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BULLETIN, 1932, No. 17

MONOGRAPH No. 1

**UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF EDUCATION**

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NATIONAL SURVEY OF SECONDARY EDUCATION

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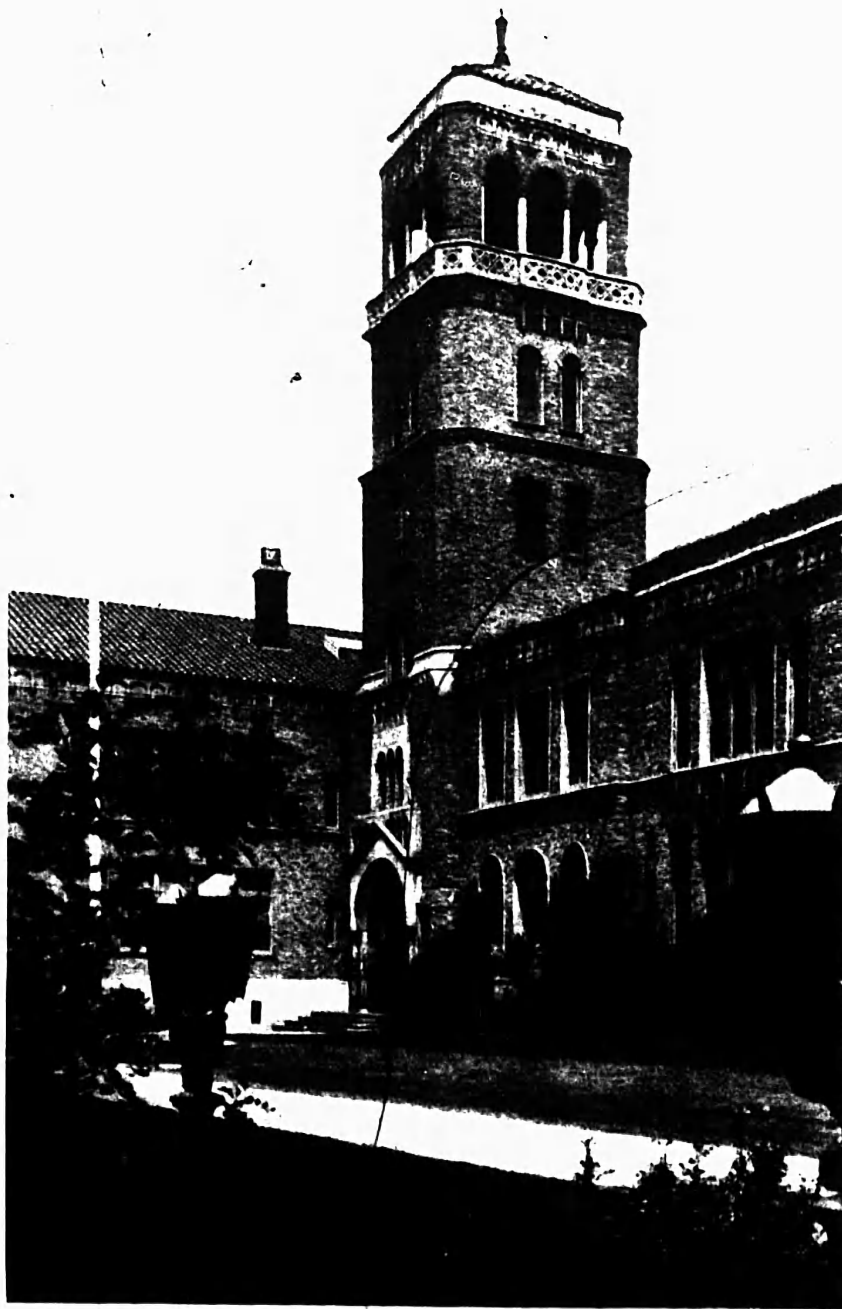
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Emblematic of our faith in secondary education.

UNITED STATES DEPARTMENT OF THE INTERIOR
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OFFICE OF EDUCATION : WILLIAM JOHN COOPER
COMMISSIONER

S U M M A R Y

BY
LEONARD V. KOOS
AND STAFF

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NOTE

The entire staff of the NATIONAL SURVEY OF SECONDARY EDUCATION have cooperated with Dr. Leonard V. Koos in producing this volume. William John Cooper, United States Commissioner of Education, is director of the Survey; Leonard V. Koos, professor of secondary education at the University of Chicago, is associate director; and Carl A. Jessen, specialist in secondary education of the Office of Education, is coordinator

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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., July, 1933.

SIR: Within a period of 30 years the high-school enrollment has increased from a little over 10 per cent of the population of high-school age to more than 50 per cent of that population. This enrollment is so unusual for a secondary school that it has attracted the attention of Europe, where only 8 to 10 per cent attend secondary schools. Many European educators have said that we are educating too many people. I believe, however, that the people of the United States are now getting a new conception of education. They are coming to look upon education as a preparation for citizenship and for daily life rather than for the money return which comes from it. They are looking upon the high school as a place for their boys and girls to profit at a period when they are not yet acceptable to industry.

In order that we may know where we stand in secondary education, the membership of the North Central Association of Colleges and Secondary Schools four years ago took the lead in urging a study. It seemed to them that it was wise for such a study to be made by the Government of the United States rather than by a private foundation, for if such an agency studied secondary education, it might be accused either rightly or wrongly of a bias toward a special interest. When the members of a committee of this association appeared before the Bureau of the Budget in 1928, they received a very courteous hearing. It was impossible, so the Chief of the Budget Bureau thought, to obtain all the money which the commission felt desirable; with the money which was obtained, \$225,000, to be expended over a 3-year period, it was found impossible to do all the things that the committee had in mind. It was possible, however, to study those things which pertained strictly to secondary education, that is, its organization; its curriculum, including some of the more

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fundamental subjects, and particularly those subjects on which a comparison could be made between the present and earlier periods; its extracurriculum, which is almost entirely new in the past 30 years; the pupil population; and administrative and supervisory problems, personnel, and activities.

The handling of this Survey was intrusted to Dr. Leonard V. Koos, of the University of Chicago. With great skill he has, working on a full-time basis during his free quarters from the University of Chicago and part time during other quarters, brought it to a conclusion.

This manuscript, prepared by Doctor Koos and the staff, is a summary of the entire Survey as published in 27 other monographs. It epitomizes the organization of secondary education, giving due stress to full-time and part-time schools; to the nature of the secondary-school population, showing that it has increased very greatly and, therefore, it has more variety than formerly; to the resulting reorganized forms of secondary education, particularly the junior high school, the 6-year school, and the junior college. About half of our schools are found to be schools of fewer than 100 pupils. A chapter accordingly is given to the small high schools. Likewise in 16 of the States there are separate schools for Negroes and in 230 counties of the Southern realm, where large parts of the population is of the Negro race, there is, owing largely to poverty, still no recognition of their educational needs.

The organization of secondary education receives due notice not only in those States, such as Michigan, where it has developed out of the elementary school, but in States like California and Illinois where the organization of the high-school district has tended to prevent reorganization to meet modern conditions. The articulation of the high school and the college receives attention in one chapter. Likewise the administrative and supervisory staffs and the programs of supervision that these people work on have attention in one chapter. The selection and appointment of teachers, provisions made for individual differences, programs of guidance, and programs of research are each given one chapter in this monograph.

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Such new issues as interpreting the secondary schools to the public, the secondary school library, and procedures in making the curriculum are each briefly touched with a short chapter. The monograph comes to an end with attention to the trends in the curriculum and extracurriculum.

The Survey as a whole is an excellent piece of work done in a very scholarly way. The thanks of the country are due Prof. Leonard V. Koos, who sacrificed much of his own time and personal convenience in order to make the investigation effective. The compensation paid him in no way pays for the time that he devoted to the National Survey of Secondary Education.

I recommend that this monograph be published in the Survey series.

Respectfully submitted.

WM. JOHN COOPER,
Commissioner.

The SECRETARY OF THE INTERIOR.

SUMMARY

CHAPTER I: SOME HIGH LIGHTS IN THE FINDINGS OF THE SURVEY

The purpose of this monograph is in brief space to give to those who do not have the time or inclination to read the special reports of the National Survey of Secondary Education published in Monographs Nos. 2 to 28 (of Bulletin, 1932, No. 17) some comprehension of the nature of the whole study and of its findings. The present chapter draws illustratively and by succinct statements on the findings of the Survey. Chapter II points out certain possible uses of the reports and findings. Chapter III describes the authorization of the Survey, and supplies information concerning the organization, the scope, the staff, and the procedures followed in making it. The remaining chapters represent efforts to provide summaries of most of the projects of the Survey.

It is desirable to emphasize that the statements to follow are nothing more than illustrative of more important outcomes of the Survey and that hundreds of additional statements of no less moment might be made. The statements will render their greatest service if they lead those who read them to examine the summaries in the following chapters or, better still, the separate monographs on which the all-too-concise summaries are based. Certainly such brief statements must be read with the understanding that many are hedged about in the complete reports with qualifications that at times alter meanings substantially. Qualifications of conclusions are almost inevitable in investigations carefully made and reported. The statements are also illustrative in another sense than being indicative of the significance of the findings in that they exemplify the scope of the Survey, which is admittedly wide.

1. The proportion of the population of high-school age represented by the enrollment in public high schools in 1930 had reached 46.6 per cent. With pupils in private secondary

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schools added this proportion was well over a half of the population of these ages. The proportion has unquestionably increased since 1930. The proportion varies from State to State and is greater in urban than in rural communities, and city systems can be found in which well nigh all pupils of high-school age are in school.

2. Information concerning the socio-economic status and measures of intelligence of pupils in specialized curriculums of a vocational character indicate that such curriculums are means of democratization of secondary education. This is true whether the curriculums are provided in comprehensive or in specialized schools.

3. Continuation schools and classes and evening high schools are further means of democratization of education at the secondary level.

4. By 1930 reorganized schools included approximately a fourth of all public secondary schools and enrolled almost a third of all pupils in grades 7, 8, and 9.

5. Up to enrollments of 2,000 and with the factor of size controlled in the comparisons made, 6-year high schools, undivided or on a 3-3 basis, were found to be superior in organization to separate junior and senior high schools. Among very small schools size of enrollment is a more important factor of superiority than reorganization.

6. By 1931 the number of junior colleges of all types was rapidly approaching 500. The total enrollment was rapidly mounting toward 100,000.

7. Special reorganizations of school systems of an experimental character involving the junior college were aiming chiefly either at the saving of time or at the integration of junior-college with high-school years.

8. One major implication of a large-scale comparison of selected small high schools with unselected small schools is that it is possible to make the unselected schools better than they are. One of the most important factors is better administrative leadership within the schools.

9. Another major implication of the same study is that size of enrollment is more influential than selection in making

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for a good school. This implication is a powerful argument against the encouragement of very small schools.

10. The number of public secondary schools for Negroes in the States providing separate schools for the two races has increased with astonishing rapidity during the past 15 to 20 years. However, there is still a great lack of high-school facilities for Negroes in many areas in these States.

11. The efforts to provide opportunities for public secondary education in this country have resulted in a great complexity of district and other arrangements not only for the country as a whole but within most States. Progress toward simpler and more effective arrangements is highly desirable.

12. An investigation of districts and schools in certain counties in California yields the recommendation of a larger district, the "superintendency area," in control of schools extending from the kindergarten through the junior college. The proposal brings a number of advantages over present arrangements, among them the extension of junior high school reorganization and the provision of better schools at lower cost.

13. A study of State control of secondary schools concludes that fewer statutory prescriptions accompanied by extension of discretionary powers in State school officials would permit the development of more flexible and adaptable programs in the administration of secondary education.

14. The trend in higher institutions has been to increase the number of ways by which students may gain admission.

15. Improvement in the articulation of high school and college is being effected by much greater attention in higher institutions to the problem of securing favorable adjustment of new students to college life and work.

16. The Survey reveals an increase in the professional education of the members of administrative and supervisory staffs of secondary schools as compared with the situation in this regard disclosed by studies made only a few years ago.

17. In outstanding schools to-day the supervisor is recognized as a leader, a formulator, an adviser, a consultant, a helper, but never as a perfunctory inspector. The relation-

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ship between the supervisor and the supervised is democratic and cooperative.

18. No essential distinctions are found in the procedures followed in the selection and appointment of teachers to elementary school, junior high school, and senior high school positions.

19. Homogeneous grouping, special classes for the gifted and for the slow, and plans characterized by the unit assignment were found to be the three core elements in a typically successful program to provide for individual differences.

20. Great confusion of terminology exists in the plans characterized by the unit assignment. In practice, a number of widely discussed plans, techniques, and procedures characterized by the unit assignment are essentially one and the same thing. These procedures are variously known as the project method, the problem method, differentiated assignments, long-unit assignments, contract plan, laboratory plan, individualized instruction, Winnetka technique, Dalton plan, Morrison plan, or a modification of one of the last three.

21. Four types of organization for guidance were distinguished; namely, (1) the central guidance bureau in city school systems without extensive development of the organization for guidance service within individual secondary schools; (2) the central guidance organization in a city system with development of the program of guidance within the individual secondary school as the unit; (3) centralized organization for guidance within individual schools and with special guidance functionaries; and (4) organization of guidance in individual schools utilizing regular officers and teachers as guidance functionaries.

22. Few bureaus of educational research are found within individual secondary schools, and almost all the educational research carried on at the secondary level within schools and systems is the work of the bureaus of research of the city school systems.

23. Investigation shows that nearly half of a selected group of schools are carrying out permanent continuing programs of school publicity. These programs aim to interpret

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the schools (1) to pupils, (2) to teachers and other school employees, and (3) to the public.

24. On the basis of provisions and practice in schools with outstanding library service, the prediction is warranted that the library will soon be one of the central features of the modern secondary school.

25. The proportions of pupils making all possible uses of the library are greater in schools in which library and study hall are combined than in schools in which they are separate.

26. In appraising the programs of curriculum revision school authorities express the belief that the professional growth of the teachers participating is the greatest benefit derived.

27. Consideration of the trends in the curriculum of the secondary school leads to the conclusion that advocates of curriculum reform would typically approve the *scope* and *direction* of the changes being made, but would be impatient with the *rate* of change.

28. Offerings show a marked tendency at the junior high school level toward general courses and away from courses in specialized aspects of the different subject groups. This tendency is illustrated in the increase of courses in general mathematics and the decrease in courses designated as arithmetic or algebra. Other academic subject groups notably affected by the tendency are English, the social studies, and science. The senior high school is less affected than the junior high school by this trend.

29. Courses in modern foreign language have been much influenced by the advocacy in the modern foreign language study of the objective of ability in reading the foreign language. The courses in Latin show the influence of the classical investigation in recommending the postponement of the reading of the first classical author to the fourth semester and a redistribution of emphasis in the study of grammar and syntax.

30. The offering in music has been rapidly widened beyond sight-singing to include choruses, glee clubs, bands, orchestras, individual instruction, and courses in theory and appre-

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ciation. In art the present trend in objectives is toward appreciation, creativeness, and self-expression.

31. Fully seven-tenths of a group of secondary schools which were studied participated in interscholastic nonathletic contests. These contests have been extended to include an exceedingly wide variety of interests and activities.

32. An outstanding trend among schools selected for the merit of their programs of health work and physical education is the policy of uniting under a single administrative head all the physical activities fostered. These include health work, physical education, intramural athletics, and interscholastic athletics.

CHAPTER II : USING THE REPORTS AND FINDINGS OF THE SURVEY

1. CHECKING THE LOCAL SITUATION AGAINST THE FINDINGS

The making of educational surveys must have arisen out of the expectation that they would prove useful. It is expected of the National Survey of Secondary Education that it will prove useful to the schools of the country. In view of this expectation it seems appropriate as early in the summary monograph as possible to make a brief statement concerning this probable usefulness.

Two main types of use of the reports and findings of the Survey will be proposed and exemplified. The first of these is not a usual one for surveys, but was clearly contemplated at the outset by being projected as one of the guiding principles of this Survey. At their earliest meetings to confer over the outlines and procedures of the whole project the members of the Board of Consultants of the Survey urged that investigations be conducted by procedures which could with advantage be duplicated in the local school situations or the findings of which could be used as a check on local practices or conditions. Most of the projects of the Survey include investigations that comply with this principle and the findings of these projects are applicable in this way.

This manner of use of the report and findings of the Survey will be generously illustrated. The first monograph to be drawn on in this way is the one entitled Instruction in English. This report is chosen because it is in a field with which most readers have made some contact and with which all have vital concern. In common with other investigators in the subject fields, Prof. Dora V. Smith, who prepared the report, based it on an analysis of recently revised course outlines and first-hand observation of classroom work. To be exact, we may report that Doctor Smith analyzed 156 course outlines for use in junior and senior high schools revised since 1925 and visited classes in 70 junior and senior high schools

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in 15 different States, the schools visited having been previously identified as doing the unusual in one or more aspects of the program of instruction in English. Thus, the whole investigation in English had to do with practices in schools with forward-looking programs in the field.

The monograph on Instruction in English (Monograph No. 20) contains, among others, chapters on time allotments to literature and composition, the teaching of composition, the teaching of grammar, the teaching of reading and literature, cooperation and correlation, and provisions for individual differences. The whole body of evidence is reported in such a way as to facilitate checking local practices against the practices in these forward-looking programs.

(1) The time allotments to literature and composition show a steadily increasing average proportion devoted to literature from grade 7 to grade 12, but the reduction in the proportion devoted to composition is far from approaching its elimination. In fact, the time allotment to composition in senior high school grades in these schools is greater than that in typical schools. It would be easy for persons in any local school situation to note any deviation there from practice in this regard in the schools represented in the report.

(2) The chapter on the teaching of composition includes sections on the general and specific aims in this work found in the revised course outlines. Proportionate frequencies are reported for junior and for senior high school grades. Further along in the chapter is a similar analysis of the objectives in oral composition. Recurrent and unusual pupil activities in the work in composition are reported, as well as of types of organization of instruction. A list of special courses in composition at the senior high school level is reported, among these being creative writing, journalism, newspaper advertising and short-story writing. Local practice can readily be investigated along similar lines and checked against the background provided by the practices in this group of innovating schools.

(3) The chapter on the teaching of reading and literature contains, among other materials, the results of an analysis of objectives made along lines similar to those followed with

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the objectives of composition, distinguishing also between objectives proposed for junior and for senior high school grades. It reports the frequencies of use in each grade of the different methods of organizing the literary selections for instructional purposes, as by literary types, theme, unitary organization, objectives, mere lists of classics, and diverse combinations of these different bases. It reports the teaching topics mentioned in 120 lesson plans reproduced in the course outlines. With respect to the teaching of composition, it is possible for individuals in local schools to check their own practices against practices in these presumably innovating schools.

(4) Many course outlines in English were found to include reference to provisions for individual differences, such as ability grouping with multiple-track programs, the core course with variations, multiple-reading programs, electives, remedial courses, modified-content courses, seminars for superior pupils, special programs for overage pupils, and differentiation in methods of instruction. This list of provisions, also, can serve as a check-list for local school workers desirous of noting their own progress in these directions.

(5) Scattered through the monograph are brief descriptions of unusual and less frequent innovations. One encounters the "functional-center" organization of instruction in composition as exemplified in Highland Park, Mich., and in Denver; the use of the school paper and the literary magazine as avenues for creative writing, as seen in the Thomas Starr King Junior High School in Los Angeles; the use of the radio as the center of interesting expressional activities, as in the Thomas Jefferson Junior High School in Cleveland; the exhaustive study of some interesting hobby, as in the Havermale Junior High School in Spokane; individualized reading programs in the Libby Junior High School in the same city; the free-reading movement to be found in several schools; the dramatic arts courses in the University High School of Oakland, where all departments of the school contribute to the performance in hand; the program by which all teachers in the school, irrespective of subject, unite in a study

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of common errors in speech and writing, as at Janesville, Wis.; and the experiments in integration of English and other subjects, as in Lincoln and Horace Mann Schools at Teachers College, Columbia University. This discovery of the unusual in individual schools provides one of the most constructive sources to be found in the report.

Of course, Doctor Smith does not assume that all the trends and innovating practices disclosed in her investigation are uniformly constructive. However, it is probably safe to conclude that among these trends and practices are to be found many changes that will have great positive influence on instruction in English during the next several years. The trends and innovating practices are, therefore, deserving of careful consideration by local school people with a view to adopting or adapting them in the local situations. Doctor Smith makes sure to bring to bear on them the findings of researches and her expert judgment in the field, to the end that the trends and practices may be as far as possible approved in the light of present knowledge. However, she goes further in suggesting in her closing chapter various lines of inquiry, investigation of which by methods of research will extend the boundaries of appraisal in many directions.

One other illustration of the first type of use of the findings of the Survey may be presented. This instance is one pertaining to the findings of the monograph on the Program of Studies which was prepared by Drs. Arthur K. Loomis and Edwin S. Lide. The present instance represents an actual use of certain findings of this report. The monograph is a substantial one reporting trends in subjects required, offered, and actually taken by pupils in junior, senior, and 4-year high schools. The instance of use to be cited is the paralleling for other schools than those represented in the monograph of a portion of the original investigation inquiring into the subjects which had been taken during their high-school careers by certain groups of recent graduates. The parallel study was made for a group of 28 suburban high schools in the region about Chicago and was executed recently by Doctors Loomis and Reavis.

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The computations of their study paralleling the project of the Survey eventuated in percentages of credit earned by the graduates in certain subject groups, namely, English, the social studies, foreign languages, mathematics, science, and the nonacademic subjects. The significance of the repetition of the study for the new group of schools may be suggested by drawing illustratively on the percentages for three of these subject groups. In one of the 28 schools the percentage of credit earned in the social studies by a group of girl graduates who did not enter college was 8.1. The percentage in the same subject field for a corresponding group of girl graduates of a school at the other extreme was 23.4—almost three times as large a proportion as for the lowest school. The median percentage for the 28 schools was 15.1. Such a comparison must prompt those responsible for the school with the lowest percentage to wonder whether the program of studies as administered by them is giving adequate recognition to the obligations for civic-social training in secondary education. The answer, of course, is not to be found within the evidence of such a study, but the findings can be expected to stimulate the deliberation over the issues involved that will aid in arriving at the appropriate answer. A few more percentages for other subject fields for the same groups of graduates not entering college are similarly provocative: For one school the percentage of credit in mathematics was 5.4, while for the school at the other extreme it was 17.4; for one school the percentage in nonacademic subjects (commercial work, the practical arts, music, and the like) was 14.1, while in the school at the other extreme it was 46.9, or almost half.

This first type of use of the findings of the Survey, in which the procedures of the Survey are applied in the local situation and local conditions are checked against those found in the selected schools of the country as a whole, is limited only by the scope of the entire Survey. This means that such use illustrated for English may be extended to subject fields like the social studies, science, mathematics, foreign languages, music, and art, in which studies comparable to that in English were made. It may also be extended to

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such major aspects or problems in the whole field of secondary education as procedures in curriculum-making, the extra-curriculum, athletics, health and physical education, the program of guidance, vocational education, part-time education, the secondary-school population, junior high school reorganization, the smaller secondary schools, selection and appointment of teachers, provisions for individual differences, marking, promotion, library service, and articulation of high school and college. Great good should come from frequent recourse to the reports and findings of the Survey in such comparative studies. This type of utilization of the reports and findings should be an exceedingly practical one, in that it should be stimulative of improvement in the schools.

2. UTILIZING THE MAJOR IMPLICATIONS

The second type of use of the findings of the National Survey to be proposed is the much more obvious one of relying on the major implications of the various projects. Practically all the investigations have yielded implications of this type, although they may not always have been labeled in this way. It is necessary to resort here again to illustration only, as it is manifestly out of the question to cite in a single brief chapter any large number of the major inferences. The projects selected for illustration deal with provisions for individual differences and the problems of smaller secondary schools, both investigating timely and prevalent concerns. It should be kept in mind that to extract a few implications from 2 only in a list of 28 monographs covering a wide range of topics pertaining to secondary education will give only a meager notion of the Survey in this aspect of its usefulness.

One of the larger projects of the Survey, directed by Dr. Roy O. Billett, endeavored to ascertain the extent of and to analyze the provisions for individual differences made in 10,000 secondary schools. In view of the recent tremendous influx of youth into secondary-school grades there can be no question of the exceptional timeliness of such a study. The projects discovered a great array of provisions for individual differences, not yet so generally practiced as seems

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desirable; but indicative at least of a general recognition of the problem. Critical analysis by Doctor Billett reduced this wide array to what he calls three "core elements" of a typically successful program to provide for individual differences, namely, homogeneous, or ability, grouping, special classes for the very bright or gifted and for the slow, and the unit assignment. This is one of the major inferences from the whole study, a conclusion of pervasive significance. It may be said in passing that special classes for the gifted or the slow pupils, the second of the three "core elements," may be thought of as a type of homogeneous grouping, the first of the three. The facts show that these classes are provided about nine times as often for slow pupils as for the very bright.

The study of procedures characterized by the unit assignment, which are among the most frequent provisions for individual differences, led to one of the most significant inferences of this part of the Survey. These procedures are known by a confusingly wide variety of names, among the most frequent being the "Dalton plan," "Winnetka technique," "Morrison plan," "differentiated assignments," "long-unit assignments," "individualized instruction," "contract plan," "laboratory plan," "problem method," and "project method." A notable fact about the first three of these procedures is that the practices carried on in schools reporting to use them with unusual success deviated widely from the characteristics of the plans as described by their originators—in differing degrees for the different procedures.

A rather startling conclusion concerning the remaining seven procedures in the lists, namely, differentiated assignments, long-unit assignments, individualized instruction, contract plan, laboratory plan, problem method, and project method, is that detailed analysis of practices in schools reporting to use them with unusual success finds these practices to be essentially identical, no matter what name is applied. A significant implication here is that terminology is needlessly elaborate and complex and that the educational world will be better off if it discards most of this jargon. The implication is no denial that the unit assign-

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ment is distinctly serviceable in providing for individual differences; the report of the project concludes that it is, and recommends a practical and simplified clarification of the issues involved. From this citation of conclusions it may be noted that major conclusions are utilizable in formulating the policies of a school or system.

The other project to be drawn upon in illustration of the usefulness of major inferences from the Survey is the one concerned with smaller secondary schools. This project was done in collaboration by Prof. Emery N. Ferriss, of Cornell; W. H. Gaumnitz of the regular staff of the Office of Education, and P. Roy Brammell, a full-time member of the Survey staff. In essence this project involved a comparison of selected and unselected small secondary schools. The list of selected schools was made up from results of inquiries sent to State supervisors of high schools and professors of secondary education in higher institutions and from descriptions in educational literature of unusual small schools. The unselected schools represented as nearly a random group of small schools as could be induced to respond to the inquiry forms devised to secure the information needed. Each of the two classes of schools, the unselected and the selected, was divided into groups according to size of enrollment, and comparisons of the schools made size by size with respect to many features that go to make up a school. A host of specific conclusions were drawn from this large project but reference here will be made to two major implications only.¹

A manifest conclusion from an overview of the evidence of the project pertains to the all but fully consistent superiority of the selected over the unselected schools represented. To be sure, it is an *average* superiority of one class over the other, rather than the superiority of all selected schools over all unselected schools; among schools of equivalent enrollments many unselected schools are indubitably, better in some respects than many selected schools. Nevertheless, the general trend of superiority is too marked to be gainsaid.

¹ These implications are drawn on again in summarizing in Chapter VI, the findings of the project relating to smaller secondary schools.

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The selected schools are in larger districts than are unselected schools of equivalent enrollments. They are more often in consolidated districts. They more often provide transportation, and provide it for larger numbers of pupils. They retain pupils better—at least when they are reorganized schools. Their class periods are longer. They more often provide the service of part-time librarians, and these librarians have had more training for their work than part-time librarians in unselected schools. Their principals are better trained both with respect to the total duration of training and the amount of work taken in the special field of education. The tenure of these principals is longer, their teaching loads are more reasonable, and their salaries higher. In material facilities the selected schools are better provided, particularly in such matters as size of grounds, service equipment, special rooms, space and equipment for libraries, equipment for motion and still pictures, and free textbooks. They are superior with respect to instruction in that they have more often in recent years made certain additions to the curriculum, are making more frequent use of newer methods of teaching, and are carrying on a greater range of supervisory activities. In the extracurriculum, in pupil accounting and guidance, in extending their educational service and in their community relationships they have gone farther than have the unselected schools. In two respects only are the unselected schools on a par with the selected schools; namely, in the tenure and in the salaries of teachers.

Thus, the first general implication from all the evidence is that, *if the selected schools are providing the facilities or carrying on the activities represented in these aspects of superiority, other schools of the same size may well be expected to do the same.* The whole study has not, to be sure, gone into the question of the local financial resources available to the unselected and selected schools in order to ascertain whether the selected schools are better off financially than the unselected schools. It is almost certain that the selected schools were superior in this respect as well as in others. If this were found to be true, the problem would become one of equalization of educational opportunities and stimulation

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by the State. In these times of a rather general acceptance of the principle of State equalization and stimulation, it seems appropriate to concede that to some extent incorporating the features of a good school in small communities should be made feasible by the State, especially if the principle is not carried so far as to minimize too greatly the advantage of size also demonstrated in this investigation.

An implication subordinate to that just stated, but important, nevertheless, pertains to the significance of educational leadership in the smaller schools. The study has shown that principals in the selected schools on the average have more extended training, hold higher degrees, and have had more work in the field of education. Besides, they have longer tenure and receive higher salaries. It seems more than likely that many of the other superiorities reported for the selected schools are directly attributable to the greater competence of the heads of these schools reflected in the evidence on these points. Although relationships in this regard are doubtless reciprocal, and although better schools would to some extent attract better leadership, one can hardly doubt that some of the superiority of the selected schools has resulted from superior competence of the schools heads. It is worth mentioning in passing that the superiority has been accomplished despite a level of salaries of teachers no higher than that in unselected schools. Unquestionably, one of the first approaches in the effort to improve a small school must be to place it in charge of a competent leader.

A second conclusion from the evidence of the whole study is with respect to the significance of size of school. The fact is that *the differences between the measures reported for one size group and the next largest among the unselected schools are typically greater than between that size group and the corresponding size group among the selected schools.* This conclusion has the corroboration of an important finding of the project of the Survey relating to the reorganization of secondary education, a finding which is to the effect that, as concerns schools with smaller enrollments, size is a more potent factor of the extent of reorganization than type of organization. The conclusion from the present investiga-

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tion is another way of saying that *size is a more important factor than selection* in making for constructive differences among small schools. It would be difficult, if not impossible, to conceive of a conclusion more momentous for the problem of the small high school.

The obvious implication from this finding is that the very small high schools ought to be kept to as small a number as possible. This implication has meaning for all who deal with the problem of small schools, whether they are persons in the localities where these small schools are operating or contemplated or whether they have to do with the determination of State policy in the establishment and maintenance of schools. State policy can be exceedingly influential here and should encourage the establishment only of high schools of good size. Doubtless in most States there are sparsely-settled areas that should be provided with secondary-school opportunities even if enrollments are small, but these should be looked upon as atypical developments. After authorization, such schools should be aided in providing the features of a good institution, as suggested above in discussing the first major implication from the study, but the normal and basic assumptions should be that it is easier to provide a good school where a sizable enrollment is assured and that to maintain a good school with a small enrollment is always an uphill and often an impossible task.

While considering the major implications of this project dealing with the smaller secondary schools we may note again the usefulness of these implications in arriving at fundamental policies in schools and school systems.

3. FOR WHOM THE REPORTS AND FINDINGS ARE USEFUL

Two types of uses of the reports and findings of the Survey have been illustrated, albeit scantily—one in the nature of checking the local situation against practices and conditions found in forward-looking schools and the other being that of applying the major implications of the projects. Resort to these uses should have a beneficial and wide-spread influence on the practices and policies of the schools. A word should perhaps be said concerning the

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groups of school workers for whom the findings should prove most useful. It is probably gratuitous to say that the findings will be useful chiefly to those responsible for our secondary schools, more specifically administrative officers and teachers. All the monographs have meaning for principal and superintendent.

The significance for the teachers is perhaps not quite so universal, except in the teachers' general understanding of and professional relationships to the school. These are unquestionably important. The full list of monographs, however, includes a number replete with specific meaning for the classroom teacher, among them those dealing with provisions for individual differences, the programs of guidance, the library, the program of studies, the several subject groups, and the nonathletic extracurriculum activities. Many of the monographs will have meaning for those at work in elementary and higher schools. The report on articulation of high school and college should be of special interest to those at work in higher institutions. To the professors of education, particularly those emphasizing secondary education, the entire list should be useful. These should find much content pertinent to their courses, both for lectures and student readings. This summary monograph has been planned largely for those who care only for an overview of the Survey, including the intelligent layman.

Among the methods, other than individual reading of the monographs, by which the findings of the reports may be brought to the attention of those most concerned, are study and discussion of the reports at educational meetings. Teachers' meetings in individual schools can profitably be based on them and sectional meetings of educational associations should find them suitable for presentations and discussions. At sessions of educational associations devoted to consideration of the report the presence of members of the Survey staff will be helpful but not indispensable.

4. THE SIGNIFICANCE OF SUCH A SURVEY IN THIS COUNTRY

In bringing this discussion of the use of the findings of the Survey to a close it seems desirable once more to emphasize

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the fact that in this 3-year study attention has been given chiefly to serious efforts at innovation. On this account, as is often mentioned, readers of the report will see passed in review the vast array of practices which have been introduced in order to effect improvement in the schools of this country. Unlike Europe with its national centralization of control of education, we have as many systems of schools and centers of control as we have States. Added to the diversity of practice is the fact that most of the States have allowed their local systems a great deal of freedom to initiate and to experiment. At the same time that, as a nation, we have decentralization of control in education, we aim to foster in all these States the same ideals. How essential it is, then, for those responsible for the schools in one State or locality to have made known to them the nature and direction of progress in the schools of other States and localities. This is the peculiar service of the National Survey of Secondary Education. By examining its reports those at work in any community or State in schools at the secondary level will be able to note the progress and trends at that level in all States and sections and will in consequence be able to give more comprehensive and systematic consideration to the next steps to be taken in improving their own practices.

A word should be said in conclusion concerning the possible bearing of the findings of the Survey on the steps taken toward retrenchment in the schools during the present economic recession. It is a frequent experience that during periods of financial distress those features of the school that have last been added are among the first to go when resources decline. In such times these novel features are dubbed "fads and frills," when in fact they are often more necessary than the features not assailed—features which are retained because of the hold of tradition long after they have outlived their usefulness. We should look carefully into the proposals to eliminate these latest developments in the schools. The report of the National Survey of Secondary Education is appearing in time to be of aid in determining what sacrifices should be made.

CHAPTER III : MAKING THE SURVEY

1. AUTHORIZATION OF THE SURVEY

The Seventieth Congress in February 1929 authorized a 3-year Survey of Secondary Education in the United States to be conducted by the Department of the Interior through the Office of Education. In his letter of transmittal, which follows the table of contents of this monograph, Commissioner Cooper indicates that the membership of the North Central Association of Colleges and Secondary Schools had taken the lead in urging such a Survey.

Under the provisions of the appropriation measure the Survey was to be "of the organization, administration, financing, and work of secondary schools and of their articulation with elementary and higher education." The measure further authorized the employment for temporary service of specialists and experts from the field without reference to the Civil Service Act. The total cost of the Survey as authorized was not to exceed \$225,000. Fifty thousand dollars of this amount was made available for the fiscal year 1929-30, \$100,000 during 1930-31, and \$75,000 during 1931-32.

2. THE DIRECTIONAL AND ADVISORY ORGANIZATION

Administrative organization for the prosecution of the Survey was effected with the Commissioner of Education, William John Cooper, as director. The work of immediate direction of the Survey was assigned to Leonard V. Koos, professor of secondary education at the University of Chicago, who was designated as associate director. Professor Koos carried the work on a part-time basis while continuing his professional activities at the university. Carl A. Jessen, specialist in secondary education in the Office of Education, was assigned to the position of coordinator for the Survey and gave most of his time to the work.

The plans outlined for the Survey included three committees from the field to serve in advisory capacities. The

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first of these, known as the board of consultants, was composed of nine members. This committee was frequently called into consultation by the staff of the Survey, in the early stages conferring over the scope and plans and in the later stages deliberating over the findings. The membership of this board was as follows:

H. V. Church, superintendent, J. Sterling Morton High School, Cicero, Ill.

Ellwood P. Cubberley, dean, School of Education, Leland Stanford University, Stanford University, Calif.

James B. Edmonson, dean, School of Education, University of Michigan, Ann Arbor, Mich.

Charles H. Judd, dean, School of Education, The University of Chicago, Chicago, Ill.

Charles P. Mann, director, American Council on Education, Washington, D.C.

A. B. Meredith, professor of education, School of Education, New York University, New York, N.Y.

John K. Norton, professor of education, Teachers College, Columbia University, New York, N.Y.

Joseph Roemer, director of instruction, Junior College Demonstration School, George Peabody College for Teachers, Nashville, Tenn.

William F. Russell, dean, Teachers College, Columbia University, New York, N.Y.

The second committee, also a professional committee, was somewhat larger and more widely representative of the various aspects of the field of secondary education. It met less frequently than the board of consultants and usually in conjunction with meetings of the department of superintendence of the National Education Association. Besides advising regarding the conduct of the Survey this committee has functioned in interpreting the Survey to other educational workers and in securing cooperation for it. The membership of this committee included the following persons:

E. J. Ashbaugh, dean, School of Education, Miami University, Oxford, Ohio.

John L. Clifton, State Director of Education, Columbus, Ohio.

R. L. Cooley, director, Milwaukee Vocational School, Milwaukee, Wis.

Philip W. L. Cox, professor of secondary education, New York University, N.Y.

Jesse B. Davis, professor of secondary education, Boston University, Boston, Mass.

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- Joseph D. Elliff, professor of high-school administration and high-school visitor, University of Missouri, Columbia, Mo.
- Lucile Fargo, associate director of Library School, George Peabody College for Teachers, Nashville, Tenn.
- * Will French, associate superintendent of schools, Tulsa, Okla.
- John M. Gandy, president, Virginia State College for Teachers, Ettrick, Va.
- Thomas W. Gosling, superintendent of schools, Akron, Ohio.
- Arthur Gould, deputy superintendent of schools, Los Angeles, Calif.
- E. D. Grizzell, professor of secondary education, University of Pennsylvania, Philadelphia, Pa.
- W. W. Haggard, superintendent, Joliet Township High School and Junior College, Joliet, Ill.
- W. A. Jessup, president, University of Iowa, Iowa City, Iowa.
- Franklin W. Johnson, president, Colby College, Waterville, Me.
- J. Stevens Kadesch, superintendent of schools, Medford, Mass.
- Frank M. Leavitt, associate superintendent of schools, Pittsburgh, Pa.
- Michael H. Lucey, principal, Julia Richman High School, New York, N. Y.
- A. Laura McGregor, vice principal, Washington Junior High School, Rochester, N. Y.
- C. R. Maxwell, dean, School of Education, University of Wyoming, Laramie, Wyo.
- Bruce E. Millikin, principal, East High School, Salt Lake City, Utah.
- Shelton Phelps, dean of the graduate school, George Peabody College for Teachers, Nashville, Tenn.
- E. Ruth Pyrtle, Bancroft High School, Lincoln, Nebr.
- Lewis W. Smith, superintendent of schools, Berkeley, Calif.
- W. R. Smithey, professor of secondary education, University of Virginia, University, Va.
- Sarah M. Sturtevant, associate professor of education, Teachers College, Columbia University, New York, N. Y.
- * Milo H. Stuart, assistant superintendent of schools, Indianapolis, Ind.
- Payne Templeton, principal, Flathead County High School, Kalispell, Mont.
- W. L. Uhl, dean, School of Education, University of Washington, Seattle, Wash.
- William A. Wetzel, principal, Central High School, Trenton, N. J.

The third advisory committee appointed by the Secretary of the Interior was a committee of prominent persons interested in education but not actively engaged in educational work. The membership of this committee was drawn from all States of the Union and is representative of a wide variety of interests and occupations. The function of the committee

* Deceased.

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was to make recommendations to the staff of the Survey and to review the findings. The membership of this advisory committee of laymen follows:

Marcus Aaron, Federal Reserve Building, Pittsburgh, Pa.
Chas. Albert Adams, Humboldt Bank Building, San Francisco, Calif.
Jane Addams, Hull House, 800 South Halsted Street, Chicago, Ill.
Roger W. Babson, Babson Park, Fla.
Rhodes S. Baker, Republic Bank Building, Dallas, Tex.
Morgan Barradale, Holland Tunnel Offices, Canal and Varick Streets,
New York, N. Y. (Appointed from New Jersey.)
W. L. Bonney, Gardiner, Me.
H. Fletcher Brown, DuPont Building, Wilmington, Del.
J. O. Carr, 400 North Front Street, Wilmington, N. C.
D. H. Christensen, Christensen Construction Co., Salt Lake City,
Utah.
Howell Cheney, South Manchester, Conn.
George I. Cochran, Sixth and Olive Streets, Los Angeles, Calif.
Mrs. Gertrude Dangberg, Minden, Nev.
Mrs. Louise Dillavou, Billings, Mont.
John Evans, First National Bank, Denver, Colo.*
J. W. Fealer, 129 East Market Street, Indianapolis, Ind.
A. Lincoln Filene, 246 Washington Street, Boston, Mass.
John H. Finley, New York Times, New York, N.Y.
Ernest C. Folsom, president, Teacher Casualty Underwriters, Lincoln,
Nebr.
J. P. Gray, Nampa, Idaho.
F. S. Harman, 397 Madison Avenue, New York, N. Y. (Appointed
from Mississippi.)
Henry J. Haskell, Kansas City Star, Kansas City, Mo.
Henry H. Hilton, Ginn & Co., 2301 Prairie Avenue, Chicago, Ill.
Forney Hutchinson, pastor, St. Luke's Methodist Church, Oklahoma
City, Okla.
Charles F. Jenkins, 232 South Seventh Street, Philadelphia, Pa.
Frank Jenkins, Eugene Daily Newspaper, Eugene, Oreg.
E. Dana Johnson, The New Mexican, Santa Fe, N. Mex.
Jerome Jones, Journal of Labor, Clayton, Ga.
*William S. Kenyon, Judge United States Circuit Court, Fort Dodge,
Iowa.
Charles F. Kettering, Ridgeleigh Terrace, Dayton, Ohio.
Harry R. Lewis, Commissioner of Agriculture, Providence, R. I.
David Littlejohn, State health department, Charleston, W. Va.
John E. Martineau, Judge United States Circuit Court, Little Rock,
Ark.
Charles H. Mayo, Rochester, Minn.
J. D. Millar, Menomonie, Wis.

* Deceased.

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R. A. Nestos, Minot, N. Dak.
William J. Norton, 51 West Warren Avenue, Detroit, Mich.
Willmot M. Odell, 506 Capps Building, Fort Worth, Tex.
Edward B. Passano, Williams & Wilkins Co., Mount Royal and
Guilford Avenues, Baltimore, Md.
Mrs. J. K. Pettingill, 426 West Saginaw Street, Lansing, Mich.
Erskine Ramsay, 1511 Webb Crawford Building, Birmingham, Ala.
R. S. Rogers, Dillon, S. C.
Virginus Randolph Shackelford, Orange, Va.
Bolton Smith, Union & Planters Bank Building, Memphis, Tenn.
Charles Judson Smith, Lexington, Ky.
Edgar B. Stern, Stern Building, New Orleans, La.
W. J. Sutton, Cheney, Wash.
*Lucius Thayer, Harrisville, N. H.
Alvin Waggoner, Philip, S. Dak.
Fred E. Warren, Cheyenne, Wyo.
William Allen White, The Emporia Gazette, Emporia, Kans.
Willis R. Whitney, General Electric Co., Schenectady, N. Y.
Benjamin Williams, Proctor, Vt.
E. M. Williams, 601 Canal Road, Cleveland, Ohio,
Charles F. Willis, 520-528 Title & Trust Building, Phoenix, Ariz.
Matthew Woll, 210 American Federation of Labor Building, Wash-
ington, D. C.

3. THE SCOPE OF THE SURVEY, THE PROJECTS, THE PROFESSIONAL
STAFF, AND THE REPORTS

The scope of the Survey as determined at conferences of the directional staff (director, associate director, and coordinator) with the board of consultants extended to four main divisions. These are (1) the organization of schools and districts, (2) the secondary-school population, (3) administrative and supervisory problems (inclusive of administrative and supervisory personnel and activities), and (4) the curriculum and related problems. The financial aspects, mentioned in the measure authorizing the Survey, were excluded because a special survey of school finance was being proposed to Congress and was subsequently authorized. The problem of the training of secondary-school teachers was likewise excluded on similar grounds.

In the carrying forward of the work of the Survey, the general outline was broken up into what were termed "projects." These were 24 in number and varied widely in magnitude.

* Deceased.

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Although many of these projects bear important relations to each other, which were recognized in assembling and digesting the evidence, they were sufficiently distinct to permit their being regarded as units of the Survey. The complete list of projects follows. They are not listed in logical order nor in the order of their importance but approximately in the order in which work was begun on each project. It will be readily understood that, in a huge enterprise like a national survey, work on all projects could hardly begin simultaneously. The logical relations of these projects were later recognized in the organization and preparation of the final report.

