estimates of ability, achievement of intelligence test results, and a composite of several factors represent the extent to which uniformity of time requirement has been abandoned. The composite factor makes use of a combination of two or more measures involving chronological age, mental age, educational age, and teachers' estimates of ability.

In view of these provisions looking toward varying rates of progress through the grades, the actual results in terms of time required to complete the junior high school course are of interest. Table 18 shows the time requirements for junior high school completion and the results in terms of time actually used by pupils.

TABLE 18.—*Time required for completion of the junior high school*

Time required:	Number of schools
Normal time	121
Average under normal time	1
Average above normal time	8
Graduation not permitted in less than normal time	87
Graduation permitted in less than normal time	43
No reply	5
Total number of schools represented	135

Only one school reports that the average pupil actually completes the junior high school in less than the normal time. On the other hand, the number of schools reporting that pupils actually require more than the normal time for graduation is also small. The results are reported in terms of broad measures only, but do seem to indicate a lack of grade retardation through the junior high-school grades. It is of interest, in view of the number of schools that report variable programs, grouping, and other promotion practices looking to flexibility of progress, that 87 schools report a practice of not allowing graduation in less than the normal time required for completion. Approximately one-half as many schools, however, do permit completion in less than the normal time, so that uniformity of practice does not by any means exist. The condition reflects a division of opinion as to the relative importance of more rapid grade progress toward completion. and curriculum enrichment for bright pupils with uniform time requirement.

Departmentalization of junior high schools.—Departmentalization is a device which aims at improvement of instruction through specialization of teaching functions. The subject matter appropriate to early adolescent education is as broad as human culture and effort. Effective mastery for teaching purposes of the whole range of appropriate subject matter is not to be expected of an individual teacher. Provision which permits concentration on one portion of the whole field of effort is therefore an essential. It is regarded as an essential not only from the point of view of actual teaching demands but from the point of view of specialization in professional training.

Table 19 shows the practices of assigning teachers to specific grades or specific subjects and is an indication of the extent to which the junior high school in rural communities has been departmentalized.

TABLE 19.—*Practice of subject or grade assignments*

Nature of assignment	Number of teachers	
	Junior schools	Senior schools
By subject	453	602
By grade	29	33
Mixed grade and subject assignments	202	219
Not specified (number of schools)	2	2
Total	684	856

For purposes of comparison the number of teachers having each type of assignment in junior and senior schools is shown parallel.

Subject assignment is an obvious ideal in the junior high school, but a considerable number of schools hold to a system of partial departmentalization as indicated by approximately one teacher in three having mixed subject and grade assignments. Approximately one teacher in four in the senior high school, however, has mixed grade and subject assignments also, so that departmentalization of the junior high school is approximately as complete as in the senior high school. The data obtained do not indicate whether or not departmentalization is more complete in grades 8 and 9 of the junior high school than in grade 7. In view of the similarity of conditions in the junior and senior schools it is probable that departmentalization has little relation to an intent to make the transition from grade to departmental organization gradual. Rather, it is probably the practice to departmentalize certain fields and to hold to grade organization in certain other fields.

CHAPTER VI

The Program of Studies

ORGANIZATION OF PROGRAM OF STUDIES

According to the data submitted the curriculum of a small junior high school is organized on the principle that subject matter should be organized for both "continuants" and "drop-outs." Seventy-two, or 53 per cent, of the schools organize their curricula on this basis; 21, or 15 per cent, make no attempt to organize curricula for drop-outs; 16, or 12 per cent, make partial provision; and 21, or 16 per cent, do not specify any attempted adaptation.

In general, there is no uniformity of policy in offering provisional electives in the small junior high school. Twenty-six per cent of those reporting on this item offer no provisional electives before the ninth grade. With the other schools provisional electives are offered from the first to the sixth semester.

The number of free study periods each week varies from 0 to 5. In the seventh grade 75 out of 130 schools reporting give from 0 to 2 free study periods each week, and in the eighth grade 76 out of 131 reporting allow from 0 to 2 study periods each week, and out of 81 reporting for the ninth grade 43 allow from 0 to 2 study periods each week. Others allow a greater number of free periods, indicating that the principle of "directed study under the supervision of a teacher" is not fully established in the small junior high school.

Seventy schools report a curriculum organized on the "constant with variable" basis. Electives are offered in the following fields: Art, agriculture, arithmetic, language, commercial geography, industrial arts, history, science, music, algebra, Bible, vocational guidance, social studies, biology, botany, home economics, physical education, and geometry. Twenty-five schools report that the program of studies is organized with differentiated curricula. Curricula listed are as follows: General, practical arts, academic, commercial, home economics, and vocational.

INTRODUCTION OF GENERAL SURVEY AND UNIT TRYOUT COURSES FOR EXPLORATORY PURPOSES

The practice of providing for provisional election of courses is an administrative device looking toward exploration. A more specific means is afforded through broad survey and short unit tryout courses in special fields of knowledge and of vocational employment.

The frequency of occurrence of courses of these types is shown in Table 20 for 26 junior high schools of Michigan, as reported in the North Central Association Quarterly by C. O. Davis,[1] and for the 135 rural junior high schools used in this study.

TABLE 20.—*Exploratory courses offered in 26 junior high schools of Michigan and 135 rural junior high schools of the United States*

Courses offered	Michigan (26 junior high schools)		United States (135 rural schools)	
	Number of schools	Per cent	Number of schools	Per cent
General language	8	30.8	0	0
General science	24	92.3	79	58.5
General mathematics	15	57.7	66	48.8
General social science	10	38.4	10	7.4
Industrial arts	10	38.4	96	71.1
Agriculture	3	11.5		
Home economics	12	46.2	99	73.3
Commercial work	11	42.3	21	15.5
Music	18	69.6	110	81.5
Fine arts	10	38.4	88	65.2
Short unit tryout courses	18	69.6	----	----
Total	26	100.0	135	100.0

The rural schools show to a disadvantage in the comparison of broad survey courses in the organized fields of knowledge. No effort at exploration of the language field is made in the rural schools, general science has been introduced in only 58.5 per cent of the schools as compared with 92.3 per cent of Michigan schools, general mathe-

[1] Davis, C. O., Broadening and Findings Courses in 25 Michigan Junior High Schools. North Central Association Quarterly, 1: 300–320, December, 1926.

matics has been introduced in only 48.8 per cent of the schools, and general social science in only 7.4 per cent of the schools. The low frequency of general science is due to the fact that no science is offered in many rural junior high schools.

In the effort to explore the fields of vocational employment the junior high schools in rural territory show to better advantage. This is due in large degree to the general introduction of courses in agriculture, shopwork, and home economics in response to the generally accepted idea that the rural schools should provide training in these fields because of the assumption that the training will be vocationally valuable to prospective farmers and their wives.

Music and art, however, have been more generally introduced in the rural schools than in the Michigan schools. Analysis of the music and arts courses in more detail from questionnaire data also shows rather broad courses in both fields. Specific elements of arts courses occurring with significant frequency are art appreciation, free-hand drawing, lettering, design, and mechanical drawing. Specific elements of music courses occurring in significant frequency are technique, chorus, assembly singing, appreciation, orchestra, and instrumental music. To these elements should be added a broad range of music and art activities.

SUBJECTS OF INSTRUCTION

English.—Great variation is shown in the proportionate amount of time allotted to each of the phases of English. Composition varies from 0.1 to 0.7, literature from 0.1 to 0.6, grammar from 0.1 to 1.0, language from 0.1 to 1.0, spelling from 0.1 to 1.0, and other subjects from 0.1 to 0.4.

The median amount of time devoted to each of the phases of work is as follows: Oral composition, 0.2; literature, 0.2; written composition, 0.2; formal grammar, 0.2; applied grammar, 0.1; language, 0.1; spelling, 0.1; and other subjects, 0.1.

Methods used in motivating English work are as follows: Clubs, literary societies, word tests, posters, dramatics, school papers, debating, moving pictures, reading, correlation with other subjects, and written and oral reports of miscellaneous subjects.

Eighty-seven schools report a junior high school library. Seventy-three of these schools stress "reference" and 53 "circulation." Twenty-three schools report special periods for library instruction, 81 have no period, and 26 did not answer this question. Special library work varies from one period yearly to one period weekly.

Eight schools terminate formal spelling with the seventh year, 57 with the eighth year, and 14 with the ninth year; 23 schools require no formal spelling and 31 did not answer this question.

Seventy-eight schools require penmanship as a special subject. Of this group, 75 require it in the seventh grade, 71 in the eighth grade, and 10 in the ninth grade. From 1 to 5 periods weekly are required for penmanship with 2 being the median number of periods required weekly. The length of period for penmanship varies from 10 to 60 minutes. The median number of periods is between 20 and 29.

Foreign language.—Forty-four schools report that Latin is offered, 17 French, and 12 Spanish. Seventy schools report that no language other than English is offered in the school and 9 do not specify any language at all. Foreign language is offered in all semesters of the junior high school years. The majority of schools, however, do not begin to study foreign language until the fifth semester or the beginning of the ninth year. Only 13 schools require all pupils to take a foreign language. Two schools report a definite attempt to correlate Latin with English.

Social studies.—American history and civics are the prevailing subjects for the seventh and eighth years, although there is no uniformity as to the offering. American history, vocational guidance, and civics lead in the ninth year. Many devices are used to secure civic training other than through the social studies. Some of those most frequently mentioned are student council, assembly, class organization, citizenship, clubs, athletics, care of building, speeches, civic improvement, scout work, and school activities.

Mathematics.—Fourteen schools continue arithmetic, unrelated to other mathematics, through the seventh year, 75 continue it through the eighth year, and 9 through the ninth year. Thirty schools indicated that general mathematics had not been introduced. Thirty schools introduced general mathematics in the seventh year, 20 in the eighth year, 16 in the ninth year, and 36 did not answer this question.

Of the schools having the ninth grade, 2 offer arithmetic, 15 general mathematics, 2 geometry, 15 commercial subjects, 63 algebra, and 5 do not specify the type of mathematics offered.

Twenty-nine out of 79 schools make mathematics an elective in the ninth year, 15 schools did not specify, and 35 schools indicate that mathematics is required in the ninth year.

The most serious problems, as far as junior high school mathematics is concerned, as indicated in the replies received are: Better preparation in the lower grades, better textbooks, practical material, mastery of fundamentals, and more drill. Few schools indicate that their organization is large enough to make possible electives in mathematics.

Geography.—Sixty-nine schools report that the social aspects of geography are considered, 80 political, 75 commercial, 80 industrial, 86 physical, and 13 did not specify the type of geography taught.

Twenty schools reported that geography is taught with social science, 10 that it is taught with elementary science, and 11 separate. Ninety schools indicate that geography is given as such in the seventh year, 32 in the eighth year, and 12 in the ninth year.

Science.—Thirty-six schools introduce science in the seventh year, 51 in the eighth year, and 24 in the ninth year. Only 8 schools indicate that no science is given, while 12 schools, indicating that science is a part of the program of studies, do not specify the grades in which it is taught. General science, biology, hygiene, and agriculture constitute the greater part of the science work.

Thirty-one schools have separate laboratory periods for science; 69 use the general laboratory method; 20 require no laboratory at all; and 30 did not answer the question. Ninety-five schools indicate that excursions form a part of the science work.

The science program of these junior high schools indicates that general science, biology, zoology, home economics, agriculture, botany, geography, and physiology are considered a part of the science program.

Health education.—The gymnasium work constitutes from 0.1 to 0.7 of the health work, drills from 0.1 to 1, play from 0.1 to 0.9, and other phases from 0.1 to 0.9.

The median time given to gymnasium is 0.1, drills 0.2, play 0.5, and other phases 0.2. Health education is coordinated with school activities through observation and health rules, physical training, county nurse, athletics, health education talks, and biology.

Art.—There is a wide spread in the nature of art education. Forty-six schools list appreciation, 70 free-hand drawing, 50 lettering, 43 designing, 46 mechanical drawing, 9 commercial art, 4 modeling; 24 schools indicate that no art work is offered; and 14 schools made no reply to this item.

Art work is introduced as an elective in 14 schools in the seventh grade, 4 schools in the eighth grade, and 15 in the ninth grade. Four schools offer no art work as an elective, and 54 did not indicate their practice.

China painting, drawing, water coloring and designing, appreciation, and poster work constitute the ninth year of elective art. Fifty-two schools use poster campaigns to stimulate art work, 19 schools cover designing, 16 stage setting, 7 visits to museums, 5 other measures, 44 report that no effort is made to stimulate development in art, and 29 did not answer the question.

Music.—Fifty-nine schools indicate that musical technique constitutes a part of the music program, 102 have choruses, 110 assembly singing, 65 music appreciation, 75 orchestra, and 19 use

other measures. Only 2 schools indicate that no music is taught in the schools.

Forty-four schools offer music as an elective in the seventh year, 44 in the eighth year, 43 in the ninth year, and 37 schools do not offer music as an elective.

Musical activities which have been found most valuable in these schools are: Chorus, orchestra, glee club, and operetta.

Practical arts.—Eighty-two schools require industrial arts or agriculture and home economics in the seventh year, 90 in the eighth year, and 36 in the ninth year. Woodworking constitutes the shop program for 50 schools, 22 operate general shops, 3 have sheet-metal shops, 5 machine shops, 2 electrical shops, 2 other shops, and 39 have no type of shop activity.

Sewing and cooking constitute the major work of home economics through grades 7–8–9. Twenty-five schools offer no home economics in the seventh year, 23 offer none in the eighth year, and 19 offer none in the ninth year.

Vocational work of grades 7–8–9 varies from 0 to ½ of the entire time of the pupil. Twenty-five schools indicate that no vocational work is given in the seventh year, 22 in the eighth year, and 17 in the ninth year. The median time given to vocational work as such, where offered, is about one-fourth of the pupil's time.

TABLE 21.—*Time allotment to vocational training in each year in fractions of total time*

Grade	None		One-tenth or less		One-fourth		One-half		Schools reporting
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
7	25	33.3	10	13.3	39	52.0	1	1.3	75
8	22	28.9	12	15.8	40	52.6	2	2.6	76
9	17	32.7	1	1.9	31	59.6	3	5.8	52

Business training.—Ten schools require junior business training as a part of the core curriculum, 102 make no such requirement, and 19 did not answer the question. Junior business training is first offered in these schools in the third semester.

Commercial electives offered in the junior high school are commercial arithmetic, shorthand, typing, bookkeeping, business methods, vocational guidance, commercial law, and commercial geography.

TABLE 22.—*Courses offered, required and elective, in 59 three-year and 45 two-year junior high schools in rural communities*[1]

Course	Type of school	Number of schools					
		Grade 7		Grade 8		Grade 9	
		Required	Elective	Required	Elective	Required	Elective
English	A	59	0	59	0	59	0
	B	45	0	45	0		
Spelling, separate	A	21	1	20	1	5	2
	B	30	0	29	0		
Foreign language	A	0	5	3	12	1	38
	B	0	1	0	2		
Social studies and history	A	56	0	59	0	45	12
	B	43	0	45	0		
Mathematics	A	59	0	59	0	45	14
	B	45	0	44	0		
Geography	A	52	0	17	1	2	10
	B	10	0	16	0		
Science	A	13	2	30	7	13	26
	B	14	0	27	1		
Health	A	45	2	38	2	24	6
	B	31	0	22	0		
Art	A	20	9	16	13	5	19
	B	19	3	18	4		
Music	A	33	13	29	14	14	24
	B	24	6	21	6		
Industrial arts and shop	A	32	7	32	10	13	28
	B	17	4	27	6		
Home economics	A	33	5	33	8	15	29
	B	25	4	29	5		
Unit try out courses	A	0	0	0	0	0	2
	B	0	0	0	0	0	
Junior business training	A		2	4	2	0	4
	B	0	0	1	1		
Commercial mathematics	A	1	0	1	1	1	13
	B	0	0	1	0		
Bookkeeping	A	1	0	1	1	0	4
	B	0	0	0	0		
Business practice	A	0	0	0	0	0	1
	B	0	0	0	0		
Typewriting	A	0	0	0	1	0	7
	B	0	0	0	1		
Penmanship	A	18	0	18	1	4	2
	B	20	0	19	0		
Guidance	A	5	0	4	0	3	0
	B	0	0	0	0		
School activities	A	9	3	9	3	10	2
	B	2	3	2	3		
Courses combined	A	457	49	429	77	272	243
	B	355	21	349	29		
All courses combined		812	71	778	106	272	243

[1] This table and the following are based upon the fairly complete returns from 101 schools and the data as a result will not agree with the figures given in the general discussion where the returns for all schools in the study were considered for the items concerned.

[2] A. 3-year schools including grades 7, 8, and 9; B. 2-year schools including grades 7 and 8.

TABLE 23.—*Per cent of courses offered, required and elective, in 59 three-year and 45 two-year junior high schools in rural communities*

Course	Type of school	Per cent of schools					
		Grade 7		Grade 8		Grade 9	
		Required	Elective	Required	Elective	Required	Elective
English	A	100.0	0.0	100.0	0.0	100.0	0.0
	B	100.0	0.0	100.0	0.0		
Spelling (separate)	A	35.7	1.7	33.9	1.7	8.5	3.4
	B	66.6	0.0	64.4	0.0		
Foreign language	A	0.0	8.5	5.1	10.3	1.7	64.4
	B	0.0	2.2	0.0	4.4		
Social studies and history	A	94.9	0.0	100.0	0.0	59.3	30.2
	B	95.5	0.0	100.0	0.0		
Mathematics	A	100.0	0.0	100.0	0.0	76.3	23.7
	B	100.0	0.0	97.9	0.0		
Geography	A	88.1	0.0	28.8	1.7	3.4	16.1
	B	88.8	0.0	35.5	0.0		
Science	A	22.0	3.4	50.8	11.8	22.0	44.1
	B	31.1	0.0	60.0	2.2		
Health	A	76.4	3.4	64.5	3.4	40.6	10.2
	B	68.9	0.0	48.8	0.0		
Art	A	33.9	15.3	27.1	22.0	8.1	32.2
	B	42.2	6.6	40.0	8.9		
Music	A	55.9	22.0	49.3	23.7	30.5	40.7
	B	53.3	13.3	53.3	13.3		
Industrial arts and agriculture	A	54.2	11.9	49.3	16.9	22.0	47.4
	B	37.7	8.9	60.0	13.3		
Home economics	A	55.9	8.5	55.9	13.5	25.4	49.2
	B	55.5	8.9	64.0	11.1		
Unit try-out courses	A	0.0	0.0	0.0	0.0	0.0	3.4
	B	0.0	0.0	0.0	0.0		
Junior business training	A	0.0	3.4	6.7	3.4	0.0	6.8
	B	0.0	0.0	2.2	2.2		
Commercial mathematics	A	1.7	0.0	1.7	1.7	0.0	22.0
	B	0.0	0.0	2.2	0.0		
Bookkeeping	A	1.7	0.0	1.7	1.7	0.0	6.8
	B	0.0	0.0	0.0	0.0		
Business practice	A	0.0	0.0	0.0	0.0	0.0	1.7
	B	0.0	0.0	0.0	0.0		
Typewriting	A	0.0	0.0	0.0	1.7	0.0	11.8
	B	0.0	0.0	0.0	2.2		
Penmanship	A	30.5	0.0	30.5	1.7	6.7	3.4
	B	44.4	0.0	42.2	0.0		
Guidance	A	8.5	0.0	6.7	0.0	5.1	0.0
	B	0.0	0.0	0.0	0.0		
School activities	A	15.2	5.1	15.2	5.1	16.9	3.4
	B	4.4	6.6	4.4	6.6		
Courses combined for types of schools	A	90.3	9.7	84.8	15.2	50.9	49.1
	B	94.4	5.6	92.3	7.7		
Courses combined for all schools	A	91.9	8.1	88.0	12.0	50.9	49.1

[1] A, 3-year schools, including grades 7, 8, and 9; B, 2-year schools, including grades 7 and 8.

SUGGESTED PROGRAM OF STUDIES FOR THE SMALL JUNIOR HIGH SCHOOL

The present state of our knowledge and information regarding what should be taught in the junior high school is such that one hesitates to recommend a hard and fast program of studies. The following is offered as a basis for the development of the program of studies of the small junior high school. The suggestions here incorporated are not developed wholly on a theoretical basis.

A program of studies similar to the one which is suggested has been in operation in a number of schools for the past 4 or 5 years.

It has been modified in the light of experience and an attempt has been made to adapt the program to various types of communities.

In considering the junior high school program of studies for a small community three types of organization must be considered. They are: (1) The 3-year junior high school; (2) the 4-year junior high school; and (3) the 6-year junior-senior high school.

It is now the generally accepted aim of those working in the secondary school field to organize a continuous program of studies for the grades included in the junior and senior high schools. There has been considerable difficulty in the past in this matter because of the lack of articulation of the junior and senior high school.

For the same type of community, therefore, the program of studies of a junior-senior high school will parallel in grades 7–8–9 the program of studies for a 3-year junior high school. No discussion is given, therefore, of the organization of the junior-senior high school.

The most serious difficulty faced with the organization of the junior-senior high school is that which reverts to a 5–2–4 or 6–2–4 organization and the ninth grade which is the "critical" year in the organization of the program of studies of the junior high school is administered as the first year of a 4-year high school with traditional courses instead of as the third year of a junior high school.

Plans I, II, and III present programs of studies for three types of junior high schools, i. e., 2-teacher 3-year junior high school, 3-teacher 3-year junior high school, and a more complete program for a school where more than three teachers are provided for grades 7–8–9 or 7–8–9–10. These programs of study have been developed in accordance with the general principles laid down for the organization and administration of the junior high school. They represent the realization of the junior high school ideals in so far as these ideals can be reached in the various types of schools.

The organization of the small junior high school has for the most part been a matter of compromise between the ideals set up by those administering the junior high school and the tradition forced upon the junior high school by the senior high school. In most cases the small junior high school sends its pupils to the senior high school for the completion of the tenth, eleventh, and twelfth, or eleventh and twelfth years of work. The senior high school has, therefore, often been able to dictate the offering of the junior high school, particularly, in the ninth or ninth and tenth grades.

This condition can be remedied in a small community only when the secondary school system is organized so as to provide a coordinated secondary school program for a unit such as a county.

Consolidation and the establishment of joint high schools will do much to provide conditions which will be more of a compromise.

Considerable success has been achieved in a number of States by organizing the program of studies of one-teacher schools so as to provide a number of combinations and alternations. The principle of combining classes and alternating subjects can well be applied to the small junior high school particularly in those subjects which are elected. Where the combined classes in the seventh and eighth grades do not exceed 20 or 25 pupils, alternation will work satisfactorily. This is especially true if the recitation period can be organized on the directed learning basis, with emphasis on individual instruction.

In the 4-year junior high school, for grades 8–9 or 7–8–9–10, as the case may be, the same procedure may be followed. It is difficult to secure satisfactory courses in alternating such subjects as mathematics and foreign language. Practically all other subjects offered in the junior high school, however, lend themselves with modification to the scheme of alternation.