- A. Junior high school reorganization.
- B. Horizontal organization of secondary education and the secondary-school population.
- C. School and district organization for administration and supervision.
- D. School and district organization in certain counties in California.
- E. The characteristics of small high schools.
- F. Selected secondary schools in smaller communities and rural areas.
- G. Guidance.
- H. Administrative and supervisory staff.
- I. Practices in the selection and appointment of teachers.
- J. Provisions for individual differences, marks and marking systems, and promotion plans.
- K. School publicity.
- L. Curriculum.
- M. Extracurriculum activities.
- N. Athletic and other activities involving interscholastic contests.
- O. Articulation of high school and college.
- P. Health education and health supervision.
- Q. Legal and other regulatory provisions (including standards).
- R. Research initiated by the schools.
- S. Supervision of instruction.
- T. Schedule making and registration.
- U. Library service.
- V. Special reorganizations of school systems.
- W. Secondary education for Negroes.
- X. Growth and trends of public junior colleges.

The names of the projects, while suggestive of the range of the Survey as a whole, can hardly indicate the scope of each project. To give such indication would require the reproduction here of the detailed outlines that were prepared—a procedure which is out of the question. The names in the

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list do not disclose that private secondary schools were studied as sources of innovations and that, in the effort to carry out the aim to discover these innovations, all private secondary schools were approached for information concerning their practices. This plan was in line with the recommendation of the consultants of the Survey that it be concerned chiefly with public secondary education but that private schools be investigated as sources of innovation and constructive practice.

The assignments of the professional members of the staff of the Survey follow. The projects are not here renamed but are referred to by the same letters assigned to them in the preceding list. The members of this professional staff were of three types. One of these includes regular members of the staff of the Office of Education who were assigned for a part of their time to these projects. The names of these in the list are followed by the letter O in parentheses. The second are specialists who gave a part of their time to the direction of the projects while continuing their connections with the higher institutions, school systems, or other organizations by which they were regularly employed. The names of these are followed by the letter P and the names of the institutions, systems, or organizations with which they were regularly connected at the time of their appointment to the staff. The third type includes full-time members of the staff stationed at the Survey offices in Washington. Their names in the list are followed by the letter F. For the most part, these include men who had recently completed their graduate training after having had practical experience in the field. The assignments of the professional staff of the Survey were as follows:

Project A: Francis T. Spaulding (P), Harvard University, and O. I. Frederick (F).

Project B: Grayson N. Kefauver (P), Teachers College, Columbia University; Victor H. Noll (F), and C. Elwood Drake (F).

Project C: Fred Engelhardt (P), University of Minnesota, and William H. Zeigel, Jr. (F).

Project D: William M. Proctor (P), Stanford University, and S. S. Mayo (P), Stanford University.

Project E: Walter H. Gaumnitz (O).

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Project F: Emery N. Ferriss (P), Cornell University, and P. Roy Brammell (F).

Project G: William C. Reavis (P), University of Chicago.

Project H: Fred Engelhardt (P), University of Minnesota, and William H. Zeigel, Jr. (F).

Project I: Walter S. Deffenbaugh (O), and William H. Zeigel, Jr. (F).

Project J: Roy O. Billett (F).

Project K: Belmont Farley (P), National Education Association.

Project L: Arthur K. Loomis (P), Denver Schools; Edwin S. Lide (F); Dora V. Smith (P), University of Minnesota; William G. Kimmel (P), Commission of the American Historical Association on the Investigation of the Social Studies in the Schools; Wilbur L. Beauchamp (P), University of Chicago; Helen M. Eddy (P), University of Iowa; Anne E. Pierce (P), University of Iowa; Robert S. Hilpert (P), University of Minnesota.

Project M: William C. Reavis (P), University of Chicago, and George E. Van Dyke (P), University of Chicago.

Projects N, O, and P: P. Roy Brammell (F).

Project Q: Ward W. Keesecker (O), and Franklin C. Sewell (F).

Project R: William H. Zeigel, Jr. (F).

Project S: Roy O. Billett (F).

Projects T and U: B. Lamar Johnson (F).

Project V: Leonard V. Koos (P).

Project W: Ambrose Caliver (O).

Project X: O. I. Frederick (F).

The total professional staff of the Survey, including the directional staff, numbered 31 persons. The number of clerical workers at times brought the total number of persons employed on the projects of the Survey to about 60 workers.

The various projects as listed above eventuated in a series of 28 monographs, of which the present volume is the first. The complete list follows, together with the author or authors of each. The whole report of the Survey is designated as Office of Education Bulletin, 1932, No. 17.

1. Summary. Leonard V. Koos and staff.
2. The Horizontal Organization of Secondary Education—A comparison of Comprehensive and Specialized Schools. Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake.
3. Part-Time Secondary Schools. Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake.
4. The Secondary-School Population. Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake.
5. The Reorganization of Secondary Education. Francis T. Spaulding, O. I. Frederick, and Leonard V. Koos.

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6. The Smaller Secondary Schools. Emery N. Ferriss, W. H. Gaumnitz, and P. Roy Brammell.
7. Secondary Education for Negroes. Ambrose Caliver.
8. District Organization and Secondary Education. Fred Engelhardt, William H. Zeigel, Jr., William M. Proctor, and Scovel S. Mayo.
9. Legal and Regulatory Provisions Affecting Secondary Education. Ward W. Keesecker and Franklin C. Sewell.
10. Articulation of High School and College. P. Roy Brammell.
11. Administration and Supervision. Fred Engelhardt, William H. Zeigel, Jr., and Roy O. Billett.
12. Selection and Appointment of Teachers. W. S. Deffenbaugh and William H. Zeigel, Jr.
13. Provisions for Individual Differences, Marking, and Promotion. Roy O. Billett.
14. Programs of Guidance. William C. Reavis.
15. Research in Secondary Schools. William H. Zeigel, Jr.
16. Interpreting the Secondary School to the Public. Belmont Farley.
17. The Secondary-School Library. B. Lamar Johnson.
18. Procedures in Curriculum Making. Edwin S. Lide.
19. The Program of Studies. A. K. Loomis, Edwin S. Lide, and B. Lamar Johnson.
20. Instruction in English. Dora V. Smith.
21. Instruction in the Social Studies. William G. Kimmel.
22. Instruction in Science. Wilbur L. Beauchamp.
23. Instruction in Mathematics. Edwin S. Lide.
24. Instruction in Foreign Languages. Helen M. Eddy.
25. Instruction in Music and Art. Anne E. Pierce and Robert S. Hilpert.
26. Nonathletic Extracurriculum Activities. William C. Reavis and George E. Van Dyke.
27. Intramural and Interscholastic Athletics. P. Roy Brammell.
28. Health and Physical Education. P. Roy Brammell.

4. THE PROCEDURES IN THE SURVEY

It is more essential to an understanding of the findings of the Survey to have some explanation of the procedures that have been followed than to be informed concerning the organization and scope. Most of the projects have been carried through four steps or stages. The first was that of (1) identifying the schools to be represented in the projects. This identification was with respect to some particular aspect of the school; for example, its organization, curriculum, or library service. The aim here was to find schools with outstanding or innovating practices in the aspect under

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consideration. The second stage involved (2) intensive study by inquiry form of these practices in schools thus identified. This stage supplied the basis for selecting the schools to be visited. (3) Visitation constituted the third stage. During the first-hand contacts afforded by the visits, the specialists gathered additional information, checked on the information gathered by inquiry form, and added that something to their impressions which is gained from observing the practices in the concrete. The fourth and last stage was that of tabulating and digesting the information gathered and preparing the report on the projects.

This dominant 4-stage procedure reflects one of the controlling policies of the Survey, which has been to study innovating practices rather than merely to ascertain typical conditions in all secondary schools of the country. This policy was prompted by the belief that analysis and interpretation of innovating practices would be more helpful to the schools of the country than would a mere study of status. Besides, information concerning status is already available along many lines. Also, it would have been out of the question to have made a study of status of all aspects of the schools represented in the outline in the approximately 23,000 public secondary schools of the Nation.

Some impression of the extent of efforts to get at the facts of practice and conditions in the schools may be gained from a word concerning the numbers of inquiry forms sent out and of visits made to the schools. A total of about 80 different forms were distributed ranging in length from a single post-card page to 46 pages; the number of different pages was more than 800. The total number of forms distributed was almost 200,000, and they went to large numbers of administrative officers in State departments and local school systems, teachers, pupils, former pupils, parents, and employers. The proportion of these forms returned has been highly gratifying, totaling almost two-thirds of all blanks sent out. This proportion indicates a highly favorable attitude toward the Survey and assures for it an excellent foundation of fact.

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The total number of visits to schools made by professional specialists has been more than 850 and the total of different schools visited is more than 550. The visits took the specialists into 41 States and the District of Columbia. The fact that effort was made to observe innovating and outstanding practices wherever located, rather than to distribute the visits proportionally to all States and sections, indicates that such practices are not concentrated in any single State or region, but are widely scattered over the Nation. The distances traveled and the areas represented are evidence that the Survey, is, in truth, in the sense of geographic representativeness, what its title indicates, a "national" survey.

CHAPTER IV : THE HORIZONTAL ORGANIZATION OF SECONDARY EDUCATION¹

1. FULL-TIME SCHOOLS

The problem of horizontal organization.—The rapid increase during recent decades in the enrollment of secondary schools has resulted in increased variation in abilities, interests, and needs of pupils. This variation has led to the development of a diversified offering aimed at serving diverse needs. As the program of the school has expanded, the different lines of education have been divided into curriculums, each representing a grouping of subjects preparatory for some line of activity, usually occupational. In some communities, the different sections of the program have been further divided by providing separate schools for each of the major divisions. The college preparatory pupils may be enrolled in one school, the commercial pupils in another, the trade pupils in another, and the technical pupils in still another. Sometimes separate schools are also provided for the pupils who attend school on a part-time basis. The organization of secondary education to provide specialized training to serve specific needs can appropriately be referred to as horizontal organization, since it is concerned with the arrangement of the different divisions of the program on the same horizontal level. The provision of different curriculums and schools at the same level also calls for horizontal articulation of the system.

The problem of horizontal organization of secondary education is concerned largely with the vocational part of the program and the relations of the vocational elements with other elements. Most of the specialized curriculums in secondary schools include groupings of subjects preparatory for some occupation. Some curriculums are more specific than others, but practically all have a vocational objective.

¹ This chapter is based on materials published in Monographs Nos. 2 and 3 of the report of the National Survey of Secondary Education entitled, respectively, "The Horizontal Organization of Secondary Education", and "Part-Time Secondary Schools", by Grayson N. Ketauer, Victor H. Noll, and C. Elwood Drake. The first section of the chapter summarizes Monograph No. 2, and the second section Monograph No. 3.

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The specialized schools have vocational labels, such as commercial, trade, technical, and vocational. Hence an investigation of the horizontal organization of secondary education necessarily involves a consideration of vocational education and horizontal articulation the relation of specialized curriculums and schools with nonvocational elements.

Prevalence of different types of schools.—Exact data on the numbers of schools of the different types in the country are not available. Since specialized schools are maintained only in the larger cities, the number of comprehensive or general schools in the country as a whole is naturally much larger than the number of specialized schools. Of the 994 schools included in the investigation, the proportion that are specialized is larger for the Eastern than for the Western and Midwestern States.

Staff of different types of schools.—Wide differences are noted in the characteristics of the 2,690 teachers of the different types of schools represented in the study. The teachers of academic subjects on the average reported as much as 9 years of formal education beyond the eighth grade while the teachers of industrial subjects reported only 6.8 years. The teachers of commercial subjects have less education than the academic teachers but more than the teachers of household and industrial arts. Also, academic teachers in general and academic schools have more education than academic teachers in trade schools; the same advantage in training exists for the industrial arts teachers in the comprehensive and academic schools. The reverse relationship exists in regard to experience in occupations other than teaching. That is, the percentage with such experience is higher for the industrial arts teachers in the trade schools than for the same teachers in the comprehensive schools.

Part-time cooperative plans.—Part-time cooperative training receives the hearty endorsement of theorists in vocational education and of teachers of vocational subjects. Under this plan, part of the time of the pupil is spent in school and part is given to actual work on the job. The school instruction consists mostly of the related or theoretical aspects of the training and the experiences on the job provide practice and

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training in the operations carried on by the worker. Under this plan, extensive equipment is not required in school, and training can be made available even though only a few pupils select it. One hundred and sixty-seven schools were located offering such training. The fields for which training is most frequently offered on the part-time basis are automobile mechanics, electricity, printing, carpentry, pattern making, drafting, and sheet-metal work in the industrial field; retail selling and clerical occupations in the commercial field. Other occupations appeared with small frequency. It will be seen that greater emphasis is placed on retail selling in this program than in the full-time training program. In most situations the number of pupils enrolled on a cooperative basis is very small. The largest enrollments are in retail selling. Automobile mechanics and machine shop are highest among the trade fields.

Most of the plans do not involve an exchange of pupils. The length of the alternate period of work and study varies, and there may be one or more plans of alternation within a given school. The most common plan reported by the 167 schools in this study was that in which pupils spend alternate weeks in school and work (37 per cent); in slightly over a fourth of the schools, pupils spend part of each day at school and part at work; about 7 per cent spend two weeks in school, two at work; a few spend alternate days or alternate months. The rate of pay for employment under this plan varies with occupations and with schools; the median rate per day for the schools reporting was \$2. The pupils enrolled in part-time cooperative courses do not differ significantly from the pupils enrolled in similar courses offered on a full-time basis. It will be well to remember that the evidence reported pertains to the school year 1930-31 and that the conclusions from it are probably not characteristic of more recent dates.

Proximity of residence of pupils to secondary schools they attend.—The question has sometimes been raised, Do specialized secondary schools draw from the entire city or do pupils tend to go to the secondary school in their neighborhood regardless of the nature of the program? It is true that

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the largest proportions of the pupils in specialized schools of three cities studied came from the sections of the cities in which the schools are located. This may be explained, in part at least, by the fact that the school is located in the section of the city where the largest number of children interested in the special line of training reside. However, pupils come from all sections of the city to attend these schools. Attendance at a specialized secondary school because it is near at hand would be particularly objectionable if it caused pupils to take courses preparatory for certain occupations when they desired to enter others. If this is the situation, it was not uncovered in the present investigation. Proximity of residence is an important factor in the choice of school by pupils who attend the general and comprehensive high schools, since these schools are organized to serve a section of the city. According to the statement of pupils, the importance of this element decreases as the program of the school offers greater opportunity for specialization, and in schools that have wholly specialized programs practically no pupils report it as the factor which determined the choice of school.

Characteristics of pupils enrolled in various curriculums and schools.—Data were gathered concerning 17,180 pupils enrolled in various curriculums and secondary schools. These data serve to define the groups served by the different types of training. Intelligence data were secured concerning 5,290 pupils. The boys in the college preparatory curriculum in the technical high school rank highest with a median I.Q. of 114. The academic and scientific groups in the comprehensive and general schools rank next. The lowest ratings were those of the industrial arts groups. The median I.Q. for the trade school is 92.4, for the industrial arts group in the comprehensive school 97.5, and for the industrial arts group in the general school 94.6. The commercial groups are uniformly lower than the academic groups and higher than the industrial arts groups, although the differences are not marked. Similar contrasts are noted for girls. The household arts group bears the same relationship to the other curriculum groups as does the industrial arts group for boys. Again, the commercial groups are between the

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academic and the household arts groups. There is little variation between the intelligence of pupils in the same curriculums appearing in different types of schools. That is, about the same type of pupil, intellectually, elects commercial and industrial curriculums regardless of the type of school in which the curriculums are given. Thus, the type of organization of secondary schools, namely, comprehensive or specialized, does not affect the selection of the pupils in the various fields of work. With respect to grades, it is evident that some selection takes place in the traits measured by the tests as pupils progress through the secondary school. The means of the medians of all groups weighted according to the number of cases in each group are as follows: Ninth grade, 98.6; tenth grade, 101; eleventh grade, 103.7; twelfth grade, 104.5. The mental test data of pupils enrolled in the various curriculums are substantiated by the report of success in school work. In general, the percentage having experienced failure of some type is largest for the household arts and industrial arts groups.

The socio-economic level of the different curriculum groups is somewhat in agreement with the intellectual levels described in the preceding section. That is, the academic and scientific curriculums have larger proportions than the other curriculums from the upper levels; the household arts and industrial arts curriculums have larger proportions from the lower economic levels than the other curriculums. While about a tenth of the pupils in the academic and scientific curriculums in the comprehensive schools come from the professional level, the proportion is less than 1 out of 20 for household and industrial arts. A difference in the same direction, though smaller, exists for the semiprofessional group. The proportions are nearly equal for the different groups on the skilled level, and the proportions are smaller for the academic and scientific groups than the other curriculum groups for the semiskilled level. In the respect considered the commercial pupils in the comprehensive schools are more nearly like the pupils in household arts and industrial arts curriculums than in the academic curriculums.

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The different curriculum groups in the general schools bear the same relationship to each other as indicated for the comprehensive school in the preceding paragraph.

The socio-economic data for the technical school present an interesting lack of agreement with the intelligence data. It was indicated above that the college preparatory group in the technical school ranked highest in intelligence in comparison with other academic groups. They do not stand so high, however, in socio-economic rating. In fact, they are nearer to the household arts and industrial arts groups than to the academic groups.

A comparison of the socio-economic status of pupils in each curriculum in the different types of schools shows little variation with type of school. Approximately the same proportion of the commercial pupils in comprehensive, general, technical, and commercial schools come from each of the socio-economic levels. Similarly, approximately the same proportion of the industrial arts pupils in the different types of schools come from each level. The foregoing indications of differences among groups of pupils should not preclude appreciation of the extent of overlapping of groups. All curriculum groups have pupils from all levels. Approximately the same relationships are noted among the different curriculum groups in other data secured in the investigation and not here reported.

Attitudes and association of academic and vocational pupils.— Segregation of pupils in specialized schools has been disapproved by some persons because they believe that such segregation accentuates the development of distinctions and class loyalties in society. Comprehensive schools are believed by these persons to promote social integration, mutual understanding, and cooperation of the different groups. Judgments of 2,738 teachers were secured and measures of attitudes of pupils were constructed and used. On the average, teachers believe that vocational pupils are likely to participate in social activities less in separate schools than in comprehensive schools. They believe, also, that vocational pupils do not associate so freely with academic pupils in out-of-school activities when they are enrolled in separate

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schools as when they are enrolled in the same school. These teachers agree that association of vocational pupils with academic pupils has a good effect on their work attitude. Separation of academic and vocational education is believed by teachers to make the group spirit and morale of vocational pupils somewhat stronger than when they are enrolled in comprehensive schools and that segregation has some effect in creating and fostering feelings of social differences between the two groups. All groups of teachers indicate that it has some effect. A smaller effect is reported by teachers of commercial and vocational schools than by the teachers in academic, general, and comprehensive schools.

The measurement of attitudes of pupils was not carried on extensively enough in the Survey to merit generalization. Attitudes in a comprehensive school in a midwestern city were compared with attitudes of pupils in an eastern city with specialized schools. The different groups in the eastern schools were more critical of each other than the groups in the comprehensive school in the middle western city, but each of the groups in the eastern city were also more critical toward themselves. Some comparisons of the attitudes of first-year pupils with the attitudes of senior pupils showed that senior industrial boys in comprehensive schools reacted less favorably toward industrial pupils and subjects and more favorably toward academic pupils and subjects than did the first-year pupils. This shift is not disclosed for industrial pupils in the segregated schools. These data would suggest (1) that industrial pupils in the comprehensive high school changed in their attitude so as to regard their own group of pupils and subjects less highly and the academic pupils and subjects more highly, and (2) that industrial boys in segregated schools shifted in their attitude to regard their own group and subjects more highly, to regard academic pupils less highly, and to increase their regard for the academic subjects (but not so much as the industrial boys in the comprehensive school). The reader is warned against placing too great reliance on these inferences, especially as the report in Monograph No. 2 on which

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this summary is based imposes important qualifications on them.

Subsequent educational and vocational activities of former pupils.—An attempt was made to secure information on 18,555 pupils who entered 35 schools of different types in 1920 and 1925. Returns were secured for 7,330 former pupils. The pupils returning the inquiry forms were somewhat higher in scholarship than the 18,555 pupils approached. Most of the pupils who left school early reported the economic reason for leaving. The great majority of the 7,330 pupils, four-fifths in point of fact, continued their education either on full-time or part-time basis after leaving or graduating from the secondary school. The full-time secondary school closes the formal education of only a small proportion of the type of pupils answering the inquiry form.

A variety of positions were held by these pupils during the period of time since they left school. On the average, the number of positions was three. There is little difference between the 1920 and the 1925 group, indicating that most of the shifts take place during the first years of employment. A great variety of positions were represented in the occupational activity of former pupils included in the investigation. Clerical work, trade work, and occupations in the manufacturing industries predominate for boys. Clerical work also stands high for girls, and a considerable number of the 1925 group were engaged in some form of personal service. The wide range of occupations gives some assurance of the representativeness of the data secured in the investigation. A large portion of all groups of pupils reported satisfaction with the position held at the time the data were furnished. The reports of girls were more favorable than those of boys. Pupils of the 1920 group reported satisfaction in larger proportions than the 1925 group. The percentage reporting satisfaction varies somewhat among the different vocational groups, although the percentages are high for all groups.

A large proportion of the commercial pupils—more than four-fifths—of all types of schools later entered commercial positions. This percentage is high even for the pupils with a small amount of commercial training. That these pupils

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tend to remain in commercial work is evidenced by the large percentage engaged in such work at the time the data were obtained. The proportion does not vary greatly with type of school. Those who attended the specialized commercial schools entered commercial occupations in larger proportions than did those for other schools, but the differences are not striking.

The proportion of industrial pupils entering the industrial field for which they were trained is not so large as for the commercial pupils. The proportion for the trade schools—three-fourths—approaches that for the commercial groups. The differences between the percentages for commercial and industrial pupils might be accounted for in part by the fact that the industrial training was related to the field of work trained for and the commercial pupils were considered to have entered the occupation trained for if they entered any type of commercial position. The similarity of the data for commercial and trade schools gives support to the procedure that was used. The difference might be explained in part, also, by the greater tendency to consider the shop courses as part of general education than is true for commercial education. Thus, some of the pupils enrolled in industrial courses without any intent of using such training vocationally. It should be noted, however, that a considerable proportion of the pupils in general schools who took industrial courses later engaged in industrial occupations, despite the fact that these courses are sometimes not considered to be vocational in nature. Larger contrasts between types of schools are noted for the industrial than for the commercial field. The percentage entering the occupation for which training was secured is considerably larger for the trade school than for the other types of institutions. The percentage is smallest for the technical school. While about a third of the pupils in industrial courses in the comprehensive schools later entered the occupation for which they secured training, the proportion for the trade school is three-fourths. Approximately the same relationship obtains among the different groups of schools in the proportion engaged at the time of the Survey in the occupation trained

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for as was noted above for the proportion who entered the occupation for which they were trained at some time since they left school.

More intensive and extensive investigation needed in areas canvassed by data reported in monograph.—The data summarized here have described the nature of the program of the different types of secondary schools and the characteristics of the pupils enrolled in them. The judgments of teachers concerning the merits of different features have been reported and objective evidence is given on certain outcomes. While a more extensive canvass is needed and a more intensive analysis of the data might have been made if more time and funds had been available, the data reported should be helpful to the critical student of the horizontal organization of secondary education. Investigation is especially needed concerning the effectiveness of the various procedures and programs in the different types of schools.

2. PART-TIME SCHOOLS

Extent of development of continuation schools.—The concern of this second section of the chapter is the continuation schools and evening schools of secondary grade. These schools, like the full-time schools represented in section 1, enter into the problem of the horizontal organization and articulation of secondary education.

Continuation schools have been developed to provide additional education for persons who find it impossible or who do not have the inclination to complete the regular high-school program. The objectives of the continuation school comprehend the objectives of the regular high school but stress is placed on vocational training in some schools, citizenship training in others, and vocational guidance in still others. The enrollment in these schools nearly doubled between 1922 and 1930. Data of the Federal Office of Education indicate that in 1930 there were 310,214 pupils enrolled in 282 schools in 217 cities with populations of 10,000 and more. This enrollment is slightly less than the enrollment in 1928 (355,115). The decrease may be accounted for by the increase in the enrollment of full-time schools, which

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might naturally absorb some of the enrollment that would otherwise go to continuation schools.

The scope of this investigation in the Survey.—The programs of 312 continuation schools located in 40 States were analyzed. Two hundred and twenty of these schools received Federal aid, and 92 were without such aid. An intensive study was made of the pupils in 10 schools located in 7 cities. Data for the intensive study were furnished by 1,547 boys and 1,445 girls, or a total of 2,992 pupils.

Nature of programs of continuation schools.—A great variety of subjects were reported to be offered in continuation schools. Of the 341 different titles listed, 291 appeared in fewer than 10 of the schools, and 50 appeared in 10 or more schools. There was doubtless much overlapping of content included under the different titles. Home economics and dressmaking both appeared in about a third of the schools, and industrial arts appeared in nearly a fourth. Special phases of industrial arts were also included: About a sixth of the schools reported courses in machine shop and electricity. Among the academic subjects English (28.5 per cent), civics (15.7 per cent), arithmetic (15.4 per cent), and hygiene (12.5 per cent) appeared most frequently. The program of some schools was limited entirely to academic subjects, such as English, civics, and arithmetic, while the program of other schools stressed the practical subjects in household arts and industrial arts. There is indication of flexibility in the programs of continuation schools with a tendency to place large stress on the more immediate educational needs of the pupils. In a few cases, correspondence courses were used.

These continuation schools have a close relationship with the regular high schools. About half of them are housed in high-school buildings. The high-school principal also serves as principal of the continuation school in about a fourth of the schools. In addition, the continuation-school pupils are allowed to enter classes along with the regular-school pupils in slightly more than a third of the schools. Also, in about a third of the schools, high-school credit is allowed for the work done in the continuation schools. In some cases work is set up especially for continuation-school pupils; in others,

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the same courses are used for both groups of pupils. In most of the schools, however, special work is arranged which deviates considerably from the work of the regular full-time pupils.

The pupils are compelled to attend the continuation school a stated minimum amount of time, usually four hours per week. Many pupils attend more than the prescribed amount of time. When they are not employed, they sometimes spend all their time in school because they are interested in the work they are doing. Also, the great majority of the schools allow pupils to remain in the continuation schools even though they are beyond the compulsory attendance age.

The continuation schools place considerable stress on guidance and on the establishment of relationships with the community. Nearly half of the schools reported having a program of placement and follow-up and a plan whereby employers are used to determine the needs of the pupils served by the school. These practices are in harmony with the stated purposes of the schools to facilitate transition from school to occupation.

The pupils in continuation schools.—The pupils in continuation schools vary in the grade they have attained prior to transfer to the continuation school. Nine-tenths have attained at least the eighth grade. Half of them have had as much as one year beyond the eighth grade, and a fourth have had as much as two years of high-school work. A considerable proportion met with failure at some place in the regular school program. Two-fifths of the boys and three-tenths of the girls reported that they repeated a grade or a part of a grade in the full-time school. About a fourth reported that they failed in one or more subjects in their last full semester in high school. However, few reported failure as the most important reason for leaving the full-time school. The economic factor was reported more than any other by both boys and girls as the most important for leaving the full-time school. Lack of interest in school work ranked second for boys and third for girls.

The pupils in continuation schools come largely from the homes of skilled, semiskilled, and unskilled groups of workers. The percentages from the unskilled (11) and from the semi-

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skilled (39.6) are larger than those for any of the curriculum groups in the full-time school. That is, these pupils come largely from the lower economic groups. Only a tenth of the fathers are employed in occupations classed as professional or semiprofessional. These pupils also are typically lower in intelligence than the pupils in the full-time schools. The two groups overlap greatly in this respect, but large differences are found between the medians of intelligence quotients.

The pupils in continuation schools, for the most part, took the first job open to them when they left the full-time school. They located the opening through personal friends or through personal search for work. Only about a tenth acknowledged assistance from the school in securing positions. Many of the jobs held afforded only part-time employment. The median number of hours boys work is 36 and the median for girls is 30. The pay received by boys (median, \$15.06) is much greater than that received by girls (median, \$6.24). In spite of the small pay many receive, a considerable proportion indicated that they were well satisfied with the jobs and that they did not plan to shift to other lines of work. Any help given to continuation-school pupils at this critical time of first employment must contribute greatly to their permanent vocational placement and adjustment.

The development of evening schools.—The enrollment in evening schools has experienced a rapid growth so that the enrollment in 1930 reached a total of 1,038,052, about a fourth of that in full-time secondary schools. The enrollment in 1920 was only 586,843. This increase in enrollment is to be explained in part by the increase in enrollment in the schools in existence in 1920 and in part by the increase from 582 to 664 of number of cities with evening schools. The evening schools have been in operation in the United States over a long period of years. The Federal Office of Education reported as many as 165 in 1890 with a total enrollment of 150,770 pupils.

Scope of the investigation.—Data were obtained on the practices in 439 evening schools. Two hundred and forty-

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four of these schools, distributed to 41 States, received Federal aid, and 195 in 28 States did not receive such aid. These data were secured by means of a check list mailed to them. In addition data were obtained concerning the characteristics of pupils enrolled in evening schools located in five cities.

Nature of program of evening schools.—It is a common policy, for evening schools to offer courses in any field in which a sufficient number of persons show interest. Consequently, one expects to find a great variety of subjects offered in evening schools. A total of 397 different titles were reported by the 244 evening schools receiving Federal aid, and 271 were offered by the 195 schools without such aid. The largest number of courses is in the academic group. Industrial arts is a close second. All subjects that are offered in full-time secondary schools appear in the offerings of these schools and some of the specialized vocational courses are peculiar to the evening school. A large number of the courses are vocational in nature. The programs of the schools with Federal aid are dominated more by vocational courses than are those of the schools without Federal aid. The outstanding characteristic of the programs of evening schools is their comprehensiveness.

Many courses in evening schools appear also in the programs of the full-time schools. About half of the schools reported that there was an attempt to make the content and difficulty of such courses similar to those offered in the day school. However, practically all respondents reported a policy of adapting the content of the courses to the special interests, abilities, and needs of pupils. This adaptation involved, as reported by a great majority of the schools, relating the content of the occupational courses to the occupations in which the pupils were employed. Adaptation is made by employment of teachers with practical experience in the occupations for which courses furnish training, by use of problems of pupils in the courses, and by limitation of courses to persons employed in the occupation, thereby making possible more complete adaptation to vocational needs. Credit is allowed for work in evening schools and

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diplomas or certificates are given after the completion of the required number of units. In about half of the schools, credits earned in the evening school are accepted toward graduation from the regular high school, and pupils in the regular high school are frequently permitted to take courses in the evening school if the courses desired are not available in the day school. Most courses meet two evenings a week and the class sessions are two hours in length. There is considerable variation in the length of the periods and in the number of hours spent in classes each week.

The principal of the high school frequently (in nearly half of the schools) serves also as principal of the evening high school. The vice principal not infrequently fills this position, but a teacher in the day school more commonly (in a fifth of the schools) carries this responsibility. Rarely does the principal of the evening school give full time to evening school responsibilities. The teaching staff of the evening school is drawn largely from the staff of day schools. Sixty-one per cent of the schools not receiving Federal aid reported that practically all teachers were also employed in the day schools. A special salary is allowed for this work, on the average \$4 a night. However, there is large variation in the remuneration for this work.

Considerable effort is put forth in evening schools to maintain close relationship with the community, especially by those schools receiving Federal aid. These efforts consist of provision of organized placement service and follow-up of pupils, obtaining judgments of employers concerning educational needs of the pupils in their employ, and making systematic study of success of pupils and the nature of activities carried on in different occupations.

Characteristics of pupils in evening schools.—The evening schools included in the investigation were attended by about twice as many men as women. The stress on vocational training may account in part for the preponderance of men. These pupils are older than those in full-time secondary schools and in continuation schools. The median age for the men is 24 and for the women 22.1. The ages of the pupils enrolled in the different fields of study do not vary greatly;

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the men enrolled in the academic subjects were somewhat younger than the others, and the women enrolled in the commercial subjects were the youngest of the groups of women. Most of the pupils were born in the United States, but about half of their fathers were foreign born. They come mostly from the middle and lower economic levels. Very few of them come from the professional, proprietary, and managerial groups in the population. The data available concerning intelligence indicate that, as a group, they are inferior to pupils in full-time schools. However, a fourth have intelligence quotients above 109.2, indicating that a considerable proportion are capable of superior academic work. Most of them have not completed the regular high-school course. The median grade attainment of the entire group is the tenth grade. A fourth have completed the twelfth grade and the lowest fourth have not gone above the eighth grade. About half of these pupils enrolled in the general and academic curriculums when they were in regular high school. A third of the men took the commercial curriculum and about a third of the men were divided between the commercial and the industrial curriculums.

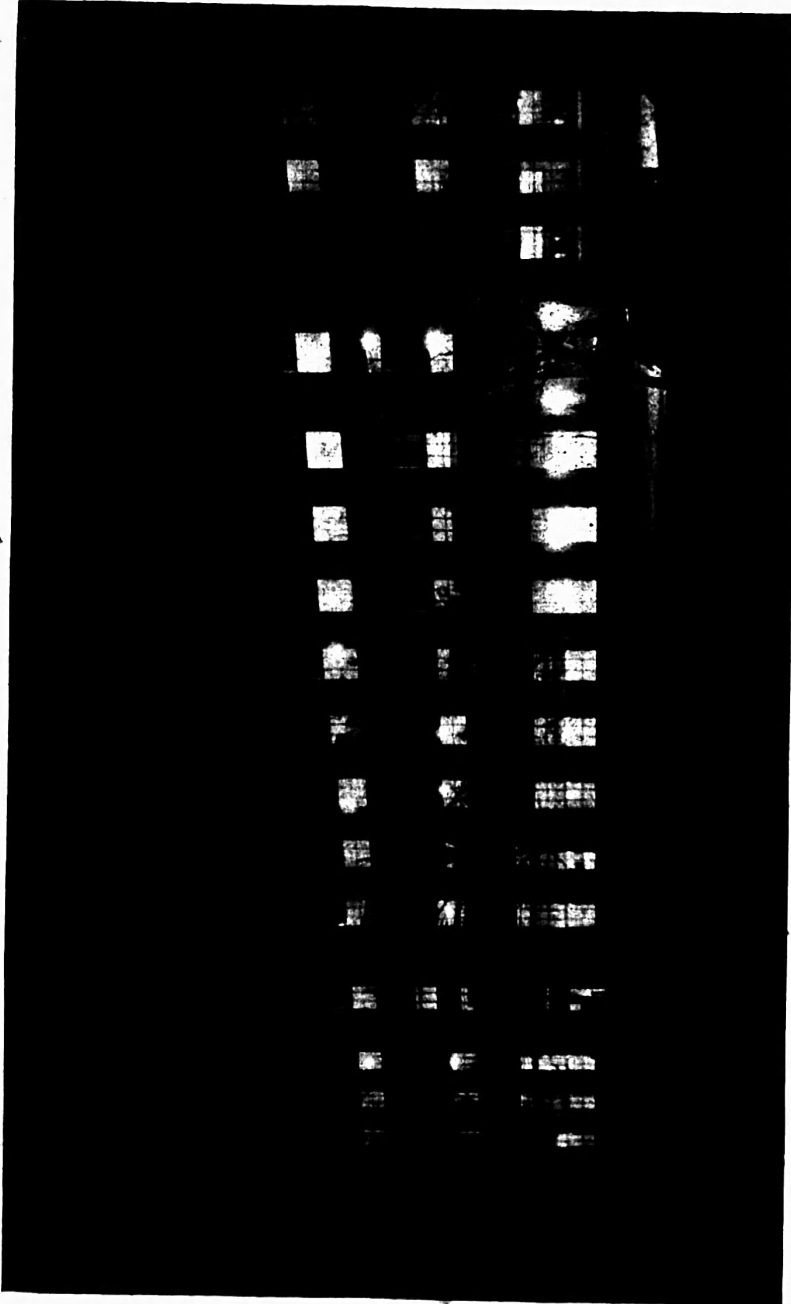
Most of the pupils in the evening schools are employed. They are distributed to a great variety of occupations. The largest proportions of the men are in machine and miscellaneous trade employments, clerical service ranks second, and common labor third. For the women, clerical occupations furnish employment for the largest proportion, home making ranks second, and the miscellaneous trades group is third. Their pay is not large, on the average \$25.81 per week for men and \$17.85 for women. Their reports indicate that they are well satisfied with their positions. Only about a fourth of the men and a fifth of the women report dissatisfaction with their positions. Report of satisfaction does not mean that their plans are always to remain in their present lines of work. About a third of the men and a fourth of the women indicate definite intentions to transfer to other lines of work. Two-fifths of the men and nearly half of the women indicated that they planned to remain in the line of work they were in at the time they made their report.



Courtesy, New York Times.

THIRTEEN HUNDRED BOYS IN THE HAAREN HIGH SCHOOL, NEW YORK CITY, ENROLLED IN GROUND COURSES FITTING THEM TO BE AIRPLANE MECHANICS.

46-1



Courtesy, Superior, Wis., Public Schools.

VOCATIONAL EVENING SCHOOL, SUPERIOR, WIS.

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Pupils in evening school gave economic pressure as the chief reason for leaving the full-time school. Combined with this reason is the desire to be earning money for themselves. A negligible proportion reported failure in school or lack of interest as the reasons for dropping out. Their reasons for attending evening school also have an economic connection. These reasons are mostly associated with the present work of the respondents. The reason most frequently mentioned is the improvement of chances for an increase in rank or in salary. Second in frequency is the preparation for a new field of work. A considerable proportion were concerned with keeping up with new development in the positions held when they furnished the data used in this report. A small proportion indicated that they were securing credits toward graduation from high school or for entrance to college.

Part-time schools contribute to a democratized secondary education.—The part-time secondary schools, both continuation schools and evening schools, are serving a group of pupils who have been denied the opportunities of full-time secondary-school work or who have not been inclined to take advantage of a regular secondary-school training. As a group, these pupils are less favored intellectually and economically than those in the full-time schools. The regular high-school program is not adapted to the capacities and interests of many of these pupils. By providing a modified program and by making it possible for the pupils to earn their support while they study, these schools bring secondary-school training more nearly within reach of all.

CHAPTER V : THE SECONDARY-SCHOOL POPULATION¹

The foregoing chapter includes a summary of the characteristics of pupils in various types of secondary schools, section 1 dealing with pupils in specialized and comprehensive schools and section 2 with pupils in continuation and evening high schools. The characteristics considered are chiefly socio-economic status and intelligence. It remains to present in this brief chapter a summary of the evidence gathered for the Survey in special inquiries bearing on the degree of popularization and democratization of secondary education in the United States. To the inferences drawn from these special studies are added a few of the broadest generalizations warranted by the related studies of pupils in specialized and comprehensive high schools and in continuation and evening schools.

(1) American secondary education has grown with great rapidity during the past half century, both in numbers of pupils enrolled and in popularization among persons in all walks of life. The rate of growth is far in excess of that of the general population and has not been equaled at any other educational level. The growth has been especially marked during the last two decades.

(2) The measure used to indicate the gain of high-school enrollment on the population is the percentage which the enrollment in public high schools in the United States has been of the number in the population of high-school age; that is, 14 to 17 years of age, inclusive. From 1880 to 1930 this percentage mounted from 2.8 to 46.6. With enrollments in private secondary schools added, the proportion of the population of high-school age represented by the enrollment in secondary schools, public and private, was well over half of all. This proportion has unquestionably increased strikingly since 1930, but the exact extent of the increase is not known.

¹ This summary is based largely on the evidence presented in Monograph No. 4 of the report of the National Survey of Secondary Education, entitled "The Secondary-School Population," by Grayson N. Kefauver, Victor H. Noll, and C. Elwood Drake.

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(3) The proportions vary from State to State and from one type of community to another. A conspicuous difference is that between urban and rural communities, the proportions being much larger for cities than for communities with populations of fewer than 2,500. Individual cities might be

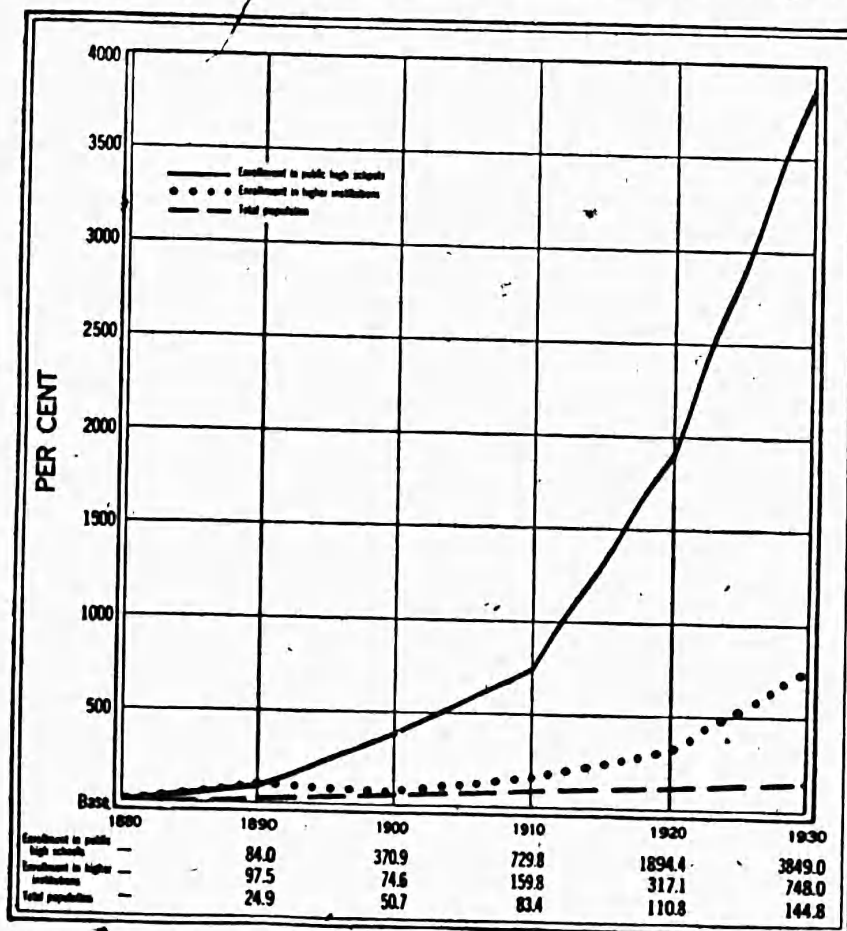


FIGURE 1.—Percentage increase in (1) enrollment in public high schools, (2) enrollment in higher institutions, and (3) total population during the 50-year period, 1880 to 1930. (The numbers for 1880 were used as the base for all percentages)

named in which the proportions enrolled in all types of schools at the secondary level are in excess of nine-tenths of all.

(4) The results of a repetition for two cities, namely, Seattle and Bridgeport, of a study of the social composition of the high-school population made by Counts, disclosed striking increases from 1920 to 1930 in the proportionate

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representation in the high school of all occupational levels in the total population. This finding is in harmony with the conclusion just reported concerning the rapidly increasing popularization of high-school education. To the extent that the lower occupational levels are represented in the increases, it may be assumed that there has been considerable progress toward socio-economic democratization of the secondary schools.

(5) However, when the increases in representation in the high school of the different socio-economic groups are compared, it is found that for Seattle the groups at the upper levels during the interval, already larger at the outset of the interval of years, were gaining on the groups at the lower levels. For example, the gains were larger for the proprietary and professional groups than for skilled and common labor. For Bridgeport the proportions at the different levels appeared to be drawing together. A first inference from the comparisons for these two cities might be that the high schools in Seattle were during the interval becoming less socio-economically democratic, despite the obviously increased popularization, and that the tendency was opposite to that in Bridgeport. At least two considerations detract from the acceptability of such an inference for Seattle. One of these is the wide range of socio-economic status represented by certain of the occupational groups in Counts' classification; they are so wide that they might easily hide genuine progress toward socio-economic democratization in high-school attendance. The other is the possibility that the movement of the occupational distribution among men over 45 in the city during the interval had been from the lower to the upper levels; the work of repeating Counts' investigation did not include the additional inquiry in this direction. It is unfortunate that it was not possible to make such comparisons for two different periods for a large number of cities, so as to justify a more clearly unequivocal conclusion applicable to most urban communities, or even to the country as a whole.

(6) The evidence presented in the full report seems to indicate progress toward intellectual democratization, that is,

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toward increased representation in secondary schools of intellectually less competent youth. It is not that intellectual selection is no longer operative, but that it is *less* operative than formerly. There is evidence that in many communities the secondary-school population as a whole is not far from a representative cross-section of at least the total literate population. The data at hand are not sufficient to yield a statement of the exact degree of progress toward intellectual democratization of education at the secondary level.

In view of the high measures of relationship usually found between intelligence and socio-economic status, the conclusion just set down concerning progress toward intellectual democratization lends support to a conclusion of progress toward socio-economic democratization suggested by the data on popularization and by the increased representation in secondary schools of children of fathers in the lower occupational groups. The evidence reported appears to be internally consistent.

(7) A highly important conclusion from the evidence presented is that intellectual democratization is being achieved by extension of the offering to include vocationalized and other non-college-preparatory curriculums in the secondary schools. This is true whether these curriculums are provided in comprehensive high schools or in specialized schools, such as commercial high schools or trade schools. By the same token, school systems that have gone farthest in providing such curriculums have probably made most progress toward complete intellectual democratization.

(8) Continuation schools and evening high schools are agencies of the democratization of secondary education, the former by affording the opportunities of secondary education for pupils of typically lower intellectual and socio-economic status and the latter for persons who are typically of lower socio-economic status and more mature than pupils attending full-time secondary schools.