Those responsible for the organization and administration of the junior high school should guard against the difficulty which has arisen in many States in the initial organization of 4-year high schools. Many of those responsible for the organization of high schools, in their enthusiasm for spreading these organizations, have permitted many small and ineffective schools to spring up. In later years it has been difficult to secure consolidation of schools which will provide a sufficiently large pupil body to make possible a satisfactory secondary school program. This same difficulty may readily arise with the junior high school and small ineffective organizations may develop which are both uneconomical and in which it will be difficult to realize the objectives of the junior high school.

PLAN I.—*Suggested program of studies for a 2-teacher junior high school, grades 7–8–9* [1]

Seventh year		Eighth year		Ninth year	
Subject	Periods a week	Subject	Periods a week	Subject	Periods a week
English (including spelling and penmanship)	6	English (including spelling and penmanship)	6	English	4
Mathematics	5	Mathematics	4	Mathematics	4
Social studies	4	Social studies	4	Social studies	4
Geography and science	4	Geography one-half year; science one-half year	4	General science	5
Agriculture and home economics projects [2]	2	Agriculture and home economics projects [2]	2	Agriculture and home economics projects [2]	2
Art—Music [2]	2	Art—Music [2]	2	Art—Music [2]	2
Health [2]	2	Health [2]	2	Health [2]	2
Activities and guidance	2	Activities and guidance	2	Activities and guidance	2
Study	3	Study	4	Study	5
Total	30	Total	30	Total	30

[1] Or grades 6–7–8 if a 6–7 system.
[2] Combinations may be made in these subjects for all three grades.

Faculty Organization

Teacher A		Teacher B	
Subject	Periods a week	Subject	Periods a week
English	12	Mathematics	13
Social studies	8	Geography and science	9
Music	2	Art	2
Activities and guidance	2	Activities and guidance	2
Home economics projects	2	Agricultural projects	2
Health	2	Health	2
Total	28	Total	30

PLAN II.—*Suggested program of studies for a 3-teacher junior high school, grades 7–8–9*[2]

Seventh year		Eighth year		Ninth year	
Subject	Periods a week	Subject	Periods a week	Subject	Periods a week
English (including spelling and penmanship).	5	English (including spelling and penmanship).	5	English	4
Social studies	4	Social studies	4	Social studies	4
Mathematics	5	Mathematics	5	Mathematics	4
Geography	4	Geography	3		
		Science	2	General science	4
Agriculture and home projects.	2	Agriculture and home projects or sewing and home projects.	2	Agriculture and home projects or sewing and home projects.	2
Health	2	Health	2	Health	2
Guidance	1	Guidance	1	Business training, language, or practical arts.	4
Activities	2	Activities	2	Activities	2
Art—Music[1]	2	Art—Music[1]	2	Art—Music[1]	2
Study	3	Study	2	Study	2
Total	30	Total	30	Total	30

[1] Combine all classes for music.

[2] Or grades 6–7–8 if a 5–7 system.

Faculty Organization

Teacher A (principal)		Teacher B		Teacher C	
Subject	Periods a week	Subject	Periods a week	Subject	Periods a week
Mathematics	14	English (including spelling and penmanship).	14	Social studies	12
Agriculture and home projects.	6	Language or other subject.	4	Sewing and home projects.	6
Guidance	2	Geography	9	Science	6
Activities	2	Health	2	Art—music	4
Supervision	5	Activities	2	Activities	2
Total	30	Total	29	Total	30

The faculty organization is given to show the practicability of the suggested program of studies. When grades can be combined, e. g., seventh and eighth grades in English or when subjects can be alternated, e. g., United States history for combined seventh and

eighth grades in one school year and civics for combined classes in the following year, it will be possible either to expand the program of studies or to increase time allotments to major subjects.

PLAN III.—*Suggested program of studies for a three or four year junior high school, grades 7–8–9 or 7–8–9–10*

Seventh year		Eighth year		Ninth year		Tenth year	
Subject	Periods a week	Subject	Periods a week	Subject	Periods a week	Subject	Periods a week
English	5	English and Latin	5	English	4	English	4
Mathematics	5	Mathematics	4	Mathematics	4	Mathematics	4
Social studies—United States history	4	Social studies—Community civics	4	Social studies and guidance	5	World history	4
Geography and science	5	Science—Geography ½ year, science ½ year	3	Science	4	Biology	5
Health	3	Health	3	Health	2	Health	2
Practical arts—Home economics, general shop	2	Practical arts—Home economics, general shop	2	Practical arts—Home economics, general shop	2	Practical arts—Home economics, general shop	2
Fine arts—Art (1); music (1)	2	Fine arts—Art (1), music (1)	2	Fine arts—Art (1), music (1)	2	Fine arts—Art (1), music (1)	2
Activities—Auditorium (1); home room (1); clubs (1)	3	Activities—Auditorium (1); home room (1); clubs (1)	3	Activities—Auditorium (1); home room (1); clubs (1)	3	Activities—Auditorium (1); home room (1); clubs (1)	3
Guidance	1	Guidance	1	Elective—Junior business training, language, additional practical arts	4	Elective—Junior business training, language, agriculture or practical arts	4
		Elective—Junior business training ½, introductory language ½	3				
Total	30	Total	30	Total	30	Total	30

The programs of studies suggested have been organized around the following principles:

1. That the junior high school calls for a reorganized program of studies requiring for its completion three or four years of work.

2. The program has been organized which will provide gradual transition from elementary to secondary education, articulating the simpler aspects of secondary education with elementary education.

3. An opportunity is given, so far as is possible, to give the pupil an insight into the various fields of learning.

4. The program has been organized on the constant with variable basis. This has been done for two reasons: (*a*) Such a program will work better administratively in a small community; (*b*) it will provide against a "scattering" which may happen in a small school unless the free elective system is guarded against.

5. The program has also been organized to allow for combinations and alternations.

PROGRAM OF STUDIES

English.—English includes literature and reading, written and oral composition, and grammar. In the first stages of development, spelling and penmanship may well be given as separate time allot-

ments but this should be done only until such time as a reorganization of the program of studies will make it possible to develop a coordinated course in English which includes penmanship and spelling.

In the very small junior high school where it is found impossible to offer exploratory courses in language the number of periods allotted to English may be increased and one or two periods each week allotted to orientation in a foreign language in the eighth year. Such a course should consist of the study of the Latin origin of English words, contribution of the Romans to modern life, and translation of easy Latin into English. This course is not only worth while as an orientation course but it will give those pupils who do not continue language some insight into the language of other people and serve to develop attitudes of appreciation which can hardly be developed in any other way.

A conscious effort should be made to correlate all activities in the auditorium, home room, clubs, etc., with the English program. This is particularly true for oral expression.

During the seventh and eighth years definite time should be set aside for library instruction and other library work. All pupils should be given instruction in the technique of using the library even though it consists only of "a collection of books." The junior high school years are the "peak" years for reading and the opportunity to stimulate boys and girls to develop ability in reading tastes at this time should not be neglected. Attention should be given to the development of a library suited to the needs and interests of junior high school pupils.

Mathematics.—The mathematics of the junior high school should be developed on a progressive basis with a gradual introduction of general mathematics in the seventh year. It may be well to organize the program so that a change of course of study is made only in one grade each year, permitting a 3-year program for the inauguration of general mathematics. On this basis the course of the seventh year would be changed in one year, that of the eighth year in the next year, and that of the ninth year in the next year.

Particular attention should be given in the ninth year to developing a program which will care for the probable future mathematical needs of every individual pupil. The content of the general mathematics program may well be organized to include geometry, elementary algebra, trigonometry, and commercial arithmetic.

Social studies and guidance.—The purpose of the social studies program of the junior high school is to give the pupil a background of civic responsibility, an appreciation of the economic and social

organization of which he is a part, and an appreciation of the historical foundation of the institutions with which he deals. The junior high school is also a period where altruistic motives may be strengthened through a study of the struggles which have brought about the institutions which we now enjoy. A study of the lives of the great men and women who have made social progress possible is particularly effective at this period.

One period in each year of the junior high school has been set aside for guidance. The purpose of this period is to familiarize each boy and girl with educational and vocational opportunity and the educational, vocational, moral, and social training necessary for the realization of these opportunities. Every school, no matter how small, should be organized with a guidance program even though most of the work must be done by the home-room teacher.

Geography and science.—It is recommended that geography be offered in the seventh year and the first half of the eighth year. After the program develops it is suggested that geography and science be offered in both the seventh and eighth years. In the beginning the program of science may well be offered for the first time during the second half of the eighth year.

Science should be continued as a constant through the ninth year.

Health.—Two periods of health instruction and at least one period of physical education or directed play, in addition to relief drills, should constitute the minimum program for a small junior high school. It is suggested that, where gymnasium facilities are not available, an all-year program of physical education, using the outdoor facilities, should be developed. Relief drills should be organized for both morning and afternoon. This work provides a splendid opportunity for the development of initiative in that pupils may direct these activities.

Practical arts.—Practical arts is the inclusive term covering both industrial arts for boys and home economics for girls. This work should be a part of the core curriculum of all junior high schools.

The work for boys will vary with the community. Where a general shop is possible, such units as can be organized will form a part of the program. A room 22 by 34 feet may house at least four or five definite units of work. In agricultural communities agriculture should be a part of this work.

Where a school can not employ a full-time teacher of practical arts peripatetic teachers should be attached to the office of the county superintendent or employed by a number of school districts. In many communities it is only through a plan of this type that the practical arts will be made possible for the smaller communities.

The work for girls should include sewing, cooking, elementary dressmaking, millinery, and courses in home making.

Schools which do not have equipment for practical-arts work should not delay starting this work until such equipment is available. Both the work for boys and the work for girls can be organized on the project basis, using the home, shop, farm, or kitchen as a laboratory.

Another device which makes it possible to organize the program of studies and time schedule in the small junior high school on a satisfactory basis is the possibility of segregation by sex, for the practical arts, health instruction, etc. If this plan is followed, it will often be possible to combine two or three classes without losing the effectiveness of instruction. This will simplify the matter of schedule making and will make possible additional offerings which would otherwise be impossible.

Fine arts.—The program as suggested provides one period each week for music and one period each week for art. In addition, supplementary work from the fine arts can be provided through the club program.

Commercial.—It is suggested that junior business training be made a constant in the program of studies for at least one semester. The purpose of this course is: (*a*) Exploratory; (*b*) to give training in fundamental business practices; and (*c*) to form a basis for future training in commercial work.

In the ninth and tenth years the program of junior business training may well be extended and a program organized whereby the eighth and ninth years may be alternated. In the larger schools typewriting should be added to the work of the business curriculum.

Foreign language.—It is suggested that at least one semester in the eighth year be devoted to introductory language. After this period of exploration, foreign language should be placed on the elective basis. Latin may well form the basis for this work in the smallest schools.

Vocational courses.—The program of vocational education does not adapt itself to the aims, purposes, and plan of administration of the small junior high school. Wherever large enough groups are brought together, such as in a junior-senior high school, it will be possible to offer half-day vocational courses. To attempt a vocational program in anything but a large junior high school will limit the program of the junior high school and probably not provide sufficient range for vocational opportunity. In general it will be far better to confine the vocational work, as developed in many States, to grades 10, 11, and 12 of the senior high school, leaving the junior

high school free to work out the specific principles which have been set up for it. In cases where it has been definitely determined that a vocational program will best meet the needs of boys and girls it will usually be better to transport these pupils to regularly organized vocational schools.

The organization of junior high schools for small communities will not become widespread until teacher-training institutions organize curricula which will enable the teacher to secure training not only in the regular academic subjects which constitute part of the junior high school program but also in the fine and practical arts. This problem is being seriously considered by a number of States, and within a very few years teachers should be available to make possible an organization of a suitable program in even the smallest junior high school.

CONCLUSIONS

As a result of the answers received in this study we may draw the following conclusions concerning the program of studies of the small junior high school:

1. While in some instances there has been a reorganization of the courses of study in conformity with the best thought in regard to junior high school organization, the courses of most small junior high schools are as yet on a conventional basis.

2. In general the small junior high school has not found it possible to develop a highly satisfactory exploratory program. In many schools, practical arts is not a constant in the program of studies. Junior business training is offered in only a few schools. The same is true for exploratory language.

3. There is a wide variation in the character of the program of studies and courses of study of various schools. This is due in part to the desire on the part of administrators to adapt courses of study to meet the needs of individuals and individual communities. It is also due in part to the fact that administrators differ in their conceptions of the junior high school and in the principles which should underlie the formulation of the junior high school program of studies.

There is far greater variation in the junior high-school program of studies than in the program of studies of established small high schools organized on the 7–4 or 8–4 plan. If an open-minded attitude is adopted by those working in the small junior high schools, it is entirely possible that out of this mass of variation will come worthwhile developments in the program of studies of the small junior high school.

CHAPTER VII

Improving the School Social Situation

With the onset of adolescence the social urges to which children are heir profoundly affect behavior. It is generally held that proper provisions, through which these urges may find expression in satisfying activity are essential as means to insure socialization of the child and to avoid antisocial attitudes that may result from blocking expression or administering social rebuffs. It is held also that provision of a school situation that will utilize the powerful social urges for purposes of formal learning tasks represents a means of securing most rapid educational advancement on the part of the child. The purpose of the junior high school to improve the school social situation is, therefore, regarded as an important purpose.

In the larger aspects of the problem improvement of the school social situation may be interpreted as involving those curricular provisions which are concerned with providing a survey of the world of human achievement as represented by academic learning and by industry. The introduction of general survey and unit try-out courses for purposes of exploration may be regarded, from this point of view, as an important means of improving the school social situation. The adolescent child is held to be keenly interested in the adult world. He wants to know how adult men and women live; how they work; what knowledge they have; what their standards of conduct are; and what their aspirations. To permit him to browse on the herbage of civilization for orientation purposes is to satisfy these desires and bend them to educative ends. Curriculum broadening is thus an element of providing a suitable school social environment.

In a more narrow and specific sense improving the school social situation concerns itself with provisions for participation in the control of school life and for participation in activities that are patterns of the social situations of life. Commonly, these provisions in junior high school relate to pupil participation in school government and extraclass activities.

Rural junior high schools have generally made provision for participation in extraclass activities of considerable range. Table 24 shows the frequency of specified provisions relating to extraclass activities. Some provision for extraclass activities is all but universal. Participation in activities by pupils is usually on an optional basis. A tendency exists to incorporate activities into the formal curriculum. Attempts to correlate activities with curricular work are made by more than half the schools. The prevailing practice is to organize activities on the basis of pupil interests, to give pupils

a voice in control through permitting pupil organizations to select teacher sponsors and have these sponsors act in an advisory rather than a directive capacity. Faculty supervision of activities through teacher sponsors is a universal practice.

TABLE 24.—*Provisions relating to extraclass activities*

Provision	Schools	
	Number	Per cent
Reporting extraclass activities	128	94.8
Requiring pupil participation	31	23.0
All activities supervised by teachers	128	94.8
Club sponsors act as advisors	99	73.3
Teacher sponsors chosen by pupil organization	60	44.4
Activities financed by school plays, carnivals, etc	94	69.2
Extraclass funds controlled by pupil treasurer	68	50.4
Activities correlated with curricular work of school	74	54.8
Activities incorporated as curricular activities	35	25.9
Activities organized on basis of pupil interests	96	77.1
Activities organized on basis of teachers' judgment of what pupils should do	51	37.7

From the facts of Table 24 it is clear that extraclass activities are generally provided and used as a means of giving pupils some measure of practice in self-direction. The kinds of extraclass activities provided are also of interest. The following shows the frequency of occurrence of specified activities in 135 rural junior high schools:

(1) Athletics, 94 schools; (2) class organizations, 63; (3) orchestra, 59; (4) glee clubs, 55; (5) chorus, 49; (6) Boy Scouts, 31; (7) school paper, 31; (8) dramatic club, 22; (9) library society, 21; (10) Camp Fire Girls, 17; (11) band, 14; (12) Annual, 13; (13) debating club, 11; (14) honor society, 9; (15) other activities (48 different activities), 58.

The most frequent type of activity provided is athletics. This includes all organized athletic games. Class organizations are next in frequency of occurrence. These are followed in close order of frequency by a group of musical organizations. After the musical organizations a considerable fall in frequency occurs, representing great variability among schools in other activities provided. All told, an array of 61 different organized activities is reported. The detailed data show wide differences between schools as to the number of activities fostered, some schools reporting only 2 or 3 activities while others report from 10 to 18 rather frequently. The number of activities seems to have little relation to the size of the school. Doubtless their organization in any particular school represents local enthusiasm for extraclass activities.

PUPIL PARTICIPATION IN SCHOOL GOVERNMENT

The provisions for extraclass activities and practices in control of those activities reflect a policy of granting to junior high school

pupils a measure of participation in control of the more informal aspects of school life. Beyond this a considerable practice of granting pupil participation in discipline and other more formal aspects of school life is evidenced.

The following shows the frequency of granting pupil participation in school government through pupil council or other forms of participation:

Pupil council, 32 schools; other form, 16; combined, 48; schools reporting, 118.

While a minority, approximately 40 per cent, of schools only report a practice of granting pupil participation in school government, the practice is obviously a growing practice and certainly represents an improvement over the elementary-school situation if so far as the desire of the early adolescent child for a measure of self-direction is a real and worthy desire.

Unfortunately, no means of determining the extent to which this reported practice of granting pupil participation in school government relates to participation in control by junior high school pupils of the junior school unit. It is possible that this practice has been reported in some cases for the secondary junior-senior school as a unit, and it is possible that representation for junior pupils may be a decidedly minority representation in such cases. This is one of the obvious handicaps of the small junior-senior secondary school. For the important aspects of school government the institution is quite likely organized as one unit. The junior pupils in such a situation are almost certain to be submerged and lose many values that may be incident to a measure of self-direction unless great care is given to the needs of the junior pupils. That distinct organization of the junior and senior pupil bodies for the purposes of control should be effected because of these considerations seems obvious. The situation must be faced, however, wherein such separate organizations are of doubtful value because of the resulting small pupil groups. Such a situation probably calls for a 6-year unit secondary school.

CHAPTER VIII

Provisions for Individual Differences

A major purpose of the junior high school, it is generally agreed, is to make provision as far as possible for the individual needs of pupils. The junior high school age, 12 to 16, is the period when individual differences come rather strikingly into the foreground.

No junior high school, therefore, whether large or small, can adequately minister to the educational needs of its pupils unless special attention is given to the varying needs of its pupils. Individual desires, individual interests, individual aptitudes, individual attainments, all must be discovered and evaluated and corresponding adjustments made in the educational process in order that each child may realize the maximum opportunity for growth and development.

In this part of the study on the junior high school in rural and small communities six phases of the problem of providing for individual differences among pupils have been investigated. These topics are: (1) Variations in content of courses of study, (2) methods of individualizing instruction, (3) classification and promotion, (4) variations in pupil load, (5) credit for outside work, and (6) extra credit for superior work.

The following brief summary is based upon information received from 131 schools for which fairly adequate data were submitted. It gives in condensed form the different ways by which these junior high schools attempt to solve the problems arising out of the individual differences of their pupils.

TABLE 25.—*Provisions made by junior high schools in rural and semirural communities for meeting individual differences of pupils*

	Number of schools	Per cent of total number of schools studied
I. Variations in content of courses of study:		
1. Provision for curriculum enrichment for bright pupils, supplementary work, and "optional assignments"	88	65.2
2. Vocational interests of pupils recognized	70	51.8
3. Minimum requirements outlined for slow pupils	59	43.7
4. Differentiated assignments—minimum, average, and maximum	40	29.6
5. Correlating extraclass activities with work of school	74	54.8
II. Methods of individualizing instruction:		
1. Devoting a part of the class period to supervised study	68	50.4
2. Project method used extensively	64	47.4
3. Limiting drill to pupils who need it	19	14.1
4. Dalton plan, "contract system" or other modifications of Dalton plan of individual instruction	13	9.6
5. Coaching sections, opportunity rooms, detention periods for pupils who are apt to fail	10	7.4
III. Classification and promotion:		
1. Overage pupils promoted to junior high school before completing elementary grades	79	58.5
2. Flexible promotion—pupils promoted at any time	53	39.3
IV. Variations in pupil load:		
1. Schools granting permission to carry extra work	83	61.5
V. Credit for outside work:		
1. Schools granting credit for outside work	57	42.2
Bible study	19	14.1
Music	42	31.1
Home projects	22	16.3
VI. Extra credit for superior work:		
1. Schools granting varying credit according to individual achievement	8	5.6

The figures above show the number of schools to which each item applies and the per cent which this number is of the total number of schools included in this study.

Although greatly handicapped by a small teaching staff, by inadequate housing facilities, and by a lack of necessary physical equipment, these data would seem to show that the small junior high school *can* make educational provision for special aid to individual pupils and that the great majority do make some such provision. Approximately two schools out of three provide for differences in general ability through curriculum enrichment for the brighter pupils, and practically one school in every two outlines minimum requirements for the slower pupils. Enrichment is also frequently sought through the project method of teaching, one school in two making extensive use of the project as a teaching device. Slightly more than one-half of the schools devote a part of the class period to supervised study. A system of individual instruction, such as the Dalton plan or a modification of this plan, is used in one school in ten; special coaching sections, opportunity rooms, or detention periods for failing pupils are used by a somewhat smaller number of schools. Credit for outside work is granted in nearly one-half of the schools, and a system of flexible promotions has been adopted by two schools out of five. Only 6 per cent of the schools, according to the returns, have adopted a system of scaled credits whereby credit is granted according to the quality of attainment.

Curriculum enrichment for bright pupils.—Most of these schools enroll fewer than 35 pupils in a grade. It is therefore usually impracticable to provide more than one recitation section for each grade group. Only in exceptional cases do the schools find it possible to form two or more sections grouped according to ability. Consequently in most of these schools all pupils within a grade are required to maintain the same general level of progress, and differences in ability must be cared for in the main through enrichment of work for the brighter pupils rather than through opportunities for more rapid progress.

That definite provision for curriculum enrichment is made in most of the small junior high schools is strikingly shown by the results of this study. In these schools, as was to be expected, this is the most universally used method for recognizing the widely varying capacities of pupils who happen to be included in a single grade group. The means employed to secure curriculum enrichment by the 88 schools listed above are as follows: (1) Supplementary work, 30 schools; (2) extra assignments, 24; (3) special reports, 12; (4) library readings, 6; (5) individual instruction and attention, 5; (6) recreational readings, 4; (7) extraclass activities, 4; (8) special division of classes, 3.

Dominant community needs and vocational interests of pupils.—Education on the junior high school level must in the future, if it is

to function effectively, place greater emphasis than it has in the past on studies of community life and community needs. Provision must also be made for awakening the vocational interests and encouraging vocational abilities of children before the time when vocational selections must actually be made. It is not intended that the junior high school shall stress a high degree of vocational specialization, but rather that a vigorous effort be made to develop a comprehensive view of industry and a democratic conception of society as a whole, so that the individual may choose his career more intelligently and make the proper social adjustments.

The small junior high school can not hope to offer a broad array of vocational or elective courses. This is perhaps not even desirable, surely not in the first year or two. Curriculum enrichment must be sought, in part at least, in other directions. Seventy of the schools in this study use the following means for recognizing dominant community needs and vocational interests of pupils: (1) Vocational courses, 27 schools; (2) club activities, 12; (3) discussion of and correlation with community problems, 8; (4) observation trips to places of business and industrial plants, 56; (5) community service projects, 5; (6) study of occupations, 70; (7) lectures by acknowledged leaders in industry and commerce, 4; (8) social science studies, 59; and (9) library reading, 3.