CHAPTER VI: THE VERTICAL REORGANIZATION OF SECONDARY EDUCATION¹

1. PURPOSE AND METHODS OF THE STUDY OF THE REORGANIZED SECONDARY SCHOOL

Purpose of the study of reorganized secondary schools.—The study of reorganized secondary schools has been concerned with four questions of immediate significance in American secondary education:

(1) What sort of school organization has the junior high school movement tended to produce?

(2) How does the organization of the typical reorganized school compare with that of conventional 8-4 system schools?

(3) What special types of reorganized schools seem to be of greatest promise?

(4) What characteristics in school organization are most likely to contribute to comprehensiveness and flexibility in a school's provisions for its pupils' needs?

Definition of "organization."—In dealing with these questions, the study has defined the term "organization" somewhat broadly. A school's organization has been assumed to comprise all the arrangements which the school makes to furnish a framework for effective education. For convenience in classification, nine major features of organization have been recognized, as follows: (1) Provisions for the admission and promotion of pupils; (2) the arrangement of instruction, in terms of departmentalization, the size of classes, the length of school sessions, the use of standardized tests; and the adoption of special schemes which make possible direct attention to individual differences; (3) the scope and arrangement (but not the detailed content) of the program of studies; (4) the scope and arrangement (but not the detailed content) of the school's extracurriculum program; (5) the school's provisions for the educational and vocational

¹ This chapter is based on Monograph No. 5 of the report of the National Survey of Secondary Education by Francis T. Spaulding, O. I. Frederick, and Leonard V. Koss, entitled "The Reorganization of Secondary Education." Secs. 1 to 6, inclusive, are based on Part I by Spaulding and Frederick; sec. 7 on Part II by Frederick, and sec. 8 on Part III by Koss.

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guidance of its pupils; (6) provisions for the articulation of the school with other school units; (7) the composition of the teaching staff; (8) arrangements for the supervision of instruction; and (9) the school's housing and equipment.

The measures of comprehensiveness and consistency of organization.—In the study on which the present summary is based two means of comparing the effectiveness of various types of organization have been used. These are referred to as measures of *comprehensiveness* and of *consistency* of organization. A school assigned a high score on comprehensiveness for any of the features listed in the foregoing paragraph is one having a relatively large number of specific practices under the heading of that feature. Furthermore, effectiveness of organization is assumed to be dependent not only on the number of different practices followed in connection with any individual feature but also on the extent to which *all* features have been developed. Serious neglect of one or more major features can not be completely atoned for by expansion in other features. The measure of consistency, therefore, is based on the extent to which a school makes adequate provision for all major features at once. These measures of comprehensiveness and consistency are often referred to in this summary and in the complete report on which it is based.

Sources of data.—Detailed descriptions of practice in more than 600 individual schools have been obtained through the use of an extended check list. This check list was so designed as to provide for an account of an individual school's activities under each of the nine major features of organization. Visits to a score or more of the schools which reported on their organization by means of the list indicate that the descriptions of practice thus secured were in the main highly trustworthy.

Reports were obtained from schools in all sections of the United States. The schools which furnished data represent every major type of organization (as determined by the combination of grades included) now in extensive use, and provide examples of school practice in institutions of various enrollments. It is probable that the returns are more largely

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representative of the better schools of each type than of the average or inferior schools. In spite of this limitation, the data allow more nearly complete and more reliable answers to the questions with which the study is concerned than have previously been obtainable.

2. THE TYPE OF SCHOOL ORGANIZATION PRODUCED BY THE JUNIOR HIGH SCHOOL MOVEMENT

Types of grade grouping produced by reorganization.—The type of school organization produced by the junior high school movement may be described most clearly in terms of the grade groupings commonly adopted in reorganized schools, the relative sizes of these schools and of the communities supporting them, and the prevailing characteristics of the schools as indicated by reports of detailed practice.

The movement for secondary-school reorganization has produced a wide variety of special types of grade grouping. The great majority of reorganized school systems have adopted either a 6-3-3 or a 6-6 plan of organization, with occasional use of the 6-2-4 plan. Present tendencies increasingly favor the 6-3-3 and 6-6 plans. The grade combinations under these plans have resulted in three major types of reorganized schools; Separate junior and senior high schools, undivided 6-year schools, and combined junior-senior high schools. Of these three types, the last represents a compromise between the first two types, providing for a distinction between junior and senior units, yet allowing the administration of both units within a single school.

The size of reorganized schools.—Data gathered in 1930 show that as compared with conventionally organized high schools, most reorganized schools are relatively large schools. With the exception of 4-year junior high schools, separate junior and senior high schools tend in the main to be city schools. Junior-senior high schools are found predominantly in small communities and communities of moderate size. Undivided 6-year schools and 4-year junior high schools are typically rural and village schools.

Reorganization in communities of various sizes.—Changes in the average sizes of reorganized schools between 1925-26

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and 1929-30 indicate a growing tendency among rural and village communities, which have thus far been only slightly affected by the junior high school movement, to abandon the conventional organization in favor of some form of 6-year school. This tendency has already had the effect of making junior-senior and undivided 6-year schools more numerous throughout the country as a whole than separate junior and senior high schools. The great majority of reorganized school pupils, however, are still enrolled in separate schools forming parts of city school systems.

Practice in the "typical" reorganized school.—As a means of gaging the effects of the junior high school movement on specific practice, reports from a total of 506 reorganized schools have been combined to show the prevailing characteristics of these schools. The resultant description of the "typical" reorganized school is in many respects disappointing. It clearly indicates that reorganized schools in general have adopted only a limited number of the varied adjustments urged by the active proponents of the movement. In the majority of junior and senior high schools, emphasis has apparently been more directly placed on the development of the extracurriculum program than on any other major feature of organization. The adoption of a comprehensive guidance program, the use of reliable measures of ability and achievement, and provision in the school organization for the special needs of the brighter pupils, seem in particular to have received less than their due share of attention. Though junior high schools have commonly adopted a somewhat more comprehensive and flexible organization than that of most senior high schools, the major points of emphasis and lack of emphasis in both school units seem to be approximately the same.

It is obvious from the data secured in this investigation that the movement for reorganization still possesses abundant vitality. It is also obvious that the movement has touched somewhat superficially most of the schools which have professed to be affected by it. Reorganization still has far to go before it will have accomplished what has been expected of it, even among schools which are nominally already reorganized.

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3. THE TYPICAL REORGANIZED SCHOOL COMPARED WITH CONVENTIONAL SCHOOLS

Differences between reorganized and conventional schools.—

In spite of its weaknesses, the organization of most junior and senior high schools probably compares favorably with that of most conventionally organized schools. Differences between the practices characteristic of the reorganized schools included in the study, and the practices reported for grades 7 through 12 by a group of conventionally organized elementary schools and 4-year high schools, are in a number of instances highly significant.

Reorganization has apparently been attended in most schools by an increase in the provisions for articulation between the upper high-school unit and the preceding school unit, by more systematic arrangements for educational and vocational guidance, by greater flexibility and perhaps also greater comprehensiveness in the program of studies, by more attention to the development of extracurriculum activities, and by an increase in the qualifications of teachers in the seventh and eighth grades. Reorganization seems also to have resulted in smaller class enrollments and somewhat longer class periods in the seventh and eighth grades, and in more systematic attention to the improvement of the curriculum by teachers of these grades.

Against these presumable gains is to be set an apparent loss in the usual provisions for articulation between the sixth and seventh grades and in the qualifications of teachers in grades 9 through 12. There may have been a slight loss also in the flexibility of requirements for admission to the seventh grade.

The data at hand show no clear differences between reorganized and conventional schools in the matter of their equipment, their provisions for individual differences through various methods of class organization, or their general arrangements for supervision.

*Progress in junior and senior high school organization compared.—*Contrary to a widely prevalent assumption, the senior high schools would seem to have accomplished quite as much in the introduction of revised practice as the junior

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high schools. The differences between the typical junior high school organization and the organization of the elementary schools are no more marked than the differences between the organization of the senior high schools and those of the 4-year high schools. The typical senior high school organization is, to be sure, less comprehensive and less flexible than the organization of the typical junior high school. The disparity between the schools in this respect is perhaps attributable, however, less to any special conservatism on the part of the senior high schools than to the fact that the upper schools units have had farther to go in improving their organization than have the lower.

General effects of reorganization.—Considered as a whole, the differences between the conventional and the reorganized schools seem definitely to favor the latter. Any general conclusion as to the superiority of the reorganized schools needs, nevertheless, to be qualified in the light of certain important facts. Except in the matter of grade combinations, every one of the practices reported by reorganized schools was reported by one or more of the conventional schools. Moreover, a considerable number of conventional schools reported all the practices reported by the typical reorganized school, and other practices as well. Clearly, reorganization in the sense of changed grade grouping is in itself no guarantee of superiority.

The form of grade grouping adopted by the reorganized schools has probably, even so, had much to do with the apparent superiority of these schools. Though the conventional organization does not prevent desirable practice, reorganization involving a regrouping of grades may quite conceivably make such practice easier to achieve. In the light of the data gathered for this study it seems fair to conclude that the junior and senior high school organization has shown itself definitely more serviceable in the improvement of school practice than has the conventional form of organization.

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4. THE COMPARATIVE PROMISE OF VARIOUS SPECIAL TYPES OF ORGANIZATION

Comparisons by size and type.—Various special types of reorganized schools differ markedly from each other in the specific practices which they have commonly adopted. As a means of determining whether any one of the usual types of organization is of greater promise than the others, detailed comparisons have been made of the procedures reported by schools of each of the major types, and by schools of various sizes. The results of these comparisons are here briefly summarized.

Effect of size of enrollment.—Small enrollment tends notably to prevent variations in school practice. Differences in practice among small schools of differing types of organization tend in the main to be fewer and less important than differences among large schools of the same types. Among small schools, indeed, the repressive effect of limited enrollment is so great that the type of organization adopted seems to be *relatively* of little moment.

Each major increase in enrollment tends to be accompanied by a marked increase in general comprehensiveness of organization. Differences between large and small schools are so great that large schools of any type are likely to be more comprehensively organized than small schools either of the same or of any other type. Moreover, the advantage possessed by the large school is a "real" advantage, in the sense that it is based upon a greater number of inherently desirable practices, rather than upon mere complexity of organization.

The differences in practice accompanying differences in enrollment are so important that in judging the effects of type of organization, size of enrollment has had to be taken into definite account. Size has been recognized in the present study by restricting comparisons of practice to schools falling within equivalent enrollment groups.

General superiority of 6-year schools.—Compared with other reorganized schools of equivalent size, the 3-3 plan junior-senior high schools and the undivided 6-year schools prove in general to be the most comprehensively organized of the various types of schools studied. In each of the nine

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major features of organization these schools tend to make at least as extensive provisions as are found in other schools. The junior-senior high schools and the undivided 6-year schools provide more extensively than other schools for the articulation of the school units, for the organization of extracurriculum activities, for educational and vocational guidance, for the maintenance of high standards in the appointment of teachers, and for the offering of a broadly-comprehensive program of studies. Considered as individual schools, moreover, the junior-senior and undivided schools exhibit marked superiority in the consistency with which they provide for all their major features of organization at once. They tend more frequently than other schools to have developed all these features concurrently, rather than to have built up certain features to the neglect of others.

Large junior-senior high schools compared with large separate schools.—It has been noted earlier that large school systems have in general adopted the separate junior and senior high school form of organization. A sufficient number of large junior-senior high schools submitted reports on their organization to permit a comparison of separate and combined schools having various total enrollments up to approximately 2,000 pupils.

The results of these comparisons indicate a distinct superiority on the part of the combined schools, which increases as the size of the schools increases. Not merely in their arrangements for articulation between the junior and senior units, but in their organization of instruction, their senior high school programs of studies, their extracurriculum programs for both junior and senior high school grades, their provisions for guidance, and their supervisory programs for the senior units, the junior-senior high schools report appreciably more comprehensive organizations than those of the separate schools. The advantage of the junior-senior schools with respect to consistency of organization is even greater than their advantage in comprehensiveness. As compared with individual junior and senior high schools, $5\frac{1}{2}$ times as large a proportion of junior-senior schools attain median standing for their size in all features of junior high school

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organization, and 10 times as large a proportion meet a similar standard in their senior high school organization.

The differences between the combined and separate schools are particularly noteworthy because of the esteem in which separate 3-year junior and senior high schools are commonly held. The comparisons here reported suggest that the advantages usually attributed to separate schools may be products quite as much of large enrollment as of the form of grade grouping adopted.

Small junior-senior high schools compared with small undivided schools.—Most common in very small systems are the reorganized schools in which the six secondary-school grades are administered as a single unit. Compared with junior-senior high schools of equivalent size, these schools, like the separate junior and senior high schools, appear at a disadvantage. Their disadvantage decreases with major increases in enrollment; and in certain features—as, for example, in their arrangements for guidance and in their supervisory programs—the undivided schools are likely to be more comprehensively organized than the combined schools. The latter, however, tend to show at least a slight superiority both in general comprehensiveness of organization and in consistency of organization within individual schools.

Relative merits of other common types of reorganized schools.—Four-year junior high schools, which are commonly found only in smallest school systems, have not been represented in large enough numbers in the study to justify more than a tentative judgment concerning their type of organization. In comprehensiveness of organization they seem to be superior to conventional schools of comparable size and to schools organized on a 2-4 basis, though whether they are equivalent in comprehensiveness to 3-year schools is uncertain. They are notably inferior to small junior-senior high schools and undivided 6-year schools. In consistency of organization they probably rank with 3-year junior high schools.

Separate junior and senior high schools and combined junior-senior high schools administered on a 6-2-4 basis are as a group the least comprehensively organized of the various types of reorganized schools investigated. Schools of this

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type seem to vary markedly in their particular strengths and weaknesses. The range in the practice is indeed almost as great as that of conventionally organized schools, which they strongly resemble. Two-four-plan schools in general are hardly more comprehensively organized than 8-4-system schools, and attain a desirable standard for consistency of organization only slightly more often.

Significance of these comparisons.—Judged in terms of comprehensiveness and consistency, junior-senior high schools organized as parts of 6-3-3 systems seem at present to be superior to other types of organization. Individual schools of the less favored types, however, frequently rank above some of the better junior-senior high schools. The general superiority of the junior-senior organization can therefore not be fairly interpreted as implying a necessary causal connection between form of organization and relative comprehensiveness and flexibility in school practice. As in the case of the differences between reorganized schools and conventionally organized schools, *the differences among the various groups of reorganized schools probably spring not so much from what the different types of organization cause as from what they make possible.*

The fact that the junior-senior organization seems to make desirable practice more readily possible than is the case under other forms of organization is nevertheless of obvious significance. The greater convenience offered by the junior-senior organization furnishes no necessary reason for the adoption of this type of organization in every secondary school. It does, however, clearly point to the need for special effort on the part of schools organized on other bases, if the relative handicaps of the less serviceable forms of organization are to be successfully overcome.

6. CHARACTERISTICS LIKELY TO PROMOTE EFFECTIVE ORGANIZATION

Why schools differ in the effectiveness of their organization.—Quite as important as the identification of especially serviceable forms of organization is a recognition of the characteristics which are likely to promote effective organization in individual schools. Particular effort has been made in this study to discover not merely *how* various types of schools

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differ but *why* they differ. It seems probable that there are at least four major characteristics which distinguish superior types of organization from average or inferior types. Listed in what seems to be the order of their importance, these characteristics are as follows:

(1) *Possession of large enrollments in separate grades.*—

Large total enrollments gained by combining numerous grades in a single organization presumably make easier the introduction of certain desirable practices. Large average grade enrollments, however, probably represent a more important advantage than large total enrollments. The adoption of a form of organization, of no matter what special type, which permits large grade enrollments within a single school would seem to be of the first importance in providing for more effective organization.

(2) *Adoption of grade combinations which free the school from a conventional pattern.*—Conventionally organized schools seem to be inferior in organization to most reorganized schools not so much because of any inherent disadvantage in their forms of grade grouping as because those forms tend to bind the schools to practices which reorganized schools are able to avoid or improve upon. Two-four-system schools seem to be less well organized than 3-year junior and senior high schools for a similar reason. Not the peculiar merit of a 3-year grade combination, but the fact of a sufficient break with the traditional pattern to allow freedom in introducing new practices, seems to give the 3-year schools their principal advantage. Thus the adoption of a form of organization which departs unmistakably from the conventional—again irrespective of the particular type of organization chosen—would seem to provide marked opportunity for greater effectiveness.

(3) *Provision for the close association of junior and senior units.*—Combining the junior and senior high school grades in either a junior-senior high school or an undivided 6-year school seems to result in at least three important benefits. The proximity of the units apparently causes each unit to stimulate the other in the adoption of desirable procedures. Administered within a single school, the junior and senior

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high school grades may readily make in combination certain special arrangements which neither could as easily undertake alone. Junior and senior units working under a single school organization more readily achieve uniformity of purpose and of standards. Within any system in which all the secondary-school grades are considered to have the same general purposes, and in which essentially the same methods and materials of teaching are employed in these grades, the combination of the grades in a single school seems likely on the whole to make for more effective organization.

(4) *Recognition of the junior and senior high school grades as coordinate units.*—As between undivided 6-year schools and junior-senior high schools, whatever major advantage is held by the latter seems to be due to arrangements through which the upper school unit is not allowed to overshadow the lower. The present need for improvement in the work of both school units means that the problems of each require direct attention. Such attention can probably best be assured by the assignment to each unit of at least one supervisory officer whose primary concern is with that unit. A form of organization making some such provision as this offers still further opportunity for effectiveness.

These four general characteristics represent the impersonal factors which most clearly distinguish superior types of secondary-school organization at the present time. Details of practice which still further characterize outstanding secondary schools are listed and commented on at length in the full report of this study. Both the general characteristics of superior schools and their detailed practices merit careful consideration.

6. IMPROVEMENT OF ORGANIZATION IN THE INDIVIDUAL SCHOOL

Most secondary schools face conditions which are presumably not greatly different from the conditions affecting the schools considered in detail in this study. Hence for the majority of individual schools the procedures here described are likely to be of marked advantage.

It should be pointed out, nevertheless, that the general value of such procedures does not necessarily imply their

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corresponding value in every school situation. Detailed knowledge of the problems confronting the individual school is necessary before any wise decision can be made as to appropriate organization. In spite of the usefulness of certain general patterns of organization, improvement in the organization of the individual school must still chiefly depend on thoughtful and painstaking effort by the school's administrative officers to find the best possible solution for that particular school's special problems.

7. RECENT GROWTH AND PRESENT STATUS OF THE PUBLIC JUNIOR COLLEGE

Scope and method of the project.—Approximately 2,000 articles, research studies, and books indicate an active and wide-spread interest in the junior college movement. This project is concerned with the recent growth of junior colleges (for white students) operated under public auspices and with their status in regard to control, housing, and relation to high school. Private junior colleges are considered very briefly for purposes of comparison, and for giving an impression of the status of the whole movement.

In order to ascertain growth and trends, the procedures employed in this study for 1931 were practically identical with those used by Koos² in 1922 and 1927. Throughout the report, data for 1922 and 1927 were taken from his findings.

Usable replies were received from 127 of the 136 local public (hereafter designated public) junior colleges, and 30 of the 39 State junior colleges known to be in existence in 1931. Findings with respect to housing and relation to high school were based on these returns only. Data concerning enrollment, control, geographical location, and dates of establishment of the few institutions not responding were secured from the directory of the junior colleges.³ The information reported concerning private junior colleges (for white students) was taken from the same directory.

² Koos, Leonard V. Recent Growth of the Junior College. *School Review*, 36:256-266. April 1928.

³ Campbell, Doak B. Directory of the Junior College, 1932. *Junior College Journal*, 2:235-248, January 1932.

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Summary of findings.—State junior colleges are a diverse and relatively unstable group. The number of units in normal schools and teachers colleges has decreased steadily from 18 in 1922 to 3 in 1931. Most, if not all, of the decrease has been due to the attainment by normal schools of the status of 4-year colleges. Other types of State junior colleges have more than offset this decline. It may be noted especially that all 11 of the junior colleges in Mississippi (which by some would be designated as county and, therefore, local public junior colleges) have developed since 1922. Three fourths of the public junior colleges are in city school systems and most of the others are in districts coterminous with one or more junior high school districts. A few are in township high school districts.

Approximately seven-eighths of the public junior colleges and almost three-fourths of the State junior colleges are housed on the same sites as the high schools, usually in the same buildings. Previous investigations have revealed other ways in which junior colleges and high schools are frequently integrated.

The States with the most public junior colleges are California, Iowa, and Texas. In all three sections of the United States typified by these States the development of new public junior colleges has been rapid. The States with the largest numbers of State junior colleges are Mississippi and Oklahoma.

Exclusive of those for Negroes and those which are lower divisions of universities and located on the same campuses, the number of public junior colleges known to be in operation in the United States was 136, the number of State junior colleges was 39, and the number of private junior colleges was 273—a total of 448. In the two college years represented and exclusive of students taking only extension courses, the enrollment was nearly 38,000 in public junior colleges, almost 10,000 in State junior colleges, and more than 36,000 in private junior colleges—a total in excess of 83,000 students.

Almost all junior colleges operating under public auspices have been established as such during the past two decades.

*Not including 11 private junior colleges for which enrollments were not reported.

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The momentum of the movement steadily increased until 1927. After that date the growth in number of institutions slackened somewhat but the enrollment mounted even more rapidly. The number of public junior colleges reported to have been organized in the two years 1928 and 1929 was only equal to the number for the single peak year of 1927. It seems logical to conclude that this was due, in part at least, to the fact that fewer communities in the States concerned were in need of new public junior colleges after the rapid development in 1927. The number of public junior colleges reporting to have been organized in 1930 and 1931 was only a third of the number for the two preceding years, which were not peak years. Economic conditions during the period probably had an effect. This explanation fits in well with the acceleration in terms of numbers of students, because it seems plausible that in adverse times more students than usual would attend junior colleges while living at home rather than going to colleges and universities away from home where attendance would be more expensive. In certain States laws passed since 1927 specifying conditions to be met before a new public junior college can be established may have had some retarding effect, but this has not been a major factor for the movement as a whole, because States not affected by such legislation show the same decline in number of new units organized.

The result of the more rapid growth in enrollment than in number of schools has been larger institutions, as may be judged from Figures 2 and 3.

Four points stand out prominently in this study. First, junior colleges operating under public auspices are commonly integrated in one or more ways with high schools or high-school departments. Second, private junior colleges are more numerous than local public and State junior colleges combined but typically have much smaller enrollments in the freshman and sophomore college grades. Third, in all three types of junior colleges the enrollment has grown even more rapidly in recent years than has the number of institutions. This growth has resulted in larger units. Fourth, the phenomenal growth of the junior-college movement is

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evidence of a vitality which merits for the movement the serious consideration of those interested in the organization of secondary and higher education.

8. SPECIAL REORGANIZATIONS INVOLVING THE JUNIOR COLLEGE

The special reorganizations considered.—Almost a score of reorganizations are dealt with in the concluding part of the monograph. The treatment has divided them into two

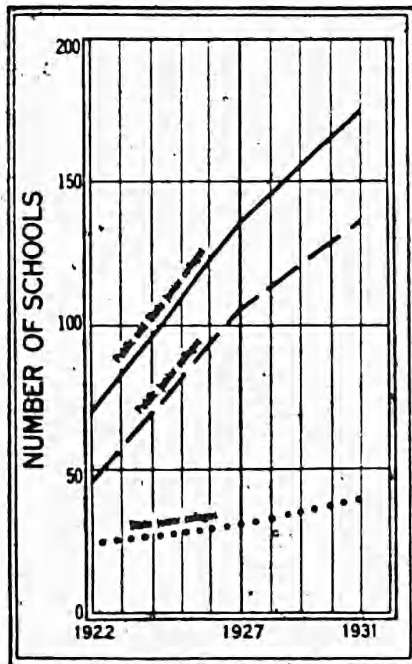


FIGURE 2.—Number of public (local control) and State junior colleges in operation in 1922, 1927, and 1931.

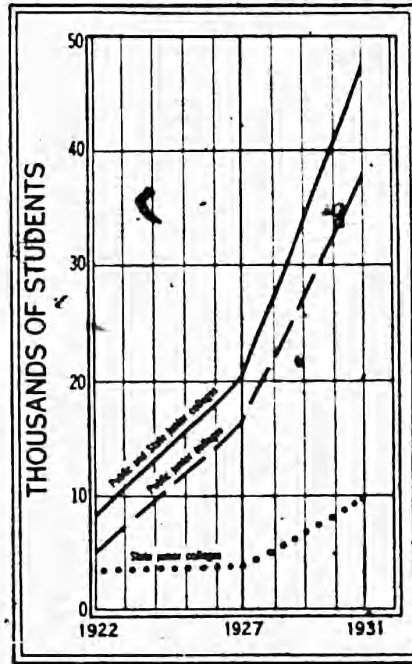


FIGURE 3.—Number of students in public and State junior colleges in operation in 1922, 1927, and 1931.

groups; (1) the reorganizations to save time, and (2) the reorganizations to achieve integration of high-school and junior-college years. The special reorganizations considered under the heading of reorganizations to save time are the experiments or realignments in the public schools of Kansas City, Mo.; Joliet, Ill.; Salt Lake City, Utah; Concord, N. H.; Tulsa, Okla.; Baltimore, Md.; and in the University of Chicago Laboratory Schools. Those considered under the heading of reorganizations to achieve integration are the rearrangements in public schools at Pasadena, Ventura,

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Compton, and Salinas, Calif.; Moberly, Mo.; Hillsboro, Tex.; Iowa Falls, Iowa; in the John Tarleton Agricultural College in Texas; in Stephens College; and the College of the University of Chicago. With two exceptions the reorganizations examined involve the work of the junior college, and in the case of the exceptions, extension of the system to include the junior college was at least contemplated.

The approaches to the saving of time in the first group are varied. In most of the group the usual 12-grade system has been shortened to 11 grades. The saving has been effected chiefly in the elementary grades. The first of the northern systems to go on this basis was Kansas City. Others of the group now on this basis are Salt Lake City, Concord, and the Laboratory Schools at the University of Chicago. Kansas City is now carrying on an experiment aiming to save another year in high-school and junior-college grades. At Joliet the procedure is to enroll selected high-school seniors in freshman college courses. At Tulsa the approach is through a careful classification of pupils and the preparation of differentiated curriculums; the curriculum of superior pupils will be planned to carry them through the second year of college work in 12 years. In Baltimore capable high-school pupils carry additional subjects and do five years of work in four years, subsequently entering higher institutions as sophomores.

With the exception of a single institution, the reorganizations to integrate set up a 4-grade institution including the last two years of high school and the two years of the junior college. The exception is Salinas, where only the last high-school year has been joined with the junior college. With two exceptions, all such of these reorganizations as are in local school systems, namely, Pasadena, Ventura, Compton, Hillsboro, and Iowa Falls, include junior high school units of four grades. One of these exceptions is Salinas, with a 3-grade high school comprehending the ninth, tenth, and eleventh grades, and the other is Moberly, where the junior high school now includes only the eighth, ninth, and tenth grades but will later include also the seventh grade. The degree of integration in these reorganizations varies. Integration begins with the housing of high-school and junior-

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college years in a common plant. It often includes some assignment of individual staff members to teaching at both high-school and junior-college levels and membership of students at both levels in the same extracurriculum organizations. The integration does not often affect the curriculum; in this respect much more progress is desirable.

A comparison of the two groups.—The reader is warned against assuming that the reorganizations in each of the groups described have no other special purpose than those implied in the grouping—in the first group, to save time, and in the second group, to integrate high-school and college work and thereby to work out a better articulation in the school system. The grouping aims merely to bring out what appears to be *the* or *a* major purpose of the special reorganization.

The fact is that no hard and fast line separates the two groups. On one hand, the experiments at Kansas City, Joliet, and Tulsa all involve the integration of high school and college in one way or another. On the other hand, certain of the plans in the second group have aimed or are aiming at saving time for the student: The reorganization in Pasadena by the new cooperative arrangement with authorities at the University of California which permits students in the upper half of the twelfth grade to take college courses; the reorganization at Stephens by an arrangement for students to begin college courses while still in high-school years; the projected college at the University of Chicago by extending the features of its New Plan, which includes opportunity for accelerated progress, into the last two high-school years.

Even the remainder of the second group may be assumed to be effecting something in the way of economy of time because individual staff members in the integrated units who give instruction in identical subject fields on both sides of the arbitrary line separating high-school and junior-college work will tend to work out a better articulation of courses than obtains in institutions in which the levels are separately administered. Also, guidance workers in integrated units will more often advise individual students against taking both of two courses covering much of the same ground given at the two levels.

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The foregoing discussion directs attention to the two possible methods of economizing time. One of these is the obvious procedure of reducing the length of time required to traverse a given period of education. Reorganizations of the first type here considered obviously belong in this category. The other procedure is to enrich the period of education without shortening it, as is possible in reorganizations of the second type. Advocates of reorganizations of the first type can, however, contend with some justification, that their procedure achieves both types of economy of time, more especially for students continuing to higher levels of education.

The argument for economy through shortening the period of training is a potent one as it applies to students destined for professional or other advanced training at the university level. It is somewhat weakened when applied to systems that do not include junior-college years or do not afford other facilities for continuance of education. Pupils who complete the shortened programs of elementary-school and high-school education and who do not continue their education are thus thrust out to seek employment at earlier ages than are characteristic of youth completing systems not effecting this type of economy of time. The argument for economy of time in this sense should now be accompanied by a proposal for upward extension of the system to include junior-college years. Otherwise, the formerly exceedingly powerful positive argument of financial saving by means of the shortened system will be offset by an even more telling negative argument arising out of the economic and social losses entailed from the presence in society of vast numbers of disorganized unemployed youth.

The second group of reorganizations, on the other hand, with their longer integrated units, should, more often than they do, provide arrangements for moving pupils through the schools more rapidly than at the traditional rate. This can be done at the same time that training programs throughout the period represented are enriched. The pupils undertaking the shortened programs should, however, be carefully selected in order that only those who can and should continue their formal education beyond the junior-college level are admitted to them.

CHAPTER VII : THE SMALLER SECONDARY SCHOOLS¹

1. THE PURPOSES AND NATURE OF THE PROJECT

Purposes.—The study of the smaller secondary schools was concerned with those schools which in the main afford the opportunities for secondary education to the children of the smaller centers of population and rural areas. In brief its major purposes were: (1) to make an analysis of the status and characteristics of secondary education in small secondary schools of different sizes; (2) to determine as far as possible the limitations of these schools due to smallness; (3) to investigate a group of selected schools and compare those of different sizes with each other and with the general run of small schools; (4) to determine what, if any, innovations or significant departures from ordinary practices existed in the selected schools that might be of value to smaller secondary schools in general; and (5) to arrive at any obvious conclusions from the whole study significant for policy concerning smaller secondary schools.

Sources.—The study was based on information gathered from 614 schools. Of these, 505, referred to throughout the study as *unselected* schools, represented a random sampling of small 4-year-high schools; and 109, referred to as *selected* schools, included 56 4-year and 53 reorganized secondary schools of different types reported as being outstanding in some phase or phases of their work. The list of selected schools approached for information was compiled from smaller schools reported as outstanding by State school officers and professors of secondary education in universities, and from published descriptions of outstanding small schools found in educational literature. Facts concerning the distribution by size and section of the country of the schools of the two classes represented, as well as concerning the average enrollment and median number of teachers, are presented in Table 1. The grouping of schools within the two classes, shown in the

¹ This chapter is based on Monograph No. 6 of the report of the National Survey of Secondary Education, by Emery N. Ferriss, W. H. Gaumnitz, and P. Roy Brammell.

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table, is such as to facilitate comparison of schools of the same size in unselected and selected schools, the schools of Groups IA and IB among the unselected schools being of the same range in enrollment as the schools of Group I among the selected schools; those of Group II among unselected schools being of the same range in enrollment as Group II among the selected schools; and the schools of Groups IIIA and IIIB among unselected schools being of the same range in enrollment as group III among the selected schools. Groups I and III among the unselected included sufficient numbers of schools to be divided into two subgroups (A and B), permitting a closer examination of the influence of size of school on facilities and practices. The range and average enrollment in Group IIIB of the unselected schools are large enough to place these schools at least on the border line between small and large schools; the advantage of the presence of such a group in a study aiming to ascertain the influence of size is obvious.

The procedure in comparison made possible by the classification and grouping just described may be seen to be in harmony with the purposes of the project as previously stated. At the same time it permits investigation of the comparative influence of size and of selection on the conditions and practices in smaller secondary schools. This is perhaps the most distinctive feature of this investigation as compared with other investigations of schools of smaller enrollments.

TABLE 1.—*Distribution, by size of enrollment and region, of the smaller secondary schools represented in the project and the average enrollment and median number of teachers in each group of schools*

Item	Groups of unselected schools					Groups of selected schools		
	IA	IB	II	IIIA	IIIB	I	II	III
1	2	3	4	5	6	7	8	9
Range of enrollment.....	40 or fewer.	41-75	76-150	151-300	More than 300	75 or fewer.	76-150	More than 150
Region:								
New England.....	3	3	8	3	6	4	8	8
Middle Atlantic.....	4	10	19	16	27	2	8	11
South.....	14	18	25	25	23	4	2	11
Middle West.....	37	45	42	48	50	6	9	15
West.....	14	16	16	15	18	3	7	11
Total number of schools represented.....	72	92	110	107	124	19	34	56
Average enrollment.....	25.9	51.4	107.2	219.4	471.7	49.1	109.2	203.3
Median number of teachers.....	2.4	4.6	5.6	10.8	18.9	3.4	6.2	13.1

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The scope of the project and of this statement.—In order to provide a rather complete picture of the two classes of schools, the information collected covers a wide range. This information pertains to the size and type of districts (consolidated or unconsolidated), the extent of provision of transportation; the material facilities; the training, experience, tenure, salaries, and responsibilities of principals and teachers; the curriculum and extracurriculum; procedures in teaching; guidance; provisions for health; community relationships; and many other matters. The total array of evidence is so overwhelming as to put it out of the question to undertake a complete summary in the brief space that can be allotted to the project here. Instead, the effort will be made to summarize only one main division of the evidence, that which pertains to the material facilities, such as grounds, buildings, and equipment, special rooms for instruction and other requirements of the school, gymnasium and auditorium, and facilities for the library. Although a description limited to the material provisions for a school can not be assumed to describe it at all adequately, it can give, because of the scope of school activity implied, some clue to the scope of the educational program that is afforded. In addition, a few major implications of the whole study concerning the influence of size and of selection on conditions and practices can be given.

2. THE MATERIAL FACILITIES OF SMALLER SCHOOLS

Buildings and equipment.—The buildings housing the smaller secondary schools are of comparatively recent construction, almost half having been built wholly or in major part during the period from 1921 to 1930. More than four-fifths of the buildings were of brick or brick with other materials, such as stucco, tile, stone, or concrete. Slightly more than 1 in 10 were of frame construction. Slightly more than a fourth of the buildings housing schools of 75 pupils or fewer were of frame construction. Practically none of those housing schools with enrollments of more than 150 was a frame building. The service equipment in the majority of the buildings was found to be modern. In a considerable proportion of those housing the smaller schools,

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however, the situation was not so desirable. Approximately 1 in 5 of the buildings accommodating unselected schools of 75 pupils or fewer were heated by stoves, 1 in 6 were supplied with water from shallow wells, and 1 in 3 had outdoor toilets. The selected schools of the same size group were much better equipped with respect to heating and toilet facilities, but in respect to source of water supply were similar to the unselected schools. The best situation with respect to service equipment existed in the unselected schools enrolling more than 300 pupils.

Grounds.—The programs of physical education including athletics fostered in secondary schools to-day make grounds of considerable extent highly desirable. The data indicate that a relatively large proportion of the schools have acreages too small to permit of provision on their own grounds for many of these activities. A third of the schools had grounds of 2 acres or less, the largest proportion being found among the schools enrolling 75 secondary pupils or fewer. In schools of this size approximately half had grounds of 2 acres or less. On the other hand, the more desirable provision of grounds greater in area than 5 acres was found in slightly less than a third of the unselected and half of the selected schools. In both classes of schools the more ample grounds were markedly more common in the groups enrolling more than 150 pupils.

Special rooms for instruction.—Five types of special rooms for instructional purposes, each found in more than half of the unselected schools, were: Science laboratory, shop, room or rooms for home economics, commercial room, and music room. A room for science laboratory was almost universally provided. No other special room for instructional purposes was provided in the majority of the unselected schools enrolling 75 pupils or fewer. The majority of all schools enrolling more than 75 pupils were provided with the five types of rooms mentioned. In the selected schools six types of special rooms for instruction were provided in more than half the schools. The additional room in selected schools was for agriculture. Of the selected schools enrolling 75 pupils or fewer more than half had a science laboratory and a home-

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economics room, while the majority of those enrolling 76 to 150 pupils had four types of special rooms as compared with five for the corresponding group of unselected schools (almost half the former group having a commercial room). A special room for instruction in art was rarely reported in both classes of schools with 75 pupils or fewer, was infrequently reported in unselected schools with 76 to 300 pupils and in selected schools with enrollments from 76 to 150, but was reported in more than 4 in 10 of the unselected schools with more than 300 pupils and of the selected schools enrolling more than 150.

Other special rooms.—The data on special rooms for other than instructional purposes show that all the smaller secondary schools as a class are more or less deficient in this respect. The only special rooms of this type, not including the library, auditorium, or gymnasium, found in a majority of both the unselected and selected schools were the office and a rest room or rooms. Practically all schools in both classes enrolling more than 75 pupils reported special rooms for office purposes and more than half of the same schools reported rest rooms. No other special rooms of this type were reported by a majority of all schools. In the unselected schools with 75 pupils or fewer the office was the only special room mentioned by a majority and a considerable proportion lacked an office. A majority of the selected schools of the same size group were provided with both an office and a rest room. Such special rooms as medical or nurse's room, publications room, club-room, and cafeteria were each mentioned by relatively small proportions of schools.

Gymnasium and auditorium.—Approximately 7 in 10 of the unselected and 8 in 10 of the selected schools were provided with gymnasium facilities, while 7 in 10 of the former and 9 in 10 of the latter had auditoriums. In a considerable proportion of both classes of schools these facilities were provided through the combination gymnasium-auditorium. The two groups of smallest unselected schools were least commonly provided with these rooms, approximately half having neither a gymnasium nor an auditorium; next were the unselected schools with 76 to 150 pupils. As a class the selected schools were better provided with gymnasium and

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auditorium facilities than the unselected schools and the situation of superiority was uniform for all size groups.

Facilities for the library.—Approximately three-fifths of both classes of schools supplied information on library facilities. Eleven in 12 of the unselected schools reporting on the item and 9 in 10 of the selected schools reported a special room for the library. It is probable that the data show a more favorable situation in both instances than actually exists, since there would naturally be a greater tendency for schools having a special library room to report than for those not provided with such facilities. The data show that approximately 1 of every 5 of the unselected schools with 75 pupils or fewer had no special room for library purposes as compared with 1 out of 8 in selected schools of similar size. Of the unselected schools enrolling 76 to 150 pupils only a small percentage reported no library room, while of the corresponding group of selected schools 1 in 6 were unprovided. Only in the unselected schools with more than 300 pupils did all report a special library room. This was also the only group of schools in which the majority had a full-time librarian. Approximately a fourth of the libraries in the unselected and a fifth of those in selected schools had 500 volumes or fewer, indicating in those schools a very limited total of library materials available to pupils. Practically all libraries were provided with five or more current magazines. They were not so well supplied with current newspapers, more than 1 in 5 of the libraries in the unselected and 1 in 7 of those in the selected schools receiving no newspaper. The proportion without such materials was markedly higher in schools with 75 pupils or fewer than in the other groups of schools.

3. TWO MAJOR IMPLICATIONS

The meaning of the consistent superiority of the selected schools.—A manifest conclusion from an overview of the evidence of the whole project, of which the summary on material facilities is inadequately illustrative, pertains to the all but fully consistent superiority of the selected over the unselected schools represented. To be sure, it is an average superiority of one class over the other, rather than the

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superiority of all selected schools over all unselected schools; among schools of equivalent enrollments many unselected schools are indubitably better in some respects than many selected schools. Nevertheless, the general trend of superiority is too marked to be gainsaid.

The selected schools are in larger districts than are the unselected schools. They are more often in consolidated districts. They more often provide transportation, and provide it for larger numbers of pupils. They retain pupils better—at least when they are reorganized schools. The class period is longer. They more often provide the service of part-time librarians, and these librarians have had more training for their work than part-time librarians in unselected schools. Their principals are better trained both with respect to the total duration of training and the amount of work taken in the special field of education. The tenure of these principals is longer, their teaching loads are more reasonable, and their salaries higher. In material facilities the selected schools are better provided, particularly in such matters as size of grounds, service equipment, special rooms, space and equipment for libraries, equipment for motion and still pictures, and free textbooks. They are superior with respect to instruction in that they have more often in recent years made certain additions to the curriculum, are making more frequent use of newer methods of teaching, and are carrying on a greater range of supervisory activities. In the extracurriculum, in pupil accounting and guidance, in extending their educational service, and in their community relationships they have gone farther than have the unselected schools.

The foregoing array of aspects of superiority of the selected schools as a class makes it clear that for the unselected schools as a group to be superior is highly exceptional. In fact, in one partial respect only were they superior to the selected schools, namely, in those changes in the curriculum involving the addition of manual training and commercial subjects (not including the course in junior business training). This superiority is offset by other additions to the curriculum more often made in the selected schools. In two respects they

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are about on a par with selected schools, namely, in the tenure and in the salaries of teachers.

Thus, the first general implication from all this evidence is that, *if the selected schools are providing the facilities or carrying on the activities represented in these aspects of superiority, other schools of the same size may well be expected to do the same.* The whole study has not, to be sure, gone into the question of the local financial resources available to the unselected and selected schools in order to ascertain whether the selected schools are better off financially than the unselected schools. It is almost certain that the selected schools were superior in this respect as well as in others. If this were found to be true, the problem would become one of equalization of educational opportunities and stimulation by the State. In these times of a rather general acceptance of the principle of State equalization and stimulation, it seems appropriate to concede that to some extent incorporating the features of a good school in small communities should be made feasible by the State, especially if the principle is not carried so far as to minimize too greatly the advantage of size to be pointed out below.

An implication subordinate to that just stated, but important, nevertheless, pertains to the significance of educational leadership in the smaller schools. The study has shown that principals in the selected schools on the average have more extended training, hold higher degrees, and have had more work in the field of education. Besides, they have longer tenure and receive higher salaries. It seems more than likely that many of the other superiorities reported for the selected schools are directly attributable to the greater competence of the heads of these schools reflected in the evidence on these points. Although relationships in this regard are doubtless somewhat reciprocal, and although better schools would to some extent attract better leadership, one can hardly doubt that some of the superiority of the selected schools has resulted from superior competence of the schools heads. It is worth mentioning in passing that the superiority has been accomplished despite a level of salaries of teachers no higher than that in unselected schools.

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Unquestionably, one of the first approaches in the effort to improve a school must be to place it in charge of a competent leader.

The significance of size.—A second conclusion from the evidence of the whole study is with respect to the significance of size of school. The fact is that *the differences between the measures reported for one size group and the next largest among the unselected schools are typically greater than between that size group and the corresponding size group among the selected schools.* This conclusion is reinforced by a fact not reported in this brief summary, the frequent superiority of Group IIIB (the group of largest unselected schools) over Group III of the selected schools, a superiority which can readily be explained by the larger enrollments already reported for the schools of Group IIIB. It also has the corroboration of an important finding of Part I of Monograph No. 5, of the National Survey of Secondary Education, The Reorganization of Secondary Education, a finding which is to the effect that, as concerns schools with smaller enrollments, size is a more potent factor of the extent of reorganization than type of organization. The conclusion from the present investigation is another way of saying that *size is more important than selection* in making for constructive differences among small schools. It would be difficult, if not impossible, to conceive of a conclusion more momentous for the problem of the small high school.

The obvious implication from this finding is that the very small high schools ought to be kept to as small a number as possible. This implication has meaning for all who deal with the problem of small schools, whether they are persons in the localities where these small schools are operating or contemplated or whether they have to do with the determination of State policy in the establishment and maintenance of schools. State policy can be exceedingly influential here and should encourage the establishment only of high schools of good size. Doubtless in most States there are sparsely settled areas that should be provided with secondary-school opportunities even if enrollments are small, but these should be looked upon as atypical developments. After authorization, such schools

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should be aided in providing the features of a good institution, as suggested above in discussing the first major implication, but the normal and basic assumptions should be that it is easier to provide a good school where a sizable enrollment is assured and that to maintain a good school with a small enrollment is always an up-hill and often an impossible task.

CHAPTER VIII: SECONDARY EDUCATION FOR NEGROES¹

One of the most inspiring chapters in American history is the history of the Negro's efforts to secure an education. The percentage of literacy among Negroes increased from probably not more than 5 per cent at the close of the Civil War to approximately 85 per cent at the present time.

While elementary education, which is responsible for much of the progress toward literacy, has shown a constant increase during the past 70 years, public secondary education for Negroes has lagged far behind. Little progress was made at this level until after the World War. Since that time, however, great advancement at a rapid rate has been made. The public schools offering secondary work for colored children in the 16 Southern and Border States and the District of Columbia numbered only 64 in 1916. By 1930 this number had increased to nearly 1,200. The high-school enrollment, during the same period, increased from 4,000 to 167,000.

Despite this encouraging progress the special project of the Survey on which the present statement is based reveals a great lack of availability of high-school facilities for Negroes in the States having separate school systems for whites and Negroes, and considerable inadequacy of such facilities as are provided, as shown by the following: (1) Of the million Negro children of high-school age (15 to 18, inclusive) in these States in 1930, only 10 per cent were enrolled in public high schools, as compared with 34 per cent for white children. (2) The ratio of Negro public high-school pupils to the Negro population is 11 per 1,000, as compared with 34 white public high-school pupils per 1,000 of the white population. (3) The ratio of the number of high-school teachers to Negro population of high-school age is 1 to 211; for whites it is 1 to 60. To equalize these ratios would require a total of 17,708 Negro high-school teachers, or 12,758 more than at present.

¹ This chapter is based on Monograph No. 7 of the report of the National Survey of Secondary Education, entitled "Secondary Education for Negroes," by Ambrose Callver.

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(4) The cost per person of high-school age for white and colored high-school teachers' salaries is, respectively, \$11.47 and \$2.16.

To make the two races equal in this regard in the 16 States studied, and on the basis of figures for 1930, would require an additional annual expenditure of \$9,937,944, or 430 per cent more than is being spent at present. (5) Of 1,140 Negro high schools reported by 15 States in 1930, only 506 offered four years of work. (6) Only 39 per cent of the 4-year high schools were available to Negroes living in rural areas who constitute 67.4 per cent of the total Negro population. (7) Of the 1,413 counties in the 15 States, 230, having a Negro population constituting 12.5 per cent or more of the total population, had no high-school facilities whatever for Negroes. The Negro population in these counties is 1,397,304, with 158,939 of high-school age. (8) Of the remaining counties, 195 in which Negroes constitute 12.5 per cent or more of the population had no 4-year high schools for colored children. The Negro population in these counties is 1,671,501, with 197,242 of high-school age. (9) In six States maintaining separate schools for the two races, the amount spent for the transportation of Negro high-school pupils is \$30,000, as compared with five and one-half million dollars for white high-school pupils in the same States. This means that \$166 is spent for the transportation of white high-school pupils for every dollar spent for the transportation of Negro high-school pupils, while the ratio of white to Negro children of high-school age in the same States is only 2 to 1.

A study of the status of existing secondary schools for Negroes reveals some surprisingly good examples of teaching facilities, organization, and administrative practices. If only limitations of space permitted, certain of these instances might well be described to indicate to what heights of adequacy secondary education for Negroes can rise. On the whole, however, great deficiencies are found in most phases of education, and in many instances wide divergencies exist between the facilities provided for Negroes and for whites. Examples of these divergencies are: (1) A relatively small proportion of the schools are accredited, and of those which have been

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accredited, 86 per cent have achieved this status since 1921. (2) The disproportion which exists between the training of Negro teachers and that of white teachers is not very great, but the differences in teaching loads and salaries are marked. (3) The curriculum and extracurriculum offerings in secondary schools for Negroes are lacking in richness and variety as well as in adaptation to local and racial needs. (4) The extent to which the enrollment of Negro girls exceeds that of boys is disquieting. (5) The overcrowded condition of most Negro high schools and the necessity of sharing the building with other school units present serious problems. (6) Although a relatively large number of Negro high schools are endeavoring to use certain modern procedures and techniques of instruction, in general the inadequate educational equipment and facilities are a serious obstruction to more rapid improvement.

If the educational chasm existing between the two races is ever bridged or lessened, improvement in school conditions must go forward at a much more rapid rate than it has in the past. Negroes can not meet the exacting standards of modern civilization with intelligence, skill, and courage, and keep pace with the tempo of American life with an education which lags behind 10 to 20 years. Increase in and improvement of secondary education is one of the important steps which must be taken in order to prepare the Negro for efficient participation in modern life.

CHAPTER IX: DISTRICT ORGANIZATION AND SECONDARY EDUCATION¹

1. THE CONFUSION IN DISTRICT ORGANIZATION FOR SECONDARY EDUCATION.

The concern of the chapter.—The urge in this country to make secondary education accessible to all youth of appropriate ages is discussed often and from many angles. At least one aspect of the problem all too seldom receives attention, namely, the bearing of district organization on the availability of secondary schools. The problem seemed of such importance that three projects, of differing proportions, have been devoted to investigating it. One of these, summarized in this section, aimed to afford a general picture of the relationships of district organization to secondary education throughout the country.

The two remaining projects considered the problem in two States, California and Illinois, in which the situation is complicated by the presence of districts maintaining high schools, districts which are autonomous with respect to districts maintaining elementary schools. Because the California Teachers Association was interested in the problem it was possible to arrange for participation of both that organization and the National Survey in the costs of the project in that State; the result of the cooperation was a larger project than the supplementary project in Illinois. This difference in the magnitude of and, therefore, in the significance of the conclusions from the two projects is the reason for using the brief space available for section 2 of this chapter for a summary of the California project. Results of the Illinois project show a district situation certainly no less complex than that in California.

Origins of the districts.—Free public secondary education, as everyone knows, had its beginning as an upward extension

¹ This chapter is based on Monograph No. 8 of the report of the National Survey of Secondary Education, by Fred Engelhardt, William H. Zeigel, Jr., William M. Proctor, and Scovel S. Mayo, entitled "District Organization and Secondary Education." Sec. 1 of the chapter is based on Part I of the monograph by Engelhardt and Zeigel, and sec. 2 is based on Part II by Proctor and Mayo.

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DU PAGE COUNTY, ILL.

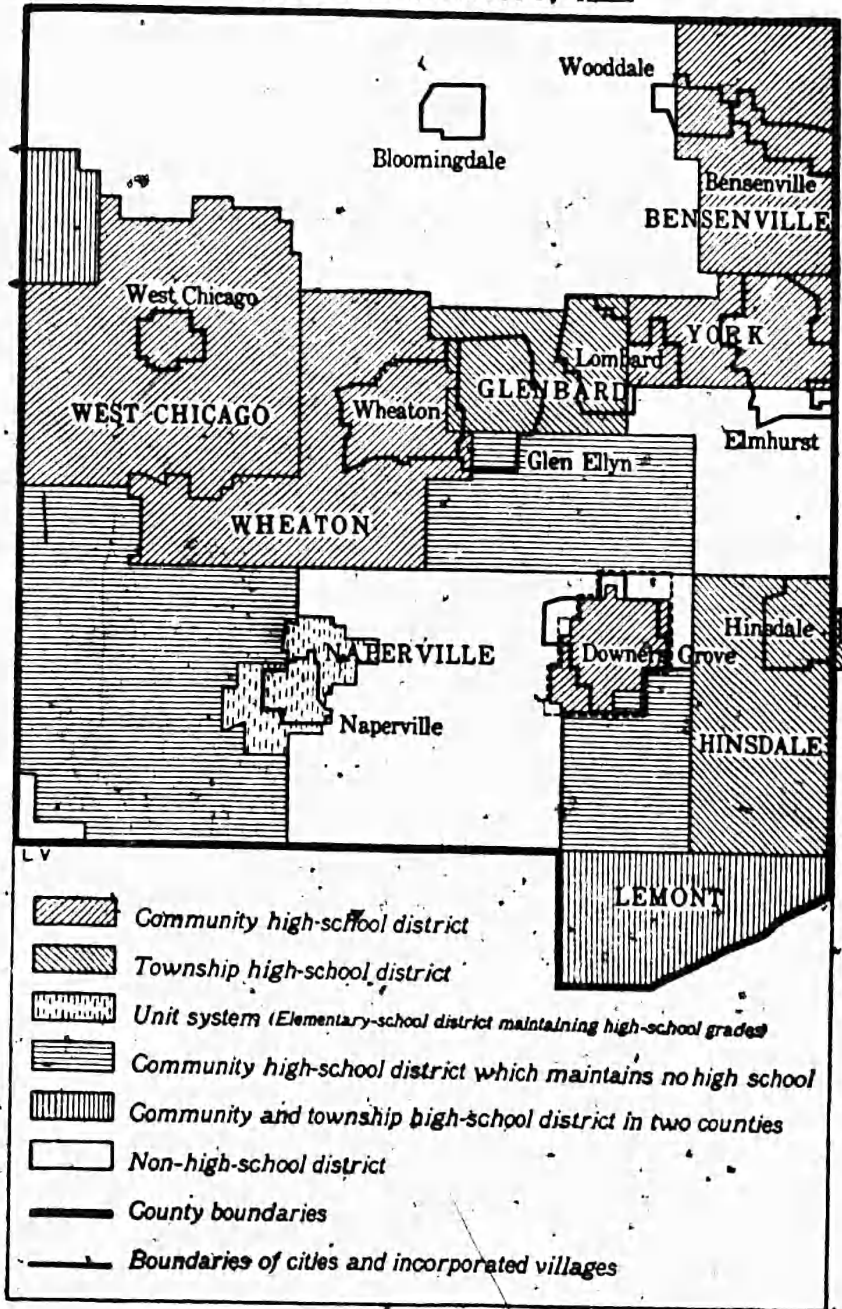


FIGURE 4.—High-school districts in Du Page County, Ill., illustrating the complexity of district organization for secondary education

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of the offering in the common-school district. These extensions were first made in the more populous or the wealthier districts, and no serious problems of support or articulation would have arisen if only all common-school districts had been populous and wealthy. The problems emerged because districts too small and too poor undertook to offer high-school work, while children in other districts even smaller and poorer had to look outside their home districts for the opportunities of high-school education. However, the common-school district was not the only type of basic subdivision used for administering schools, and the diversity of district patterns was greatly increased by predilections in various States for following the usual civil subdivisions—the town in New England, the congressional township in the Middle West, and the county in the South—in establishing the local district.

Arrangements for tuition.—The fact that not all local districts could or would provide the opportunities for high-school education gave rise to plans of tuition payment, first by parents, later typically by the district in which the pupil resided, and now, in an occasional State, by the State itself. An interesting variant here is the practice whereby some districts pay tuition to a private academy operating in the district for pupils coming from within the district. Transportation then came in to make attendance possible for children living at a distance from high schools, and this plan, since the advent of motor-driven vehicles, has increased to large proportions. In a small number of districts in regions of sparse population, dormitories have been provided.

Provision for consolidated districts.—A further means of extending availability has been the combining of two or more small districts. These plans for consolidation often apply to both elementary-school and high-school levels. However, some States have stimulated consolidation chiefly at the high-school level—a plan which in effect superimposes autonomous high-school districts on two or more elementary-school districts. This practice has been commonly followed in California and Illinois and to a lesser extent in Wisconsin. Thus, resources are combined for high-school purposes but

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to some extent to the detriment of elementary education and the attainment of satisfactory articulation of schools. It is common knowledge that junior high school reorganization has not flourished in areas served by these union, township, and community high-school districts.

Special provisions.—During the work on the project evidence was assembled on a great variety of special provisions for secondary education. County high schools were found in several States in which the county is not the prevailing unit for the administration of lower schools. Among these States are Montana, Mississippi (with its agricultural high schools), and Tennessee. The report on the project calls attention to the provision in Wisconsin for vocational education, which is unquestionably a type of secondary education, under boards separate from those in control of general education. Then there is the list of States with State-supported secondary schools more or less independent of local control. Among these are the State agricultural schools of secondary grade in Alabama, Georgia, and Minnesota, and the State vocational schools in Connecticut. Here, too, might be included State nautical schools and such provisions for secondary education as are made in schools for the blind and the deaf.

In rounding out the list of complicating factors in the district problem, the investigators took account of the junior college. They mention States in which junior-college districts have been superimposed on districts already in existence and call attention to the possible extension of the size of the optimum district if each district within a State is to be large enough to justify the provision of all levels of education from kindergarten through junior college.

The study of the problem within individual States.—The impression of confusion might well be regarded as overdrawn if most States made only one of the arrangements named. The fact is that most States have two or more and some States have many different provisions. The student of the problem who undertakes to gain intellectual command of the types of provisions encounters confusion also in the terms applied. To be sure, all these variations are to be commended as

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efforts, at least, toward the solution of a critical problem and as opportunities for observing and investigating the acceptability of the various plans. Besides, we may question whether solution even in a single State will ever be by a single simple arrangement. At the same time, the procedures are without doubt too numerous and too complex to be efficient and to serve best the purpose of achieving full availability of secondary education, and it behooves us to encourage wherever possible the scrutiny of current arrangements. Such scrutiny is particularly appropriate in times like these when all avenues of governmental outlay are being vigilantly patrolled. The special monograph on district organization and secondary education reports that several States have already taken steps toward the realignment of district organization, among which are New York, North Carolina, Arkansas, and Missouri. The issue has been raised in other States, and interest in the whole problem is destined to become widespread.

1. THE DISTRICT PROBLEM IN CALIFORNIA

Scope of the project.—Seven counties in California were studied with a view to discovering the relations between the present union high school district organization and the progress of educational reorganization, as it relates to vertical articulation of the units of the school system. The results for one county, Kern, are presented in detail in the complete report, while the results for all seven counties are summarized in a series of tables and graphs. Also, there is a section dealing with proposed solutions of the problems uncovered in the investigation of the seven counties.

The general situation in the State.—There are 2,636 active elementary districts in the State, only about 5 per cent of which have been unionized or consolidated. Also it appears that 57 per cent of the elementary districts employ only one teacher. On the other hand secondary education is highly organized, since 91 per cent of the high-school districts are either union, joint-union, county, or large city districts. Such a situation tends to perpetuate the 8-4 type of organization outside the cities. This is shown by the fact that California is tenth in rank among the States of the country

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in reorganized secondary schools, whereas in most other phases of secondary education this State ranks nearer the top. Reorganized schools are found for the most part only in the larger urban centers.

The situation in Kern County.—(1) *Kindergartens* were found only in one district having as few as five teachers; hence kindergartens are apparently urban, not rural, institutions.

(2) Of the 88 *elementary* districts in the county 57 per cent employ only one or two teachers, and the median school has 12 to 20 pupils. The range of assessed valuation in elementary schools is from \$840 to \$140,707 per child in average daily attendance and from \$10,000 to \$2,500,000 per teacher. Costs per pupil were found to be from \$38 to \$870 per pupil in average daily attendance. In general the small units were found to have the highest costs per child, and tax rates varied with costs per child and assessed valuation per teacher employed.

(3) Kern County was found to have seven regular, union, or joint-union² *high school* districts, ranging from 1 to 60 elementary districts each, and from an average daily attendance of 23 to 2,250. Only one junior-senior high school was found and that was in the only regular or single district in the county. There were two departmental junior colleges. Assessed valuations ranged from \$28,000 to \$100,000 per pupil in average daily attendance and from \$403,000 to \$1,500,000 per teacher. Tax rates for high schools ranged from 40 cents to 80 cents per \$100 of assessed valuation.

Tentative plan proposed.—Marked inequalities in educational opportunities, extremes in tax burdens for support of schools, and decided lack of articulation between elementary and secondary schools, were discovered. It was proposed to try out a tentative solution consisting of enlarged areas of administration. These were called "superintendency areas" and were to be administered by one board and to have control of all schools in that district or area. When the county was reorganized in this way, into five such areas, estimates were made of the effects upon the various units of the school system in the county. It was found that about 85 per cent of the children would be in elementary schools having only grades

² Union districts including portions of 2 or more counties.

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1 to 6; that 31 small schools would be eliminated; assessed valuation per teacher, average cost per pupil, total costs, and tax rates would be equalized.

In the secondary field, there would be thirteen 3-year and 4-year junior high schools, 1 junior-senior high school, 3 senior high schools, and 2 junior colleges. Relative assessed valuation per teacher and per pupil as well as tax burdens would be materially equalized. Thus practically all the weaknesses shown to exist in the present type of school organization would either disappear entirely or be greatly reduced by the superintendency area plan of reorganization.

Application of superintendency area plan to all seven counties.—Because the superintendency area plan appeared to solve many of the organization problems when applied to Kern County it was applied as a tentative solution to the six other counties with the results as summarized.

(1) *Kindergartens.*—It was found that kindergartens are at present confined almost entirely to districts having 10 or more teachers. If they could be made a part of the State school system and granted State aid on the same basis as elementary schools, rural consolidated districts having five teachers could introduce them. This would make kindergarten training available to about 80 per cent of the children of the counties surveyed.

(2) *Elementary schools.*—By applying the superintendency area plan it was found that there would result the elimination of 155 1-room and 2-room schools, and that instruction could be carried on with 147 fewer teachers. Whereas, at present assessed valuations per average daily attendance range from \$709 to \$140,000 per pupil in A.D.A. under the proposed plan the range would be from \$2,500 to \$25,000 per pupil in A.D.A. The valuation per teacher now ranges from \$10,000 to \$2,500,000. Under reorganization the range would be from \$68,000 to \$708,000. In other words the very wide differences among districts to support education would tend to be equalized.

It was found that transportation costs entailed by consolidations under the proposed plan would be greatly increased but that owing to savings in teachers' salaries there

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would be a net reduction in costs of about \$50,000 for the seven counties.

(3) *Secondary schools.*—In the seven counties, only 11 junior high schools were found and one 6-year or junior-senior high school. Under the proposed reorganization there would be 31 3-year and 15 4-year junior high schools, 22 junior-senior high schools, 21 3-year senior high schools, and 9 junior colleges, all under county or joint county district organization.

The total budget for secondary schools under the proposed reorganization would be about \$6,650,000, the percentage distribution of which would be as follows: 3.5 per cent for general control and fixed charges; 55 per cent for teachers' salaries and other costs of instruction; 2.5 per cent for library and laboratory supplies; 11 per cent for operation and maintenance; 10 per cent for transportation; and 18 per cent for capital outlay.

Assessed valuation per pupil in A.D.A. in secondary schools would range from \$7,500 to \$87,500. The range per teacher employed would be from \$67,000 to \$1,280,000. This would constitute a considerable equalization of existing extremes. Tax differences at present range from 10 cents to \$1.25 on each \$100 of assessed valuation for secondary-school support. Under reorganization the range would be from 73 cents to \$1 per \$100 of assessed valuation. Here again the extremes would be equalized.

Combined elementary and secondary costs and tax rates.—When elementary and secondary costs for the counties surveyed were combined it was found that the proposed reorganization would result both in material reductions in total school costs and in a more even spread of tax burden over all property in each county. From a combined low tax of 56 cents to a high tax of \$2.71 as at present, the lowest combined tax rate would be \$1.07 and the highest \$1.45 per \$100 of assessed valuation.

Summary for the seven counties.—It was found that all the advantages brought out in the study of Kern County would apply also to the six other counties. The educational opportunities of at least 85 per cent of the children of the counties

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would be improved; reorganization on modern lines, such as 6-3-3-2, or 6-6-2, or 6-4-4 could be accomplished under the superintendency area plan; these would be unified as against dual control; costs and tax burdens would be equalized.

Desirable changes in State educational policies and school laws pointed out.—Assuming desirability of changes looking toward larger administrative areas, whether along lines of the tentative formula applied to seven surveyed counties, or along some other feasible lines, the Survey staff gathered suggestions from California educators as to best means of bringing about such changes. Their recommendations follow:

(1) *State support of kindergartens* is presented as a desirable change in State law to make such institutions available to rural as well as to city and town dwelling children.

(2) *Redefinition of elementary and secondary education* would remove present ambiguities in school code, make State and county aid at the secondary scale of reimbursement available to seventh and eighth grades of junior high schools, and facilitate the development of junior high schools in union high school and consolidated districts.

(3) *Regional junior colleges* are suggested as a means of stabilizing junior-college support and insuring institutions with adequate enrollment and curriculums.

(4) *State Equalization Fund.*—A State sales tax or income tax, or both, are advocated by six organizations to help shift the burden from real and personal property, to equalize tax burdens, and to stimulate reorganization. This is embodied in a proposed constitutional amendment.

(5) *The Central rural-school plan in New York State* is suggested as a means of stimulating the creation of superintendency areas. This would provide reimbursements to such areas for one-half of transportation costs and one-fourth of building costs.

(6) *State and county educational reorganization commissions* are also suggested to investigate proposed areas and assist in carrying out provisions of legislation enacted to promote reorganization that will result in larger areas of administration, the equalization of tax burdens, and the improvement of articulation between the various units of the California school system.

CHAPTER X: LEGAL AND REGULATORY CONTROL OF SECONDARY EDUCATION¹

I. STATE CONTROL

The full report of which the present chapter is an outgrowth is largely an analysis of laws of the States which pertain to secondary education. Not *all* statutes relating to this school level are represented. The subjects included within the scope of the analysis are the districts authorized to maintain high schools; the levels of secondary instruction represented by the junior high school and the junior college; the aspects of high-school attendance comprehended by requirements for admission, compulsory attendance, transportation, and tuition; and administrative and supervisory considerations represented in classification and accrediting of schools, the curriculum, and textbooks. The study includes also some consideration of the regulations exercised by regional accrediting agencies like the North Central Association of Colleges and Secondary Schools and the Association of Colleges and Secondary Schools of the Southern States. The present statement does not draw on the detailed findings of the study, but aims to present only certain larger general comments and implications.

Legal administrative tendencies are toward greater State control over secondary schools. These tendencies are more pronounced in administrative than in legislative proceedings. This control has been exercised indirectly rather than directly; that is to say, it has been exercised through administrative officers acting under powers conferred on them rather than through direct prescriptions by the legislature. The increase in State control over high schools in this manner is not so undemocratic as it is often asserted to be, for in most instances local communities and districts have been privileged either to retain or to surrender the functions

¹ This statement is based on Monograph No. 9 of the report of the National Survey of Secondary Education, entitled "Legal and Regulatory Provisions Affecting Secondary Education," by Ward W. Keesecker and Franklin C. Sewell.

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which they have given up. Of course, it is true that local communities often have been induced to surrender certain functions to the State in return for the advantages in grants of aid and recognition on the part of the State. The enforcement of State administrative control over secondary schools is exercised to a large extent by the withholding of State aid and also of State recognition or accrediting in case of noncompliance with State prescriptions—legislative or administrative.

There is, perhaps, under our system of local autonomy in school matters, no more potent means of State influence and control over secondary schools than that induced by the various methods and conditions upon which State aid is granted for high-school purposes. Contingent State aid affords a basis for State inspection, classification, and approval of high schools. This is indirect rather than direct State control. The control is, nevertheless, vital and coercive, unless the conditions upon which State aid is granted are easy of fulfillment.

The separation of State functions from local administrative functions is a constant and perplexing problem in secondary education. Many students of the subject claim that secondary education is retarded by the present degree of local autonomy, while others claim that advance in education can be had only insofar as the local communities appreciate and support educational ideals, programs, and standards. The varying degrees and methods of State control over secondary schools arise to some extent from differences in laws but more generally from a difference of opinion as to the best administrative procedure to be followed in carrying out the established legal principle that education is a State function. Standards and requirements by legislative prescriptions are few compared with those embodied in regulations of State departments of education.

Within this dual and intricate system of administrative control is to be found a system of checks on practically all State and local school officials, which supports the following statement of the Supreme Court of the United States: "The theory of our governments, State and National, is opposed

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to the deposit of unlimited power anywhere." ² Whatever the degree of State administrative control, it should secure local cooperation, mutual respect and confidence, and promote local initiative and freedom of action.

2. GENERAL IMPLICATIONS

Secondary education occupies those grades of instruction which lie between elementary education and higher education and is thus closely related to the whole field of education. In legal contemplation it can not be regarded as a fixed entity constituting a separate compartment, process, or program in our educational system. Statutory provisions relating to secondary education are not susceptible to separation. Naturally, laws which deal with intangible forces should be general in scope and authority so as to provide ample freedom for natural educational developments. Education, like the individual, must have freedom of action. It is frequently claimed in justification of this freedom that it opens the way for experimentation and discovery as to best methods of educational administration. The study on which the statement in this chapter is based emphasizes the importance of developing some scientific method for measuring the results of different systems in the administration of secondary schools. Actual experimentation in this respect is inadequate. After many years of various systems, school administrators do not agree on what constitutes the best administrative procedure with respect to the many problems arising in school administration and which produce the most desirable results.

School administration may not be an exact science, but its procedure may be subject to objective appraisal in terms of results obtained. The science of education may yet work out the technique to determine with reasonable assurance that certain school methods or systems are better than others. The development of such technique will enable the working out of legislation affecting secondary education on the basis of careful evaluation of existing legislative systems. This will enable the development of legislation not merely

² *Loan Association v. Topeka*, 20 Wallace (U. S.) 656.

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in conformity with professional opinion but also upon the basis of scientific and reliable data.

State legislatures have absolute power to control secondary schools unless limited by constitutional provisions. No constitutional provisions specifically restrict legislatures in this respect. It follows that legislatures are free to adjust State school systems to meet changing conditions. Present conditions of secondary education emphasize the need for legislators to consult with educational authorities. It seems desirable that educational legislation should conform to the best opinion of authorities in education and that it should follow carefully worked-out systems which have been found to be producing good results.

Fewer statutory prescriptions accompanied by extension of discretionary powers in State school officials would apparently permit the development of more flexible and adaptable programs in the administration of secondary education, including its support and curriculum services. Laws which require uniformity in the administration of education to all may stifle the natural educational processes, especially as they affect the individual.

CHAPTER XI: TRENDS IN THE ARTICULATION OF HIGH SCHOOL AND COLLEGE¹

1. METHODS OF ADMISSION

Scope of the investigation.—For the purposes of the project represented in this summary efforts at improved articulation of high school and college were assumed to be made in two main areas, namely, in the arrangements for admission and in the adjustment of students subsequent to admission. The practices followed were ascertained chiefly by inquiry forms returned from more than 500 higher institutions and during visits to a number of such institutions.

The numbers of methods of admission.—In general, the higher institutions included in this study are increasing the number of methods by which students may gain admission. Furthermore, to an increasing extent, institutions are judging applicants on the basis of a combination of criteria rather than on the information gained through a single criterion. Institutions do not in general abandon old criteria of admission when new ones are adopted; rather, batteries of criteria are set up as opposed to criteria used singly. Few really innovating plans of admission are reported. The trend in general is to increase the number of ways by which students may gain admission, at the same time, in many cases, raising the requirements in single methods.

Subjects required.—The number of units in five subject fields required for entrance by the institutions is affected more by the region in which the institutions are located than by either the size or type of institution. Since 1924 there has been a tendency to increase the number of units of English required for admission. The same tendency is discernible to a lesser degree in the field of the social studies. No trend since 1924 is discernible in the requirement in natural science. However, in mathematics and foreign language there has been a pronounced downward trend since 1924 in the number of

¹ This chapter is based on Monograph No. 10 of the report of the National Survey of Secondary Education, entitled "Articulation of High School and College," by P. Roy Brammell.

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units required for college entrance. There has been a more striking reduction in the foreign language requirement than in the requirement for mathematics.

It was found that few institutions make careful studies to justify the requirement of certain subjects for entrance or the acceptance of other subjects for admission credit. Present preference for or discrimination against certain subjects needs to be justified or shown to be fallacious. Such studies as have been made seem to throw the weight of evidence against specific subject requirements, although a few investigators attribute special predictive value to certain types of subjects.

Recognition of certain newer fields.—The number of institutions which have increased since 1924 the number of commercial-industrial-vocational units that will be accepted for entrance is almost exactly the same as the number which have decreased it. Prior to 1924 four times as many institutions had increased the maximum number of units allowed for these subjects as had decreased it. It appears, therefore, that since 1924 the tendency to decrease the maximum has grown more rapidly than the tendency to increase it.

The junior high school.—Approximately a third of the institutions included in this study indicate that, in recognition of the junior high school, appropriate adjustments are made in the number and nature of units which students may submit for entrance credit. The Middle West and West are clearly ahead in the extent to which such recognition is given. Only about a third of the institutions which recognize the junior high school make a careful check to determine whether or not the 11 or 12 units required for admission actually represent work done in advance of the junior high school level. Of 105 institutions which reported the date when the junior high school was recognized, 98 specified that such recognition was made subsequently to 1925.

1. ADJUSTMENT OF STUDENTS SUBSEQUENT TO ADMISSION

Higher institutions are giving a great deal of attention to the problem of securing the favorable adjustment of new students to college life and work. Considerable care is

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taken to secure information regarding the students' scholastic, social, and economic background, and other items of information, such as condition of health, character rating, and special interests. Large numbers of tests are administered on the results of which class sectionings are made, educational and vocational guidance are given, and the student is in general appraised. Not much progress has been made by the institutions in differentiating freshman instruction in certain subject fields to suit the previous training of students. More has been done in this regard in the field of chemistry than in any other field. The interests of students is the chief basis on which certain freshman courses are recommended. In general, it appears that the institutions are encouraging students to follow their intellectual inclinations and are endeavoring to help them succeed after they have chosen a line of study.

In almost 300 institutions, 6.5 per cent of the 1929-30 freshman class was dropped on account of deficient scholarship. Chief among the devices used by the institutions to reduce freshman mortality are freshman week, educational guidance, and orientation courses. To an increasing extent the institutions are designating special officers who counsel and guide the freshmen in all the phases of college life. Only a small number of institutions have made recent studies to determine causes of freshman failure.

3. HINDRANCES TO IMPROVED ARTICULATION AND PLANS FOR IMPROVEMENT

The outstanding hindrances to improved articulation listed by the higher institutions all have to do with the lack of effective guidance work in either the secondary schools or the colleges. When the plans in operation for the improvement of articulation are studied, the absence of plans for effective guidance programs is conspicuous. The plans for improvement most frequently reported require a minimum of *direct* cooperation between the secondary schools and the higher institutions. When the plans reported by the institutions to be unusually successful are considered, the prevalence of devices which penetrate directly to the pupils in the secondary schools and to those who have immediate super-

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vision over them is notable. Two facts are outstanding when the plans for improved articulation submitted by the secondary schools are studied. First, the most common arrangement, although it is reported by only a dozen institutions, is one whereby high-school pupils may register for a certain amount of work in an adjacent college while they are completing their work in the high school. Second, occasionally an arrangement is cited whereby secondary-school and college personnel directors cooperate actively in studying student problems and in setting up devices for the improvement of articulation.

4. THE CONFUSION AND THE WAY OUT

One leaves the detailed evidence of the study on which this summary is based with a sense of confusion engendered by the extreme diversity of the practices reported; there is an accompanying feeling that a few plans now in operation for the improvement of articulation are pointing in the right direction. The maze of admission criteria used at present by the higher institutions demonstrates the fact that either there are no admittedly superior standards of admission or the superiority of certain standards has been accepted on the basis of observation of isolated cases. The problem of articulation does not center and is not to be solved at the point of transition from the secondary school to college. It is more far-reaching than that. A great deal of the expensive research now being carried on to determine what entrance criteria are most effective or what subjects should be required might well be turned to the task of solving the articulation problem at its source. That is to say, the abilities, habits, characteristics, interests, health, etc., of pupils ought to be studied during their secondary-school careers, and on the basis of the determined relationships of these to subsequent scholastic success, pupils should be guided into or directed away from the higher institutions. This may seem to be a task for the secondary schools only; but equally as important as this is the task of increasing, through cooperative guidance work within the secondary schools and differentiated instruction in college, the chances of success in the higher

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institutions. In view of the fact that past practices in general have failed to allay confusion and have not established the fact of the superiority of certain practices over others, it seems proper to hope that fair trial will be given to a small number of cooperative programs which touch directly and intimately the present work and future plans of the secondary-school and college populations.

CHAPTER XII: ADMINISTRATIVE AND SUPERVISORY STAFFS AND PROGRAMS OF SUPERVISION¹

1. THE ADMINISTRATIVE AND SUPERVISORY STAFF

The State department and local administration and supervision of secondary schools.—State departments of education throughout the country assume a more direct administrative and supervisory responsibility for the secondary schools than for the elementary schools. This is particularly true in those States employing specialists or supervisors in the subject fields, which is done more often in agriculture, the household arts, and vocational education than in other fields. Except in the very large cities the work in secondary education in the local schools in these three fields is supervised directly by State educational offices.

Through regulations and standards of accrediting prescribed by the State, through State inspection and visitation, and through the courses of study and bulletins prepared by the State the work in the local secondary schools in most sections of the country undergoes varying degrees of administrative and supervisory control. These State activities tend to bring about a degree of uniformity and a type of standardization that in many respects are desirable, but that on the other hand seem to destroy certain essential variations in practice that possess those potentialities necessary to a dynamic enterprise. Although there are evidences of cooperative effort among the State educational staff members and superintendents, principals, supervisors, and teachers in the preparation of standards and curriculums, too few cases reveal complete recognition on the part of the State that educational leadership in the local public schools has made rapid advances through the increased professional qualifications of the personnel employed in the schools. It

¹ This chapter is based on Monograph No. 11 of the report of the National Survey of Secondary Education, entitled "Administration and Supervision," by Fred Engelhardt, William H. Zeigel, Jr., and Roy O. Billett. Sec. 1 reports only the broadest generalizations from a project by Engelhardt and Zeigel, and secs. 2 and 3 report more of the detailed findings of a project by Billett.

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is believed that the most satisfactory secondary-school developments are taking place in those States where emphasis is laid on higher professional qualifications for the staff members to be employed in the local schools and where the State assumes a leadership that fosters variations that are intelligently conceived, directed, and controlled in the local application of standard practices.

Local boards and the schools.—In general, boards of education do not differentiate the secondary schools from the elementary schools in carrying on the functions of their office. In school districts that maintain independently operated high schools, boards of education tend to assume more direct control of the business affairs than in the school systems that operate both elementary and secondary schools. However, in part this must be the influence of size of schools, since the schools in high-school districts are typically smaller than in city systems, and boards in small districts exercise more direct authority over schools than boards in larger districts. There are standing committees to be found throughout the country in surprising frequency, but a critical review of the facts indicates that these committees in many cases are merely traditional and are losing rapidly the place formerly held by them in the public-school arrangements. Special high-school committees of school boards are rarely found.

This investigation reveals that in those school systems where competent professional leadership is found in the office of the superintendent or the principal in charge of the school systems, boards of education invariably recognize these officials as the executive head of the schools in the district. In other than the independent high-school districts it is the exception rather than the rule to find the board or its committees dealing directly with the various school principals.

The local administrative staff.—This study reveals a more general increase in professional education among the administrative and supervisory staff members of public secondary schools than is revealed in studies made a few years ago. Never in the history of public education in this country have the secondary schools been better manned than they are to-day.

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In small school systems that operate the entire school organization in one building or that have one or two small elementary schools in addition to the high school the superintendent of schools is virtually the high-school principal. There are small school systems that engage superintendents as well as high-school principals. From observation it appears that the most satisfactory plan of administrative control of the small system is through one executive acting both as superintendent and principal and the employment of competent clerical assistance for that officer.

An answer to the question as to the optimum size of a secondary school in a school system that warrants the employment of a full-time principal is difficult to make in terms of evidence available in this investigation. The relationship of the secondary school to the entire system is an important factor since many school districts have large high schools with a small elementary-school enrollment, while others have a large elementary-school enrollment and a relatively small secondary-school attendance. The number and location of buildings in the school plant are also important factors in determining the type of organization that will be most efficient.

In school systems operating one or more large secondary schools the principals of the 4-year and senior high schools are allowed much freedom in administration and supervision. In many cases the junior high schools were observed to be more inclined to look to the central office for direction and assistance while the senior high schools sought greater freedom from central office control or interference. This condition appears to be more prevalent in school systems in which the junior high school staffs were recruited from among those who have had elementary-school experience.

Although an accepted principle of good management holds that an organization should not be built around individuals, the peculiar relationships of a public-school system to its environment force superintendents again and again to disregard this principle. One observes many violations of this principle as the plans of staff organization for adminis-

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tration and supervision in school systems are compared with the daily operation of administrative and supervisory control.

It seems fair to state that, in spite of the increased professional qualifications of the staff employed in public-school systems, the organizations for the administration and supervision of the work in the schools appear to be static rather than dynamic. School systems making vital changes in many phases of secondary-school work seem to be carrying on with organizations that were devised many years ago.

The staff organizations reviewed in the whole study do not appear to have responded to the challenges that have brought about changes in the curriculum, methods of teaching, and internal school services. In fact, administrative officials appear to hold that an organization once installed may be expected to carry on undisturbed for an indefinite period. A great step forward in educational administration will be made when those responsible for public education realize the basic importance of reviewing the organization of the staffs with every important modification that is proposed in other phases of school work and practice.

With each additional school in the system the problems of coordinating services and articulating the work performed in the various divisions become increasingly important. In spite of the efforts that are being made these problems appear to be among those that need the most intensive study for a satisfactory solution.

The need for more investigation of the problems represented.— This study of the staff employed for the administration and supervision of secondary schools indicates that along with the progress that has been made there remain many old issues awaiting a more adequate handling. Supervision in secondary schools continues to be a subject for discussion while those in charge of the schools are waiting for an organization and techniques that will serve effectively in practice. Office management needs more careful study. The functions and duties of principals, of their staff associates, and of teachers need redefining and reclassification. Professional and clerical duties need to be more discriminately allocated to clerks and to the professional staff. In fact, organization can not

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remain static but must provide the plan through which the schools may capitalize increasingly on the competence and skill of those employed in order that service may be rendered more efficiently and economically.

2. AIMS AND ACTIVITIES OF SUPERVISORS

Number of schools studied and criteria for selecting them.—

This section and section 3 of the chapter deal primarily with the aims and activities of supervisors in a small number of schools carefully selected on the basis of the following criteria: First, each school should be recommended by some competent authority as having an unusually successful supervisory program. Second, the supervisory staff of the school should have some confidence in the merit of its program of supervision. Third, the supervisory staff should be willing to assist the visiting member of the survey staff in collecting the necessary data. Fourth, the schools selected should be representative of the various geographical areas of the country. On the basis of these criteria 30 cities were selected for intensive study. The staff member in charge of the project originally planned to visit one school in each city. In a few cities it later seemed advisable to include two or three schools.

Plan of the study.—The literature of the field was analyzed to discover what competent writers on the subject of supervision have regarded as supervisory activities. Seventy-two such activities were found. A similar analysis of the literature was made to discover what competent writers on the subject of supervision have regarded as the elements of a supervisory program. Sixty-three such elements were found and classified under the following six major divisions: (1) Helping to develop educational aims or objectives; (2) helping to develop subject matter or content, including pupil activities and experiences; (3) helping to develop teaching methods and procedures; (4) helping to adjust the teacher to the community; (5) helping to provide for the individual differences of teachers; and (6) helping to evaluate the supervisory program. By objective methods three comparisons were made, namely, (1) the extent to which the

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real activities of supervisors coincide with the theoretical list of activities derived from the literature; (2) the extent to which the practical programs of supervisors coincide with the theoretical program derived from the literature; and (3) the degree of success, as estimated by the supervisors on a 3-point scale, with which each supervisory activity has contributed to each of the major divisions of the supervisory program.

As a second phase of the study supervisory practices in individual schools were investigated through observation, interview, and the analysis of available mimeographed and printed materials submitted from the schools.

Supervisors classified.—The supervisors who cooperated in this investigation include every person doing any effective supervision in the schools studied. Twenty-five different official titles are represented. For the purposes of this study these various officials have been classified into three groups, namely, (1) those supervisors charged with a large measure of administrative or coordinating functions (for example, the principal); (2) those supervisors who usually give a considerable part of their time to teaching (for example, the department head); and (3) those supervisors who usually give full time to supervision (for example, the special supervisor).

Real and theoretical programs compared.—The following statements may be made as illustrative of the findings in this phase of the study. The theoretical supervisory program proved to be inclusive of every goal toward which practical supervisors in the schools studied were working during 1930-31. No element classified under any of the six major divisions of the supervisory program was recognized as a goal by less than 30 per cent nor by more than 77 per cent of the supervisors cooperating in the study. Supervisors of each type were concentrating their efforts on a comparatively small number of objectives. This is conspicuously true of supervisors of the third type as just listed. Such concentration of effort is partly the result of the division of labor, but it is even more the result of a wise decision to do a few things well. The elements of the supervisory program most frequently recognized as goals are elements in the fields of subject matter, teaching methods, and educational aims or

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objectives. In the field of subject matter the selection of textbooks, reference books, and classroom equipment, the development of the content of individual subjects, and the adaptation of subjects and of content to the individual differences among pupils, were most frequently the objectives of the group of supervisors for the year in question. In the field of teaching methods adaptations for pupils of different levels of academic ability and of different interests rank highest in frequency. In the field of educational aims or objectives individual subjects and subject-matter fields were more often the objects of attention by supervisors than were the subdivisions of individual subjects on the one hand or of the whole educative process on the other. Measurement of the results of supervision by means of tests is conspicuously not a common aim of the supervisors studied. By far the most frequently recognized means of evaluation is careful observation.

Real and theoretical supervisory activities compared.—Of the 72 more or less theoretical supervisory activities derived from an analysis of the literature, all were recognized by varying percentages of supervisors as real supervisory activities composing their supervisory practice.

The 18 supervisory activities most frequently checked as supervisory activities actually performed are—

1. Visit classroom teachers.
2. Read educational literature.
3. Attend professional meetings outside the school system.
4. Plan, conduct, or follow up the results of individual conferences.
5. Hold membership or office in professional organizations outside the school system.
6. Attend, plan, conduct, or follow up the results of departmental meetings.
7. Attend, plan, conduct, or follow up the results of group conferences or committee meetings.
8. Requisition materials needed for classroom work.
9. Consult with parents concerning pupils.
10. Study the interests, abilities, talents, experience, and training of the staff supervised.
11. Attend meetings of community groups or organizations.
12. Study the interests, abilities, talents, and experiential background of the pupils.

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13. Analyze and follow up suggestions made by teachers for the improvement of the educational program of the school.
14. Help teachers to utilize newly introduced materials and equipment.
15. Maintain a system encouraging teachers to offer suggestions for the improvement of the educational program of the school.
16. Encourage teachers to attend professional meetings outside their own school system.
17. Attend, plan, conduct, or follow up the results of general faculty meetings.
18. Advise concerning, or plan the teacher's daily schedule.

Most of the supervisory activities ranking in the lowest fourth in the order of percentages of supervisors performing them are either activities which need not be performed by more than one of a few supervisors in any given system, or they are activities which usually can not be performed because of circumstances over which the supervisor has no control. As examples of the former may be mentioned the "directing and coordinating of the work of all supervisors in the school" and "surveying the community served by the school." As examples of the latter may be mentioned "recommending teachers for leaves of absence with pay or part pay for further training," and "teaching summer school, extension, or correspondence school courses." However, at least four activities appearing in the lowest fourth merit further comment. Two of these deal with the question of rating. Apparently either supervisors do not esteem highly the experience of being rated by their teachers or the idea has not yet become generally current. An analogous observation holds for schemes whereby teachers may rate themselves. The other two activities which merit comment because of the infrequency with which they are performed are demonstration teaching and the development and maintenance of cumulative records of teachers.

3. CONCLUSIONS FROM CONSIDERING SUPERVISORY PROGRAMS IN INDIVIDUAL SCHOOLS

The changing concept of supervision.—The concept of supervision has evolved to a point where the word is no longer a sign of the idea which it is supposed to convey. To-day the supervisor is recognized in outstanding schools as a leader, a formulator, an advisor, a consultant, a helper, but never as a

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perfunctory inspector. The relationship between the supervisor and the supervised is democratic and cooperative. The idea of the supervisor as a consultant is gaining ground rapidly. In some schools the sentiment is unmistakably in favor of making all supervisory service a privilege which teachers may enjoy only on request. Occasionally a part of each supervisor's time is scheduled to "consultation periods" for the help of individual members of the staff who of their own accord are seeking aid; and sometimes educational specialists are secured from outside the local school system for scheduled advisory meetings with teachers and supervisors.

Beginning the year with a program.—The typical supervisor in the schools studied begins the year with a definite plan usually developed through close cooperation with the teachers who are to participate in it. The plan is specific in nature dealing with the problems most needing solution during the current year. The plan sets up goals and outlines the methods by which the goals may be attained. It is in no sense a formula. No formula has been devised whereby success may be insured in the complex business of supervision. Certain goals may be established as worth striving for and certain activities may be listed which supervisors have found successful. But in the last analysis successful supervision is unique with each supervisor, being conditioned to a large extent by his or her unique traits of intelligence, character, and personality.

Approaches to the improvement of classroom instruction.—The principal approach to the problem of improving classroom instruction is no longer the classroom visit with its inevitably ensuing conference. This approach is still an important one, but in outstanding schools supervisors are realizing as never before the potential aggregate benefits which may accrue from many methods of supervision proceeding simultaneously. Group conferences, departmental meetings, and faculty meetings are among the most frequently employed means of supervision, and among those judged to be most uniformly successful. The meetings have no magic virtue in themselves. They must be carefully planned and ably conducted. Carefully prepared agenda issued to teachers in advance of the meetings are elements in their success.

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The time at which meetings are held should coincide with the convenience of those who are to attend. In one system faculty meetings are repeated on the same day for the convenience of teachers. All schools use the mimeographed bulletin as a means of transmitting information intended to help in the realization of the supervisory program. Depending upon the purpose to be served, these bulletins vary from a single page of letter-size paper to comprehensive bound volumes. Printed bulletins and handbooks serve the ends of supervision in a few schools.

Gathering data for supervision.—Since evaluation of existing procedures must antedate intelligent efforts to improve the educative environment, methods of gathering data on which to base plans for improvement are exceedingly important. Tests are little used as sources of data for evaluating present supervisory and teaching procedures, except in a few outstanding schools. Even where tests are used with maximum efficiency the data are supplemented by careful observation of persons qualified to judge. Questionnaires to teachers and pupils and interviews with pupils are proving valuable sources of data. Formal rating scales are not used extensively in the group of schools included in this investigation. In a number of schools they are used only to rate new teachers or teachers on probation. Most rating scales in use have been devised locally. In a few instances scales or score cards are developed by means of which the supervisor is rated by the teachers, or by means of which the teacher may analyze his or her own traits and activities. Valid rating scales used alternately by the teacher and the supervisor tend to keep the teacher constantly critical of his or her methods and to lead to intelligent modifications of his or her teaching procedures. Only one system reported the use of a professional test for teachers. The test tends to acquaint teachers with educational terminology and to stimulate their thinking about educational theory and practice. Supervisors sometimes prepare lists of questions which teachers may use in the analysis of their own traits and activities.