Supervised study.—A little over one-half of these small junior high schools devote a part of the class period in directing the study habits of pupils. Short recitation hours necessitated by the relatively large number of periods in the daily schedule undoubtedly prevents a large number of the other schools from devoting some time to supervised study. Another limitation imposed by the lack of that type of professional training among teachers which prepares specifically for junior high school teaching is obviously also a deterring factor.

The following tabulation shows the number of minutes of the total class time devoted to recitation work and the number of minutes devoted to supervised study in the 68 small junior high schools having supervised study:

TABLE 26.—*Division of class period into recitation and supervised study*

	10 to 14 minutes	15 to 19 minutes	20 to 24 minutes	25 to 29 minutes	30 to 34 minutes	35 to 39 minutes	40 to 44 minutes	45 to 49 minutes
Schools devoting the time stated to recitation work	.....	2	7	18	20	7	6	8
Schools devoting the time stated to supervised study	7	22	19	10	6	2	2	.....

The median length of the recitation period in these schools having supervised study is 31.7 minutes, while the median length of the supervised study period is 21.3 minutes, thus making the median length of the total class period 53 minutes.

Other means for directing the study habits of pupils as reported by 51 of the other small junior high schools: (1) Study-hall direction, 22 schools; (2) instructions in class on how to study, 9; (3) assembly and chapel talks on correct habits of study, 8; (4) home-room direction, 5; (5) personal interviews with the teacher, 5.

Project method of teaching.—The project method as a teaching device, particularly when directed by skillful teachers, offers abundant opportunities for encouraging individuality and freedom of expression. It utilizes the capabilities of pupils and is on the whole an excellent means for recognizing individual differences among pupils in a small school.

Nearly one-half (64) of the small junior-high schools report an extensive use of the project method of teaching. The subjects in which the project method is used extensively are: (1) Geography, 24 schools; (2) history and civics, 21; (3) general science, 19; (4) agriculture, 15; (5) shop work, 14; (6) home economics, 13; (7) English, 9; (8) mathematics, 4; (9) art, 3; (10) biology, 2.

Promotion of overage pupils.—A considerable number of the small junior high schools make a practice of admitting overage pupils even if they have not satisfied the subject-matter requirements in the elementary grades. The ages at which such pupils are automatically promoted in some systems to the junior high schools are: (1) 13 years of age, 2 schools; (2) 14 years, 14; (3) 15 years, 13; (4) 16 years, 9; (5) 17 years, 2.

Definite policies as adopted by some of the small junior high schools in dealing with overage pupils are: (1) Not more than two years in any one grade, 22 schools; (2) determined by individual needs of pupils, 10; (3) not to hold in the grades overage or oversize pupils, 8; (4) determined by teacher's judgment, 5; (5) determined by ability of the pupil to do junior high school work, 5; (6) promote those who would be a detriment to the average sixth grade, 3; (7) keep in school for the sake of vocational training, 3; and (8) hold in school girls of low mentality who persist in attendance to prevent possible social complications, 2.

Permission to carry extra work.—Approximately 61 per cent of these small junior high schools permit their more capable pupils to carry extra work. The median number of pupils permitted to carry extra work is 10 per cent, and only four of these schools extend the privilege of carrying extra work to more than 25 per cent of their pupils. Two-thirds of the schools which grant this privilege do so

on the basis of teachers' marks the previous semester, the large majority of them requiring a "B" average, or 85 or better. The other one-third allow pupils to carry extra work on one of the following bases: (1) Intelligence tests, 18 schools; (2) character traits—industry, attitude, 7; (3) achievement and intelligence tests, 6; (4) judgment of teacher and principal, 4; (5) physical condition, 1 school; or (6) one or two credits short of graduation, 1 school.

Credit for outside work.—Less than one-half of the small junior high schools are committed to the practice of granting credit for work carried outside of school. Credit is granted for the following types of outside work: (1) Music, 42 schools; (2) home projects, 22; (3) Bible study, 19. Other activities mentioned are: 4-H Club, boys' and girls' clubs, school paper, and dramatics and public speaking.

Other educational provisions for individual differences.—Only eight of the small junior high schools, 6 per cent of the number for which returns were received, use a system of weighted credits allowing more than the usual amount of credit if a high mark is earned. The practice most frequently followed is:

Teacher's mark:	Credit granted
Excellent	25 per cent above normal.
Superior	15 per cent above normal.
Average	Normal.
Inferior	15 per cent below normal.
Poor	25 per cent below normal.

One school uses the qualitative standard through the establishment of a system of "merit points."

Other administrative provisions for individual differences—elective courses, ability grouping, promotion by subject—are discussed in another section of this study.

Conclusion.—The results of this study indicate that the great majority of the small junior high schools do not as yet make adequate provision for the individual needs of their pupils. Numerous factors are involved, some of which are exceedingly complex. Undoubtedly more has been accomplished through variations in teaching procedures than through administrative adjustments. The evidence points rather conclusively to the fact that the success of these small junior high schools in solving the problems arising out of the individual differences of pupils—as, indeed, of any secondary school with a small enrollment—depends very largely upon a high degree of flexibility secured through adaptations in methods of teaching, such as differentiated assignments, extensive use of project as a teaching device, supervised study, correlation of extraclass activities with curriculum work, socialized recitations, and limiting drill to

those pupils who need it. Lack of professional training undoubtedly places a direct handicap on the small junior high school's attempt to introduce these methods of instruction adapted to the needs of adolescent pupils. The immediate need, therefore, is for more professionally trained teachers, and more particularly for teachers whose specialized training prepares them specifically for junior high school teaching.

CHAPTER IX

Pupil Guidance

Properly directed transition from common integrating education toward differentiated programs of study appropriate to the individual, in view of suitable purposes in life, demands systematic guidance. The practices of providing for exploration and provisional election of courses having differentiating values are important elements of a guidance program. It is further desirable to set up such machinery in the school that the guidance possibilities of these curriculum provisions may be fully realized for individual children. This demands provision for securing detailed personal data for individual children, and direction of individual children in self-study of interests and abilities with reference to the requirements and rewards of different fields of occupational employment and study. The frequency of provisions for these elements of a guidance program is shown in Table 27 and the accompanying discussion.

Guidance below the junior high school.—For the purpose of acquainting the pupil in the sixth grade with the offerings of the junior high school various practices are in use. A little over one-half of the schools reporting send the junior high school principal to give talks to the sixth grade, and practically the same proportion have these pupils visit the junior high school to become acquainted with the nature of the work done there. An individual conference with the sixth-grade teacher to learn more about the pupils is practiced by 62 schools as compared with 38 who do not.

It is quite evident from the returns that the great majority of schools wait until the pupils arrive in the seventh grade before any real attempt at guidance is started. Of those reporting more than three-fourths stated that a detailed explanation of the work was given at the beginning of the seventh grade. It is at this time also that a somewhat larger proportion discuss the values of each new subject taken by the pupil. From the data at hand it must be con-

cluded that there is much to be done to bind the sixth and seventh grades closer together, and to prepare the individual pupil for the transition to the junior high school with its new procedures and new opportunities.

Guidance value of subjects taught.—If the returns on this topic can be taken at their face value, they speak well for the reorganization of the courses of study in the small junior high school. One hundred and one out of 108 claim to give the pupil the largest value for a given year's work even though he may have to leave school to go to work. Of course, some may claim this to be true regardless of the subjects taken or of the content and purpose of the teaching. It may be assumed, however, that many of the modern textbooks for the junior high school either attempt or accomplish this end. The idea of presenting a subject in such a manner that it gives the pupil a preview of the work to be offered in the senior high school or college is emphasized by 88 out of 100 schools. Again, 103 out of 110 emphasize the pupil's present as well as future needs. It may thus be assumed that practically all of our small junior high schools are presenting the subjects taught in a manner to secure their largest guidance values.

Occupational information.—The problem of giving definite instruction in occupational information has not been given serious consideration by a large number of schools. Fourteen out of 96 schools report some instruction in the seventh grade, 23 out of 96 in the eighth grade, and 57 out of 103 in the ninth grade. It is impossible to determine from the scattered returns just what time is devoted to this instruction in the seventh and eighth grades. The general practice, wherever such instruction is given in the ninth grade, is to offer it as a 5-period subject.

Occupational information as incidental to both the social studies and to English composition and reading is practiced in about the same proportion of the schools. Fifty-nine schools reported the employment of the social studies and 60 the use of English as a means of approach to occupational information. General science and the practical arts emphasize the occupational outlook in 70 schools. A considerable number of schools (from 28 to 48 on the different items under this topic) give no report as to what is being done.

Talks on guidance.—Making use of the home-room period or of the regular assembly for talks on guidance seems to be quite general. At the same time it is evident that too many schools are not making use of this opportunity for guidance. Sixty-one schools reported talks about vocations. Practically one-half of the schools reporting give talks on how to choose a vocation. The great emphasis, how-

ever, seems to be upon morals and conduct, over 95 per cent of the schools replying in the affirmative to this question. To what extent these talks are given to secure right conduct in school or for success in life is not known. Ninety-three schools report the emphasis in these talks on the value of education and approximately 60 per cent give groups of pupils an opportunity to discuss the talks after they have been given. On the whole, it would appear that assembly talks have a tendency toward the customary or traditional topics, yet a fair proportion of the schools are using this opportunity for guidance.

Guidance visitation.—A visit to an institution of learning or to an industrial plant may be made valuable or it may be nothing more than a pleasure trip for the pupils. When seriously undertaken and followed up it can be made stimulating to many of the group. Sixty-eight schools have their pupils visit the senior high school while only 10 schools report that their pupils have the opportunity of visiting a college campus. About one-half of the schools replying to the item conduct visits to business and industrial plants in the community. Here, again, it is evident that much more could be done in the way of guidance visitation than is at present in small junior high schools.

Club activities and guidance.—A surprisingly small number of schools, only about 9 per cent of the schools studied, report the use of club activities to arouse an interest in vocations. This apparently has not been recognized as a means of vocational exploration and guidance. Some of the clubs among those mentioned as being used for guidance purposes are the following: 4–H club, farm or agricultural club, home-economics club, guidance club, commercial club, and the life-career club.

Personal conferences.—The most important phase of guidance is the personal conference. One might naturally expect, perhaps, that in the small school this would be the one feature in which returns would be most encouraging. Based upon the schools replying, in only one-half of the schools does the principal hold a conference with each pupil during a semester. In 21 schools this is done by a special teacher appointed for the purpose. If personal conferences are given at all one would expect the home-room teacher to do it, yet this is apparently the practice in only 46 schools. In 8 of the schools a specially trained counselor is reported. The returns on this item appear to be a little inconsistent with other statements since 75 of the schools report personal advice regarding the choice of elective subjects in the curriculum. One can not help wondering who gives this advice and how it is given. This also applies to the giving

of advice to each pupil regarding the choice of a curriculum upon entering the senior high school; 83 schools reporting such guidance.

Fifty-four schools state that they give personal advice regarding employment to those leaving school. Forty-six schools do not give such counsel and 31 did not answer the question. It is evident that this responsibility has been neglected by too large a number of schools. Counsel with regard to personal problems is provided by some one in 70 schools; 25 state that such counsel is not given and 36 fail to answer the question. This may be a difficult item to estimate accurately as teachers have always given such advice in confidence and without any formality of record.

Following up the pupil as to his success or failure is evidently more effectively practiced in the small school than in the large. Eighty-eight schools report the follow-up of the record of their pupils who go into the senior high school. To follow up those who enter employment is not an easy task, yet 51 schools report that they attempt to do this; 54 schools do not, and 26 schools made no reply to the question.