The development of subject matter or content.—Supervisors cooperating in this study are concerned far more with prob-

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lems related to the development of subject matter or content than with any other phase of the supervisory program. In this work the activities of teachers and supervisors are directed along two related routes. The first route leads to the organization of existing subject matter into teaching units or unit assignments. The second leads to the development of new courses and curriculums.

Supervision in the light of present practice.—Almost without exception the supervisors of the first and second types cooperating in this study are doing some work of a purely administrative nature, or some teaching, or both. Attempts to make academic distinctions between administration and supervision meet with numerous difficulties. Intelligent and effective administration creates an environment conducive to the growth of teachers and pupils. Supervision begins where administration leaves off and provides for the additional and direct adjustments necessary if teachers are to function at their best and if pupils are to grow at their optimum rates. Supervision is no longer a "one-man" job, if it ever was such. Outstanding projects now being undertaken in the name of supervision have raised supervision far above the inspeccional level. They involve the cooperative efforts of supervisors, teachers, and even pupils over long periods of time. They are aimed at the improvement of the environment wherein teachers teach and learners learn. They force a consideration of the objectives of education, of child nature, of children's present interests, and their immediate and future needs. They demand skill in all the techniques of research. Hence specialists in the curriculum, in tests, in measurements, and in other forms of research have become integral parts of the supervisory organization. Present practice suggests that an adequate conception of supervision includes every cooperative effort making directly for improved teaching and learning situations, whether the activity deals with the aims of education, with subject matter or content, with teaching procedures, with the better adjustment of the teacher to his or her working environment, or with the evaluation of the supervisory activities themselves.

CHAPTER XIII: SELECTION AND APPOINTMENT OF TEACHERS¹

I. THE NATURE OF THE STUDY

The investigation summarized here has two major purposes: (1) To determine the status of current practices in the selection and appointment of teachers and (2) to identify and to study intensively some of the public schools where the procedures followed in selecting and appointing teachers are unusual or innovating. It differs from investigations in most other projects of the Survey by being more a study of status than of innovating practice. It is concerned also with practices relating to both elementary-school and secondary-school (junior and senior) levels, although little difference was found between practices relating to teachers at the different levels.

The problem is of great importance not only because of the fact that in normal times large numbers of teachers must be employed annually, but also because of the responsibility resting on school executives for choosing personnel wisely in order gradually and continuously to build up a more efficient teaching corps. The greatest obstacle to be overcome in securing the most efficient teachers seems to be the lack of objective methods by which to distinguish superior teachers.

The procedures followed by school executives in selecting and appointing new teachers may be classified under the following headings: (1) The determination of the number of new teachers needed for the following school year; (2) the determination of the qualifications desired of new teachers; (3) the location of desirable prospective candidates; (4) the collection of information concerning prospective teachers; (5) the actual selection and appointment of teachers; and (6) the retention of teachers of high quality. While all these procedures are here briefly sum-

¹ The chapter is based on Monograph No. 12 of the report of the National Survey of Secondary Education, entitled "Selection and Appointment of Teachers," by W. S. Deffenbaugh and William H. Zeigel, Jr.

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marized, more attention is accorded the practice in actual appointment than to others.

2. SELECTION

Types of teachers desired.—Boards of education in a large number of cities and villages have formulated more or less definite policies concerning the selection and appointment of new teachers. This report presents the current practices in cities of different sizes, in different regions of the country, and in different types of schools with respect to: (1) Qualifications concerning educational training of new teachers; (2) requirements concerning experience; (3) minimum and maximum age requirements; (4) the employment of married women; (5) the retention of women who marry in service; (6) the appointment of local and nonlocal candidates; (7) the appointment of relatives of members of the school board; and (8) other local regulations concerning the employment of new teachers.

Locating prospective teachers.—A number of agencies are utilized for the purpose of locating prospective teachers. The agencies utilized for locating new teachers in 1929-30 for the whole group of systems were found to rank in the order of frequency as follows:

1. Applications from individual teachers.
2. Placement bureaus of educational institutions.
3. Private teachers' agencies.
4. City teacher-training schools.
5. Visits to other schools or systems.
6. Visits to higher institutions.
7. Visits to observe practice teachers.
8. State appointment bureaus.
9. State teachers' association bureaus.
10. Lists of candidates from higher institutions.

There are, however, differences of emphasis in these practices for different types of systems. Applications from individual teachers are utilized more frequently in cities of more than 30,000 population, in junior high schools, and in the county systems than in cities of any other size group, school level, or type of school. Placement bureaus in higher educational institutions are utilized more frequently

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in cities of less than 10,000 population, and somewhat more frequently in locating junior high school teachers than at other levels. Private teachers' agencies are utilized more frequently in cities of fewer than 10,000, in the East, and in senior high schools than in other groups of cities, geographical regions, or school levels.

Methods of collecting information about prospective teachers.— Numerous methods are utilized to secure information about prospective teachers. Application blanks are used by about 90 per cent of the systems, and reference blanks by almost 70 per cent, written examinations are given in about 4 per cent of the systems, health and physical examinations are required in about 16 per cent of the systems, interviews with candidates are held in about 97 per cent of the systems, and policies calling for the visiting of candidates in their positions exist in about 60 per cent of the systems.

The devices used for collecting information are also numerous, but there is a significant lack of attempts to judge objectively the probable success of candidates. Researches carried on in this field indicate that the problem of predicting teaching success is far from solved. Until we have more scientific information concerning the prognostic value of certain factors as related to teaching success, superintendents and boards of education will continue to locate teachers in much the same way as heretofore and will of necessity judge the desirability of candidates largely by general impressions.

3. APPOINTMENT

The question as to who actually selects and appoints teachers is of prime importance not only to persons engaged in educational work but also to the community and all persons interested in the welfare of children in the schools. The National Survey has collected material showing the methods used in the actual selection of teachers at various school levels in cities of different sizes, in different geographical regions, and in different types of schools. The material shown in Table 2 presents the data for city schools and independent secondary schools when only single methods

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are reported. Space can not be taken to explain the combination methods referred to in the table.

TABLE 2.—Percentage distributions of systems and schools according to methods and procedures used exclusively in the appointment of teachers at the different school levels

Methods and procedures	City school systems										Independent secondary schools
	Population group ¹					Region					
	I	II	III	IV	V	East	Middle West	South	West	All	
1	2	3	4	5	6	7	8	9	10	11	12
Elementary-school teachers:											
A.....	0.0	1.1	0.8	0.7	4.6	1.2	3.2	0.0	0.0	1.8	(²)
B.....	36.5	44.4	39.2	47.1	57.8	49.1	44.8	52.0	46.5	47.2	
C.....	38.8	25.6	27.2	21.6	19.8	22.7	30.8	10.6	16.9	24.0	
D.....	16.1	2.2	1.6	.0	3.8	3.7	2.4	2.7	1.4	2.7	
Combinations.....	9.6	26.7	31.2	30.6	14.0	23.3	18.8	34.7	35.2	24.3	
Junior high school teachers:											
A.....	.0	1.5	.0	.0	2.5	.9	1.2	.0	.0	.8	
B.....	32.3	45.6	36.8	46.6	56.8	45.9	43.5	48.7	46.3	45.0	
C.....	42.8	26.5	28.8	24.3	19.7	25.3	33.3	8.1	18.5	26.3	
D.....	17.9	2.9	1.1	.0	3.7	3.6	2.4	5.4	1.9	3.0	
Combinations.....	7.1	23.5	33.3	29.1	17.3	24.3	19.6	37.8	33.3	24.9	
Senior or 4-year high-school teachers:											
A.....	.0	1.1	.0	.0	3.5	1.2	1.8	.0	.0	1.1	8.2
B.....	37.4	45.0	38.9	46.1	58.7	48.1	46.3	50.7	43.7	47.2	41.1
C.....	37.6	23.5	28.0	22.3	22.0	23.8	30.5	10.6	21.9	24.6	24.7
D.....	15.6	3.4	1.7	.7	3.4	3.7	2.5	4.0	1.6	3.0	3.2
Combinations.....	9.4	27.0	31.4	30.9	12.4	23.2	18.9	34.7	32.8	24.1	22.8

¹ The ranges of population in the groups are: I, more than 100,000; II, 30,000 to 100,000; III, 10,000 to 30,000; IV, 2,500 to 10,000; V, fewer than 2,500.

² A. The board of education or a committee of the board appoints teachers without official participation by the superintendent. B. Superintendent takes the initial steps by nominating candidates. C. Superintendent makes the appointment to be confirmed or rejected by the board. D. Other methods and procedures.

³ Independent secondary schools in no case reported elementary or junior high school grades.

Few superintendents report that boards of education or their committees appoint teachers without the official participation of the superintendent; almost a half of the superintendents report that they take the initial steps in locating, selecting, and nominating teachers; about a fourth report that they make the actual appointment subject to the approval of the board; and a fourth report the use of a combination of methods.

Boards of education in smaller cities more often than in the larger cities assume the responsibility independently of

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the superintendent. As the size of city increases the percentages of systems in which the superintendent nominates candidates to the board decrease. A direct relationship appears to exist between the size of city and the percentage of superintendents making the actual appointment of teachers, the percentage being largest for the largest systems. Boards of education assume the complete responsibility for selecting and appointing teachers most frequently in the Middle Western States and least frequently in the South and West. Teachers are nominated by the superintendent most frequently in the Southern States and are appointed by them most frequently in the Middle West.

The data also indicate that relatively small differences exist among the methods used for selecting teachers in elementary schools, junior high schools, and senior high schools. Not only does this conclusion hold for all cities combined but also for each of the individual population groups and regions. It is also shown that school boards in independent secondary schools select and appoint teachers much more frequently than in city school systems. This must be owing in chief part to the small size of many independent high schools.

A fact not shown in the table is that school-board committees either nominate, approve the nomination, or actually appoint teachers in about a fifth of the systems. These committees function almost exactly to the same extent in choosing teachers at all school levels, elementary school, junior high school, or senior high school.

4. METHODS OF RETAINING TEACHERS OF HIGH QUALITY

In the larger school systems numerous methods are utilized to retain good teachers. Small schools, under present conditions, find it difficult, if not impossible, to induce superior teachers to remain. Among the devices most frequently mentioned as being used to hold superior teachers are: (1) Salary schedules, (2) provisions for retirement and pension, (3) provisions for tenure, (4) promotions, and (5) leaves of absence.

CHAPTER XIV : PROVISIONS FOR INDIVIDUAL DIFFERENCES¹

1. THE PROVISIONS CONSIDERED AND THE PROVISIONS FOR INDIVIDUAL DIFFERENCES CLASSIFIED

All provisions for individual differences now in use in the secondary schools may be classified into seven categories, namely, (1) homogeneous grouping, (2) special classes, (3) plans characterized by the unit assignment, (4) scientific study of problem cases, (5) variation in pupil load, (6) out-of-school projects and studies, and (7) advisory or guidance programs. The first three of these have been found to be core elements in a typically successful program to provide for individual differences. The last is a provision of sufficient distinctiveness as compared with the remainder that it has been made the subject of a separate project² of the Survey and is mentioned here only to indicate that it is significant in a program of provisions for individual differences.

Nature of the present résumé.—In this summary, so far as space permits, certain significant findings are reported concerning the first three of the seven types of provisions for individual differences listed above. Much less will be said here concerning the three other provisions. For the most part details concerning the provisions dealt with are necessarily omitted. The chief exception to this rule is found in section 4 dealing with plans characterized by the unit assignment, where more specific data are reproduced from the monograph on provisions for individual differences in support of the statement that in practice all plans characterized by the unit assignment are very much alike.

1. HOMOGENEOUS GROUPING

Some axioms and a partly demonstrated theorem.—Homogeneous grouping is a more comprehensive term than ability

¹ The present summary is based on Provisions for Individual Differences, Marking, and Promotion, by Roy O. Billett, Monograph No. 13 of the report of the National Survey of Secondary Education.

² Programs of Guidance by William C. Reavis. Monograph No. 14, of the report of the National Survey of Secondary Education.

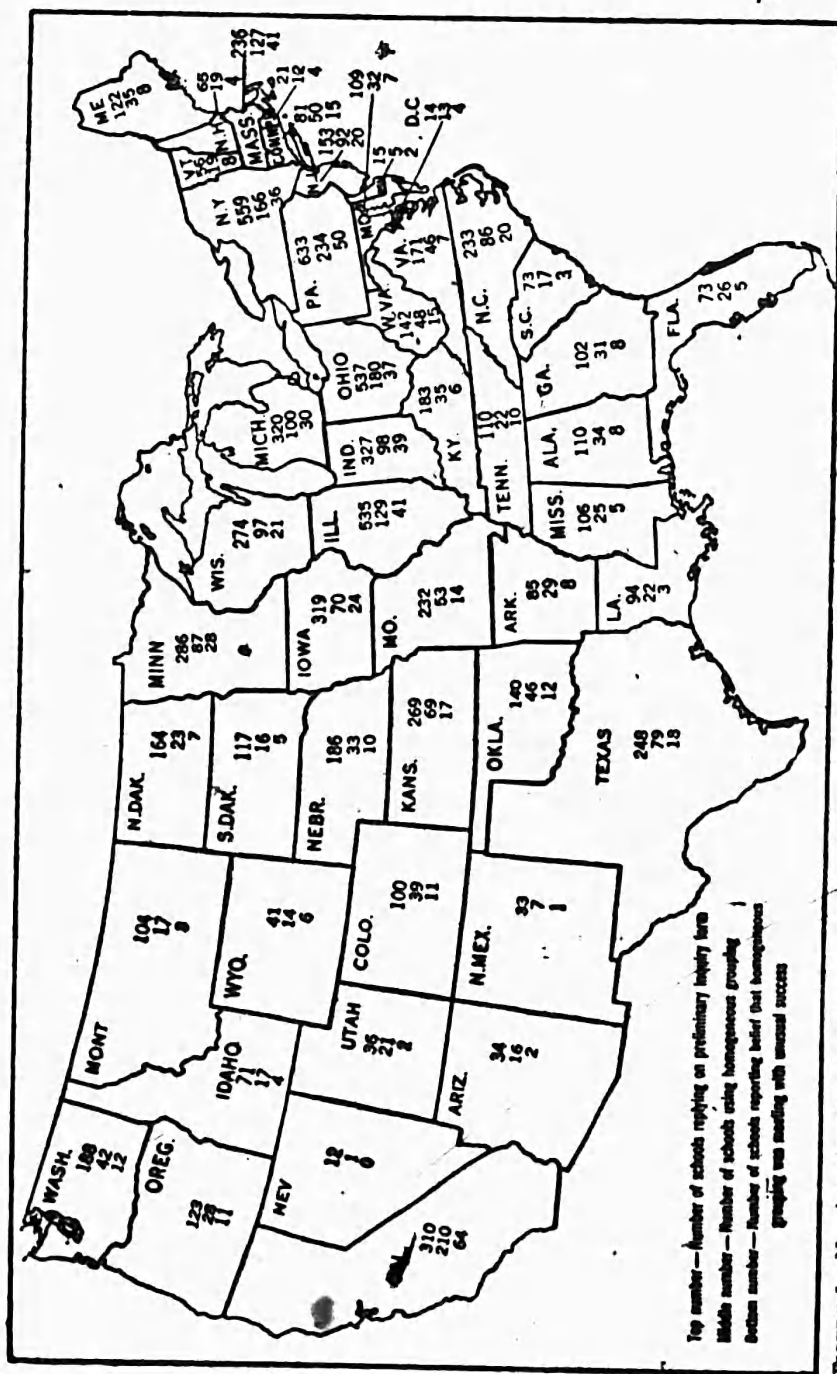
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grouping since grouping is often based on pupils' interests, needs, or objectives, as well as their abilities. Homogeneous grouping is in effect a refinement of classification or a reduction of heterogeneity. Homogeneous grouping is most needed in democratic systems of education because in such systems extreme ranges and diversities prevail in pupils' abilities, interests, needs, and aims. Those who have practiced homogeneous grouping or have experimented with it usually have judged its results to be desirable. In general, controlled experiments with grouping have yielded evidence favoring homogeneous grouping for slow pupils but the evidence for average and bright pupils is conflicting. Good reasons exist for inferring that the advantages of homogeneous grouping decrease as the pupils' abilities increase.

Extent to which grouping is practiced.—Homogeneous grouping is reported in use in the schools of every State in the Union. Nearly a fourth of all schools using the plan report unusual success with it. Homogeneous grouping as practiced in the secondary schools to-day may refer either to grouping *into* class sections or *within* the class section. Of a group of highly selected schools known to be placing unusual emphasis on homogeneous grouping the following statements are true: (1) Less than half of the total offerings are presented to pupils in homogeneous groups; (2) the percentage of offerings presented to pupils in homogeneous groups decreases regularly from the lower to the higher grades of the secondary school; (3) grouping is employed much more extensively in the academic fields than in the commercial fields, and considerably more in the commercial fields than in other nonacademic fields; (4) the extent to which grouping is practiced in the various grades and in the several subject matter fields is determined by common-sense considerations of practicability and desirability.

Bases of grouping.—No feature of a plan for homogeneous grouping is more important than the criterion which determines the pupil's place in the refined order of classification. With respect to basis of grouping used, no two schools of the group of schools studied intensively are proceeding along identical lines. In 289 schools selected for intensive study

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Top number—Number of schools replying on preliminary inquiry form
 Middle number—Number of schools using homogeneous grouping
 Bottom number—Number of schools reporting belief that homogeneous grouping was meeting with unusual success

FIGURE 5.—Number of replies on preliminary inquiry concerning provisions for individual differences from each State; number of schools using homogeneous grouping; number of schools reporting belief that homogeneous grouping was meeting with unusual success

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16 different bases of grouping are in use in a wide variety of combinations. Of all 16 bases employed in these schools the intelligence quotient from a group mental test is most widely used. Average scholarship marks in all subjects combined ranks second, and industry, application, or effort, third. The score from a prognostic test ranks lowest in extent of use.

Classifying and scheduling pupils.—A central agency for classifying pupils predominates in schools using homogeneous grouping most extensively, that is, in large schools and in schools of the reorganized type. Three distinct procedures are followed in determining a pupil's classification level, two of which employ a single numerical criterion. The third omits a numerical criterion altogether. A definite effort is made to schedule fewer pupils to slow than to average sections, and fewer pupils to average than to fast sections. Usually the frequency with which all pupils are reorganized into new homogeneous groups is determined by the frequency of promotion. Misplacement of pupils varies from 1 to 10 per cent, of the total enrollment with the median at 3 per cent. The chief causes of misplacement are: (1) the necessity of balancing class size; (2) irregular schedules; (3) the election of special subjects; and (4) the arrangement of special programs for pupils who for one reason or another can be present for only a portion of the school day. The chief reasons for transferring a pupil from one level to another, in the order of frequency of mention, are: (1) teacher's judgment that the pupil was misplaced; (2) the necessity of balancing class size; (3) the request or objection of the pupil; (4) the request or objection of the parent.

Differentiated courses and teaching procedures.—The percentage of carefully modified courses for the different classification levels increases with increase in grade enrollment. However, even among the largest schools less than 50 per cent report any carefully modified courses in any subject. In the rank order of proportion of carefully modified courses certain of the subject-matter fields are: English, mathematics, social studies, science, foreign language, art, industrial and household arts, and commercial subjects.

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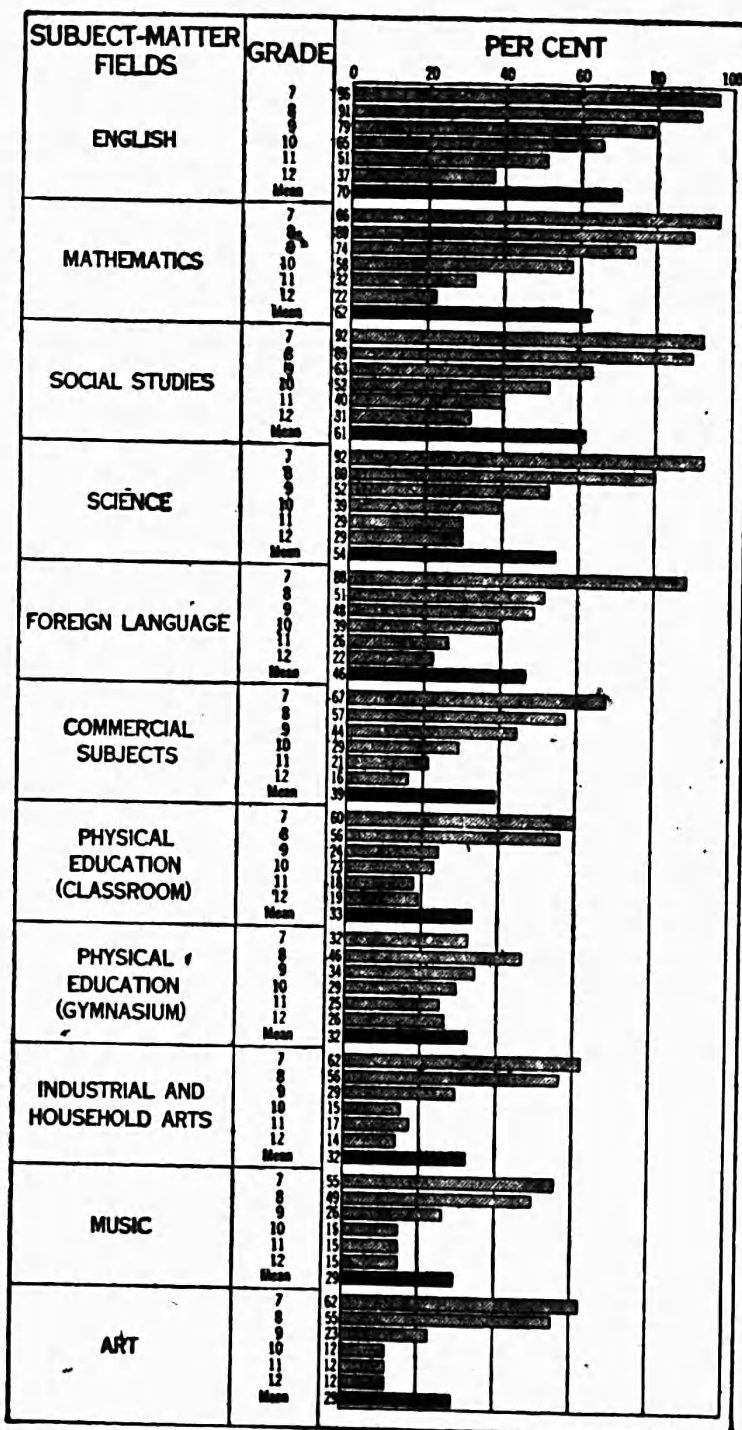


FIGURE 6.—Extent of homogeneous grouping in each subject-matter field and in each grade of all schools

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The differentiation of teaching procedure has advanced much farther than the differentiation of subject matter. Small schools are differentiating teaching procedure *within* the class section much more extensively than large schools. Plans characterized by the unit assignment are a frequent accompaniment of homogeneous grouping.

3. SPECIAL CLASSES

Relation to homogeneous grouping and to "honors" courses.—Special classes begin where homogeneous grouping leaves off, that is, they are formed for those pupils who deviate most extremely from the norm in capacities, or in needs, or in both. The evidence suggests that "honors" courses may be a very acceptable alternative to segregated enrichment classes for the gifted.

Extent of use.—Special classes are widely used in the schools of every State; and use increases regularly with increase in total enrollment. The reorganized schools, especially schools including grades 7 to 9, greatly surpass the unreorganized schools in the extent to which special classes are provided. Special classes are available somewhat more often in the lower grades than in the upper grades of the secondary school.

Reasons for creating special classes.—Stated in general terms the replies show that special classes primarily for the very slow have been created because, when all other provisions for individual differences are functioning efficiently, a certain small percentage of the pupils are unable to succeed with the regular school work without additional help. The pupil's lack of success may be due to insufficient ability, to absence from regular classes, to unwillingness to work, or to any one of a number of adverse circumstances which may have imposed upon him a handicap which makes it impossible for him to achieve success in the regular classes. On the other hand, special classes for the very capable or gifted are established either to bring retarded but capable pupils up to normal grade placement, to accelerate capable pupils, or to enrich the program for capable pupils. In the very nature of the purposes for which the two types of special classes are created it follows that a heterogeneous array of pupils find

their way into the special classes for the slow-learning and a fairly homogeneous group into classes for the very capable or gifted.

The assignment of pupils to and their removal from special classes.—A wide variety of data is considered before either slow or gifted pupils are assigned to special classes. The most frequently considered bases for assigning slow pupils are teacher's rating or the pupil's academic ability or intelligence and average scholarship marks in certain subjects. Six types of data are stressed in assigning pupils to special classes for the very capable or gifted; namely (1) industry, application, or effort; (2) health; (3) average scholarship marks in all subjects combined; (4) intelligence quotient from a group test; (5) physical maturity; and (6) social maturity. No definite formula is employed in determining whether a pupil shall be assigned to a special class. Each case is handled individually in the light of available data. If the assignment is to be relatively permanent thorough case studies are made.

Pupils are usually assigned to, or removed from, special classes for the slow or failing as occasion demands. However, special classes for the very subnormal and for the very capable or gifted are created with the expectation that most pupils assigned to them will remain there permanently. Slow pupils are usually assigned to special classes for help in one or more academic subjects. The gifted are usually segregated in all academic subjects.

The scheduling of special classes.—Classes for the very slow may be scheduled at any hour of the school day, or before or after school, or on Saturdays. Classes for the gifted, for pupils who are behavior problems, and for slow pupils whose handicaps are regarded as permanent are scheduled within the limits of the regular school day. No special classroom facilities are provided for special classes.

Modified content and teaching procedure.—The regular curriculum is the basis for work done in special classes. Most modifications are purely empirical. Modifications of teaching procedure are much more frequent than modifications of subject matter. The unit assignment is extensively used both in classes for the slow and in classes for the gifted.

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Qualifications of teachers.—Aside from sufficient experience and adequate general, professional, and special training, the three most essential qualifications of teachers of very slow groups are: (1) Sympathy, (2) patience, and (3) skill in diagnosing pupil's difficulties. The three qualifications of teachers of the very capable or gifted most frequently mentioned are (1) high intelligence, (2) versatility, and (3) superior knowledge of subject matter.

Reactions of pupils, parents, teachers, and administrators.—Pupils, parents, teachers, and administrators are reported to react favorably to special classes. However, the reactions are not all favorable and point to dangers to be avoided.

4. PLANS CHARACTERIZED BY THE UNIT ASSIGNMENT

The unit and the unit assignment.—A clear-cut distinction should be made between the unit and the unit assignment. The unit is regarded in this study as a concept, attitude, appreciation, knowledge, or skill which, if acquired by the pupil, will produce a desirable modification of his thinking or of other forms of his behavior. The unit assignment consists of those activities and experiences planned by the teacher to enable the pupil to master the unit.

Confused terminology.—Great confusion of terminology exists in the field of plans characterized by the unit assignment. In practice, a number of widely discussed plans, techniques, or procedures characterized by the unit assignment are essentially one and the same thing. These procedures are variously known as the project method, the problem method, differentiated assignments, long-unit assignments, contract plan, laboratory plan, individualized instruction, Winnetka technique, Dalton plan, Morrison plan, or a modification of any one of the last three. Part of the evidence of the essential sameness of the first seven of these procedures in actual practice will be reproduced here. Readers must be referred to the monograph of this project for a report on other comparative studies dealing with the Winnetka technique, Dalton plan, and Morrison plan. These comparative studies amply justify the statement that schools operating under any one of these three last-mentioned terms,

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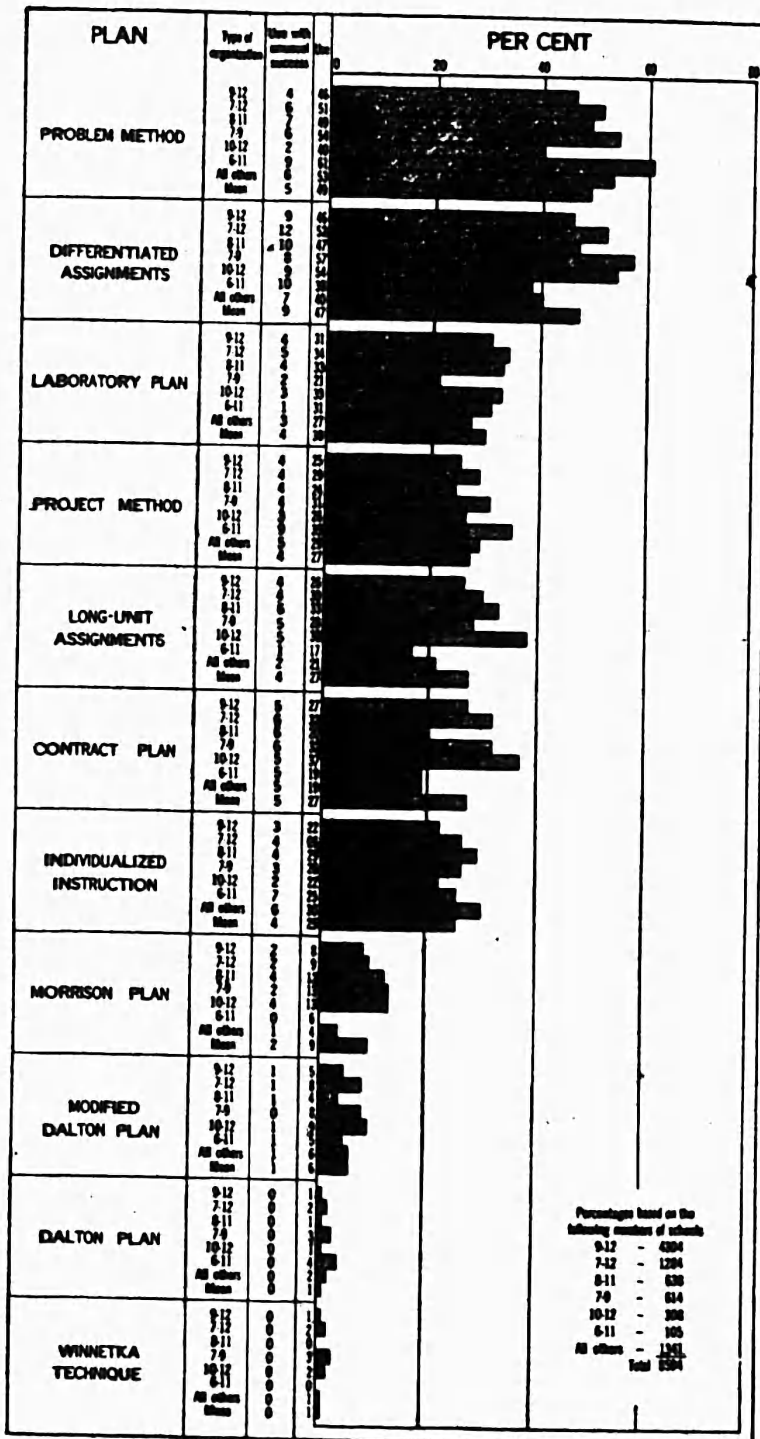


FIGURE 7.—Percentages of schools of different sizes reporting on the preliminary inquiry form the use, and the use with unusual success, of various plans characterized by the unit assignment. (Black and shaded combined, use of the plan; black, use with unusual success)

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or under any modification of them, are doing very much the same type of work done by schools operating under any one of the first seven terms. For a comparative study of actual practice under each of the first seven terms mentioned seven groups of outstanding schools were selected, each preferring one of the seven terms to describe its practices. That is, each term was represented by one group of schools. Three lines of evidence will be presented showing that methods of organization, administration, and classroom procedure are essentially alike in all seven groups of schools.

First line of evidence.—With but one exception the offerings of all schools in each group are organized in the usual way. That is, the offerings are expressed in terms of the usual subject-matter fields, subdivided into the usual required and elective courses, which in turn are subdivided into unit assignments called by various names. The usual number of units defined in the usual way is required for graduation. This finding is of primary significance in the consideration of the problem and project methods since the literature of the field plainly leads one to expect curriculums organized along nontraditional lines.

Second line of evidence.—The second line of evidence is limited to the problem method and the project method. It reveals the rather startling fact that the definition of a problem by respondents from schools using the problem method varies in no significant way, if at all, from the definition of a project as given by respondents from schools using the project method. This identity holds whether the respondents are considering the abstract virtues of a *good* problem or project, or merely the actual characteristics of *most* problems or projects in use in their schools. The reader must be referred to the full report of this investigation for the evidence in support of this conclusion.

The third line of evidence.—So far the evidence has shown that problem and project are defined synonymously by the respondents and that in all seven groups of schools the offerings are organized into the usual subject matter fields, subdivided into the usual courses, which in turn are broken up into units and unit assignments. The third line of evidence

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is drawn from a comprehensive and detailed exploration and intercomparison of the actual practices of the seven groups of schools. This comparative study is based on the tabulated responses of the 7 groups of schools to 21 pages of inquiry material carrying 641 items of information. The tabulated responses answered in clear-cut detail 37 major questions. Lack of space prevents the reproduction of these questions here. They may be found, along with a more extended treatment of this topic, in the monograph of the National Survey dealing with provisions for individual differences. If differences actually exist in the practices of the several groups of schools under the various terminologies, then objective answers to these 37 questions should reveal them.

When the thousands of responses of the 7 groups of schools to the 641 items covering the aforementioned 37 questions were tabulated, classified according to terminology preferred, reduced to percentages, and compared, the evidence showed beyond a doubt that the practices of the 7 groups of schools were essentially alike.

To illustrate the inherent identity of the reactions of the 7 groups of schools to the 641 items, the percentage reactions of the 7 groups to 70 items taken at random were tabulated. To each item approximately equal percentages of schools in each group have reacted in the same way. If the percentage reaction to an item is high for one group of schools it is high for the other groups. If it is low for one group it is just about as low for the other groups. Precisely this situation obtains for each of the 641 items. From a common-sense standpoint the conclusion is justified that these groups of schools reporting different names for their procedures are doing the same things in much the same ways. Practices typical of one group are typical of all. Practices tabooed in one group are tabooed in all.

Statistical treatment of the data supports the common-sense conclusion. For each of the 70 items there are 21 different pairs of percentages to be compared. Hence there are 1,470 paired percentage reactions to be considered. Of these 1,470 pairs of compared percentage reactions only

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43 pairs, or less than 3 per cent, show differences which are statistically real in the sense that the difference divided by its standard error is 3 or more. Seventy-two, or less than 5 per cent, are 2.5 or greater. Further random samplings of items yielding practically the same results show this to be a true picture for all 641 items covering in minute detail the 37 questions listed above as criteria.

Hence the conclusion is inevitable that in practice differentiated assignments, long-unit assignments, individualized instruction, the contract plan, the laboratory plan, the problem method, and the project method are one and the same thing, differing in name only. This conclusion carries no implication that uniformity of practice prevails in any or all of the seven groups of schools. On the contrary great variability exists. However, the variability of practice in any one of the groups of schools is essentially the same in kind and in degree as the variability in any other group, and hence in all groups.

The proved similarity of the various procedures does not subtract from their significance, at least as a group. The full report on this project asserts the usefulness of the unit and the unit assignment and points the way to having them yield maximum utility.

5. OTHER PROVISIONS FOR INDIVIDUAL DIFFERENCES

Scientific study of problem cases.—The scientific study of problem cases as a provision for individual differences increases regularly as the total enrollments of the schools increase. Schools including grades 7 to 9 or grades 10 to 12 make considerably more use of the plan than schools of other types of organization. Sixty-seven per cent of all pupils initially recommended for study as problem cases are recommended primarily because of retardation. Efforts at the scientific study of pupils who have become problem cases emphasizes the fact that the individual pupil must be a known quantity if successful provisions are to be made for his particular needs. In outstanding schools each pupil's interests, special aptitudes, aims, heredity, home environment, health history, school history, and many other signifi-

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cant characteristics and accomplishments, both physical and mental, are known and made a matter of record. In such schools serious problem cases occur infrequently, but when they do occur the data are ready at hand for a preliminary case study. In these schools, furthermore, the services of a visiting teacher, counselor, or consulting psychologist is available if a complete case study involving the collection and interpretation of further data is necessary. The scientific study of problem cases is a provision for individual differences feasible in any school. For financial reasons, however, a school may lack the necessary trained personnel to make possible the collection of sufficient reliable data, their proper filing, or their interpretation. Moreover, the needed facilities for the application of remedial treatment may not be at hand.

Variation in pupil load.—By variation in pupil load is meant variation in the number of subjects a pupil may carry for credit. This provision for individual differences is employed systematically in only a few schools. In these schools, of 21 items likely to influence the decision as to the number of subjects a pupil should carry the pupil's average scholarship marks in all subjects combined and his health are most frequently considered. The plan, where used, is meeting with evident success. Full realization of its possibilities depends on the sanction of accrediting agencies.

Out-of-school projects or studies.—In schools awarding credit for out-of-school projects or studies only a fraction of 1 per cent of the pupils comprising the total enrollment are carrying such work. Although no extensive or unusual work is being done along this line the field seems to be a promising one. Out-of-school projects or studies are less prevalent in schools including only the lower secondary grades than in schools including the higher secondary grades.

The special report on marking and promotion not summarized here.—Monograph No. 13 of the report of the National Survey of Secondary Education, which reports in full the extended study of provisions for individual differences, contains also the report of a study of marking and promotion. This report is not summarized here. The reader interested will find it in Part IV of the monograph mentioned.

CHAPTER XV: PROGRAMS OF GUIDANCE ¹

1. THE DEVELOPMENT OF GUIDANCE PROGRAMS

The last 20 years have witnessed a rapid development of guidance programs in secondary schools. A voluminous literature on guidance has been produced, officers on personnel have been added to the school staffs, and budget provisions have been made for guidance services in some school systems and in many individual secondary schools. Naturally some stock-taking of guidance programs is both desirable and necessary.

One of the projects of the National Survey of Secondary Education had for its purpose a study of guidance programs in city school systems and individual secondary schools reputed to have made significant progress in the organization and administration of guidance service.

The complete report of this project contains in addition to the analytical description of the types of organization of guidance programs found in individual systems and schools, a discussion of the need of guidance in secondary schools; evidence on the proportion of schools carrying on the different phases of guidance, such as guidance concerning quality of work, curriculum guidance, vocational guidance, and placement; and the proportions of schools having the different guidance functionaries, such as home-room advisers, deans of girls, counselors, and visiting teachers. The treatment in this brief exposition will be restricted to consideration of the types of organization of guidance programs. Before proceeding to these analytical descriptions it may be stated that they are based on first-hand contact through visits to the systems and schools represented. There is no assumption that the 10 programs described are the best 10 to be found in the country. They have been selected because they represent serious effort to develop constructive programs and exemplify the chief types of organization.

¹ This chapter is based on Monograph No. 14 of the report of the National Survey of Secondary Education, entitled "Programs of Guidance," by William C. Reavis.

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2. THE TYPES OF ORGANIZATION OF GUIDANCE PROGRAMS

Case studies of guidance programs in school systems and individual schools.—The five school systems of which case studies were made are Boston, Chicago, Providence, Cincinnati, and Milwaukee. The activities featured in the case reports are: (1) Vocational guidance in Boston and Chicago; (2) personnel research, orientation, and counseling in Providence; (3) occupational research and counseling in Cincinnati; and (4) life advisement in Milwaukee. The activities specifically considered in the five reports of guidance programs in individual secondary schools are: (1) Guidance for continuation pupils in the Milwaukee Vocational School; (2) personnel service through committees in the Joliet Township High School and Junior College; (3) the integrated organization of advisory service in the New Trier Township High School; (4) guidance through administrative officers in the Thornton Township High School; and (5) psychiatric-social guidance in the Township High School and Junior College, La Salle, Ill.

The types of organization found.—Analysis of the case reports for the five school systems and five individual secondary schools discloses four general types of organization of guidance programs: (1) Centralized bureaus of guidance for secondary schools in city systems, represented by Boston, Chicago, and Cincinnati. (2) City school systems with a central guidance organization but with the individual secondary school considered the unit in the program, represented by Providence and Milwaukee. (3) Centralized bureaus or departments in individual secondary schools, represented by the Milwaukee Vocational School and the Township High School and Junior College, La Salle, Ill. (4) Central guidance organizations in individual secondary schools which utilize regular officers and teachers as guidance functionaries, represented by the Joliet Township High School and Junior College, the Thornton Township High School, and the New Trier Township High School. Virtually the same guidance activities are undertaken under the different programs. The chief variations consist in the procedures and organization employed in the several school systems and individual schools.

SUMMARY

The central guidance bureau in city school systems.—Principles formulated by the National Vocational Guidance Association² in 1921, and revised in 1924, 1930, and 1931 urge the development of a special bureau or separate departments responsible directly to the superintendent of schools for carrying on vocational guidance service. While recognizing the fact that local conditions render impossible the prescription of the exact form of the bureau or department, the activities to be performed are specified and the recommendation made that the activities be performed only by persons possessing the necessary personal qualifications, experience, and training. Obviously, the plan is intended for use in school systems and individual schools of considerable size.

The organization of a guidance bureau makes possible the carrying on of certain guidance activities, such as occupational research, follow-up studies, and vocational guidance in connection with placement in a central office apart from the administrative work of the schools. A staff of trained workers can be maintained who not only perform the office duties incident to guidance but who also visit schools on call and engage in group instruction, group counseling, and individual counseling. They may also give advice to teachers, parents, and administrative officers regarding guidance of an unspecialized sort that can be carried on in the schools or homes by persons not specifically trained for guidance work.

The director of the guidance bureau is usually responsible to an assistant superintendent or to the superintendent. He is expected to formulate the guidance policy of the school system subject to the approval of his superior officers; to organize the bureau or department as a clearing house for problems of guidance, placement, and follow-up; and to provide assistants who can render expert counseling service to schools desiring such aid.

The activities which can be carried on in the schools by the guidance assistants are: Group interviewing of pupils in

² See *Basic Units for an Introductory Course in Vocational Guidance*, pp. 181-194. New York. McGraw-Hill Book Co. (Inc.). 1931.

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entering classes, individual interviewing of members of the graduating class, individual interviewing of pupils as needs arise, instructing classes in occupations, assisting graduates or pupils required to leave school to secure employment, keeping records of pupils interviewed, visiting employers to enlist their interests and to secure knowledge of the conditions under which employed pupils work, conducting community surveys to ascertain environmental conditions and opportunities for employment, and carrying on follow-up studies of withdrawals and graduates.

In the systems organized in this way the guidance bureau is not expected to provide all the guidance service in the individual schools of the system. The principal of the individual school through his teachers and administrative assistants is expected to aid pupils in the choice of courses or subjects, in the selection of extracurriculum activities, in the development of intellectual interests, in social adjustments, in overcoming difficulties in classroom work, and the like. The guidance bureau provides the specialized service and aids the principal in the organization of the school's guidance program and in the integration of its various guidance activities.

In large cities the staff of the guidance bureau is usually inadequate to provide all the guidance service needed in all the schools. Some schools of a system will be satisfied with nominal services while others will desire all the service possible for the bureau to render. As a result the guidance programs in the individual schools of a school system often vary greatly in both scope and effectiveness. This condition should be charged largely to the administrators of the individual schools rather than to the central bureau.

The development of the central bureau of guidance in school systems and in large schools makes possible occupational research and the utilization of the findings in vocational guidance and placement to an extent scarcely possible under the other types of programs. However, the guidance activities that belong in the individual schools are likely to be neglected unless complementary guidance programs are developed by the principals of the schools or are projected

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by the guidance bureau for individual schools. The weakness of the guidance programs under the control of central bureaus is not inherent, but rather the result of the objectives of the bureaus.

The central guidance organization in a city system with the individual secondary school as the unit.—This type of guidance organization places the responsibility for the guidance program on the head of the individual secondary school. A central organization is established to render consultant service to the principals and specialized services to the local guidance functionaries. The plan eliminates the necessity of specific appropriations in the city school budget solely for guidance purposes. Guidance is integrated with education and is supported as a vital part of the work of the individual school. The activities of guidance should be differentiated and definitely assigned to officers of administration and teachers properly qualified to carry on the activities assigned.

The administrative officers, consisting of principal, vice principal, deans, director of extracurriculum activities, and department heads, accept executive responsibility for providing the program of studies, materials of instruction, the record system; admission of pupils to school; classification of pupils; preparation of the school schedule; arrangement of the program of pupil activities; and administration of cases of discipline. They interview parents; administer attendance; record and evaluate credits; and organize, direct, and supervise the functioning of the different members of the school staff. Many of the activities of the administrative officers affect guidance only indirectly, yet unless the relation of administrative activities to guidance is clearly conceived the guidance activities of other workers may be hampered or completely inhibited.

In the type of central organization here being considered the director of guidance, in case there is such an official, projects the guidance program subject to the approval of the school head. He outlines the guidance activities to be performed by the counselors, home-room advisers, and teachers, and provides the training needed to carry on the

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guidance program. He interprets the guidance program to the school and community, carries on research basic to guidance, and performs guidance activities which require types of skill not possessed by the other members of the staff.

The counselors teach the courses in occupations, aid the pupils in the selection of courses, give group guidance to all pupils, and counsel individual pupils in need of adjustment. They may also serve part time as regular teachers.

The home-room advisers may accept responsibility for the orientation of their pupils, the maintenance of pupil morale, and the development of a wholesome attitude toward the school as a civic enterprise. They keep the records of the pupils, give advice with respect to extracurriculum and other social activities, and act as the intermediary for the pupils with administrative and guidance officers and parents.