The use of tests in guidance.—The replies of the schools studied indicate that the small junior high schools are making use of standardized tests for understanding pupils and their work. Out of 114 schools 77 state that they use intelligence tests in guidance. Seventy schools out of 111 reporting are using achievement tests. Here one wonders just how these tests are applied in guidance. An unusually small number of schools failed to answer these items, indicating considerable interest in the use of tests in the small schools. Prognostic tests have not come into such general use in these schools, only 28 schools reporting their use, 61 reporting negatively, and 42 making no reply. The responsibility of the teacher of a "try-out" or exploratory course to study the aptitudes and abilities of the pupils and to be able to make a report on each pupil has not been assumed in many schools, only 22 schools reported in the affirmative, while 66 reported in the negative, and 42 gave no reply to this question.

These tests and reports are made a part of the permanent record of the school by fully 60 per cent of the schools reporting on the question. These records are used in counseling by 69 schools. Sixty-six of the schools carry on these records to the senior high school, but only 51 claim to make use of them after they are received. It is encouraging to note that 73 schools require the signature of a counselor approving the choice of curriculums or electives on the part of the pupil.

TABLE 27.—*Frequency of provision for specified elements of a guidance program in 135 rural junior high schools*

Provision	Frequency			
	Yes	No	Not specified	Per cent "Yes"
1. For making sixth and seventh grades familiar with the junior high school:				
(a) Talks by junior high school principal	55	52	28	40.8
(b) Pupils visit junior high school	49	47	39	36.3
(c) Conference by junior high school principal with sixth-grade teacher	62	38	35	45.9
(d) Detailed explanation of the work at beginning of seventh grade	79	24	32	58.5
(e) Discussion of purpose and value of each new subject taken by pupil	62	30	43	46
2. Through organization and content of subject taught:				
(a) To give pupil largest value even though he leave school early	101	7	27	74.8
(b) To give pupil opportunity to know what he may gain from further study of subject	88	12	35	65.2
(c) To emphasize pupil's present and future interests and needs	103	7	25	76.3
3. For systematically giving occupational information to pupils:				
(a) Through a separate course in occupations—				
(1) In grade 7	14	82	39	10.4
(2) In grade 8	23	73	39	17.0
(3) In grade 9	57	46	32	42.2
(b) As incidental to social studies	59	24	52	43.7
(c) Through English	60	25	50	44.4
(d) Incidentally in general science and practical arts	70	18	47	51.8
4. Through talks on guidance:				
(a) Importance and nature of vocations	61	42	32	45.2
(b) How to choose a vocation	50	48	37	37.0
(c) On moral conduct	97	17	21	71.8
(d) On social conduct	94	18	23	69.6
(e) On the value of education	93	20	22	68.8
5. Guidance through visitation and club activities through visits to:				
(a) Senior high school	68	39	18	50.4
(b) A college	10	86	39	7.4
(c) Business and industrial plants	56	53	26	41.5
(d) Through club activities	12	89	34	8.8
6. For systematic individual counseling with reference to educational and vocational problems:				
(a) Through personal conferences with—				
(1) Principal as counselor	79	59	17	58.7
(2) Teacher appointed as counselor	21	76	38	15.6
(3) Home-room teacher	46	54	31	34.1
(4) Special counselor	8	81	46	5.9
(b) Giving personal advice regarding—				
(1) Choice of electives	75	32	28	55.5
(2) Choice of curriculums upon going to senior high school	83	27	25	61.5
(3) Choice of employment if leaving school	54	46	35	40.0
(4) On personal problems	70	25	40	51.8
7. For follow-up work concerned with—				
(a) Success or failure in senior high school	88	28	19	65.2
(b) Success or failure in employment	51	54	30	37.7
8. For securing and using personal pupil records:				
(a) Objective measures of intelligence	77	37	21	57.0
(b) Objective measures of achievement	70	41	24	51.8
(c) Measures of probable success—prognostic tests	28	61	46	20.7
(d) Reports on aptitudes, abilities, etc., from teachers of try-out and exploratory courses	22	66	47	16.3
(e) Keeping permanent school record of tests and reports of pupils	60	45	30	44.4
(f) Use of records by counselors in advising pupils and parents	69	34	32	51.1
(g) Requiring signature of counselor before permitting pupil choice of a subject or curriculum	73	23	39	54.1

Summary.—That the small junior high schools recognize the guidance phase of education is evidenced by the returns on guidance. There is not, however, any marked uniformity as to the specific means of guidance employed. Greatest uniformity seems to exist in the provisions that are made for the purposes of educational and social guidance. That a considerable proportion of the schools are not carrying on a very extensive or definite plan of guidance is indicated by the rather large number replying in the negative to many of the

items and by those not making any reply. Those details of guidance reported by more than 60 per cent of the schools studied are: (1) Teaching subject to give pupil the largest value even though he leave school early, 74.8 per cent; (2) teaching subject to give pupil opportunity to know what he may gain from further study of subject, 65.2 per cent; (3) teaching subject to emphasize pupil's present and future needs, 76.3 per cent; (4) giving pupil guidance through talks on (*a*) moral conduct, 71.8 per cent; (*b*) social conduct, 69.6 per cent; (*c*) the value of education, 68.8 per cent; (5) giving pupil personal advice on choice of curriculum on going to senior high school, 61.5 per cent; (6) follow-up work concerned with pupil's success or failure in senior high school, 65.2 per cent.

CHAPTER X

Rural Junior High School Buildings and Equipment

It is the purpose of this chapter to show what has been done up to this time in the way of buildings and equipment for rural junior high schools. One hundred and thirty-one junior high schools are represented in the report on buildings and equipment. It will be desirable to keep in mind the following eight qualities, which are regarded by the Committee of Fifteen as essential to any modern high-school building: (1) Comprehensiveness; (2) convenience; (3) flexibility; (4) safety; (5) healthfulness; (6) expansiveness; (7) economy and efficiency; (8) aesthetic fitness.

The following indicates how the junior high schools are housed: (1) Separate building, 11; (2) building with elementary school, 14; (3) building with senior high school, 46; (4) general building for all schools of district, 58; (5) not specified, 2; total, 131.

Ten of the 11 separate buildings were erected with special reference to junior high-school work. The first of these separate high-school buildings was erected in 1916.

Materials.—In planning a junior high-school building some decision must be reached relative to fire protection. This brings up the question of the kind of materials to be used in its construction. The chief materials used in the construction of these buildings are indicated by the following: Brick, 59 per cent of all schools reporting the item; brick and concrete, 6.7 per cent; concrete and stone, 3.8 per cent; frame, 16.1 per cent; stone, 2.9 per cent; concrete and brick, 9.5 per cent; concrete, 2 per cent; total, 100 per cent.

Types.—Information was secured to determine the shapes of buildings now used for rural junior high-school work. It is as follows: H, 19 buildings; U, 4 buildings; T, 9 buildings; I, 3 buildings; L, 1 building; square, 10 buildings; rectangular, 5 buildings; other shapes, 27 buildings; not specified, 53 buildings; total, 131 buildings.

The American Institute of Architects has grouped buildings under five types, as follows:

Type A.—A building construction entirely of fire-resistant materials, including roof, windows, doors, floors, and finish.

Type B.—A building of fire-resistant construction in its walls, floors, stairways, and ceiling, but with wood finish, wood or composition floor surface, and wood-roof construction over fire-resistant ceiling.

Type C.—A building with masonry walls, fire-resistant corridors and stairways, but with ordinary construction otherwise, i. e., combustible floors, partitions, roofs, and finish.

Type D.—A building with masonry walls, but otherwise ordinary or joist construction and wood finish.

Type E.—A frame building constructed with wood above foundation, with or without slate or other semifireproof material on roof.

It would seem that no buildings should be erected with cheaper construction than C. See above for materials of construction of the buildings represented in this study.

Number of stories.—The number of stories which a building contains is far more important than the type or shape and should receive careful consideration by school authorities when a junior high-school building is to be erected. The buildings represented in this study range from one to four stories. Eighteen of them are 1-story buildings; 62 are 2-story buildings; 21 are 3-story buildings; and 1 of the buildings contains 4 stories. Information was not obtained on 25 of these buildings.

The 1-story type of building is generally regarded as most satisfactory for junior high-school work. This type of building reduces to a minimum noise and confusion and is freer from fire hazards.

Number of rooms.—The number of rooms necessary for carrying on efficient work in the junior high school must be determined by the number of pupils and the number of courses to be offered. In the Junior High School Manual prepared by the Committee of Fifteen is given a plan whereby a 12-room building can be made to accommodate 300 pupils and provide for a good variety of work.

The number of rooms in the junior high school buildings considered in this study range from 3 to 48. Forty of these buildings have fewer than 12 rooms, 44 as many as 12 but fewer than 20 rooms, and 47 have 20 or more rooms. The data at hand do not show

definitely but probably represent, except in the 11 separate junior high school buildings, the total number of rooms in the building. It is evident, as shown by these figures, that at least 40 of these schools are unable to offer a variety of subjects sufficient to take care of the needs of all pupils of the junior high school.

Gymnasium.—On account of the health program, the gymnasium is considered an essential feature of the junior high school. The size of the gymnasium will depend upon the size of the school and whether or not it is to be used for community purposes. It seems that only about 60 per cent of the junior high schools considered in this study are provided with gymnasiums and that the size of these gymnasiums varies from 360 square feet to 9,000 square feet. As to the equipment of the gymnasiums now in use there are 72 of the 78 equipped with showers and 3 with swimming pools.

Auditorium.—Seventy-nine per cent of these junior high schools are provided with auditoriums which range in size from 16 by 25 feet to 80 by 120 feet, with 50 per cent having a seating capacity of less than 300.

The sizes of auditoriums of 71 junior high schools were as follows: Up to 499 square feet, 1 school; 500 to 999 square feet, 2; 1,000 to 1,499 square feet, 5; 1,500 to 1,999 square feet, 7; 2,000 to 2,499 square feet, 13; 2,500 to 2,999 square feet, 12; 3,000 to 3,499 square feet, 6; 3,500 to 3,999 square feet, 11; 4,000 to 4,499 square feet, 2; 4,500 to 4,999 square feet, 4; 5,000 to 5,499 square feet, 4; 5,500 to 5,999 square feet, none; 6,000 square feet or more, 4; total, 71; median in square feet, 2,811.

The seating capacity of 95 junior high school auditoriums was: Up to 49 pupils, 2 schools; 50 to 99 pupils, 4; 100 to 149 pupils, 9; 150 to 199 pupils, 6; 200 to 249 pupils, 10; 250 to 299 pupils, 3; 300 to 349 pupils, 11; 350 to 399 pupils, 7; 400 to 449 pupils, 6; 450 to 499 pupils, 5; 500 to 549 pupils, 7; 550 to 599 pupils, 1; 600 to 649 pupils, 6; 650 to 699 pupils, none; 700 to 749 pupils, 3; 750 to 799 pupils, 3; 800 to 849 pupils, 5; 850 to 899 pupils, 2; 900 to 949 pupils, 1; 950 to 999 pupils, none; 1,000 pupils or more, 4; total, 95; median seating capacity, 375.

The size of the auditorium will depend on a number of factors. First, it must be decided whether it shall be for school use only or for community purposes as well. If it is to be used for community needs, this may demand that it be made larger than the school needs would require. If it is to be used for school purposes only, the question will arise as to the purpose for which it will be used. It seems that it should be large enough, in any event, to seat a little more than half of the enrollment. It should, by all

means, be provided with a large stage and necessary equipment and dressing rooms.

TABLE 28.—*Auditorium equipment*

	Percentage of all schools answering "yes"	Percentage of schools not answering this item in questionnaire
Stage	86.4	33.6
Curtains	89.7	36.7
Piano	98.9	30.6
Moving-picture machines	57.6	40.0

Libraries.—The high-school library should be an integral part of the high school; housed in the same building, and the reading room should be provided with facilities to accommodate at one full period at least 10 per cent of the total daily attendance of the school. In the high school housing 500 pupils the reading room should have a seating capacity of between 40 to 50; an area of 25 square feet per person is required for complete accommodation and service; tables 3 feet by 5 feet, seating six persons, are recommended.

A junior high school with an enrollment of 100 or fewer students should have a library of not fewer than 1,000 carefully selected books, and schools with an enrollment of 200 should have at least 3,000 volumes. This means practically 10 volumes for every student in the school. Following is the number of volumes of books in 95 junior high schools: Up to 199 volumes, 5 schools; 200 to 399 volumes, 16; 400 to 599 volumes, 11; 600 to 799 volumes, 16; 800 to 999 volumes, 8; 1,000 to 1,199 volumes, 11; 1,200 to 1,399 volumes, 8; 1,400 to 1,599 volumes, 6; 1,600 to 1,799 volumes, 2; 1,800 to 1,999 volumes, none; 2,000 to 2,199 volumes, 4 schools; 2,200 to 2,399 volumes, 1 school; 2,400 volumes or over, 7; total, 95 schools; median number of volumes, 355.

"Owing to the variation in the use of the school libraries, the size of its component parts can not be safely standardized. If, however, the main reading room accommodates 10 per cent of the student body at a time, and the accessory rooms are planned in relative proportion, the group should be of sufficient size for the most extensive demands now being made of libraries."[1]

In this study it was found that the library rooms range in size from 8 by 12 feet to 40 by 60 feet, and that all but six of the rooms

[1] United States Bureau of Education. Bul., 1922, No. 23, High School Buildings and Grounds.

now in use for libraries have a floor space of less than 600 square feet. It is also shown in this study that 50 per cent of the libraries are without tables and that slightly more than 40 per cent of the libraries have fewer than 1,000 books, with only 26 of the 131 junior high schools reporting, or a little less than 20 per cent, having a full-time librarian.

Playgrounds.—In considering the facilities for carrying on junior high-school work the size of the playground is a very important factor and one that has been often overlooked by the school authorities, as is shown by the figures given below. Of the junior high schools considered in this study, more than one-half are without ample playground space. Sixty-four schools have less than 1 acre, 49 have more than 1 acre but less than 2 acres, and the other 18 range between 5 and 15 acres.

Artificial lighting.—Artificial lighting is necessary for all high-school buildings in order that evening classes may be conducted and for use on dark days. It would seem that this phase of the junior high-school requirements has been fairly well taken care of. One hundred and twelve of the 131 schools reporting are lighted by electricity. Sixteen schools failed to state the method of lighting their school plant. Three schools replied that they did not use electricity for lighting their buildings. When the same schools, as referred to above, were asked if gas was used for lighting purposes, 42 replied in the affirmative, 56 in the negative, and 33 failed to answer the question.

Practical arts rooms.—One hundred and twenty-three of these junior high schools have practical arts rooms. Seventy per cent of these schools have from 1 to 4 such rooms and the others from 5 to 8 rooms. The information as to the character of these special rooms is interesting.

Cooking rooms head the list with 70, and the others in their order are as follows:

Sewing rooms, 62; general domestic arts, 55; machine shops, 6; woodworking shops, 51; general shops, 42; dining rooms, 29; auto shops, 3; and printing shops; 1.

The value of equipment for practical art rooms in 70 junior high-schools is as follows: Up to $499, 14 schools; $500 to $999, 24; $1,000 to $1,499, 10; $1,500 to $1,999, 8; $2,000 to $2,499, 8; $2,500 to $2,999, 1; $3,000 to $4,999, none; $5,000 or more, 5; total, 70; median value, $937.50.

The importance of practical-arts rooms can not be overemphasized, since two of the main purposes of the junior high school are: (1) To explore by means of materials worth while the interests, aptitudes,

and capacities of pupils; and (2) to reveal to them by such materials many things that otherwise would not be learned in the major fields of activity. The courses in practical arts lend themselves readily to these purposes when they are properly planned. In the very nature of the case the success or failure of these courses will depend very largely on the equipment of such shops.

Number of rooms equipped with movable seats.—Ernest J. Ashbaugh, in the "Survey of the School Buildings of Muscatine," says: "The best type of seat for the junior high school is the individual movable seat, since with these the floors can be quickly cleared for cleaning and made ready for plays and games." Thirteen of the schools under consideration have made provision to equip the classrooms with movable seats. Approximately 40 per cent of the schools have fewer than 4 rooms equipped with this type of desk. Fifty-seven of the schools have from 4 to 25 rooms equipped with seats which are movable. One-half of the schools under consideration are without this type of seating equipment.

School offices.—The location of the principal's office in any school building is a matter of prime importance. Eighty-six of the schools under consideration have made provision for a private office for the principal, but there is no uniformity as to the location. Only 11 of the schools provide an office for the assistant principal and only 8 for the dean of girls. Thirty schools provide special offices.

Lunch rooms.—Modern school buildings are provided with a lunch or cafeteria room. The capacity of the lunch room should depend upon the size and organization of the school. It should be large enough to seat the entire school at lunch in two sections. For convenience of service and maximum of safety lunch rooms should be placed on the ground floor. Only 18 of the schools under consideration are provided with lunch rooms. The size of these rooms varies all the way from 14 by 40 feet to 50 by 50 feet. There is no uniformity as to either the size or the location of the lunch room.

Laboratories.—One hundred and fourteen of the schools under consideration are equipped with laboratories. Forty-four of these schools have one laboratory room; 39 have 2; 26 have 3; 3 schools report 4; and 2 report 6. Six schools reported no laboratory rooms and 11 others failed to furnish this information. The value of the laboratory equipment in 52 of the schools is less than $1,000; in 23 schools it is between $1,000 to $2,000. In the other schools all laboratory equipment is valued from $2,000 to $5,000. In a considerable proportion of the schools the laboratories, like the libraries, are used by both the junior and senior schools.

The subjects taught in the junior high school laboratories and the number of schools teaching each subject are: Manual training, 16 schools; domestic science, 36; agriculture, 32; physiology, 4; music, 1; general science, 70; biology, 16; occupations, 2; botany, 3; industrial arts, 1; business, 1; English, 1; history, 2; arithmetic, 3; spelling, 1; physical geography, 2.

Special rooms.—There are certain rooms that junior high school buildings should have in order to care for the special features of junior high school work. The following table gives information concerning the special rooms provided for in the junior high school buildings considered in this study:

TABLE 29.—*Special rooms in rural junior high school buildings*

	Percentage of all schools answering "yes" [1]	Percentage of schools not replying to item in questionnaire		Percentage of all schools answering "yes"	Percentage of schools not replying to item in questionnaire
Auditorium	70.3	13.8	Art	0.9	0
Gymnasium	76.2	19.8	Store	1.5	0
General shops	36.2	11.4	Free textbook	.9	0
Machine shops	5.1	11.4	Superintendent's office	11.2	0
Woodworking shops	43.9	11.4	Physical trainer's office	3.7	0
Printing shops	.9	11.4	Nurse	21.8	33.4
Auto shops	2.5	11.4	Dean of boys	1.2	0
General domestic arts	47.4	11.4	Lunch	66.4	0
Sewing	53.5	11.4	Study	32.5	33.4
Cooking	66.9	11.4	Play room (girls)	40.0	35.1
Kitchen	1.5	0	Play room (boys)	39.5	34.3
Pantry	.9	0	Shower	83.7	48.1
Laundry	.9	0	Swimming pool	4.4	0
Library	97.7	0	Dressing	4.5	25.2
Principal's office	89.9	10.7	Teachers' rest room (men)	16.3	19.0
Assistant-principal's office	14.1	40.0	Teachers' rest room (women)	50.9	8.4
Dean of girls' office	9.9	32.8	Laboratory	94.9	.....
Teachers' reading room	.9	0	Laboratory rooms for use in junior high	24.4	34.4
Club	.9	0			
Music	1.5	0			

[1] The percentages in column 1 are obtained by dividing the number of schools answering "yes" by the sum of the schools answering "yes" or "no." The percentages in column 2 are obtained by dividing the number of schools not replying to the question in the questionnaire by the total number of schools studied.

It is evident from the facts reported that there is no uniformity as to the rural junior high school buildings. There is very little standardization as to the equipment and location of classrooms, special rooms, and offices. Most of these buildings now in use for junior high schools were not constructed for junior high school work.

TABLE 30.—*Provisions for specialized floor space in junior high schools in comparison with Terry's list of minimum provisions*

Kinds of floor space	Per cent of schools	
	Rural schools [1]	Terry
General:		
1. Class or recitation room	100.0	100
2. Principal's office	64.0	100
3. Auditorium	76.3	94
4. Stage in auditorium	54.8	92
5. Rest room for women teachers	40.0	92
6. Library	35.0	78
7. Textbook stock room		65
8. Reception room		60
Industrial arts:		
1. Manual training shop		79
2. Mechanical drawing room		60
3. Separate woodworking shop	37.7	65
4. General shop	33.0	
Physical education:		
1. Showers for boys	53.3	90
2. Showers for girls		85
3. Physical director's room		71
4. Gymnasium locker for boys		67
5. Gymnasium locker for girls		62
6. Gymnasium for both boys and girls	57.7	60
Domestic science:		
1. Cooking room for home economics	51.8	95
2. Sewing room for home economics	46.0	90
3. Dining room for home economics	21.5	67
4. Supply room for home economics		62
5. General domestic arts room	40.8	
Science:		
1. Separate general science laboratory	51.8	77
Fine arts:		
1. Free-hand drawing room		71
2. Music room		67
Lunch room		65
Cafeteria	13.3	

[1] Percentages based upon 135 rural junior high schools.

The buildings of the rural junior high schools must be regarded as inadequate. Ordinary classrooms with provision for mass assembly and for physical education characterize the great majority of schools. A bare majority make some provision for cooking and for a general science laboratory. Not more than one school in three, on the whole, can be regarded as having adequate housing provisions.

That one school in three has provision for laboratory science, shopwork, and home economics represents an advance over the usual elementary school situation. A majority of schools, however, show building provisions which correspond more closely to the elementary than to the standard secondary school situation. Data on equipment indicate a situation that corresponds to the housing provisions. These inadequacies represent serious limiting factors on instruction and make real improvement of the teaching situation over elementary-school conditions dependent almost wholly upon such advantages as are derived through departmentalization, with consequent specialization of teaching.

CHAPTER XI

General Summary.

There exists in the United States at the present time a fair degree of consensus of opinion as to the major purposes of the junior high school and the more general provisions of processes through which those purposes may reasonably be sought. An examination of available literature on purposes warrants the setting up of the purpose to meet the needs of early adolescents as an all-inclusive purpose of the junior high school. Observations on the age of physiological maturation fix the age span of the early adolescent group as that of approximately 12 to 16 years. We are, therefore, concerned with an educational unit designed to serve properly those of approximately 12 to 16 years of age. As means of creating an educational environment suitable to the needs of this group, opinion is common that we should (1) provide a distinct educational unit for their accommodation; (2) make provision for guiding pupils through gradual transition from common integrating education to appropriate differentiated programs of study; (3) make better provision for maximal rates of progress in learning on the part of individual pupils; and (4) improve the school social situation for this group.