The teacher must be encouraged to play a large part in the guidance program of the individual school. His interest in the welfare of the pupil is indispensable, if guidance is to bear fruit. He should sense the symptoms of maladjustment in a pupil in the incipient stages, bring the guidance organization to bear on the case, contribute to the diagnosis of the causes of maladjustment, and assist in the application of the corrective or remedial measures advised. Furthermore, the teacher may give specific guidance to pupils in the pursuit of intellectual interests, in the development of proper habits of study, and in the development of the proper conception of the processes of education and the opportunities for education provided through the school.

The central organization is responsible for encouraging the development of complete programs of guidance in the individual secondary schools. The chief official of the central organization may be an executive officer, as in Providence, R. I., or a consulting officer, as in Milwaukee, Wis. In either case he is likely to function in the individual school as an adviser to the principal and an instructor for the other administrative officers and teachers. Through supervision he seeks to develop a guidance program in all individual schools in accordance with the guidance policy of the central organization.

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Centralized guidance organization in individual schools.— In secondary schools in which the principal is the chief executive officer with full power or much autonomy in organizing and administering his school, a guidance organization may be effected similar in character to that of the central bureau type in city systems. The guidance organization can be made a structural part of the school organization and functional responsibility delegated to the director for organizing and carrying on the guidance activities specified in the school program. The director and his staff may undertake to carry on all guidance activities or he may organize his department to carry on certain activities and delegate to administrative officers and teachers certain other activities retaining supervisory oversight. In either case the possibility of coordinating the guidance activities of the individual school is greater than under the central bureau type of organization for city systems.

The programs of the two schools for which case reports have been presented differ markedly in character, although the type of organization is much the same. Guidance is a department in the administrative organization of each school and the directors are executive officers of their departments with authority in carrying on the guidance functions of the school. They may summon individual pupils for conference, administer tests to classes or groups, give advice to pupils regarding the choice of college or occupation, make contacts with business organizations and industry with respect to placements, carry on research investigations designed to facilitate guidance, and cooperate with welfare organizations in the interests of the pupil personnel of the school.

The central organization in the individual school has a distinct advantage over its analogue, the central bureau of the city systems, in that its activities are concentrated in an individual school instead of dissipated among a number of schools. In operation it more closely resembles the guidance organizations in city systems which emphasize the individual schools as units; it differs in that it maintains a staff of guidance officers instead of utilizing regular administrative officers and teachers.

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Central guidance organizations in individual schools utilizing regular officers and teachers as functionaries.—In schools classified under this type of organization the principal or a trained counselor serves as director of the guidance program. Administrative officers and teachers are utilized as functionaries in carrying on guidance activities.

Large secondary schools with large staffs of officers and teachers make possible the selection of functionaries with special aptitude or training for guidance duties and the differentiation of duties along functional lines. The prevailing organization of the guidance work in the large schools is the home-room plan supplemented by special administrative officers, such as the dean of girls, dean of boys, director of personnel, director of extracurriculum activities, and the like, or class principals, advisory committees, and special counselors.

Through functionaries of the kinds indicated pupils are guided in their choice of curriculums, the adjustment of their schedules, the selection of extracurriculum activities, the correction of disabilities, the development of special interests and abilities, the choice of a college or occupation, and securing placement. Activities of the sort specified are closely related. Unless the school organizes and coordinates the work of the functionaries who perform the activities into a program the guidance services will likely be haphazard and unsystematic.

The organization in small schools.—It is scarcely possible for the small secondary school to secure either the full-time or the part-time service of a trained worker in the field of guidance. Its program of guidance must therefore be developed by the principal and carried on either by him or his teachers. An example of this type of guidance program is reported by Proctor³ for a small rural high school in California. Persons interested in programs for small schools will do well to read Proctor's description for this individual school.

The cost of guidance programs.—In either large or small schools a guidance program may be developed for an indi-

³ Proctor, W. M. *Guidance Program of a Rural High School in California*. Junior-Senior High School Clearing House, 5:14-16, September, 1930.

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vidual school as an integral part of the educational program. The cost of the program may be either greater or less than that of the central guidance department in individual secondary schools, depending on the elaborateness of the organization and the utilization of administrative or teaching time for separate guidance activities. The evidence indicates that the cost of the guidance program will be less if regular officers and teachers are utilized as guidance functionaries.

CHAPTER XVI: RESEARCH WITHIN SCHOOLS AND SYSTEMS¹

I. DEVELOPMENT AND ORGANIZATION OF RESEARCH BUREAUS

The project represented.—The purpose of the project on the full report of which this summary is based was investigation of (1) the personnel of local bureaus of educational research, (2) the undertakings of bureaus or departments of research in city school systems and in individual secondary schools, (3) the research undertakings of individual secondary-school staff members not officially connected with bureaus or departments of research, and (4) the character of the research pertaining to secondary education conducted within schools and school systems. The concern was with the nature and extent of educational research at the secondary level done in schools and systems rather than with that relating to the same level carried on in higher institutions, in State departments, or under other nonlocal auspices. Inquiry revealed that few bureaus of research have been organized in secondary schools and that nearly all local research at the secondary level carried on in school systems is conducted by the bureaus of research in city school systems. The project thus became largely one of studying these bureaus of research in school systems with some emphasis on their relationships to research in secondary education.

Growth in number of bureaus.—It has been shown that the movement for organized research in education is comparatively recent, for it was not until the survey and testing movement was under way that city school systems and State universities began the organization of bureaus of research. From the establishment of the first bureaus about 1912 the number has grown rapidly until there are at present about 150 bureaus in city school systems and about 95 others divided among State departments of education, State educational associations, State universities and colleges, teachers

¹ This chapter is based on Monograph No. 15 of the report of the National Survey of Secondary Education by William H. Zeigel, Jr., entitled "Research in Secondary Schools."

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colleges, and secondary schools. About half of the bureaus have been established since 1925 and about a fourth since 1928.

The director of research.—Exactly half of the full-time directors of research have ranks equivalent to that of assistant superintendents of schools. Part-time directors devote the remainder of their time to a diversity of other duties. The directors are usually responsible to the superintendent of schools and since many of them are in the line of authority they are given the right both by authorization and implication to investigate problems in any field of education. The directors have had on the average less educational experience than superintendents or principals, but about the same as other administrative staff members. However, some directors of research have not worked in types of school positions that would give them a basis of practical school experience. Almost three-fourths have never taught in city elementary schools, about three-fifths have not been principals of elementary schools, and the same proportion have not been principals of secondary schools. On the other hand, directors of research, in terms of academic degrees held, are better trained than other school officers. More than half hold masters' degrees and more than a fourth hold doctors' degrees. Most directors have earned their advanced degrees in the field of education. At the time of inquiry the median salary paid full-time directors was about \$4,000.

The staff of research bureaus.—The staff of the median research bureau consists of the directors and three assistants. These assistants are about equally divided between those of professional and those of clerical grade. About half of the professional assistants in the bureaus, who devote only part time to research, are elementary-school teachers. Part-time clerical assistants are frequently high-school pupils.

The budget of research bureaus.—The median salary and operating budgets of research bureaus were about \$9,700 and \$2,000, respectively. In view of the fact that the median bureau conducts 21 studies a year, it is difficult to see how comprehensive investigations can be made with the personnel and the resources available for the work. The financial

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resources must explain in part the limited types of researches reported. Classification and analysis of researches reveal that many of the studies involve merely the compilation and presentation of facts, and that the staffs of many bureaus are absorbed in duties and functions which are more of an administrative and supervisory type than of a truly research character.

Research bureaus in secondary education.—Only a few bureaus of research have been organized within individual secondary schools. Their organization differs but little from that of city school bureaus, except that their activities pertain to the secondary-school level only.

1. FUNCTIONS OF RESEARCH BUREAUS

Administrative and supervisory functions performed.—As already indicated, large proportions of the directors of research perform duties and functions which are not of a research nature. There is no assumption that these administrative functions are not important. However, analysis supports the belief that these functions are not always in the nature of genuine research nor inevitably functions which should be delegated to research bureaus. The compilation of data, the administration of achievement and intelligence tests, and the classification of school children are important functions, but these activities are not research in the strict sense. At least school authorities should not confuse these activities with research and assume that, having provided bureaus so engaged, substantial research contributions are being made.

Studies which bureaus may make.—Bureaus of research are authorized to make studies of pupil failures, promotions, and testing more frequently than of certain other problems such as employment service, clerical service, teaching methods, and supervision. The data did not permit an analysis of the reasons why some types of studies are authorized more frequently than others, but size of the system seems to influence the scope of activities.

In general, bureaus of research have actually made studies most frequently in the fields in which the greatest proportions

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of systems have been authorized to conduct investigations. Large numbers of studies have been made in the fields of testing, promotion, retardation, and elimination, and relatively few studies have been made in such fields as teaching methods, supervision, and library service.

Studies made during 1929-30.—Directors of research of 53 city bureaus reported a total of 1,116 studies in progress during the year 1929-30. The median bureau had in progress about 21 researches. As previously pointed out, the type of assistance furnished the director and the amounts spent for the operating expenses of the bureau raise a presumption of doubt concerning the quality of many of these researches. A fact of significance in a survey of secondary education in this country is that half the studies in progress during the year were reported as relating primarily to the secondary level. Slightly more than half the whole number of studies in progress during 1929-30 were later mimeographed but relatively few have been either printed or published in educational periodicals. Only a few of the studies conducted in city bureaus have been submitted as theses for advanced degrees and about 10 per cent were reported by the directors of research as affecting in any marked way school organization and practice. The data do not permit an analysis of the extent and manner in which these studies have actually affected educational practices. This problem should be a fruitful field for further investigation.

Coordination of research activities.—Research activities of city bureaus are coordinated with those of other agencies inside or outside the system in about three-fifths of the cases. The research bureau provides such coordination as is attempted within city school systems by outlining the projects, by advising the staff members, and by exchanging the results of investigations with other bureaus of research. A number of directors indicate that the bureaus attempt to develop programs of research activities for the systems represented and to guide and direct research work of teachers within the system.

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3. RESEARCH BY PERSONS NOT CONNECTED WITH BUREAUS

Research has come to be considered by educational leaders as a function of teachers and principals, but to date few boards of education have made provisions enabling teachers to carry on research activities on school time. The number of researches carried on by staff members not connected with research bureaus is small and relatively few are ultimately mimeographed or printed. The underlying incentive for more than a third of the studies made by individuals unconnected with bureaus is the earning of advanced degrees. Research within individual secondary schools is even more limited in extent. Large proportions of the high-school principals, both of the schools reported as outstanding in research and of secondary schools selected at random, stated that no research was being conducted in the schools. As a result, if the contention is that teachers and principals should carry on research, practice lags far behind theory. At present little research is being carried on in secondary schools except by city bureaus of research, and usually the investigations of these bureaus do not interpret the data and recommend improvements in school practice.

4. CLASSIFICATION AND ANALYSIS OF RESEARCHES MADE

In general, the reports of investigations submitted to the Survey indicate that bureaus of research in city school systems devote the major portion of their time and energies to the compilation of facts and statistics. However, this conclusion is not unexpected in view of the many administrative and supervisory functions delegated to these bureaus. They do not have the time nor the resources to permit many investigations of a true research character. It is admitted that facts and statistics concerning the school systems should be available to the superintendent and board at all times, but it is highly unfortunate that more bureaus do not conduct investigations of educational problems holding more promise of modifying and improving school organization and administration, classroom techniques, and other educational practices.

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5. CONCLUSION

The first impression from the evidence gathered is one of discouragement. The upshot of the facts presented is that the total extent and the quality of the research carried on within schools and systems is not highly commendable. The second thought on the situation disclosed is, however, more encouraging. The research movement in education, after all, is relatively new and bureaus have had to work out their own problems and doubtless must at first justify their existence by rendering immediate services to administration. Performances of these services, which frequently resort to the procedures of research, should gradually lead to committal to substantial programs of research in these bureaus and these, in turn, should stimulate larger proportions of individual members of school staffs not officially connected with the bureaus to carry on significant studies. Much assurance may be taken from the fact that at least a small number of bureaus in city systems of the country are prosecuting estimable investigative programs. The existence of a large number of bureaus of research which have made beginnings and of at least a small number of bureaus with strong investigative programs are a prophecy of generous spread of research activity outside higher institutions that will help to elevate education to unquestioned professional status.

CHAPTER XVII: INTERPRETING THE SECONDARY SCHOOL TO THE PUBLIC¹

The need for interpretation of schools.—Since education is basic to social changes of great importance to human progress, the general public has a vital interest in the needs, aims, and achievements of the schools. The amount of support for education depends on the degree to which the public understands and appreciates its educational institutions.

Because of the extensive and sometimes costly expansions in the educational offering of the rapidly growing secondary schools, the present need for interpretation is probably more insistent at this level of the educational ladder than at any other.

Purposes and methods of the study.—The investigation of programs of interpretation was made (1) to describe the policies and practices of publicity in a few selected secondary schools, (2) to secure information on the frequency with which these policies and practices are followed, and (3) to estimate the effectiveness of certain programs and mediums of interpretation in use.

To describe the policies and practices of publicity in a few selected secondary schools, an investigation was made of the complete interpretation programs of six junior and senior high schools in Denver, Cleveland, Philadelphia, and Kansas City, Mo. To learn how generally the practices of publicity followed by the six schools studied in detail are employed by schools active in educational interpretation, responses to an inquiry form of approximately 250 items were secured from 160 public junior and senior high schools selected with the assistance of State and city school officials. To estimate the effectiveness of certain programs and mediums of interpretation in use, the following were among the steps taken:

¹ This chapter is based on Monograph No. 16 of the report of the National Survey of Secondary Education, entitled "Interpreting the Secondary School to the Public," by Belmont Farley.

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(1) The amount of space devoted to school affairs in newspapers in four cities was measured. A total of 13,225 column inches of school news was read during a 3-month period.

(2) An examination was given to patrons of certain high schools in these four cities in order to discover whether there was a relation between the amount of space devoted in the newspapers to school news and the extent to which the patrons were informed about schools.

The following summary sets forth the principal policies and practices of the 6 schools in the 4 cities selected for special study, with comments on the extent to which these policies and practices obtain in the 160 schools responding to the inquiry.

Policies of interpretation.—In nearly half the schools studied permanent continuing programs of interpreting the schools to the public are being carried out in accordance with accepted policy. Generally, policies of educational interpretation in force have been arrived at through the initiative of school officers and teachers rather than through formal adoption by boards of education.

Officers responsible for public relations are endeavoring to adapt their programs of interpretation to the interests and needs of at least three groups, namely, pupils, teachers and other school employees, and the general public.

Interpreting the schools to pupils.—Interpretation to pupils is accomplished through educational guidance, the social sciences, or other established courses. Assembly exercises, school clubs, and school publications are important mediums employed for keeping pupils informed. Among school publications the school paper is the most important for this purpose. In a few cities illustrated programs of studies are written in popular language for distribution to pupils and their parents.

Interpreting the schools to teachers and other school employees.—Faculty meetings afford the most convenient and effective opportunity for keeping teachers informed of the schools. The annual report of the superintendent to the board of education and the important motions, resolutions, and official actions of the board of education are important

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topics for consideration. Surveys are made of the school or of the city school system; plans for new buildings and new tax levies are studied. Many principals explain the aims and needs of the schools at regular meetings held for janitors, clerks, and other employees. Bulletins from school officers are a widely used medium of interpretation to school employees. In some of the larger cities publications referred to as "house organs" keep school employees informed of the activities of the school system. Local teachers' associations issue similar publications.

Interpreting the schools to the public.—Exhibiting school work is the favorite method of interpreting the schools to patrons and the general public.

The local newspapers rank second in frequency as a medium of publicity. In some cities newspapers assign special staff reporters regularly to cover educational news. Faculty members seldom contribute articles to the local press.

In only 8 per cent of the school systems from which responses came is there a formally organized department of public relations with a director held responsible for the program of interpretation. In other school systems duties connected with the program of public relations are performed by the board of education, the superintendent, the principal, the teachers, or by teachers and officers organized into committees for the purpose.

The annual commencement exercises are an increasingly popular means of interpreting education to the public. Addresses, exhibits, and demonstrations on these occasions describe the aims, needs, and achievements of the schools.

Direct contacts with the home are made through bulletins or news sheets for parents, periodic reports of marks, souvenir booklets, and letters written to parents by pupils and teachers. In half the schools provision is made for the systematic visiting of homes by teachers. In most of the schools parents are urged to visit regular class work. The parent-teacher association is considered one of the most important means of securing cooperation from patrons and

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the public. The schools make important community contacts through cooperation with local organizations, such as the chamber of commerce, lodges, and fraternal societies, medical and legal organizations, churches, etc.

The radio is used by many high schools in the program of interpretation. The high-school building is frequently used as a community center and is an important means of bringing the public and the school together.

The effectiveness of programs of interpretation.—The highest average score on the parents' examination was made by the patrons of Collinwood Senior High School in Cleveland. The average score next to the lowest of the six schools was made by patrons of Thomas Jefferson Junior High School in the same city. Cleveland led all four cities by a considerable margin in amount of newspaper space devoted to schools. Among patrons of Collinwood participating, there was a higher percentage of parents who had attended school above the elementary grades than there was among patrons of Thomas Jefferson. However, the results of the examination from all schools combined show that extent of education of parents had little influence on the score.

The data suggest that other mediums may be more effective than the newspaper in familiarizing patrons with school facts. At least no definite relationship between the amount of school news published and the extent of parents' information of the schools can be established from the study made.

The scores made by fathers and mothers show that they are about equally well informed on details pertaining to the education of their children. Contrary to any opinion that may be entertained to the effect that parents do not keep as close touch with the education of their children in the later years of school as in the earlier years, the data show that parents of senior high school pupils are as familiar with school-matters as are parents of junior high school pupils. In fact, when the scores of parents were grouped according to the number of years which their children had attended the same school, the average scores increased proportionately to the length of the period attended.

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The latter finding points to the fact that parents learn a great deal of what they know about the schools from their children, and emphasizes the importance of interpreting the schools to pupils.

Conclusion.—From the fact, that the policies of interpretation in force have been so seldom adopted formally by boards of education and have evolved through the initiative of individuals, it may be inferred that too often programs of interpretation depend on the foresight of chance leadership. The lack of planned programs with well-defined objectives is also indicated by the few school systems in which the responsibility for interpretation has been centered in a single individual.

The study shows, however, a recognition of the need of interpretation, and a careful test of its possibilities in many communities. The results achieved by these programs justify the expansion of efforts to interpret the schools under the direction of trained leadership, with a plan which coordinates all the available and appropriate mediums through which education may be interpreted to the public.

CHAPTER XVIII : THE SECONDARY SCHOOL LIBRARY¹

1. THE METHOD OF INVESTIGATION

In common with most other phases of the Survey, the library project aims to report innovations. Accordingly the first step was to locate secondary schools with outstanding library service. Early in the Survey there were sent to State commissioners of education, to city school superintendents, and to high-school principals inquiry forms on which they were asked to report the names of secondary schools having outstanding library service. Similar requests were sent to library specialists, including supervisors of school libraries, State library commissions, and other leaders in the school-library field.

The second step in the study was the preparation and sending of inquiry forms to 620 of the schools which had been recommended as having successful library service. In the inquiry forms emphasis was given to the fact that mention and description of innovations in high-school library service were particularly desired. The 390 returned forms, which were received from schools in 46 States and the District of Columbia, were studied carefully for the purposes of locating innovations and of selecting libraries to be visited.

The third step was that of visiting a selected group of secondary-school libraries. First-hand contact through visitation was made with libraries in 44 schools. Lack of time made it impossible to visit a larger number of outstanding high-school libraries. It is believed, however, that the schools selected are representative of the better practices in secondary-school library work. During the visits to these libraries, innovations in library service and devices reported to be used successfully were particularly sought.

The findings of the library investigation are based on (1) data reported on the inquiry forms filled out in 390 schools and (2) evidence gathered during the visits to school libraries.

¹ Based on *The Secondary-School Library*, by E. Lamar Johnson, Monograph No. 17 of the report of the National Survey of Secondary Education.

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In the following pages are presented a limited proportion of the findings of the whole study.

2. CERTAIN FINDINGS OF THE INVESTIGATION

Library rooms.—Secondary-school libraries are housed not only in reading rooms but also in additional rooms useful in extending library service. Among such rooms reported by various schools are conference rooms, library classrooms, and rooms for visual education. In a few schools teachers' reading rooms adjoin the library, thus giving teachers ready access to the library during their vacant periods.

Library equipment.—Equipment in the selected libraries cooperating in this investigation includes not only charging desks, catalog cases, and other equipment necessary for carrying on the routine work of the library, but also many items useful in stimulating recreational reading and in extending the sphere of the library's influence. Among such equipment are the following: Bulletin boards, display cases, magazine display racks, files of pictures and of pamphlets, phonographs, cabinets of phonograph records, trans-lux machines, and cabinets of phonograph materials.

Admitting pupils to the library.—Methods of admitting pupils to the library undoubtedly have an important influence on the use of library materials. If pupils have difficulty in gaining admittance to the library, its use will be reduced; if, on the other hand, pupils have ready access to the library, they will be encouraged to come to the library and to use its materials.

A number of schools have systems of admitting pupils to the library which reduce admission routine to a minimum for pupils, teachers, and librarians. Many schools use methods of admission which make unnecessary the use of library permits, and a few schools have gone so far as to give pupils complete freedom with regard to going to and from the library, no attendance being recorded either in the library or in the study hall.

Relation of the library to the study hall.—Reports from the schools studied reveal a wide divergence of opinion with regard to the combination library-study hall. In an effort

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to determine the actual use made of library materials in schools with the two types of arrangements as regards study halls, more than 17,000 pupils were asked to indicate on a simple form whether they had used the library the day before the form was filled out, and if so, to report the uses they had made of the library on that day. Results of an analysis of the replies show that every activity requiring the use of library materials was more frequently performed in schools combining the library with the study hall than in the other schools. In other words, the data consistently show that pupils in schools having library-study halls make greater use of library materials than do those who attend schools having libraries separate from study halls. The evidence indicates that if the library purposes to encourage the use of its materials, the combination plan achieves this aim better than separation. Objections to the library-study hall must not, however, be ignored. Those favoring the combination plan must make every effort to remove the basis for objections to it. A number of school administrators are providing librarians with teacher-assistants who relieve the librarian of all duties with regard to attendance or discipline. Efforts along these and similar lines must be made if the difficulties associated with the library-study hall are to be overcome. Also, in schools with separate libraries unusual efforts should be made to offset the disadvantages present in a plan which does not make library materials immediately accessible to pupils.

The library in the small secondary school.—That library facilities in small high schools are usually inadequate is the conclusion reached by investigators who have studied secondary-school libraries. The successful library service found in a number of the selected schools included in the present investigation demonstrates, however, the possibilities of libraries in small schools. Continued efforts to increase the size of the groups served by the libraries in the smaller high schools will undoubtedly result in raising the standards of library efficiency in them.

Pupil library assistants.—In large and in small schools throughout the country, librarians are being helped by pupil

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assistants. More than three-fourths of the schools cooperating in this study have pupil library assistants, and a number of schools have effective programs for selecting pupil library assistants and for training them in the duties they are to perform. Among the wide range of activities in which pupil assistants engage are the following: Place returned books on shelves, check returned books, charge books, file charge slips, check library attendance, file clippings and pictures, mount pictures, read shelves, make posters, collect fines, and type book cards.

Instruction in the use of the library.—Librarians and educators agree that high-school pupils should be given instruction in the use of the library, and a large proportion of the schools studied provide such instruction. In most schools this instruction is given as a unit in some regular course like English, but in a number of schools library instruction is provided in separate courses required of all pupils.

Adapting the library to new methods of teaching.—The newer methods of classroom teaching are making unusual demands on the high-school library. Courses are now less frequently than formerly based on single textbooks only. The Dalton plan, the Morrison technique, the contract plan, and various plans of supervised study place a new emphasis on the use of library books, and in many cases pupils must be given access to these books during class periods. Librarians report using a number of devices to give pupils access to library books during class periods. Representative of the methods used are the following: Providing books for classroom libraries, loaning books to classrooms for varying lengths of time, establishing departmental libraries, permitting pupils to come to the library during class periods, and having classes meet in the library.

Encouraging teachers to use the library.—The success of high-school library service depends in a large measure on the cooperation which the library staff receives from teachers. No school library can achieve a maximum degree of success unless teachers are aware of the resources of the library and are alert to the possibilities of using library materials in their teaching.



Courtesy: Los Angeles City Schools

EAGLE ROCK HIGH SCHOOL, LOS ANGELES

The 6-year secondary school, on a 5-3 or undivided basis, was found by the Survey to be superior to separate junior and senior high school.



Courtesy, Milwaukee City Schools.
PUPILS AS ASSISTANTS IN THE HIGH-SCHOOL LIBRARY, MILWAUKEE.

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Many librarians are aware of this situation and report making efforts to encourage teachers to use the library. Most frequently used are devices which inform teachers of the resources of the library: Library news bulletins, library news notes in the principal's bulletin, book exhibits in the teachers' reading room, talks by the librarian at faculty meetings, discussion of library problems during an entire faculty meeting, and teas for teachers held in the library.

Encouraging recreational reading.—Librarians report various methods used in stimulating recreational reading. Representative of devices reported to be successful in encouraging pupils to read for pleasure are the following: Exhibiting books, posting book jackets, using posters to advertise books, exhibiting autographs, and autographed books, using book lists, placing book notes in the school paper, giving book talks, having story hours, conducting book clubs, and giving pupils time for browsing and free reading in the library.

Studies reported by librarians.—A few librarians report making research studies as a means of attacking local library problems. Such investigations as are reported may not in every instance be valid from a scientific point of view. The studies do, however, represent efforts to improve conditions or to reveal conditions in order that desirable changes may be made. Among the investigations reported by librarians are the survey of pupils' reading habits and interests, the library census to identify pupils who are not using library materials, the study of the number of pupils coming to the library to study assignments made by various teachers, the study of library attendance of pupils in the various home rooms of the school, the study of book cards to determine what books are not being used, and the investigation of circulation statistics and of library attendance data to determine the influence of new methods of classroom teaching on the use of the library. The reports of these studies indicate not only that school librarians can conduct experimental investigations in their schools but also that they can make studies which are of practical help in meeting the problems which they face.

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3. PROBLEMS FOR INVESTIGATION

An examination of the literature regarding the school library reveals that few research studies have been made in attempting to throw light on the vital issues of school library administration. Among studies which^a need to be made are the following:

(1) Many and various in character are the library standards which have been set up by States and by other school accrediting bodies. No compilation of standards has as yet proved completely satisfactory; no set of standards has been developed on the basis of scientific evidence regarding the library requirements of schools; and in no case has a statement of standards been arrived at which adequately recognizes the qualitative as well as the quantitative aspects of school library service. The problem is one which demands both extensive and intensive study.

(2) Little cooperation is reported between schools and public libraries. Few high-school librarians report receiving assistance from public libraries, and even fewer secondary-school librarians report performing activities to assist public libraries. The problem of the relation of the school library to the public library demands extended investigation in order to determine the respective functions of these two types of libraries and in order to set up programs for effective cooperation between school and public libraries. The situation is one which might well be investigated by a committee of school and public librarians.

(3) The entire problem of instruction in the use of books and of libraries demands investigation. Can the value of such instruction be scientifically demonstrated? What ought to be included in a course in library instruction? In what grades of the school ought the various units of instruction to be given? Who should give the instruction, librarians or teachers? These questions must be given the same careful study that is being given questions touching other branches of the curriculum.

(4) Throughout the country the relations of teachers to the library is receiving much attention. If teachers are not led to make effective use of library materials, the school

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library can at best achieve only a small measure of success. Most librarians are making conscious efforts to encourage teacher use of the library, and in many schools effective programs of teacher-library cooperation have been set up. In general, such difficulties as are reported appear to center around the fact that teachers fail to realize the resources of the library. This situation is, it would seem, one which must be attacked during the period of professional training of teachers in college or university. A much-needed investigation is that of provisions which teacher-training institutions are making and can make for instructing their students, first in the use of libraries, and second, in the use of library materials as an aid to effective teaching in the secondary school.

CHAPTER XIX : PROCEDURES IN CURRICULUM MAKING¹

1. CITY-WIDE CURRICULUM REVISION

Plan of the investigation.—The study on procedures of curriculum making involves an analysis of practices reported for curriculum making (city-wide, county-wide, and state-wide) and of central influences within States on local curriculum making. A separate section is devoted to each of these studies.

Method of investigating city-wide procedures in curriculum making.—Data compiled for the study of procedures in curriculum making on a city-wide basis are the result of an analysis of 162 forms returned by school officials and of visits to a selected group of systems and schools. The cities from which reports were had vary in location and size, 60 being of less than 30,000 population. In all cases, the revision reported is that in process during the five years immediately preceding the date of the report. Returns were received from 64 schools reporting revision as completed, and from 98 reporting revision as in progress at the time of report. Space was given on the form for the appraisal of each procedure followed.

General features of programs.—Respondents listed 1,921 courses as being revised, 208 schools reporting revision of junior high school courses, and 146 reporting for senior high school. In 129 of the 162 cases, the reports represent revision for the city as a whole. Elementary-school and secondary-school revision were conducted as separate organizations in 117 cases, and 72 per cent of those reporting had abandoned the 8-4 form of organizing school grades. Less than half of all schools reported building the curriculum "from the ground up." Provisions were not reported in half of all schools for such important elements as training teachers to make and to use the new courses, to correlate and edit the work, and to appraise the results of revision. The average time required

¹ This chapter is based on Monograph No. 18 of the report of the National Survey of Secondary Education, entitled "Procedures in Curriculum Making," by Edwin S. Lide.

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for revision was approximately three years. Although many schools did not report cost, the median system spent less than \$1,000 for revision. In the majority of systems, the superintendent or principal directed the programs. Lay agencies were seldom used and less than half the systems reported the use of outside specialists. The production committees average fewer than 10 members, the department head usually acting as chairman.

Specific procedures for separate elements.—Listed below are the procedures most often reported for realizing certain elements of the program. Space will not allow indication of differences according to size of city, or of outstanding practices which are listed in the body of the report.

<i>Element</i>	<i>Procedure</i>
Securing cooperation and interest.	Meetings with administrative staff; individual talks.
Organizing committees.	✓ Central office determines; a few use objective criteria.
Conditions of work:	
1. Training teachers.	Faculty meetings, special class.
2. Making literature accessible.	Centrally organized library.
3. Provisions for meetings.	School hours used by less than half of the cities.
4. Relation to regular duties.	No release in more than half of the cities.
Selecting and organizing material.	Practices elsewhere.
Coordinating and correlating work.	Joint committee meetings.
Trying out tentative course.	In classroom by all teachers.
Assembling the course.	Mimeographed.
Training in use of new course.	No formal provision in half of the cities.
Appraising results.	Informal, if at all.
Continuous revision:	
1. Agency directing.	Same committee as first used.
2. How criticism secured.	Initiated by general committee.
3. How experiments conducted.	Teachers are encouraged to conduct them.
4. Agency deciding changes made.	Administrative and supervisory staff.

General appraisal.—The general evaluations given at the end of the form used by respondents indicate the following

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conclusions as a result of their experience: (1) The service of a capable director is most essential; (2) all teachers should participate and should be relieved in part from other duties; (3) there should be more thorough preliminary instruction; (4) lack of money, time, and training of teachers are obstacles to the success of the work; (5) the professional growth of teachers is the greatest benefit derived.

1. COUNTY-WIDE REVISION

Although schools are organized in many States on a county-wide basis, it is only in Maryland that a state-wide policy is in operation involving each county as a unit for curriculum making. The few additional examples given of plans in other States, however, may be symbolic of beginnings which will later be extended more widely. The plans employed differ materially from those indicated for revision on a city-wide scale only in that more extensive aid is had from State departments. In Maryland, while the plans formulated for each county are adapted to the conditions in that county, the ultimate end is not only better courses of study, but curriculum making is employed as a means of constructive supervision and teacher training. Conditions in Maryland seem peculiarly adapted to such a policy, but the wide-spread interest and effort given by these teachers will encourage those State departments looking ultimately to more wide-spread county revision.

3. STATE-WIDE REVISION

General features.—Replies from all States to a general inquiry form indicate that 12 had, within the past five years, been engaged in curriculum making on a state-wide scale. The present report is based on an analysis of a special inquiry form and pertinent literature received from 11 of these States. Except that each State selected a general or administrative committee and production committees in the several subject fields, there is little agreement in the organizations employed.

Comparison with city-wide revision.—The facilities available in a state-wide revision program are more extensive than those in a city-wide program, but only a few States have

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made the utmost use of them. Later programs—such as those of Idaho, Minnesota, and South Dakota—indicate more extensive plans for their employment. In Idaho, for example, interest and effort of the teaching force of the entire State were largely secured, careful attention was given to the selection and training of teachers, facilities and advice from the university were utilized, and plans were formulated for trying out and appraising the new work. The major elements included in State programs are practically the same as those indicated for city programs, but procedures for their realization differ. In most States, organization for secondary-school revision is distinct from that of the elementary school. The average time for complete revision of the curriculum on a state-wide basis is three years—the same as for a city-wide program.

Details of organization.—In most States, revision of the curriculum has not involved several distinct and carefully planned stages. Later programs indicate the giving of more attention to this feature. Direction of the program is usually given to a member of the State department of education or of the State university. Some States pointed out the need of a full-time director for the work. The production committees number from 4 to 12 members, usually determined by the State department. In Idaho, a special nominating committee was appointed for this purpose. Not many States have attempted to engage individuals to act in other capacities in developing the program. Attention is called to efforts in Oklahoma to secure the advice of classroom teachers and in South Dakota to plans calling for reaction from many nonprofessional groups as well. Except in revising subject-matter materials and teaching procedures, elements of the program in most States are handled by the central or administrative committee. Only a few States indicate the placing of definite responsibility for selecting textbooks, trying out the courses before adoption, training teachers in the use of the new courses, and appraising the results of instruction. The cost of revision, which varies from \$600 to \$30,000, is borne for the most part by the State departments of education.

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Specific procedures.—Careful plans for securing extensive cooperation and interest of teachers in curriculum making are also reported in only a few States. The extensive programs of research undertaken in Idaho and South Dakota are noteworthy. Respondents indicate the need of providing better conditions of work. Enthusiasm is reported for plans employed in Indiana and Idaho, where production committees work out courses of study in seminars at the university. Greater need is also expressed for coordinating and correlating the work of the various committees. Programs of curriculum making seem most lax, however, in provisions for trying out tentative courses, training teachers in their use, appraising the results of instruction, and keeping the courses up to date. Of interest in this connection are plans employed in Connecticut for experimental try-out and the training of teachers in State institutions, reports from classroom teachers on a special form in Indiana, and the use of questionnaires by two States in appraising results. Although the stage had not yet been reached, it is significant that plans in two of the Western States include procedures for keeping the course of study up to date.

4. INFLUENCE OF CENTRAL AGENCIES

Replies were received from approximately half of all State departments of education, State universities, and State teachers' associations on a special form inquiring as to the actual preparation of programs of studies or courses of study, field service, and circularization of information for local schools. Almost all State departments publish programs of studies. In many instances, however, they apply only to small schools. Of particular interest are the programs devised for schools of different size in Arkansas, North Carolina, and Oklahoma. Most States also set up minimum essentials of instruction in the various fields, but less than half reported publication of detailed courses of study. Field service furnished through State departments is mostly of an incidental nature, such as that given by supervisors on their annual visits. In California, however, a definite program has been set up for the development of curriculum making

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through the conference method. Most of the information circularized by State departments relates to studies of high-school graduates or to test results. In New York, a careful study was made of general and outstanding practices in all of the junior high school fields of instruction. In a few States, regional conferences are held for the discussion of curriculum matters.

The activities reported by State universities are largely of a cooperative nature on projects initiated by State departments. Extension courses are given in most States, and one State reports a survey of one of the city schools, without charge. The activities of State teachers' associations are likewise for the most part in cooperation with State departments. In a few States, plans have been recommended for action to State departments, and in one State, courses of study were printed by the State teachers' association.

CHAPTER XX : TRENDS IN PROGRAMS OF STUDIES¹

1. THE PROGRAM OF STUDIES IN THE NATIONAL SURVEY

The aim of this statement.—The purpose here is to summarize and comment on the results of investigations relating to the program of studies conducted in connection with the National Survey of Secondary Education. By the term "program of studies" is meant the total curriculum offering of the school, its arrangement, the subject groups represented, and the distribution of the offering to required and elective subjects. The program of studies should not be confused with the daily or weekly schedule of classes. We are not here concerned with the details of content and method within the course outlines; these are summarized in the next chapter of this monograph.

Eleven investigations of trends.—A total of 11 different, although related, investigations underlie the summary and comments to be made. All the studies excepting one, the author of which will be mentioned later, were made by Arthur K. Loomis and Edwin S. Lide, members of the Survey staff. All are studies of *trends*, the aim being to ascertain the *dynamic tendencies* of the secondary-school curriculum throughout the country. An unusual feature of practically all these investigations is that they report trends within *identical* groups of schools. For example, one investigation at the junior high school level analyzed two sets of programs of studies for the *same group* of 60 junior high schools at two periods about 10 years apart, one set of programs being those in operation about 1930 and the other set being those in operation in the same schools about 1920. The merit of this procedure of including only identical schools at the different periods is that actual trends are disclosed,

¹ This chapter is based on Part I of Monograph No. 19 of the report of the National Survey of Secondary Education, entitled "The Program of Studies," by A. K. Loomis, Edwin S. Lide, and B. Lamar Johnson. Limitations of space preclude presenting a summary of Part II, which deals with registration and schedule making.

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rather than what may be merely differences between different groups of schools.

Five of the 11 investigations relate to programs at the junior high school level and 6 to programs at the level of senior and 4-year high schools. All but 1 of the 11 investigations involve the tabulation of subjects and subject groups which are offered, required, and elective, without relationship to the actual proportions of pupils enrolled in the different fields. The remaining investigation, by ascertaining the percentages of pupils enrolled in certain subject groups in identical schools over a long period of years, shows how the program actually works out.

1. TRENDS AT THE JUNIOR HIGH SCHOOL LEVEL

The investigations at the junior high school level.—Reference has already been made to the investigation at the junior high school level involving analytical comparison of the programs in 60 identical schools at the two ends of an interval about ten years apart. Two more of the group of five studies at this level involved smaller groups of junior high schools at shorter intervals. The fourth and fifth of these studies involved comparisons, respectively, (1) of programs in schools before and after reorganization and (2) of contemporaneous programs in reorganized and unreorganized schools in the same systems. (There are still many city school systems committed to reorganization in which only a part of the pupils of junior high school age are enrolled in reorganized schools, the remainder being enrolled in schools conventionally organized.) Most of the trends disclosed are rather similar for all the five studies. This fact makes it both practicable and desirable to report the trends for this whole group of studies at once. The same fact adds assurance to the reliability of the trends reported. It is worth mentioning that the last two studies referred to, namely, the study comparing programs in schools before and after reorganization and the study comparing programs in reorganized and unreorganized schools in the same systems, show trends more pronounced than those shown in the other three investigations, which compare programs in the same schools at different periods.

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The main trends.—The total number of changes shown in the programs of studies of junior high schools makes up a considerable array, but it would be confusing to cite them all in a brief statement. Instead, the chief trends only will be described, and the treatment accorded them will be concise.

(1) The relative prominence in the total offerings of the different subject groups has undergone considerable change. The tendency is for the nonacademic subjects to gain at the expense of academic subjects. The only academic subjects to experience notable gains in the number of offerings are the group of social studies, whereas increments are seen for fine and practical arts, commercial subjects, and physical education.

(2) In harmony with the extension of the offering in the social studies is the increased amount of time given to what in this report of the National Survey are called "social-integration activities," that is, home-room activities, clubs, group-guidance activities, and the activities in the assembly or auditorium. Although these activities are still the less formalized portions of the educational program, they are, nevertheless, increasingly scheduled as parts of the regular school day and given increased allotments of time.

(3) When attention is directed to the work which is required rather than work which is merely offered, it is seen that the largest increments have gone to the social studies, to physical education, and to the social-integrative activities. Smaller gains have been made by required science and these chiefly in grades 8 and 9.

(4) What may seem to many to be a retrogressive movement is the tendency to reduce for the individual pupil the variable or elective portions of his curriculum or, conversely, to prescribe increasing proportions of his work. The average percentages of time given to required subjects for the more recent period were 90 in the seventh grade, 90 in the eighth grade, and 55 in the ninth grade. Those who deplore this trend will see in it a restriction of the opportunities for serving individual pupils; to serve the individual has always been a cherished function of the junior high school.

(5) Persons disturbed over the situation just reported should be able to take some compensating comfort from the

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fact that the portions of the curriculum prescribed for all in the seventh and eighth grades on the one hand and in the ninth on the other are not so far apart as formerly, either in quantity or in the nature of the content. The former difference between the eighth and ninth grades in this respect was another reflection of the poor articulation within the junior high school curriculum. Other evidence could be cited to indicate the improving vertical integration of the curriculum in this unit of the school system, but it would be even easier to supply information showing that the proportion of schools so affected is still a minority of all.

The chief obstructive influences here have been the admission requirements to colleges and the too great respect for the Carnegie unit in terms of which the admission requirements are almost universally stated. With the 4-unit pupil program still applying in the ninth grade, it is difficult to work out a satisfactory articulation with the curriculum in the seventh and eighth grades below, which includes more subjects in the program of the individual pupil. Now that standardizing agencies and higher institutions are beginning to lift their oppressive hands from the ninth-grade curriculum, we should soon see more rapid progress toward articulating this curriculum with the curriculum of the first two grades of the junior high school.

(6) One of the most pronounced trends in the junior high school program is the displacement of specialized courses by more general courses. In English this displacement is reflected by the rapid disappearance from the programs of courses with such names as "grammar," "composition," "reading," "spelling," and "penmanship" and the emergence in their place of courses reported simply as "English" or, at most, of courses in the two main phases, language and literature. In the social studies the displacement is shown in the dropping out of many programs of courses designated "geography," "United States history," and "community civics" and the use simply of the term "social studies." The substitution of the new term must mean, to be sure, widely varying degrees of fusion of the older courses represented. In mathematics courses in arithmetic in seventh and eighth

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grades and algebra in the ninth grade have been giving place to "general mathematics" in all three grades. Having much in common with the movement toward general courses in the more academic fields is the trend to develop courses in home economics, industrial arts, commerce, and the fine arts more or less exploratory in character. This conclusion of a trend toward general courses has the corroboration of the findings of the projects of the Survey dealing with the individual subject groups, which were carried out by subject specialists.

The trends and the concepts of purpose of the junior high school.—Even from this brief summary of trends it may be seen that the junior high school is a vehicle of curriculum innovation. This observation concerning the innovating character of the junior high school is to be found in the reports of several other projects of the whole Survey. The trends in the program of studies recognize the concepts of distinctive purposes of the junior high school, such as economy of time through enrichment of education at this level (inclusive of a greater recognition of the socializing obligation of the secondary school), exploration and guidance, and the recognition of the needs of the early adolescent. Increased recognition of individual differences is not equally apparent. Much of this recognition persists, however, and there are many other means besides the program of studies by which individual differences are being served.

3. TRENDS AT THE SENIOR AND 4-YEAR HIGH SCHOOL LEVEL

Conclusions from Van Dyke's extension of Stout's investigation and from other projects.—A study which the National Survey fostered by assisting in the gathering of the evidence required, although the investigation was not actually planned as a part of the Survey, is an extension by Van Dyke² of Stout's study of the development of the high-school curriculum in North Central States. By means of the extension it was possible to note the changes in the programs of studies of 35 high schools over a period of almost a quarter century. At least five trends are disclosed in the results of this study.

² Van Dyke, George E. Trends in the Development of the High-School Offering. *School Review*, 39: 657-664, 737-748, November and December 1931.

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(1) The first of these trends relates to the rapid increase in the numbers of curriculums offered. The word "curriculum" is here used in the sense of a schematic arrangement of courses designed to meet the needs of some particular group of pupils. The median number of curriculums offered in the schools represented increased over the interval of years from 2.5 to 5.2; that is, the median more than doubled.

(2) During the interval college preparatory curriculums decreased from well over half to almost exactly a third of the whole number of curriculums offered. Correspondingly, during the period general curriculums and commercial, industrial arts, household arts, fine arts, and other curriculums shifted to the position of numerical dominance.

(3) The total number of different courses offered, as judged by titles assigned to them, increased with astonishing rapidity. The actual figures are 53 at the opening of the period to 306 at its close. Although titles of courses may sometimes differ when content does not, the fact of rapid increase can not be doubted. It is reflected in the average number of courses per school, which mounted during the interval from 23.7 to 48.1—an actual doubling of the offering in the average school of this group.

(4) The increment for the entire offering as just summarized spread to all subject groups, but much more to certain groups than to others. Fields experiencing the largest proportionate increments are English, the social studies, commercial subjects, industrial arts, household arts, fine arts, and physical education. Fields experiencing least expansion are science, mathematics, and foreign languages—three of the five academic subject groups.

It may be judged from scattered evidence that this trend toward expansion of the offering has during the last few years been checked by efforts at retrenchment. In some schools these efforts have gone even further and have reduced the total offering to some extent.

(5) For the most part, the findings of the other analytical comparisons of senior and 4-year high school programs of studies, made by Edwin S. Lide, are similar to those of Van Dyke's study and, therefore, need not be repeated here.