Providing a distinct educational unit.—Normally our children enter school at 6 years of age and move forward one grade each year, so that the grades normal to children approximately 12 to 16 years of age are grades 7, 8, and 9. There is at present quite general agreement that these grades should be combined to form the junior high school. Because of the rôle of the social urges during the period of coming into puberty it is held important that the junior high school provide for full use of these urges for purposes of formal education. This requires that the pupil group concerned be neither submerged in the elementary-school world of children or the more mature world of late adolescents and adults which characterizes the senior high school. It is accepted as desirable, therefore, that the junior high school be organized as a separate social entity distinct from the elementary and senior high schools.

The junior high school idea has spread generally to rural communities. The junior high school as a distinct educational unit is as yet practically confined to urban areas. The United States as a whole reports only 173 completely segregated junior schools in rural areas. The additional schools making up the total of 1,181 schools termed rural junior high schools exhibit various degrees of distinctness in organization and administration, ranging from nothing more

than a term applied to grades 7 and 8, which have been partially departmentalized, to a rather complete educational entity with distinct curriculum, social organization, teaching, and administrative staffs.

The practice of combining grades 7, 8, and 9 to form the junior-school unit is the prevailing practice for rural schools. The 2-year junior unit formed by combining grades 7 and 8 is, however, of decidedly more frequent occurrence in rural than in urban areas. In view of the fact that the junior school is associated with elementary and senior schools as units housed in the same building and under the same local central administration in a majority of cases, the frequency of occurrence of the 2-year junior-school unit is surprising in view of the overwhelming consensus of expert opinion favoring the 3-year unit. Where the junior and senior units are thus associated no reason for the 2-year unit can be ascribed other than that of administrative choice. Rural junior high schools are rarely housed separately. The practice of providing for separate administration through a special principal for the junior-school unit is more common, but this has been achieved in fewer than 20 per cent of the cases. The most common practice looking to distinctness in organization is that of restricting teachers to teaching duties in the junior-school unit. This practice of some but not all teachers in an individual school is widespread.

Clearly, the rural areas afford such situations that organization of junior high school units as distinct from elementary and senior units has not been found expedient. The primary limiting factor is that of the number of pupils enrolled in individual schools. The majority of schools enroll fewer than 100 in the junior unit. Under these conditions of enrollment one recitation section to the grade is all that is practicable, and in order to secure teacher specialization by subject matter it is necessary to assign teachers to duty in both junior and senior units. Segregation of junior high school teaching is thus impracticable in such situations. It is doubtful whether a case for special junior and senior school administration as opposed to general secondary school administration can be sustained. It is rather probable that school units of such size as occur in rural areas must depend upon State and intermediate administrative units for special aspects of secondary school administration and supervision. It is also doubtful whether the advantages incident to segregation of junior high school pupils for purposes of organizing socialized activities outweigh the limitations as to the variety of activities and the size of the activity groups. The situation, therefore, seems to favor the 6-year secondary school where a senior school can be justified with some differentiation between junior and senior units in curri-

culum organization, government, and in social and extraclass activities. Probably the special junior high school is not adapted to rural situations except where a complete 6-year school can not be operated and except where unusual numbers can be assembled through centralization. From this point of view it appears that efforts to organize the junior and senior units separately are fully as widespread as conditions in rural areas warrant. There is some indication that the emphasis upon the desirability of separate organization has led to somewhat strained attempts to achieve that end in situations that do not warrant the attempt. A more promising field of effort seems to be that of developing the junior school in situations that do not warrant complete 6-year schools. The comparative frequencies of elementary-junior and elementary-junior-senior schools indicate either that the possibilities of assembling grades 7 and 8 from several local elementary schools and forming a central junior high school by extending local education through grade 9 or grades 9 and 10 have been neglected or a tendency to develop 6-year schools in unwarranted situations exist.

GUIDING THROUGH GRADUAL TRANSITION FROM COMMON INTEGRATING EDUCATION TO APPROPRIATE DIFFERENTIATED PROGRAMS

Rural junior high schools are continuing common integrating education. In many cases they are continuing the characteristic education of the elementary school and little more. This is more pronounced for the 2-year junior high schools than for the 3-year schools. The situation presents a sharp break between grades 7 and 8 and grade 9, and apparently has done little in many cases to lay down an adequate basis of guidance through gradual transition. Such an adequate basis certainly involves exploration of the possible fields of learning, of the possible fields of employment, of the individual aptitudes, abilities, and interests of pupils, and of all these in their mutual interrelations.

The rural schools can not be said to have made adequate provision for exploration. The general survey courses of the fields of language, science, mathematics, and social science are woefully neglected. The situation is better with reference to certain fields of employment, but the accomplishment here is partial in that the fields of agriculture and home making are emphasized to the neglect of the fields of mechanic arts and of business. It is also true that the efforts in the fields of agriculture and home making are more narrow and more concerned with specific knowledge and skills than is advisable for exploratory courses. The situation is unfortunate in that the general provisions are concerned with definite vocational outcomes on the assumption that rural youth should be trained for rural voca-

tions, while the known nature of the instruction in general is such that real vocational values are not probable. It is the double misfortune of a misplaced aim and an impotent technique in seeking the aim. It is a program which seeks to indoctrinate and prepare for a special field of employment while withholding the possibility for contact with the requirements and possibilities of other fields. This general characterization should not be construed as applying to all schools, but to the prevailing school. A minority does provide opportunities which may be judged to have real exploratory values through general courses in agriculture, home making, shopwork, and business practice. Such programs appear to be in keeping with the vocational exploratory purpose of the junior high school and to be about as broad as is practicable at the present time.

Aside from these definite curricular provisions, systematic efforts at educational and vocational guidance through the collection of personal data on pupil abilities and interests and through miscellaneous provisions for imparting occupational and educational information through incidental means are found in a majority of schools. Probably the more frequent report of such guidance provisions based in part upon incidental means of imparting information is to be expected as a forerunner of more definite curricular provisions. From this point of view definite curriculum adjustment may be expected to follow and the present situation may be regarded as promising. When numerous schools reported as junior high schools, however, exhibit neither provision for exploration nor for systematic efforts at individual pupil guidance one concludes that a definition of the junior high school in terms of the mechanics of departmentalization and subject promotion has been frequently accepted rather than a definition in terms of educational experiences provided. Considered from this point of view the situation is not so promising that the junior high school idea is winning a place for itself in rural communities.

BETTER PROVISION FOR MAXIMAL RATES OF PROGRESS IN LEARNING ON THE PART OF INDIVIDUAL PUPILS

The rural junior high schools have generally made those mechanical provisions which look to rates of progress through the grades in keeping with the ability of the individual pupil to do work. The practice of grouping by ability is rather common where numbers involved permit the organization of more than one recitation section in a given grade group. Promotion by subject as a substitution for grade promotion is rather general and the use of objective criteria of promotion as supplementary to teachers' marks has achieved considerable recognition in practice.

The tendency to admit to the junior high school only those who have completed grade 6 of the elementary school is yet so general, however, that a decided restriction on secondary education for some pupils of the early adolescent age is still imposed. Practically it is an institution for sixth grade graduates rather than an institution for pupils having reached a certain stage of physiological maturity. Efforts to improve the teaching situation through departmentalization of instruction is an ideal of the schools but the limitation of numbers results in many cases in partial departmentalization only. What is probably a more serious limiting factor is the failure to provide in rural junior high schools those features of specialized building space and material equipment which are necessities for any considerable adaptation of instruction such as is contemplated for the junior high school. Considering the limitations on building space provisions and equipment in connection with curricular provisions previously noted, it becomes evident that instruction is in many cases the characteristic teacher-textbook-pupil instruction of grades 7 and 8 in the elementary school.

Efforts to adjust the curriculum to individual needs of pupils are generally reported. The provisions, in general, relate to efforts to make adjustments looking to curriculum enrichment for superior pupils and outlining minimum essentials for pupils of low ability. These adjustments are sought through extensive use of the project in teaching, permitting bright pupils to carry extra work, correlating extraclass activities with curricular work, granting school credit for outside work, limiting drill to pupils who need it, adaptation to community needs and vocational interests of pupils, and organizing courses specifically to meet the needs of both continuants into senior high school and drop-outs from junior high school.

While these adaptations are reported as having been made by from 53.3 to 14.1 per cent of schools, any judgment as to the effectiveness of what is reported is not possible from available data. It indicates a consciousness of need of adjustment, and the beginnings of subject-matter reorganization in some schools. What seems to be most unfortunate in the situation is that comparatively few schools may be regarded as having taken the first essential step of working out a distinctive junior high-school program of studies centering in social orientation. Lacking this first step, efforts at adaptation of materials of traditional elementary and high school courses to varying pupil needs and abilities must prove largely futile. Administration seems to be passing the problem to the classroom teacher and to be playing with incidental and informal devices rather than attacking the fundamental curriculum problem from the administrative end of the task; i. e., determining the appropriate subjects

of instruction and their time allotment in view of junior high-school purposes.

IMPROVING THE SCHOOL SOCIAL SITUATION

More generally than is true for any other practice, the rural junior high schools report provisions for extraclass activities. It is largely through these activities that development of the qualities of good citizenship is sought and opportunity for the development of qualities of initiative and leadership on the part of individual pupils is provided. The activities reported cover a wide range of effort. They are usually organized deliberately with a view to giving pupils opportunity to participate in group direction. Faculty supervision in an advisory capacity, however, is universal.

An outstanding difference in attitude toward school control in junior high schools as contrasted with elementary schools is shown by the tendency to grant to pupils in junior high schools a measure of participation in school government, usually through pupil councils. This is both a proper concession to adolescent pupils in their desire to be self-determining and an appropriate means of gradually developing those attitudes which are essential for self-control. It is a desirable preliminary to student self-government. This field of extraclass activities seeking to provide for participation according to interest, in activities which are patterns of the social situations of adult life, is a field that the rural secondary school can and should conserve for pupils of junior high-school age, whether the school is organized as a 6-year unit school or as a junior-senior school. If junior pupils are not allowed their own junior school council, home rooms, class organizations, and assemblies, but are merged with seniors in these and other activities, the school will certainly take on the social atmosphere fitted to senior-school pupils. This is probably one of the dangers of the 6-year unit school. Regardless of separate administrative, supervisory, and teaching staffs or of housing, these safeguards against submergence of junior pupils and consequent loss of opportunities for social expression and practice in self-direction can be maintained. It is recognized that complete segregation of junior and senior groups in school activities will result, in many cases, in undesirable limitations upon the scope of activities and upon the numbers participating in a given activity. There seems no occasion, in view of these considerations, to attempt to segregate completely the two pupil groups in clubs and other activities of interest to special groups only.

There is a noticeable trend toward incorporation of extraclass activities as curricular activities. In so far as this signifies a definite

time allotment and serious faculty effort to utilize activities for formal educational purposes, it is undoubtedly a desirable trend. If incorporation as curricular work means loss of pupil initiative and essential direction, however, it represents the loss of a desirable aspect of the school environment.

In general summary it appears that the rural junior high school shows widely varying degrees of adaptation to the accepted special purposes of the institution. Too often the institution has been conceived as a mechanical administrative device and no distinctive educational program centering in social orientation of the pupil through exploration of the fields of human learning activity, and vocational employment for the purpose of guidance into appropriate programs of study differentiated in relation to worthy purposes in life has been provided.

Serious limitations on the schools are imposed because of failure to provide essential building space and material equipment through which the desirable special activities as media of instruction are made possible. Equally serious limitations on organization of the junior school as a distinct educational entity are imposed because of the small numbers of pupils assembled in individual schools. Apparently the possibilities of improving rural secondary education through assembling pupils of grades 7 and 8 from several elementary centers and extending local education through grade 9 or grades 9 and 10 in centers which are more accessible to pupils but do not justify a complete 6-year secondary unit are not being realized. The junior unit has been developed but rarely in rural areas except in association with a senior unit in a 6-year school.

O