However, it was possible in certain of Lide's investigations to inquire into the trend in subjects required of all pupils; because Stout did not include this phase of the problem in his investigation, Van Dyke could not well do so. Lide found a slight tendency towards an increase in the total number of units of courses prescribed for all pupils—about a half unit in recent years. Much more significant than this minor change is the shift in the nature of the required work. This shift has been away from foreign language and mathematics and toward English, the social studies, and physical education. Practically no senior and 4-year schools, other than small schools, now prescribe foreign language; the same may be said for geometry, which is now being rapidly followed by algebra to a place in the list of variable subjects.

A comparison of trends at the junior and senior high school levels.—Except with respect to the expansion of the offering, the changes in programs of studies at the junior high school level are more notable than those at the senior high school level. Although the offering in the lower unit has undergone considerable extension, that at the upper level seems to have grown even more rapidly. In at least two aspects the development of the offering at the upper level seems to have lagged behind that at the junior level. The first of these aspects is in the social-integrative activities. If the trend to increase offerings in this field has been as rapid in the senior high school as in the junior high school, it has not been reflected in the actual recognition of these activities in the daily or the weekly schedule and the activities referred to are still in the informal state where their educative value is not officially recognized in the schedules.

The second aspect in which the enlargement of the offering of the senior high school has not been carried so far as that of the junior high school is in the movement for developing general courses. To be sure, general biology has largely displaced the separate courses in botany and zoology and courses in "problems of democracy" are to some extent taking the place of separate courses in civics, economics, and sociology. However, not many additional examples can be cited, and not so many can be reported as can now be found at the

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junior college level in higher institutions, in which the demand for departmental separation has been proverbial. If it be granted that the development of general courses is lagging, the broader movement toward a more pervasive integration and intercorrelation of the whole program must be admitted to have hardly emerged at all. Here again the Carnegie unit appears to be a serious deterrent to improvement of the curriculum. In the senior high school this measure obstructs over the full period, while in the junior high school its negative influence is restricted largely to a single grade.

Notwithstanding the unfavorable comparisons with the trends in the junior high school, the senior high school has unquestionably been moving toward opportunities for diversification for individual pupils, toward enrichment that gives greater recognition to immediate values than to deferred values, and toward an experimentation (in the uncontrolled sense) with new content that is having a wholesome and constructive influence on the educational program.

4. TRENDS IN WORK ACTUALLY TAKEN IN HIGH SCHOOL

The procedure in Loomis's study.—The last of the studies to be drawn on in this statement is one by Arthur K. Loomis in which he tabulated the courses which had actually been pursued in high school by the graduates. He turned the tabulations into percentages of work taken in the different subject groups, namely, English, the social studies, science, mathematics, foreign language, and the nonacademic subjects (the fine arts; the practical arts, inclusive of commercial subjects; and physical education). Nine high schools, widely scattered over the country, were represented. The percentages were computed for some earlier year—for some schools as far back as 1890—and for periods a decade apart, up to and including 1930. In the case of certain schools the percentages were computed not only for graduates, but also for all pupils enrolled at a given time irrespective of graduation.

Some results of the study.—No more can be done here than to epitomize certain findings of this whole study by Loomis,

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as has just been done for the other studies. Considering all schools, graduates in the classes of 1930 had taken more work in English and the social studies than in the other academic fields. In the declining order of the amount of work represented, these other academic fields were foreign language, mathematics, and science, the field last named comprising only a tenth of the total. More than a fourth of all work was taken in the nonacademic fields.

For six of the nine schools it was possible to trace the record over a period of 40 years. English and the social studies show marked increases during the period. The percentages of work taken in the nonacademic fields increased from 3.6 to 21.2 of all work taken. These gains were made largely at the expense of foreign language, although mathematics and science also lost considerably during the period.

The evidence for individual schools disclosed shifts even more striking than these. For example, for one classical high school in the East the proportion in foreign language and mathematics declined from 95.6 per cent (of all work taken) in 1890 to 58.6 per cent in 1930. For a high school in the West the proportion in the same subjects declined over a similar period from 54.5 to 32.7 per cent. While these changes were going on, other subjects came in to take the place of those losing ground. Among the greatest increments were those for the nonacademic subjects. In certain schools this large group of subjects had by the close of the period come to claim from a third to two-fifths of all the pupils' time in the classroom. These figures are for the graduates; the figures for nongraduates show even larger proportions in the nonacademic subjects as well as in the field of social subjects.

5. PROJECTING THE TRENDS

An overview.—Many who consider the trends revealed by these investigations of the National Survey will take assurance from the fact that, after all, there *are* trends. We have been experiencing movement in the curriculum—movement in definitive directions. The curriculum is dynamic.

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Besides, the directions of the trends are for the most part the directions desired by advocates of curriculum reform, even if these trends do not comprehend all aspects of change that have been proposed. The trends have been toward the diversification of the offering, which increases the opportunities to ascertain and to recognize individual differences among the increasingly diverse secondary-school population. The same trends also make possible the recognition of many more aspects of complete living than were served by the older offering; the more recent offering is to a larger extent cast in terms of immediate values instead of the remoter and deferred values of college preparation and the presumed pervasive mental discipline. Instances of this fact are found in the increased emphasis on training for participation in social and civic life, for maintenance of health, and for sharing in the æsthetic heritage represented in art and music. The trend, again, is toward the general and away from the specific, as concerns subjects of study, although this trend is more noticeable at the junior high school than at the senior high school level. Thus, the movement is in the direction of the integrated and away from the piecemeal curriculum.

If one were to take exception to the scope of these trends, a criticism might well be that the field of natural science has had too little a share in the total increment of the offering and that the proportions of pupils studying science have shown too little disposition to swell. We talk volubly about this "age of science" and unquestionably contributions to the field of natural science through research have piled up at a great rate and have influenced amazingly our manner of life. Nevertheless, all this development is meagerly reflected in the secondary-school curriculum. Those interested in instruction in science have a huge task ahead of them in understanding the forces that are retarding the adequate recognition of the field and in working out a curriculum that will more frequently recommend itself to pupils and to those in charge of the schools.

Accentuating the trends.—With admission of this one partial exception to acceptability of the nature of the trends it seems within the truth to say that the impatience of the advocates

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of curriculum reform must be impatience with the *rate* of the trends more than with their *scope* and *direction*. If one compares the trends with the statements of many who have been urging basic changes, it will be found that the changes which they propose fall largely within the compass of the trends disclosed in the Survey. However, if the changes proposed were made, they would be more far-reaching than the trends, but not because the proposals differ from the trends in nature and direction. We should be complying with the recommendations if we could bring about an accentuation of the several recent trends beyond their present rate.

Perhaps the chief obstructions to reform are the high-school counter for credit, the Carnegie unit, and the traditions that have grown up around it. The universal use of this counter works to restrict the number of instructional fields with which high-school pupils are brought into contact and perpetuates the isolation of each of these fields. It is exceedingly unfortunate that a counter devised exclusively to standardize the college should be permitted to retard and stunt the growth of the curriculum of the institution below. It is high time that the Carnegie unit be discarded.

Whatever the obstacles, we need the experimentation and the example of at least a small number of secondary schools striking out boldly and intelligently toward the new curriculum. In view of the current discontent with the present curriculum, we are justified in hoping that they will soon assert themselves. It seems likely that some will be stimulated to curriculum reform by the freedom arranged for through the Commission on the Relation of Secondary School and College of the Progressive Education Association. With a small number of schools leading the way, the trends found in many schools as disclosed by the Survey could be markedly accentuated, and the curriculum that is might soon give place to the curriculum that should be.

CHAPTER XXI : INSTRUCTION IN CERTAIN SUBJECT GROUPS

1 THE SCOPE OF THE PROJECTS REPRESENTED

The subject groups represented and the sources of the evidence used.—The summaries presented in the subsequent sections of this chapter are based on a series of monographs of the National Survey of Secondary Education dealing with certain subject groups represented in the offering of secondary schools. The series of monographs includes Nos. 20 to 25, of which the titles and authors are as follows: Instruction in English (Monograph No. 20) by Dora V. Smith; Instruction in the Social Studies (Monograph No. 21) by William G. Kimmel; Instruction in Science (Monograph No. 22) by Wilbur L. Beauchamp; Instruction in Mathematics (Monograph No. 23) by Edwin S. Lide; Instruction in Foreign Languages (Monograph No. 24) by Helen M. Eddy; and Instruction in Music and Art (Monograph No. 25) by Anne E. Pierce and Robert S. Hilpert.

All the investigations represented involved analysis of course outlines prepared and published since 1925 and visits to schools and classes. The total of course outlines represented in the work of analysis was not far from 800. The purpose in restricting the analysis to recent courses of study was to facilitate the identification of trends. The findings of the analyses relate to the names of courses, major influences, objectives, content, internal organization, methods, tests, provisions for individual differences, and the like. Visits were made to more than 150 school systems and to thousands of classes, most of the systems being among those from which the new course outlines had been issued. The examination of the course outlines and the observation of teaching afforded the specialists exceptional opportunities to render judgments concerning the work being carried on in these subject groups.

Subject groups not represented in this chapter.—Certain subjects and subject groups are not represented in the seven

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remaining sections of the chapter. These are physical education and the practical arts, namely, industrial arts, agriculture, home economics, and the commercial subjects. Such study as had been made of the first of these, physical education, is summarized in Chapter XXIV of this monograph. In the present stage of development of the field, it seemed desirable to give more attention to the administrative relationships of physical education to other elements of the complete health program and not to stress as much as has been done for the subject groups of this chapter, the matters of content of courses in physical training, methods of instruction in the field, and the like.

A partially analogous purpose explains the omission of separate monographs dealing with industrial arts, agriculture, home economics, and commercial subjects from this series dealing with subjects of study. It seemed to those responsible for the whole Survey that such a study as was made of these special fields in their present state of development should inquire into their place in the programs of general, comprehensive, and specialized secondary schools, as well as in continuation and evening schools. (See Monograph Nos. 2 and 3.) The problem of the horizontal organization and articulation of general and specialized education involving the recognition of these subject groups seemed more timely than a mere analysis of their content and methods. Moreover, resources were not at hand for both this study of the place of these important subjects in the internal organization of schools and the analysis of courses. It may be of interest to some readers to be informed that a report of expenditures on the National Survey would show a much greater outlay for the investigation of these groups of subjects in the way that has been done than was made for all the subject groups represented in the summaries of the current chapter.

1. ENGLISH

The sources and scope of the study.—The national survey of secondary-school English is based on the minute analysis of 156 courses of study which have appeared since 1925, more than half of them the work of the school years 1928 to 1930.

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These courses represent 127 cities in 33 States, with a range in population from less than 2,000 to more than 6,000,000. The findings were further verified and extended by classroom visitation during the spring of 1930 in the junior and senior high schools of 30 representative cities from Seattle, Wash., to Richmond, Va., and from Los Angeles, Calif., to Cranston, R. I.

It is impossible in this brief summary to do more than sketch the most important of the results. Detailed evidence appears in the report for numerous topics of which only mention can be made here. The methods of curriculum revision in outstanding cities is of great interest, as are the relationships of English to the general objectives of education and the time allotted to the subject as a whole and to its various aspects from the seventh grade through the twelfth. The aims of each phase of English instruction are tabulated in detail, and the proposed activities compiled. The offerings in grammar are investigated, the problem of minimum essentials, and the relationship of the textbook to each of these topics. Tables of elective courses appear, and the year in which each is offered. In the field of literature, objectives are tabulated, the classics most frequently used, the proportion of contemporary materials, the organization of courses by type, by theme, by units, by set books, or by historical sequence, and the nature of the themes proposed.

Investigation is also made of the program of supplementary reading, the problem of the extensive versus the intensive in method, special procedures in American and English literature, the plan of free reading developing in the West, the relationship of English to the library, the correlation of English with other subjects, and the proposed differentiation in courses for pupils of varying levels of ability. Finally, descriptive accounts are given of novel procedures in use throughout the country. All of these it is hoped may be of practical value to those faced with the challenging task of curriculum revision in English.

The trends. (1) *Time allotment.*—What then are the major trends revealed by all these data? First, a general reduction of time devoted to English as a subject in the junior high school years. Eighty-five per cent of the schools

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devote 5 hours a week to English in grades 7, 8, and 9. The reduction is based on the assumption that responsibility for the use of good English in the junior high school belongs alike to all departments of the school. Suggestions as to how this is done appear in the report. At the senior high school level investigation shows a gradual decrease from grades 10 to 12 in the time devoted to composition and a corresponding increase in that allotted to literature.

(2) *Objectives of composition.*—In the second place, analysis of aims of the teaching of composition from the 156 courses concerned shows large emphasis on the fundamentals of expression and a correspondingly low place accorded to elements of style, forms of discourse, and the mechanical study of rhetorical principles. English as a tool of thought and expression for public and private life is more important from the point of view of recent courses than English as an artistic outlet or form of æsthetic or spiritual self-realization. There is stress also on stimulating the *desire* to improve one's use of language, the development of a sense of pride in correct, effective speech. Correlative with this objective are the large use of drill materials and emphasis on the functional elements of grammar. The list of objectives in composition reveals also extraordinary emphasis in this country to-day on the mere mechanism of expression and a corresponding lack of consideration for having something to say. Courses are concerned primarily with whether expression is correct, and comparatively little with whether it is vigorous and otherwise effective. There are 15 objectives of the teaching of composition in the courses of study examined. Of these the first 6 concern correct usage and sentence structure. The desirability of having ideas to express occurs seventh, and the possible bearing of these ideas on the social and civic relationships of everyday life, fourteenth. Observation of composition classes throughout the country bears out the evidence of the courses themselves.

(3) *Oral composition.*—A third notable tendency is the placing of relatively little stress on oral English and letter writing in comparison with their importance in everyday life and in contrast also to the recommendations of experts

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as well as to the results of scientific investigations. When oral composition is engaged in, however, the activities are nearer life situations than are the corresponding activities of written composition. In statements of aim, the desire "to help pupils to meet with intelligence and ease life situations demanding speech" occurs with three times the frequency of any other objective. Large emphasis on *conversation* and correspondingly lessened stress on public speaking in general bear out this tendency.

(4) *Functional centers of expression.*—A fourth trend appearing in recent courses of study is the reorganization of certain junior high school courses about functional centers of expression such as (1) conversation and discussion; (2) giving instructions, directions, and explanations; (3) making announcements, reports, and speeches; (4) story telling; (5) writing explanations, stories, and poems; (6) letter writing; and (7) word study and spelling. One may predict that courses of this kind will become increasingly popular in the future.

(5) *The amount of grammar.*—The final trend in the teaching of composition is illustrated by the unanimity of aim in the 156 courses examined to teach *that amount of grammar which is necessary to function in correct speech and writing.* In spite of this agreement on a functional content in grammar, the number of topics listed for study ranges from 45 to 149. The evidence of the Survey points clearly to the fact that nobody knows what grammar is functional. Detailed analysis of the grammar offerings of 22 representative cities for grades 7 through 12 shows a trend away from the grammar of classification and Latinized forms in the direction of the actual needs of English speech. In general, however, in view of the overcrowded condition of the course in English and in view also of the relative value of other elements of English for which there is no time because the demands of grammar loom so large within the course, careful consideration of the requirements in grammar backed by scientific evidence of function, would seem a paramount necessity in curriculum making in English to-day.

(6) *Minimum essentials.*—Closely related to the problem of how much English grammar is the chaotic condition of

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minimum essential requirements throughout the country. Evidence exists in many places that the minimum essentials set up have been largely beyond the power of mastery of the lower 50 percent of the high-school population to-day. Remedial groups have been established in many places where administrative conditions make such a program possible. Other cities have definitely abandoned a program of minimum essentials to be passed with a fixed level of mastery by every pupil in a given class as inconsistent with the known range of individual abilities within high-school classes to-day.

(7) *The teaching of literature.*—Evidence concerning the teaching of literature in secondary schools at the present time is at once encouraging and discouraging. The two objectives having major prominence in the 156 courses of study examined emphasize the importance of broad contacts with books in order "to extend the range of pupils' understanding and interests through vicarious experience" and "to develop among them the desire and standards of evaluation to continue reading under their own direction." There is heartening evidence throughout the country in general of a trend toward the enrichment of personal living among boys and girls through a broader program of extensive reading. It is seen in the prevailing unit organization, in which many selections grouped by theme or by type supplant the single masterpiece of former days. To-day also a compilation of a hundred poems or a score of essays supplemented by innumerable titles in the school or classroom library supplants the slender edition of *The Rime of the Ancient Mariner* and *The Vision of Sir Launfal* or three essays by Emerson and two by Charles Lamb. Another indication of broader trends in the literature program is the purchasing of 10 copies of each of four books for a class of 40 instead of 40 copies of one title. The popularity of classroom libraries and laboratory periods for individualized reading together with periods for free reading in the general school library are further indication of the same tendency. Most significant also is the program of free or directed reading developing in the West. Beginning with a frank consideration of the books the boys and girls are reading outside of school, the teacher develops

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an interest in books in general, talks with the pupils about their favorite titles and directs informal discussion of them in the classroom. Gradually, by suggesting others similar in appeal but higher in literary value, she builds standards of taste in individual reading, at the same time developing the habit of life-long association with good books.

In spite of notable improvement in the direction of extensive programs of reading, the traditional list of four separate classics per year still predominates over all other types of literature organization. Grouping by literary types is likewise prominent in the senior high school, even in courses in English and American literature, where chronological treatment has prevailed in the past. Courses in the history of American and English literature are confined largely to the Middle West, in the East giving way to emphasis on individual classics and in the West to teaching by type. In the junior high school, organization by theme predominates over all other methods save that of the individual classic. This tendency is coupled with the frequent use of compilations of literature particularly in grades 7 and 8. Throughout there is a notable tendency for the ninth grade, whether in the junior or 4-year high school, to be dominated by practice in the upper school.

Tabulation of the 30 classics most frequently required in junior and senior high schools reveals the fact that, with the exception of the addition of three novels of adventure from the nineteenth century, the list is practically identical with that required for college entrance in the year 1890. Grade placement of selections is in a chaotic state, *As You Like It*, for instance, being taught in every year from the seventh through the twelfth.

(8) *Provision for individual differences.*—Finally there can be little doubt that the outstanding problem faced by the curriculum maker in English to-day is the adaptation of the curriculum to the individual needs and abilities of the pupils concerned. Sometimes the 3-track plan is resorted to with pupils grouped according to ability. Sometimes a core course is provided with differentiated programs for brilliant or for slow-moving groups. Uppermost is a question curriculum

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makers can not escape: Is there a minimum content in literature which must be read in common by every pupil in the school? There are those who say "Yes." For the most part they advocate a longer time spent on fewer selections by the less able pupils with enriched programs for the strong; the same literary victuals for all, but for the weak in smaller helpings with a longer time for digestion. Results of the Survey show no single title required in common by more than a third of the schools submitting courses in English. Clearly, minimum content is a myth so far as American schools are concerned.

Some courses suggest the difference will be essentially one of method—the same selection read by a superior group and told by a master story teller to a slower section incapable of reading it for themselves. Others propose different versions of the same literary selection for pupils of varying ability. Large numbers of schools, however, are seeking for a different type of content suited to the over-age pupils of lower mentality. Nobody knows the type of material needed. On the whole, it seems *not* to be merely factual prose on vocational subjects. Experimentation with literary readings for these pupils appears one of the urgent needs of the moment.

3. THE SOCIAL STUDIES

The social studies in a period of rapid change.—During the past decade the social studies have been allotted a more prominent place in the curriculum of secondary schools. Current interest in curriculum building has resulted in the construction of many courses of study which, in general, seem to conform to theories currently advocated and applied by educators. An analysis of 50 courses of study for junior high school grades and 32 courses for senior high school grades reveals an astonishing diversity in programs of social studies and in all phases of the development of courses of study. Visitation of classes in representative schools using new or revised courses and conferences with teachers corroborates the evidence of variations found in courses of study. A considerable amount of unrest and uncertainty as to procedures and practices in the development of programs and

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materials is also evident. Plans which seem feasible and desirable are found to bristle with problems; the wealth of available content also adds to the difficulties encountered in the selection and organization of subject matter for instructional purposes as well as in the interpretations of materials in the classrooms.

Courses of study in the social studies examined are in a state of becoming rather than in a status of relative completeness. Many are in a very tentative preliminary form; a relatively small number have been revised several times, with changes in organization and in details; a few are in printed form while most of them are available in mimeographed or typed copies. These courses are constructed by committees or by individual teachers working under the direction and supervision of committees that, in turn, are sometimes working under the direction of general curriculum specialists, but seldom with the aid of specialists in the teaching of the social studies. Because of the varying stages of completeness and of the number of committees engaged in the work for different subjects in the social studies in a given school system, variations in practices and procedures for different grades and subjects are found in a considerable number of courses of study.

The courses offered.—Fusion, unified, or composite courses seem to find increasing favor at the junior high school level. An overview of these courses in terms of general organization reveals seven types, with many common features and considerable overlapping of content. Reduced to their component elements, these courses include content in varying combinations from geography, history, and civics, set off by new façades and superstructures. Courses in geography defy attempts at classification; in general the selection and organization of subject matter seem to indicate that they are intended as culminating courses for those offered in elementary schools or as an overview of the subject for junior high school programs. European Background of American History appears in the programs of school systems which do not offer the course in the last year of the elementary school. American history, sometimes in combination with

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civics, finds a place in all courses of study, with few departures from conventional plans of organization. Courses in community civics usually stress institutions or problems; when they do not include economic and vocational materials, separate courses are sometimes provided.

World history, rather than the 2-year sequence in European history, seems to be favored in the senior high school, although competently educated teachers report many unsolved problems and considerable dissatisfaction with the courses as now organized. American history, usually in conventional form with emphasis on political aspects, is included in all social studies programs examined. Civics is combined with American history in a small number of courses. Separate courses in economics, civics, and sociology or social problems seem still to find more favor than the course in problems of democracy. International relations and other 1-semester courses are included in social studies programs in a small number of cities for which courses of study are available.

Courses in history, with few exceptions, are organized in terms of conventional materials, with emphasis primarily on political aspects. Phases of social, economic, and cultural history, when they appear in the courses, are presumably regarded, with few exceptions, as incidental and supplementary. Cross-sectional views of history, involving attempts to reconstruct the many-sided aspects of the life of a people in a given age, are found in a small number of courses. The social studies other than history seem to be focused on an orientation for pupils rather than on attempts to have pupils gain an understanding of the basic principles or of the ways in which political scientists, economists, and sociologists approach the study of phenomena in their respective fields. The study of local communities finds a place in a few courses at the senior high school level, either in terms of specific first-hand study or in general applications.

Objectives.—Derived objectives in terms of understandings, abilities, appreciations, and the like rather than purposes more closely allied to inherent values in content are usually stressed in courses of study, particularly at the junior high

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school level. Fashions in the formulation of objectives seem to change almost as frequently as those in dress. Curriculum committees that have exploited the possibilities of very detailed lists of specific objectives expressed in terms of the capabilities of pupils seem to be turning again to shorter lists of general purposes; other committees until recently concerned with bringing objectives down to the level of pupils now seem content to try to raise pupils up to the level of basic and inherent purposes realizable in the teaching of the social studies. Values and judgments seem again to be regarded as essential in the formulation of objectives, at least in some courses.

Internal organization of courses.—While the courses of study contain many new and unusual rearrangements and combinations of major headings, expressed frequently in journalistic phraseology, the selection and internal organization of content, with few exceptions, are very similar to and possibly derived from representative textbooks. Committees face the stubborn reality that facts, events, concepts, and interpretations assume certain arrangements and relationships in terms of values, principles, and other evidences of scholarship. The social studies are not a mammoth storehouse from which odd assortments of materials, uprooted from their "internal necessities," can be assembled, arranged, and focused on derived objectives, without doing violence to the essential contributions which these subjects may make to secondary education. Accordingly, committees face many difficulties when they espouse radical proposals not in conformity with these basic considerations, and for which corresponding subject matter has not been made available for the use of the pupils.

Reasonably specific principles for the selection and organization of subject matter are set forth in only a small number of courses of study. In view of the tentative character of many courses and of the fact that teachers are urged to make contributions to the outlines, this would seem to be a serious omission. Courses intended for use as syllabi by pupils are more compactly organized than those intended for the use of teachers. Whether teachers are expected to use the courses

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as issued or to develop them in greater detail for instructional purposes is not revealed through an analysis of the materials.

Methods of teaching.—Considerable freedom on the part of teachers to select methods and to develop the details of particular methods seems apparent, provided the lack of definite stipulations in courses of study may be so interpreted. Differentiations between narrow mechanical conceptions of method and broad and basic concepts of methodology are not always indicated, but the former are frequently mentioned. The conventional recitation, with many modifications in details, retains a dominant place in social studies classrooms, despite much criticism and many attempts to displace it by newer and more complicated techniques. These can be introduced, according to the testimony of teachers, only when different plans of organization, more adequate classroom and library facilities, smaller classes, and other essential elements are forthcoming.

Library facilities for the social studies.—A small number of courses contain lists of books that are adequate in terms of both qualitative and quantitative aspects. The need for improvement in this respect in many courses is urgent. A close relationship between suitable book lists in courses of study and adequate library facilities was found in the visitation of schools. Probably the most important step toward improvement of the teaching of the social studies in many secondary schools is adequate provision for library facilities including the formulation of satisfactory policies for the duplication of most-used titles and adequate funds specifically allotted for this purpose. The stimulation and development of reading interests, more satisfactory selection and organization of content, and creative teaching are largely dependent on adequate collections of books in the social studies. Pupils enrolled in these classes in all too many secondary schools are still Robinson Crusoes, albeit with at least one textbook. Competently educated teachers are well aware of their needs and clamor for the improvement of the library situation for the social studies; the responsibility for meeting this need rests in large measure with those in charge of the administration of secondary schools.

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The need for the aid of specialists in content.—Perhaps the weakest element in current plans for curriculum building in the social studies in many cities is the failure to provide for expert guidance in the planning and development of courses of study. Discerning teachers are in general agreement that, in addition to the services of general curriculum specialists, there is urgent need for guidance of specialists in content and in the teaching of the social studies both in order to avoid mistakes in the initial stages as well as in resolving the many difficult problems encountered, if solutions are not attainable.

The social studies and the understanding of current problems.—Viewed in terms of current happenings in national and international affairs, present-day courses in the social studies may seem to some to shrink immeasurably in significance. Many new proposals are advocated, and much new content, based on varying points of emphasis, is suggested. At the same time it may be illuminating to consider current problems in national and international affairs in the light of history as well as the lack of knowledge of history, or the unwillingness to apply such knowledge, revealed in some quarters. Courses of study, moreover, can not be conceived in terms of, or based upon current new values, however much they may help to furnish insights on present-day problems, if suitable content on the backgrounds of these problems both national and international in scope is provided and interpreted in social studies classrooms. The danger lies, not in the failure to provide for the treatment of current problems, but rather in the possibility that emphasis on the immediate situations may displace the presentation of content which will afford a long-term and systematic view as the basis for an understanding of how current problems evolved.

Secondary-school pupils can not be expected to find solutions for national and international problems; at best teachers of social studies should receive a small measure of satisfaction and encouragement if their pupils gain certain insights into the backgrounds of current situations and some well-founded conceptions of their many-sided aspects and involved relationships. This would seem to involve the

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gradual unfolding of history in terms of the presentation of content, recurring in different combinations and relationships in different courses, as contrasted with a transitory and fragmentary treatment. Thus will the insights of pupils be expanded through consideration in a more detailed and systematic manner of content concerned with social, economic, and political phenomena in terms of current relationships of pupils and those of adults.

To attain this end cumulative social studies programs to which pupils will be exposed continuously throughout their secondary-school careers are needed. When the organization of curriculums of secondary schools is changed to provide for cumulative social studies programs in every grade, courses of study may be planned and developed in such a manner as to provide for the cumulative development of expanding insights, relationships, and interpretations for youth in their ever-present quest for a better understanding of the world in which they live.

4. SCIENCE

Sources of data.—The investigation of the teaching of science in secondary schools is based on the analysis of 58 courses of study in general science, 45 in biology, 27 in physics, and 30 in chemistry. Analysis of these courses supplied data concerning the educational objectives, methods of organization, and technique of instruction of the various cities from which the courses were secured. Visits were made to 14 cities to discover the extent to which the courses of study actually functioned in the classroom and to study more completely the promising innovations revealed in the analysis of the courses of study.

Preparation of courses of study.—Examination of the courses of study indicates that the majority were formulated by committees representing each of the different fields of science; that is, the courses in general science were made by teachers of general science, courses in biology by teachers of biology, and so on. No reference was found which might indicate that the courses were formulated by single committees representing the whole field of science. Too often

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the course in science is regarded as an independent unit rather than as a part of a sequence of courses in a major subject group.

The formulation of science courses by more or less independent committees representing each course in the field has an important bearing on the nature of the courses found. In the first place, courses of study prepared by subject-matter specialists exhibit a lack of a general viewpoint toward the teaching of science. The content of the courses is dictated almost entirely by the logical divisions of the subjects. Aims of education in the secondary period, the particular contribution which science should make to the achievement of these aims, and the psychology of the learning process do not receive the consideration to which they are entitled. The starting point for the preparation of the courses is the subject matter of the courses rather than general principles derived from the objectives of education and the learning process.

Two types of evidence support the conclusions stated above, namely, the absence of mention of the objectives of secondary education or of the objectives of science teaching in 85 per cent of the courses, and lack of consistency in the organization of the various units, topics, or problems which constitute the courses.

An additional consequence of the organization by independent committees is exhibited by the degree of overlapping of the content of the various subjects. This overlapping is especially prominent in general science and physics, and in general science and biology. The specialized science courses show clearly that the committees are not conversant with the work outlined in the earlier courses or that they do not consider them to be of value. Whatever the cause may be, there is a distinct lack of sequence, both from the standpoint of content and from the standpoint of difficulty, in the organization of the science program.

Several courses were made under the supervision of a curriculum specialist or a supervisor of science. Without exception these courses are superior in organization to those formulated by subject-matter specialists working alone.

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Guidance by some individual who sees the relation of science to the educational program, as a whole appears to be prerequisite to progress in the formulation of a course of study.

Methods of organization.—Three general types of organization are common: (1) The topical organization, (2) the specific-objective organization, and (3) the unit method of organization. Ninety-three of the 160 courses present simply topical outlines of the subject following the traditional methods of organization. The remaining 67 courses may be classified under 9 distinct types of organization and these may be further subdivided under 23 headings. In general these 67 courses are combinations of the three general types of organization previously mentioned.

The topical method of organization, which is the most common, differs from earlier methods of organization only in the types of topics presented. The publication of the Los Angeles courses of study in 1923 ushered in a period of organization around specific objectives. These courses are commonly organized under headings such as the following: Specific Objectives, Suggested Activities, Suggested Procedure, and Desirable Outcomes. An examination of the specific objectives shows that they commonly begin with an infinitive and are usually expressed in somewhat the following form: To learn that metals increase in weight when heated. The formulation of specific objectives after the fashion just described has left a definite mark on our courses of study. A large percentage of the modern courses make use of the plan and apply it in various ways in the organization of courses. The most recent courses, however, have discarded this plan of organization.

Since 1926 the unit plan of organization has been widely adopted. Sixty-two of the courses examined refer to the divisions of the course as units. Of the 26 courses appearing during 1930-31, 20 are presumably organized on the unit basis. Analysis of the courses divided into units points to several conclusions: (1) The concept of the unit is not clearly defined; (2) the title of the unit does not indicate the nature of the content to any high degree; (3) the emphasis is placed on the subject matter or assimilative materials

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rather than on the elements through which the intelligent attitude implied by the unit is attained.

The most promising variation in the organization of units appears to be that in which the units are analyzed into the concepts, principles, generalizations, or understandings to be attained. For example:

Unit I. The chemical nature of matter—

- (a) Everything which occupies space and has weight is matter.
- (b) Matter may exist in three physical states—solid, liquid, and gaseous.
- (c) Matter is made of simple substances; pure complex substances, compounds; mixed substances; and mixtures.
- (d) The ultimate unit of an elementary substance, an element, is the atom.
- (e) For the purpose of interpreting chemical phenomena the atom may be conceived as a structure made of protons and electrons.

The organization of courses as outlined above presents a distinct departure from the conventional topical method of presentation. The emphasis is placed on the generalizations to be attained rather than on the details of the subject matter. Subject matter therefore becomes a means of instruction rather than an end product.

The multitude of types of organization shows very clearly the lack of a fundamental theory of education. Until educators and science teachers have clearly formulated an adequate theory of education it is probable that we may continue to expect the chaos which now prevails in the organization of courses in science.

A comparison of the more recent courses and the earlier courses indicates that there is a greater emphasis on the interpretation of the environment. This is shown by the introduction of topics on science for the consumer, and an increasing amount of space devoted to the application of science principles in problematic situations. There is also a more marked emphasis on the qualitative aspects of physics and chemistry with an accompanying decrease in emphasis on the quantitative aspects.

Suggestions for instructional technique.—In general, few suggestions are made in the courses concerning the method of teaching to be employed. Curriculum makers apparently

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believe that the individual teacher should be permitted the utmost freedom in the selection of method in teaching. A consideration of the objectives of science teaching suggests that many of the most important results to be attained by a course in science are a product of the method rather than of subject matter covered. Certainly this is true of such learning products as the ability to employ the safeguards which make thinking critical and the development of a scientific attitude or an attitude of appreciation. Curriculum makers have assumed that teachers can and do employ those methods which will obtain these objectives. While this may be true for the great majority of skilled teachers, this consideration does not apply to young and inexperienced teachers. Committees preparing course outlines should probably recede from the extreme position which they have taken and make more provision for the guidance of those teachers who have not reached perfection or complacency. Until a more uniform method of instruction is adopted it is doubtful that we will be able to organize courses in science which are sequential in the development of the ability to do scientific thinking and in the development of the other abilities which result from the method of teaching employed rather than from the content taught.

Observations of classroom teaching, use of work books or work sheets.—The most marked change in classroom teaching is the widespread use of mimeographed work sheets or printed work books. The classroom has now become a laboratory in which the pupil studies rather than a lesson-hearing room. While work sheets and guidebooks do secure greater pupil activity than was formerly secured under the assignment-recitation plan, it is evident that to be effective they must be focused on the attainment of valuable learning products. Many of the guide sheets and work books in use consist of statements with one or more words missing or of best-answer tests. Pupils commonly read through the text until they find a section dealing with the item in question and then write in some word or phrase which completes the meaning, or underline one of the completing statements. Unless provision is made for the integration of the subject

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matter around the important principles and concepts of science and unless opportunity is offered for the use of these principles in problematic situations, there is grave danger that the pupils will leave the course in science with a miscellaneous collection of facts rather than increased ability to interpret his environment or to apply the safeguards which make thinking scientific. While guide sheets and work books are probably a step in the right direction, their value is conditioned by the types of activities which they present.

5. MATHEMATICS

Scope of the report.—This statement is based on analyses of courses of study and published materials of instruction, correspondence with school authorities, and visits of one or two days each to selected schools and individuals working in the field. The practices reported are from schools in which more than average attention is given to instruction in mathematics. Altogether, practices in 79 cities, representing 57 junior and 46 senior or 4-year high schools are reported. Included also in the analyses are 6 junior and 10 senior or 4-year high school courses constructed on a state-wide basis. All courses were published since 1926. The cities represented vary in size and geographical location. The materials are treated under the following headings: (1) Analysis of courses of study; (2) instruction in junior high school grades; (3) instruction in senior high school grades; (4) influences on the production and use of courses of study.

General phases treated in course outlines.—Outlines were analyzed to show the form of publication, including the general phases treated, the manner of treatment, the proportion of space devoted to each phase, and the specific items included under each phase. The fact that two-thirds of the 103 courses of study examined were mimeographed, supports the statement often appearing in them, that they are to be considered tentative and subject to constant changes. The majority treat objectives, teaching procedures and materials of instruction. Tests, individual differences, reference materials, and miscellaneous phases are not considered in half of all the courses. By far the greatest per-

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centage of space is devoted to materials of instruction and teaching procedures. The treatment given these phases appears somewhat formal in the majority of outlines in that only a bare list of objectives and references is given, together with an informal account of teaching procedures, individual differences, and miscellaneous phases, with an organized outline of materials in instruction. Many significant departures from majority practices, however, are indicated. While averages presented are true of the majority of both junior and senior high school outlines, those prepared for the lower level are less formal and more suggestive than those planned for senior high school grades.

Items treated under each phase.—Tabulation was made of certain specific items which were included in the treatment of objectives, selection and organization of materials, teaching procedures, individual differences, measuring the learning product, and mechanical make-up of outlines. For example, under objectives were tabulated the number of outlines including objectives for all secondary education, junior or senior high school, secondary-school mathematics, junior or senior high school mathematics, objectives for each grade or course, specific outcomes for each grade or course, broad aims related to major objectives or detailed aims related to broad aims, and authoritative formulations or local conditions influencing the formulation of objectives.

The results indicate that more attention is given to items included under teaching procedures and selection and organization of materials. Practices in schools visited, point to the fact that committees are of late more concerned over course-of-study materials that will help the teacher than over those that secure uniformity of practice alone. Junior high school outlines in particular have been much influenced by the formulations of the national committee.

Instruction in grades 7 and 8.—It is in grades 7 and 8 that closer adherence to the recommendations of the National Committee on Mathematical Requirements and the greatest departure from traditional instruction is to be found. The objectives show markedly the influence of recommendations of the national committee. In the courses

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analyzed, 58 per cent of all objectives are of a practical nature, while the remainder pertain to disciplinary and cultural aims. The majority of schools offer mathematics or general mathematics rather than merely arithmetic. But even in the courses offered as arithmetic, analysis of courses and textbooks shows inclusion of considerable intuitive geometry and algebra, and the elimination of such traditional topics as square root, and ratio and proportion.

The majority of courses present materials arranged psychologically. Considerable attention is given to social and economic uses of arithmetic and efforts to introduce elementary concepts of higher mathematics and to correlate mathematics with other fields are observable. Through introduction of the history of mathematics, orientation courses, the connection of mathematics with everyday problems of the pupil, and use of drill books in which the pupil records his own progress, attempt is made to secure better motivation. Only a few schools, however, seem to follow the recommendation of the national committee in emphasizing functional thinking. Results obtained in the intermediate schools of Boston through emphasis on reverse multiplication, checking, and estimating answers, are noteworthy.

Instruction in grade 9.—As in grades 7 and 8, analyses of courses of study and textbooks for grade 9 indicate greater changes for courses in general mathematics than for those in algebra. More attention is given in general mathematics to statistics, graphs, and intuitive geometry, while less is given to fractions, factors, and multiples. The approach in general mathematics is more psychological than logical. The majority of courses in general mathematics begin with the meaning and use of the formula, while the courses in algebra begin with the fundamental operations of algebra. Although the national committee recommends that general mathematics be required in grade 9, this practice is followed in only a half of all schools. In those carrying out this recommendation, difficulty is yet encountered in providing materials that are adapted to both college-going and non-college-going pupils.

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Contrasts of senior high school with junior high school grades.—In the remaining paragraphs separate treatment is given to objectives in senior high school grades, the courses required and elective there, mathematics in grade 10, objectives in plane geometry, textbooks in plane geometry, adaptation to pupil needs in plane geometry, classes for specialized groups, and mathematics in grades 11 and 12. As has already been suggested, instruction in the average senior high school follows the traditional plan much more closely than is the case in junior high school grades. Disciplinary and cultural aims are more often posited than practical aims. Although this is true for the average school, certain practices described in the body of the report on which this summary is based indicate dissatisfaction with older methods. The traditional courses in plane geometry, advanced or college algebra, solid geometry, and trigonometry constitute the entire offering in the majority of schools, but some indication of waning emphasis on college preparation is had from the fact that only five of these schools require plane geometry in grade 10. The objectives indicate compliance with the recommendation of the national committee that increased attention be given in these grades to logical organization, but there is little indication of adherence to the recommendation that attention be given the vocational needs of pupils or that mathematics be applied to the modern world.

Plane geometry.—The majority of schools indicate emphasis on the development of logical thinking in plane geometry, and exactly half indicate the omission of some of the traditional theorems. In less than half of all courses, however, were to be found statements, in accordance with the recommendations of the national committee, calling for the omission of formal treatment of the theory of limits and incommensurables, for the more frequent use of the idea of motion, and for emphasis on the function concept. The courses of study examined reveal little departure from use of traditional materials. Comparison of older with newer textbooks, however, indicates among other things, that a better basis is laid for beginning geometry, less attention is given to scientific rigor, and some attention to individual differences and

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correlation with other subject fields. Examples are given in the report of schools in which success has attended the introduction of solid geometry with the plane, but no school reported the satisfactory completion of both courses in one year.

Other mathematics.—The total mathematics offering reveals little provision for vocational needs. Examples can be given of schools such as the Wright Cooperative School, Detroit, which are now concerned with constructing practical courses. Oakland and Detroit have outlined courses in the concepts of geometry. Several schools have successfully introduced analytics and the calculus into the work of these grades and a few schools are attempting a closer connection of algebra and geometry to preclude the need of later reviews of algebra. Attempts to correlate mathematics with other fields are illustrated by a combined course in physics and geometry being given at Lincoln School, Teachers College, New York City.

6. FOREIGN LANGUAGES

Sources and method of the study.—This report is based on the examination of 207 courses of study in foreign languages from schools of all types and in all sections of the country; the visitation of 263 classes, of which 82 were in Latin or general language and 181 in modern language; and inquiries by means of letters and personal conferences with teachers, supervisors, directors of curriculum, members of research departments, principals, and superintendents. Schools doing noteworthy work in foreign languages were identified by means of letters of inquiry to teachers and administrators in strategic positions in various sections of the country; by personal consultation with one member of the special investigating committee of both the classical investigation and the modern foreign language study, and with the specialist who visited classes for the study; and by examination of printed and mimeographed courses of study. The 72 schools visited are located in 12 States; 4 States in the Middle Atlantic section, 5 in the North Central, 1 in the Southwest (Colorado), and 1 on the west coast (California). Advance requests to school systems indicated a desire to see promising

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experimental work, constructive innovation, and the best teaching in each of the foreign languages. An effort has been made to discover the best present practice with respect to content and teaching procedures and to indicate the newer trends that have promise for courses in foreign language in the secondary schools.

Modern foreign languages.—The examination of recent courses of study in modern foreign languages revealed all but universal agreement on the development of the ability to read as the chief linguistic aim of the modern language course in the secondary school. The two cultural objectives, knowledge of the foreign country and people and increased knowledge of English vocabulary, grammar, and the relationship of the foreign language to English, are also generally accepted as valid.

Unanimity has not been reached, however, in regard to the selection and organization of the teaching materials and pupil activities by means of which pupils are to acquire reading power most effectively and economically. One group would develop reading ability progressively throughout the course along with speaking, writing, and hearing. The intensive study of a comparatively small number of reading texts and of the essentials of grammar, combined with much oral and written practice in the use of the language, are the means employed to develop the power to read. Another group favors the new-type course proposed by the Modern Foreign Language study,¹ which is characterized by a change in the order of attack on the four basic aspects of language learning. Reading and understanding the spoken language are set forth as the immediate aims of the first two years, while emphasis on speaking and writing as ends in themselves is postponed until the third and fourth years. The learner advances toward the reading goal by means of abundant direct practice in reading, a procedure made possible by the utilization in the early stages of a carefully selected and systematically controlled reading vocabulary. The

¹ Coleman, Algernon. *The Teaching of Modern Foreign Languages*. Vol. XII, Publications of the American and Canadian Committees on Modern Languages. New York, the Macmillan Co., 1929.

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progressive development of the ability to pronounce correctly, to understand and to use the foreign language orally within the limits of classroom materials is also included in this approach to reading. The study of grammar is limited to those phenomena that are shown to be necessary for reading with comprehension. Such a focalization on the reading objective is motivated by a desire to make the 2-year course an entity and one of higher surrender value to the overwhelming majority of pupils of modern foreign languages for whom it is a terminal course.

Experiments with the new-type course are in progress in a considerable number of schools in all sections of the country, notably in Los Angeles and New York City; the vocabulary frequency lists are being utilized for the selection of basic words and idioms for each year of the course, for the evaluation and construction of grammar texts and reading material, and for the building of objective tests; the amount of reading has been increased in courses of all types; cultural material in English is being provided to supplement the comparatively meager contribution of the foreign language reading texts; activity in the construction of objective prognosis and achievement tests has been stimulated; and problems in class organization arising from variations in ability and achievement are receiving greater attention.

By classroom visitation in a number of selected schools an attempt was made to discover the relation between the printed or mimeographed courses of study and classroom practice. In the departments the courses of study which are based on the fourfold (older) aim, the objective that seemed to be kept in mind most consistently by the best teachers was understanding of the spoken word. As for the content of the course, the grammatical portion, rather than reading, received the chief emphasis in most of the schools visited. Evidence of the greater importance attached to grammar was the frequent omission by teachers of even the small amount of reading material contained in the basic grammar text, in order to use the time thus saved in additional drill on grammar. Activities in writing consisted of synthetic grammatical exercises in the foreign language and in

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translating English into the foreign tongue. Little free composition was observed. There was no indication of a clear-cut differentiation in the selection of content materials for the teaching of reading and speech. For this reason, most of the speech lessons were too difficult for the pupils and their participation was limited to monosyllables or brief sentences in the words of the teacher's question.

Teachers who are experimenting with the new-type course recommended by the study differ in their ability to keep the reading aim uppermost and to subordinate practice for active command to training for reading facility and ready understanding of the spoken word. Reading lessons were observed in which during the entire period attention was centered on the comprehension of thought. Pupils were tested on the meaning of the reading assignment by a short objective test followed by brief but lively discussion and then they read on silently in advance. In other classes, there was evidence of confusion of aims in the minds of the teachers. In the reading lessons, checks on comprehension became exercises in piecing together imperfectly assimilated grammatical forms, and drills in recognition-type grammar were interpolated with rote recitation of paradigms and other recall types of performance.

The most potent influence affecting course content and methods continues to be the textbooks in use. The requirements and examinations set by the college entrance examination board have also affected course content and classroom procedure very generally throughout the country even in schools in which the percentage of pupils preparing to take these examinations is almost negligible. A noteworthy revision in the requirements for the modern foreign languages was adopted by the board in April, 1932, and is announced to go into effect with the examinations in June, 1934, and thereafter. The immediate objectives set forth by the board in this recent statement correspond closely to those proposed by the Modern Foreign Language Study. The emphasis is clearly on the acquisition of fluent reading ability with active command of the spoken language placed in the background, particularly during the first two years.

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Latin.—The analysis of representative courses of study in Latin disclosed a marked uniformity in the statement of aims and in the selection of content for the four years of the high-school course. Of the 80 State and city courses of study examined, 69 set forth the program recommended by the classical report, 7 present the traditional course, and 4 offer a choice between the two.

To discover to what extent the prescriptions of these course outlines are carried out in practice was one of the purposes of classroom visitation. The chief recommendation of the report as to the content of the Latin course appears to be generally adhered to, namely, a reduction in the amount of grammar in the first year and of reading in the later years. Also, the reading of the first classical author has been postponed until the fourth semester, and some variety, though not as yet extensive, has been introduced into the reading content of the last two years. Materials for teaching to achieve the ultimate objectives, particularly those concerned with the relation of Latin to English and with the life, history, institutions, mythology, and religion of the Romans, have been more systematically organized and are finding a larger place in the classroom. On the other hand, suggestions appearing in course outlines as to activities of pupil and teacher which are to lead to the attainment of the primary immediate aim of the course, namely, reading and understanding Latin, are not followed to any appreciable extent.

Although most of the newer courses of study prescribe the so-called "reading" or "Latin word-order" method² recommended by the classical report, in accordance with which comprehension of the thought of a sentence or paragraph is to precede translation, in most classes observed translation was used as the initial step in getting the thought. The term "sight reading" found in course outlines is to be interpreted in the majority of cases to mean "sight translation," and, for the most part, word-by-word translation. The emphasis in the teaching of vocabulary, forms, and syntax is almost universally English-Latin rather than Latin-English. Inas-

² For typical descriptions of this method, see the following courses of study in Latin: Denver, 1928; Kansas City, Mo., 1929; Newark, N. J. (no date, but subsequent to 1924); New York State, 1931; Oakland, Calif., 1930; Pennsylvania State, 1929; Rochester, N. Y., 1930.

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much as reading has been set up as the chief objective of the course, the justification in the minds of the teachers for the predominance of activities which contribute primarily to the writing of Latin seems to be a belief that mastery of vocabulary, forms, and syntax to the extent required for writing Latin is essential for attaining the ability to read Latin.

Apart from the classical investigation, the strongest influence on courses of study and classroom procedures is that exerted by the examinations of the college entrance examination board. This influence is felt even in schools in which only a small minority of the pupils are preparing to take these examinations. It is true that the college entrance board has removed its prescriptions as to the amount and kind of reading in the high-school Latin course, leaving only the recommendation that one semester at least in each of the last three years be devoted to the Latin authors that have been traditionally read in those years; but the prestige of the college entrance board is such that their examinations serve as a standard of achievement and a determinant of classroom teaching the country over.

The great majority of teachers of Latin interviewed favored the changes recommended by the classical report, which have resulted in relieving the congestion in the first three semesters of the course. Many teachers would go a step further and postpone the reading of the unmodified text of a classical author to the third year. In their opinion the vocabulary burden is still too heavy in the reading material of the second year to enable any except the most gifted pupils to acquire the ability to read Latin in a manner at all comparable to their reading of English. Workers in the laboratories of some of the experimental schools, particularly those connected with the University of Chicago and Teachers College, Columbia University, seem convinced that progress lies in the direction of the preparation of an abundance of interesting graded reading material, adapted in large measure from classical authors, in which the vocabulary and syntactical matter are carefully selected and systematically controlled. Not until such tools are ready, they believe, can a satisfactory technique for teaching the reading of Latin be worked out.

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Foreign language in the junior high school.—The foreign-language situation in the junior high school is still in a chaotic state. Courses are offered in modern languages, in Latin, and in a considerable number of schools, in general language, and may be found to begin in every term except the second semester of the ninth grade. Monograph No. 19 of this report of the National Survey of Secondary Education concerning the comparative offerings of 60 junior high school programs of studies in 1920 and 1930 reveals a marked decrease in foreign language in grades 7 and 8, but an increase in grade 9; also a tendency to postpone foreign language until the ninth grade.

Observation of selected classes in foreign language in junior high schools indicates that the best teachers, at least, have been eminently successful in shaping course content and in devising pupil activities suited to the early adolescent. The problem of proper articulation of the work of the junior high school in foreign language with courses in the senior high school remains, however, a perplexing one. Nor is a decisive answer available to the question of the value of the earlier beginning.

The general-language course offers a possible solution to the problem of articulation, while serving also to some degree as an exploratory course in foreign language and providing general information valuable in itself. The aims, content, and values of the course in general language, however, need to be more sharply defined on the basis of objective data derived from careful experimentation.

7. MUSIC

Purpose and method of the study.—An attempt was made in the study summarized in this section to portray some of the present practices in the teaching of music in the secondary school. To gain a perspective of music in secondary education, cognizance was taken of available surveys and studies relating to music in the schools, courses of study were examined to determine what the printed page declared were the purposes and customs of teaching this subject, while correspondence likewise played a part in setting up impressions

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as to what was being done to develop high-school boys and girls musically. Furthermore, visitation was made to 30 school systems to gain first-hand information of innovations now in progress. The situations thus found undoubtedly represent some of the best practices in the secondary field, since a conscious effort was made to seek places offering a broad curriculum and endeavoring to instruct in the most effective way.

The findings.—Prominent among the features of present progressive tendencies is the wide and expansive course of study that is frequently offered pupils at both junior and senior levels of instruction. The majority of schools now require all pupils in the first two junior high school grades to take general music—a course in which is implicit training in singing, music reading, theory, and appreciation. In addition to this required class, opportunity is given those interested to take instrumental class lessons and to participate in bands, orchestras, choruses, and glee clubs. Beginning with the third year of junior high school and continuing throughout the senior division, most schools administer music as an elective subject and allow pupils to take work according to talents and interests. In some schools, as in Cass Technical High School, Detroit, and Polytechnic High School, Los Angeles, pupils may pursue vocational courses in music. Many others, although not furnishing so comprehensive a program, have varied offerings to provide pupils broad musical experiences.

As a result of improved instruction and equipment, made possible through the cooperation of school administrators and the community, courses given in some places are exerting an influence reaching far beyond the confines of the school. Bands, orchestras, a *cappella* choirs, glee clubs, and choruses which contribute to the musical pleasure and education of the people of a community, and which are often of a quality rivaling professional organizations, are sometimes found. Also of vital importance in the musical training of the youth of the country are courses directed toward the large body of consumers of music, or classes in music appreciation, which train in discriminating listening. Caring for a smaller but

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more select group are courses which teach talented pupils harmony and the elements of musical composition, while lessons in voice, piano, and other instruments give them opportunity to develop skill as soloists. *

Any curriculum to fulfill its highest purposes must be carefully constructed and administered. Although holding many beliefs in common as to the ends to be attained from instruction, music educators use different means to achieve them. In some cases printed courses of study have been accepted as definitive guides, while in others are tentative plans undergoing a process of testing before being accepted as final commitment. Some supervisors set up objectives of attainment, and through frequent consultation with instructors and observation of teaching, direct the work without adhering strictly to a written scheme. Occasionally the person in charge allows individual teachers to construct and follow plans according to their own inclinations and training. Not a few of the directors consulted in visitation expressed the hope that out of the work in progress, courses of study might later evolve—a recognition of the value of well-conceived plans.

As a rule, courses of study in cities where work was observed at first hand reveal the same characteristics in form and content as those examined at large. The commonly accepted aims of education frequently render service both as general and specific objectives, sometimes with only slight recognition as to the specific field to which they are applied. Occasionally a teaching device is used as a general objective and often a specific aim is listed as general, or vice versa. Both the National Education Association and the Music Supervisors' National Conference have influenced the selection of aims, although not all courses are committed by word to an acceptance of any well-defined objective.

In courses of study inspected, the subject matter appears in outline, discussion, topic, unit, or problem form by subjects in theory, history, appreciation, instrumental, and vocal music. At the junior high school level of instruction, courses are organized most often by subject and grade and in the senior high school most frequently by subject. Some

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courses give lists of materials, others make use of textbooks, and some give only the course title with no descriptive or subject-matter guides.

Materials listed indicate to a great extent the character of the work to be done. For example, compositions suggested for vocal and instrumental groups determine the quality and trend of instruction. Both visitation and analysis of courses of study showed a wide variety in content of courses, yet some duplication of material was evident. Although in the main, the compositions selected are of a superior type judged from musical standards, they do not always appear well-advised for the group at hand. This is particularly true in the required work in the junior high school. In this administrative division of the school and in this phase of music instruction, groups of children are commonly found that represent all stages of musical talent and interests. What to teach these adolescents to care best for their varied needs is a question of major importance. The attempt to solve this problem is reflected in two patterns of instruction to be described.

In the belief that the gifted child is the one deserving the most attention some teachers have constructed a course in which musical theory and the development of skills receive the main emphasis. Others holding that the majority of pupils are listeners rather than performers have endeavored to present work which will interest this larger group in an art capable of becoming a force in their leisure-time activities and yet afford a valuable musical experience for those who will become musicians in adult life. Elective courses, found chiefly in the senior high school, do not offer such taxing difficulties as in the required classes, for although pupils without visible talents often register for them, such a gesture is proof of a desire to take part in a musical activity even if the contribution may be negligible. Nevertheless, what to teach in some of the elective subjects as music, history, appreciation, harmony, glee clubs, choruses, bands, and orchestras sometimes is a source of trouble requiring skill and experience to overcome. To solve these problems, the teacher and educationist are rendered dependent chiefly

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on their own resources and that of other workers so engaged, for as yet there is a lack of well-established criteria and thoughtful and objective studies available for the instruction of music. For the most part teachers of music do not often venture into the realm of the untried—a condition not unknown in other fields.

However, innovating tendencies in course of study construction are in evidence in some cases. For example, the required general music course is a point of departure in the Grover Cleveland Junior High School, Elizabeth, N. J. Here pupils' activities and interests are the bases of plans.; Correlation and association with other school subjects are means through which the instructor works in an effort to enrich the offerings in music, especially for pupils without special talent. The required work in Plymouth, Ind., is presented in vocal, instrumental, and scientific units, and pupils are given the privilege of entering the class in which they are most interested. In the Voorhis School for Boys, San Dimas, Calif., a course in music appreciation, developed chiefly from the historical angle, is offered seventh-grade boys who are not interested in singing. Exploratory classes in appreciation and vocal and instrumental music given as the required freshman work in the Joliet (Ill.) Township High School, provide a variety of musical contacts and give them some choice as to the type of music activity in which they participate. Content and methods of instruction in the appreciation and history of music differing from the usual are found in the plans of Evanston, Santa Monica, and Oakland. Instruction in harmony, vocal, and instrumental classes are likewise receiving the attention of some leaders in school music, including those of Pittsburgh, Los Angeles, Flint, Rochester, and Cleveland. Special classes for developing individual pupil leaders are notable phases of the music program in Oakland and Cedar Rapids.

It was not until 1837 that Lowell Mason introduced music into the public elementary schools of Boston. As the high school became an agency in the educational process of the United States, music gradually found recognition as a part of secondary-school instruction. At first attended by

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obstacles accompanying all new subjects in the curriculum, it has only recently come to hold a place at all comparable to its possibilities. Evolving from a limited vocal offering it has, in a relatively short time, come to embrace individual and group instruction in theory, history, appreciation, vocal, and instrumental music. It is not surprising that because of its recency as an integral part of the school curriculum the statement of its purposes are not always clearly defined nor the standards of its teaching universally agreed upon. This is because, in music, as in all school subjects, any well-rounded course is a result of careful consideration, testing, and teaching. Yet despite its unsolved problems, to-day's broadened music curriculum, in which are evidences of progressive thinking and practices, gives promise of a constantly expanding usefulness of this subject in the cultural equipment of modern America.

8. ART

The nature of the study.—The report of the survey of art in secondary schools is based on the analysis of available printed courses of study in art and on visitation of some of the schools represented by these courses of study. It is concerned with the trends of art education in secondary schools: Methods of developing the art curriculum, the objectives and aims, and the organization of the subject matter. While a marked improvement in the development of the art curriculum was shown in its written form, as compared with earlier forms, a greater improvement was found in actual classroom situations where innovations in subject matter were being followed. Course outlines in the field of art appear to lag behind actual classroom instruction.

Trends in art education.—While art education and certain other new and specialized fields have not maintained the pace set by the older academic subjects in curriculum development, several cities have employed curriculum specialists to organize and conduct the programs of curriculum construction. In such cities the art committee was released from regular teaching duty in order to work under the guidance of curriculum specialists. The courses of study in art thus developed in these cities have become the patterns for many

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smaller cities where the local faculty only is depended upon to write the course of study. - In general the organization of the curriculum in art is, unfortunately, not developed by the cooperation of curriculum specialist and supervisor of art.

The analysis of the courses of study in art revealed the general trends in the objectives of art education as being, first, appreciation for all pupils, and, second, creative self-expression with recognition of the talented few. This is in contrast with earlier objectives which aimed at the development of skills and techniques in representation through drawing and painting.

In many courses of study in art the selection and organization of subject matter does not show so marked a relationship to current educational criteria as do the aims and objectives. There is a tendency to continue the selection of subject matter for the development of skills even though the general objectives have been stated as for "appreciation," and "creative self-expression." In a few of the newer courses the selection and organization of subject matter is based on current educational and psychological theories. There is need for further study to determine grade placement and time allotment of subject matter in secondary-school art. At present there is a general spread of all the art topics through every grade with no agreement on time allotment. In some outstanding schools, subject matter to meet the newer objectives has been chosen from needs and interests of the pupil as well as from future adult needs.

The lessons in art continue to be presented largely in logical sequence. Many courses, however, are less formal than in the past, and afford more freedom in teaching methods, proceeding from the intimate to the remote, from the personal to the impersonal, being based on current educational and psychological theories.

Neither the objectives, the subject matter, nor the teaching methods of art seem to have been based on objective studies, but follow either tradition or meet conditions unique in certain localities. The field of art education has not kept abreast with the academic subjects in scientific educational research. The extent to which art functions in life needs to

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be determined in order that a curriculum based on the actual needs and uses of art may be developed. Subject matter, grade placement, time allotment, and methods of teaching could all be objectively determined to a much larger extent than at present. Another needed study suggested by teachers visited is the development of a check list for the supervision and teaching of art, to correspond with check lists prepared for the academic subjects, which will incorporate all the new and accepted aims and objectives of art education.

The recent recognition of self-expression as one of the major objectives of art education suggests possibilities of research in methods of teaching to determine how self-expression and creativeness may be conserved and still develop the skills and techniques of art needed to parallel the increased appreciation with each advancing year. This also suggests research in the psychology of self-expression, imagination, and creativeness leading to the development of tests for their discovery in students and experiments to determine methods to develop these qualities.

Visitation showed that most teachers of art are not familiar with nor prepared to meet the needed movement of research in art education. Their only possible contact thus far seems to have been with the use of recent standardized tests in art judgment.

Visitation to schools represented by the courses of study analyzed revealed many interesting procedures and innovations not mentioned in the courses of study. Innovations which break away from the traditional curriculum in art tend (1) to meet the needs of communities as well as of the individuals in the community; (2) to introduce subject matter of current interest and importance to the local community; and (3) to develop "units of work" which integrate the different academic subjects. The majority of school systems offer the printed course of study as a suggested curriculum only and recommend innovations and experiments when approved by the supervisor of art.

The recent introduction of required courses in art appreciation for all pupils in some cities is being enthusiastically watched by art teachers over the entire country. Unlike

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former required courses which emphasized either the chronological facts of history or the development of drawing skills, these new required courses aim to awaken interest and enjoyment in art by developing discrimination in art choices for all pupils. They involve only such manipulative experiences as are within the limits of talent of the group. These required courses in art appreciation have inspired several cities to modify their art curriculum to broader and less technical methods. Textbooks recently published to meet this form of instruction have been written by teachers who pioneered in developing this work and contain many suggestions for the organization of similar courses in other cities.

The art curriculum is now enriched by the opportunities extended by art museums and libraries. Not only are there gallery tours, lectures, and loan exhibits to public schools, but free drawing classes are now a feature of the educational work of the art museum. Through loan of prints and lantern slides the work of the museum extends even to communities without museums. Some art museums broadcast lectures on aspects of art which have not yet been incorporated in the school program. In one city the use of the radio in teaching art is a unique and interesting method to supplement the regular work. It affords an opportunity for all pupils of the same grade in a large city to follow the same lesson presented by an inspiring leader and authority in art education not possible by the method of personal visit. Specially chosen illustrations for these radio lessons are supplied to each pupil by the school. These are published in pamphlet-form and include excellent examples of the arts and crafts of the past and present.

Continuous school exhibits of work representing all the pupils were maintained in some schools instead of the usual annual exhibit of the best work only. The claim is that this type of exhibit, changed frequently during the year, offers many educational possibilities. Some schools visited were fortunate enough to have occasional loan exhibits of excellent paintings, prints, and collotype reproductions. In one city the loan collections of an art museum were selected to parallel and enrich the different subjects of the academic

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classes. Modern art was included in these loan exhibits but it was found that some teachers were unprepared to meet the interest in modern art expressed by the pupils. In only one school visited was the entire approach to teaching art uniquely that based on modern art. Carefully planned by a well-trained teacher, this work appeared interesting and stimulating to all pupils.

While there is but occasional mention in printed courses of study of the use of school and community activities in the teaching of art, this field is among those most called upon to contribute to these activities. Visitation revealed many interesting and valuable uses of community activities as a means of teaching art. Frequently these gave pupils an opportunity to select, purchase, and profitably work with a variety of mediums too expensive for school budgets.

The full report of the survey of instruction in art closes with a list of available art tests used in secondary schools as classed into three groups, namely, (1) aesthetic judgment or art appreciation tests, (2) drawing scales, and (3) art ability tests. While these are recognized as contributions to the scientific movement in research, they have not exhausted the possibilities nor met the needs of all phases of art education. Leading art educators feel that tests have not yet been developed which measure the qualities modern art education aims to develop, such as appreciation and attitudes, imagination and creativeness.

CHAPTER XXII : NONATHLETIC EXTRACURRICULUM ACTIVITIES ¹

1. THE SCOPE OF THIS PROJECT OF THE SURVEY

The investigation considers (1) the development of extracurriculum activities as revealed in a study of four secondary schools over a period of 30 years; (2) the current practices in organization and administration of such activities in 224 selected schools; (3) the programs of 606 individual organizations in 24 selected schools; (4) interscholastic participation in nonathletic activities in the group of 224 selected schools; and (5) an appraisal of extracurriculum activities by adults who participated in such activities while attending secondary schools.

2. THE DEVELOPMENT OF ACTIVITIES IN FOUR SCHOOLS

The data for the first part of the investigation were secured from the "annuals" published by 4 secondary schools, 3 public and 1 private, located within a 50-mile radius of Chicago.

The records of extracurriculum activities in four schools for the 30-year period 1900 to 1930 show that in the public schools nonathletic activities had made only a small beginning prior to 1910. The number of activities in the school increased about 60 per cent during the next decade, 1910 to 1920, while the enrollment was making similar gain. By 1930 activities in these schools were more than four times the number provided in 1910 for a pupil enrollment which had increased in approximately the same ratio. In the private school represented little change in the total number of activities occurred throughout the 30-year period. Such change as was apparent consisted in a slight shifting toward the end of the period from activities exclusively for boys to activities for both boys and girls. The enrollment of the private school throughout the period was virtually constant. If the data

¹ This chapter is based on Monograph No. 26 of the report of the National Survey of Secondary Education, entitled "Nonathletic Extracurriculum Activities," by William O. Reavis and George E. Van Dyke.

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for the four schools for the 18-year period, 1913-1930, for which the records are complete, are totaled, an increase of 170 per cent in number of nonathletic activities is found to have taken place. The largest increase was in the activities for girls (313 per cent). Activities for boys and girls increased 169 per cent and for boys only, 108 per cent. The increase in nonathletic activities for the period was approximately eight times the increase in athletic activities.

Classification of the activities provided in the four schools for the period 1913-1930 reveals a marked increase in three types of activities, namely, "Civic, Moral, and Honorary" (560 per cent), "Avocational" (533 per cent), and "Subject, Musical, Literary, and Teams" (155 per cent). "Publication" increased only 44 per cent in the same period, and "Social Activities" lost 20 per cent. While the ratio of the number of activities to the enrollment of the four schools did not change materially in the 18-year period, the pupils were provided with a much greater variety of activities, as is shown by the increase in the number of different activities for the three 6-year periods, 1913-1918 (88 activities), 1919-1924 (140), and 1925-1930 (248).

A total of 391 different activities (athletic and nonathletic) was provided in the four schools during the years 1900-1930 for which records were available. The average length of life of these activities was 6.8 years, and the median life was 4.4 years. The participation in activities of the members of two graduating classes (1921 and 1928) during their residence in the four schools shows that the boys slightly exceeded the girls in 1921 in average number of activities (4.2 to 4) and that the girls exceeded the boys considerably in 1928 (4.7 to 3.6). The participation of both boys and girls was slightly greater in 1928 than in 1921 (4.4 to 4.1).

3. THE PRACTICES IN 399 SELECTED SCHOOLS

The schools represented and the diversity of practices.—As a means of ascertaining current practices in the organization and administration of nonathletic activities a check-list inquiry form was prepared and mailed to 399 schools selected on the basis of information available in the United States

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Office of Education. This information indicated that these schools had in a marked way developed their nonathletic extracurriculum activities. Replies were received from 224 schools, which were distributed according to geographical location as follows: New England States, 22; Middle Atlantic, 40; Southern, 40; Middle Western, 91; and Western, 31.

This group of 224 schools included 64 junior high schools scattered in 26 States and the District of Columbia, 38 senior high schools in 21 States, 89 4-year high schools in 36 States and the District of Columbia, and 33 6-year high schools in 18 States. The distribution of the schools according to enrollment was as follows: 12.1 per cent were small schools enrolling 100 pupils or fewer; 21.4 per cent enrolled from 101 to 300 pupils; 21.9 per cent, from 301 to 750 pupils; 32.1 per cent, from 751 to 2,000 pupils; 8.9 per cent, more than 2,000 pupils; 3.6 per cent failed to specify their enrollments. The median enrollments were 950 in the junior high schools, 1,125 in the senior high schools, 260 in the 4-year high schools, and 325 in the 6-year high schools. The median enrollment of the entire group of schools was 600.

The practices discovered in the 224 selected secondary schools reported to have made innovating departures and significant progress in the organization and administration of nonathletic activities reveal many accomplishments as well as conditions which require further investigation and appraisal. The inquiry shows that certain practices may be considered characteristic of certain types of school organization and of schools of different enrollments. While marked variations in practices are observed among the schools in the different geographical divisions, no practice can be said to characterize the schools of a given division because of the operation of the factors of type of organization and school size.

The numbers of activities.—The findings show that the number of activities supported by a selected secondary school are determined largely by enrollment, although the type of organization is a secondary influence. The junior high school grades apparently require a slightly larger ratio of number of activities to pupil enrollment than the senior high school

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grades, despite the fact that the percentage of pupils participating in activities is greater in the twelfth than in any of the other five secondary-school grades.

Required and voluntary participation.—Differences in administrative policy, a factor that is also influenced by type of school organization and enrollment, account for differences in practice. An example of such a difference in policy is with respect to required and voluntary participation. In schools with required participation (about a fifth) approximately 40 per cent more activities are supported per school than in schools with voluntary participation, although the median membership in activities is the same. However, the opportunities for selection are greater in schools with required participation as the ratio of activities to enrollment is 30 per cent greater than in the schools which do not require participation.

Regulation of participation.—Approximately three-fourths of the schools attempt regulation of participation. The methods vary widely, some schools restricting participation on the basis of number, administrative regulation, scholarship standing, arrangement of the schedule, and the like. Other practices—such as the time of organizing activities; admission of new members; the school officials responsible for the organization of new activities; award of credit of different kinds for participation; guidance of pupils in the selection of activities; functionaries responsible for the regulation of activities; methods of providing for the expenses of activities and the administration of funds; selection and recognition of sponsors; and policies with respect to meetings of activities, restrictions on membership, participation, organization, program making, and the training of pupil officers in activities—reveal marked variations. As a result, generalization regarding best practices is virtually impossible. Frequencies of practices can be considered and tendencies determined. However, criteria other than frequency should be applied before any given practice in the organization and administration of activities is accepted.

The data submitted afford a basis for comparing practices in any given secondary school with selected schools of similar organization, size, or regional location.

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4. THE PROGRAMS OF INDIVIDUAL ORGANIZATIONS

The information concerning the programs of individual organizations was secured through personal visits to 24 selected schools and a check list filled out by the sponsors of 606 clubs. The clubs were classified into (1) subject clubs; (2) avocational or hobby clubs; (3) student government and school service organizations; (4) honorary, leadership, moral, and social groups; (5) publications; (6) dramatic, literary, and forensic clubs; and (7) musical organizations. The data secured reveal the policies, practices, and problems in the organization, administration, and supervision of the individual organizations in the schools studied.

The readers of the monograph on which this summary is based will no doubt be impressed with the uneven distribution of the different types of activities in the several schools. Variation in the proportion of activities of the different types among the schools should be expected, but extreme variation—such as was found among the 24 schools studied—indicates the absence of guiding principles in the organization and administration of activity programs in the majority of the schools.

Approximately two-thirds of the clubs studied were not definitely related to the regular curriculum, indicating a tendency to develop programs of activities in response to the spontaneous interests of pupils. Less than a third of the clubs had adopted written constitutions, indicating further that the majority of the activities were organized and conducted informally. Information secured from an analysis of the constitutions and the statements of purpose given by the sponsors and administrative officers shows that the leading objectives of the activities were: "Extending the interests already aroused in specific activities," "Arousing interests in specific types of activities," and "Providing desirable means of utilizing leisure time under school direction." The data indicate that clear conceptions of the purposes of individual clubs and extracurriculum programs were lacking in a number of the schools. The data further show that the majority of the sponsors seek as members of the activities sponsored only those pupils whose interests or skills in the

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type of activity are already formed or developed, a practice conducive to exclusiveness and very generally condemned by writers on extracurriculum activities.

Analysis of the membership lists of the individual activities reveals that approximately three-fourths of the clubs admit both boys and girls, that the average membership per club is nearly 40, and that girls outnumber the boys by about 15 per cent. About half of the clubs have found it necessary to limit membership, and of this number the present membership is approximately 95 per cent of the maximum membership. Grade restrictions were applied to membership in some of the schools with results unsatisfactory to pupils in the grades discriminated against. This method of regulating membership is detrimental to school morale unless similar activities are provided for the pupils involved in the restrictions.

5. INTERSCHOLASTIC NONATHLETIC ACTIVITIES

The data secured from the 224 schools with innovating practices in extracurriculum activities made possible an intensive examination of the practices in these schools with respect to interscholastic nonathletic activities. One hundred and fifty-eight, or 70.5 per cent, of the whole number of schools studied, participated in interscholastic nonathletic contests, tournaments, and meets during the school year 1929-30 for which the data of the investigation were collected. The range in the percentages of the schools in the various geographical divisions participating in these activities is slight (only 5.2).

The ranges in the percentages of participation are greater when the schools are classified according to type of organization and according to enrollment. All senior high schools participated in such activities, whereas only two-fifths of the junior high schools and approximately three-fourths of the 4-year and 6-year high schools participated. In the enrollment groups the percentages of schools participating ranges from 61.1 per cent for schools with enrollments of 751 to 2,000 to 85.2 per cent for schools with enrollments of 100 or fewer. Low percentages of participation for the

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schools with enrollments of 301 to 2,000 is explained by the fact that most of the junior high schools, in which the percentages of participation were lowest, fall within these enrollment limits.

Evidence concerning the number of pupils practicing for participation in interscholastic contests, exclusive of tournaments and meets, in the 158 schools sponsoring such contests and the number actually participating, during the school year 1929-30 can not be presented in this brief summary. Practice was held for 575 contests in the 32 activities reported, or an average of 3.6 contests to a school; 467 contests were participated in, or an average of approximately 3 contests per school. A total of 30,782 pupils, almost a third of the total enrollment of the schools, practiced for competition in the various contests, and 10,202 pupils, approximately 10 per cent of the total enrollment, actually participated in the contests.

The activities providing practice for the largest number of pupils were health clubs, glee clubs, publications, choruses, and oratory. The activities permitting the largest number of pupils to participate in contests were glee clubs, publications, choruses, scholarship contests, and bands. When both practice and participation are considered, the 10 activities offering the benefits of participation to the largest number of pupils were, in order of frequency, health clubs, glee clubs, publications, choruses, scholarship contests, oratory, bands, debates, spelling contests, and essay contests. The activities providing the least participation in practice and contests were chemistry contests, stock-judging, musical readings, dramatics, 4-H contests, small instrument ensembles, stenography, commercial contests, typewriting, and manual arts.

Six hundred and nineteen interscholastic nonathletic tournaments and meets were participated in by the pupils in the 158 schools during the year 1929-30. The largest number of competitions (319) were of the intercity type; 194 competitions were sponsored by State associations; 104 were intracity contests; and only 2 were nationally sponsored.

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The intracity competitions provided participation for the largest number of pupils; the national competitions, the lowest number. The percentage of the total number of pupils participating in the interscholastic tournaments and meets was 7.3.

When the number of pupils practicing for contests is combined with the number participating in contests, tournaments, and meets, it is found that a total of 47,859 pupils were provided participation through such activities, or nearly a half of the pupils enrolled in all the schools studied.

6. APPRAISING THE ACTIVITIES

In the investigation being summarized an attempt was included to secure an evaluation of extracurriculum activities by adults who had participated in such activities while attending secondary schools. Two schools were located which had excellent directories of the alumni and the officers of which were willing to cooperate in efforts at appraisal. One is a large private military academy and the other a large comprehensive high school in a city of approximately 80,000 population. The cooperation of these schools was secured in studying the influence of participation in extracurriculum activities in high school on subsequent activities and interests in college and in community life.

The data secured from the private school show that 42 per cent of the respondents pursued the same types of activities in both secondary school and college. The activities having the greatest carry-over influence were athletics (76.5 per cent), literary activities (44.2), and music (39.1). From secondary school to community life the influence of participation in activities was slightly lower than from secondary school to college (31.2 per cent). The greatest carry-over was found in service activities (59.4 per cent), literary activities (52.9 per cent), and religious activities (36.1 per cent).

The findings for the alumni of the public high school reveal a considerable shift in interests from secondary school to college and community life, although the number of activities claiming the attention of the individuals remains virtually constant.

CHAPTER XXIII.: INTRAMURAL AND INTERSCHOLASTIC ATHLETICS¹

1. INTRAMURAL ATHLETICS

Among the selected schools included in this study of athletics at the secondary level the movement to organize definite programs of intramural athletics has come into full swing since 1925. The size of the school is the most influential factor in determining whether or not a school will adopt such a program. There is no dearth of intramural games, either for boys or for girls, although for both boys and girls a few games only are outstanding in the frequency with which they enter into the programs. A tendency exists among the larger schools to foster games which have carry-over value in the sense of lending themselves to participation in life after one's school days are over. Sports do not vary much by grades, football and golf excepted. Football is more prominent as an intramural sport among the 4-year high schools than among other types of schools. Comparatively large amounts of in-school and out-of-school time are given to practice and contests.

A tendency is discernible among the schools to link together the after-school intramural program and the in-school physical education work, the former often being considered an extension of the latter. Parallel to the sports involving many contests, a few schools are fostering other less competitive sports having longer playing seasons and more of the nature of voluntary free play, to take care of pupils having certain physical and mental limitations and choices. In a few schools the groupings made in physical education are carried over into the intramural activities. The most common groupings are by grades, physical education classes, and home rooms. There is a tendency, especially among the reorganized schools, for the administration of schools to

¹ This chapter is based on Monograph No. 27 of the report of the National Survey of Secondary Education, entitled "Intramural and Interscholastic Athletics", by P. Roy Brammell.

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designate the basis for group competitions (grades, home rooms, etc.) and then allow the pupils to organize and direct their own play. Rules of eligibility vary, but are concerned chiefly with amount of participation and conduct. No large number of schools grant credit in physical education for intramural participation. The junior high schools are especially strong against this practice. The extent to which the 5-year and 6-year undivided secondary schools refrain from allowing the lower grades to compete against the higher is encouraging. Few schools have intramural athletic associations independent of other athletic associations in the school.

Programs of intramural athletics are not expensive. The reorganized schools are ahead of the 4-year high schools in the frequency with which boards of education provide funds for intramurals. Pupil sources of support outnumber the nonpupil sources. A tendency prevails for the frequency of support by the board of education to increase as the size of the school increases. Intramural funds are controlled by responsible and authoritative persons within the school. When boards of education support intramurals, funds for intramural sports are almost always an unspecified part of the physical education budget. There is a slight beginning in appropriating funds for intramural sports in general. When financial deficits appear in the intramural accounts, in exactly two-thirds of the cases the necessary funds are procured from pupil sources.

The schools in general are recognizing the close relationship between intramural sports, physical education, health work, and interscholastic athletics. There is a tendency to dovetail closely the programs of intramural athletics and physical education. Close cooperation between health work and intramural athletics is frequently understood to be possible and necessary; it is not so often actively secured. A few schools are beginning to use intramural sports as a means of making habitual certain phases of health instruction, and as a means of improving the health of pupils through uncoerced activity. The feeling that both intramural and interscholastic activities are necessary to a comprehensive

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athletics program seems to be growing. Complete substitution of intramural for interscholastic sports programs for boys is rare, but not infrequent for girls. The question of the duplication of personnel for intramural and interscholastic coaching is at present a moot one.

Comprehensive studies in the field of intramural athletics are few. The tendency in this regard to evaluate pupil leadership is commendable. There is evidence in the data concerning the careful study of problems that the first great task of the schools has been to fit the intramural plan into the school organization, and then, second, to evaluate it in terms of educational outcomes. The second task (of evaluation) has only of late been seriously approached.

1. INTERSCHOLASTIC ATHLETICS

Respecting the administration of interscholastic athletics, it is shown in the complete report that, among the schools included in this study, interscholastic competitions are confined mainly to a few sports, most of which have no recognized carry-over value. The sports in which the largest numbers of pupils participate are not necessarily the sports having long playing seasons. About two-thirds of the pupils who practice for interscholastic contests actually participate in them. The number of pupils practicing for interscholastic contests in certain sports is small compared with the number engaging in intramural activities in the same sports. When the amount of school and out-of-school time devoted to practice and contests in interscholastic athletics is compared with that for intramural sports, the amounts are seen to be about equal. That is to say, the cost in time to pupils engaging in interscholastic sports is not greater than the cost to pupils who go in heavily for intramural sports. The schools in this study participate freely in tournaments and meets of various types. However, tournaments to determine national and State championships are being objected to strenuously, and tournaments involving smaller competing areas are being organized.

The type of association to which the schools belong is most frequently the State high-school athletic association.

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These associations are strong in most States, and their regulations are seldom added to by individual schools. These regulations pertain to such items as the limitation of participation on the part of pupils, standards of scholarship to which pupils must measure up before they may compete in interscholastic contests, and the like. In a few States the State department of education has direct control over the interscholastic athletic activities of all schools in the State. In numerous States there is close cooperation between the State department of education and the State high-school athletic association. Constructive steps have been taken in several States and numerous localities to make sure that only competent officials are put in charge of interscholastic contests. The objection to interscholastic athletics for girls is primarily against certain sports and not against interscholastic contests in general. The most common substitute is a point system within the school in which girls can earn athletic awards, and which culminates in one or more play days in which several schools participate.

In many schools the amount of money taken in and expended for athletic purposes is large. The fact that interscholastic athletics is usually called on to be self-supporting and to support other activities in the school creates the danger of overemphasis on the development of winning teams. There is a growing feeling that the educational value of interscholastic contests in certain sports should be established or disestablished and a subsidy by the board of education given to the sports shown to be beneficial, in case a nominal charge for admission to contests throughout the playing season has failed to meet expenses. Various plans for handling season tickets, administering budgets, and controlling finance are presented in the full report. In general, the control of funds for interscholastic athletics in the schools is in the hands of authoritative and competent persons.

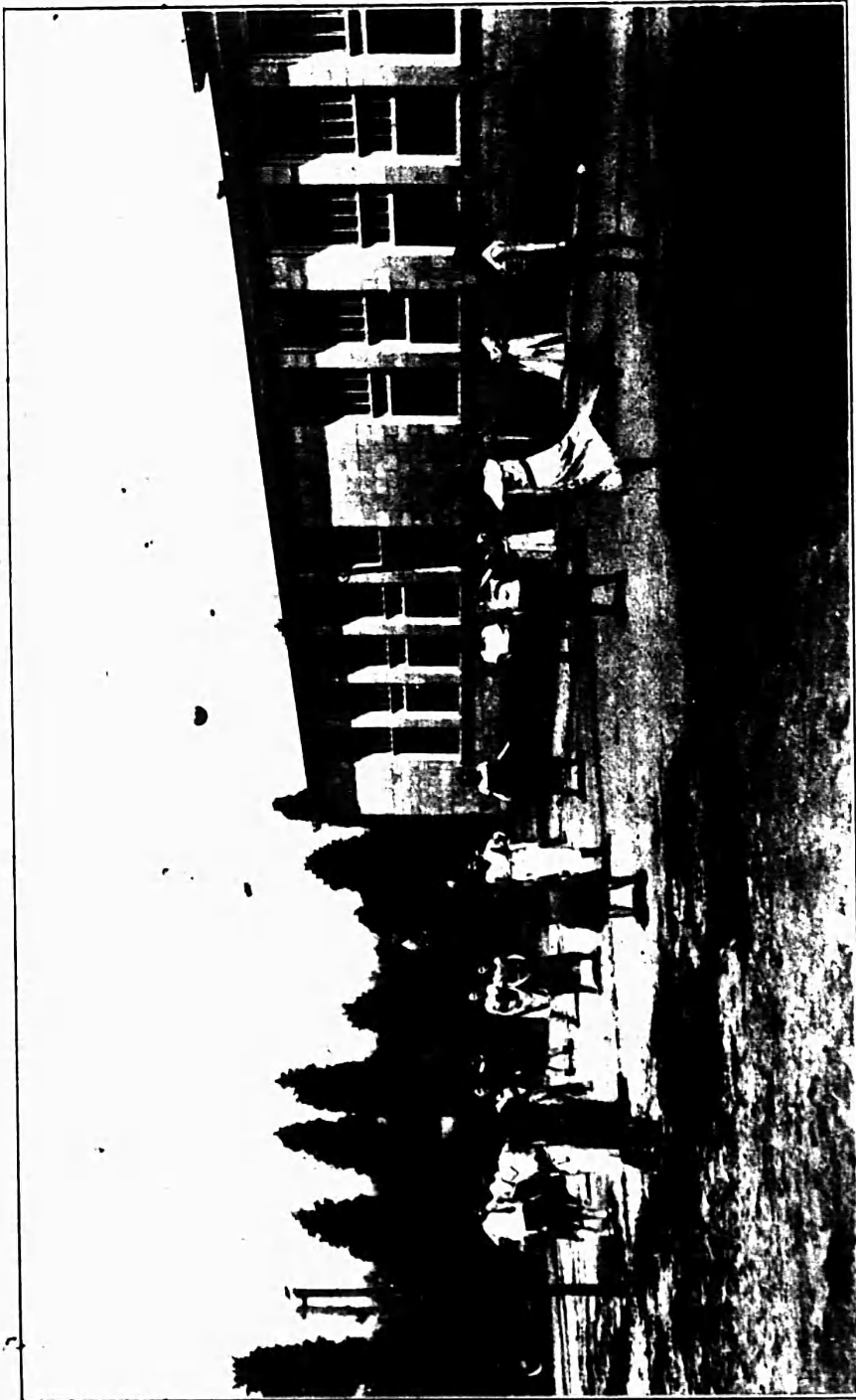
Athletic coaches in the schools are usually members of the faculty and teach regular classroom subjects. They may or may not have had training in physical education or in how to coach the sports for which they have been made responsible in the school. The department of education in the



Courtesy, Hamtramck Public Schools

GROUP INSTRUCTION ON PIANO IN THE COPERNICUS JUNIOR HIGH SCHOOL, HAMTRAMCK, MICH

At the left are sound-proof practice rooms.



GIRLS' VOLLEY BALL GAME AT OXON HILL SCHOOL, MD.

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State of Ohio has recently set up regulations regarding the certification of full-time or part-time teachers of physical education and health, including athletic coaches.

The close relationship of interscholastic athletics to health work, physical education, and intramural athletics is usually recognized. There is a tendency to unite all these activities under a single administrative head. Examples of such unification are given in the full report. Recognized leaders in the field encourage such unification.

The desirability of friendly relationships between members of competing teams, schools, and communities is recognized everywhere. The report points out examples of good relationships and how they may be promoted, and has discussed what certain agencies are doing to foster sportsmanship in schools and communities. A list of traits of character which are commonly mentioned as being developed, or possible of development, through interscholastic athletics is presented. The importance of proper leadership in developing desirable traits of character is recognized. The alumni of individual schools are less often a problem in the administration of interscholastic athletics than the local press. The move to "give back the game to the players" does not seem to be gaining ground.

Special problems in interscholastic athletics were reported by the schools as: Present now; prevalent once, but no longer problems; or never problems under the present administrative regime of the school. In a list of 28 problems, the one at present troublesome to the largest number of schools centers around the fact that too few pupils derive benefit. The problem ranking second is the tendency of the community to rate the success of the school in terms of athletic success. Special attention is given in the complete report to two problems, namely, physical hazards to contestants, and the offering of inducements to high-school athletes by private individuals, alumni, business men, or other persons interested in certain higher institutions.

When the complete data for intramural and interscholastic athletics presented in this report are scanned in the large, one has the feeling that the general program of intramural

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sports is in the process of establishment, while the program of interscholastic athletics is in the process of adjustment. Both are being appraised in the light of educational outcomes, and, rightly selected and administered, both are felt to contain definite educational values. The schools in this study which seem to be setting the pace in this field are headed definitely in the direction of dovetailing these activities and making both of them parts of a larger program which includes not only them, but also the health work in the schools and the work in physical education.

CHAPTER XXIV: HEALTH WORK AND PHYSICAL EDUCATION¹

1. HEALTH WORK IN SECONDARY SCHOOLS

Among 460 selected secondary schools represented in the study included in this National Survey the health work carried on has been launched as a definite program mainly since 1920. In about 90 per cent of the schools the health work is part of a general program of health which extends beyond the school itself. This larger unit is most frequently the city school system, except in the case of the small schools, where it becomes the State or county organization. In approximately 70 per cent of about 300 individual schools full-time or part-time directors or "coordinators" of health work are employed. About the same proportion of the schools report that health work is coordinated with that in the elementary grades.

In the individual schools there is usually a close administrative relationship between the health work and the work in physical education. The schools specified 30 different types of workers who do health work. The three persons mentioned by the largest numbers of schools are nurse, physical education instructor, and physician. Inspection of the school plant for sanitation and safety is left in most cases to the administrative head of the school or the janitor. Persons employed to do health work in the school seldom make these inspections. Measures to insure the physical safety of pupils—for example, pupil traffic police—are taken by almost half of the schools.

The pupil groups used by the largest numbers of schools in carrying on health projects are: (1) Classes in physical education; (2) other classes—for example, general science, biology, etc.; (3) home rooms; and (4) clubs. Schools are giving increased attention to the health of teachers, both at the time of employment and after tenure has begun. Health

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examinations for pupils are almost universal among the schools. Usually pupils receive these examinations once a year, but in some schools only once during the secondary-school career. Other intervals are also frequent. Examination is most frequently made of eyes, throat, teeth, ears, nose, heart, and lungs. Ninety per cent of the schools inform parents of the defects found in their children during the health examination. Half of the schools offer corrective work to take care of remediable defects discovered during the health examination.

A little more than half of the schools have definite outlines of study for health instruction. Many schools report, however, that these outlines are not available for inspection or examination, which suggests that they may sometimes exist merely in the memories of supervisors or teachers. In most cases the outlines are prepared by either the city school system or the State department of education. Twenty-four different types of workers are reported to give health instruction in the schools. The teacher of physical education, teacher of science, and nurse are reported by more schools to give this instruction than anyone else. Thirteen per cent of the schools report that special teachers of health are employed. A special health course is offered and required of all pupils in two-fifths of the schools. This course is more often taught by the teacher of physical education than by any other person. It is most frequently required in the seventh, eighth, or tenth grade. This course usually runs throughout the school year and meets twice a week for full-time school periods.

Health instruction in connection with the work in courses other than the special health course is offered in almost all the schools. These other courses are most frequently physical education, general science, home economics, biology, and civics. Computations of time show that, on the average, pupils receive more instruction in health (in minutes) when this instruction is given in special health courses than when it is given in connection with the work in other courses. The subjects most likely to include instruction in health are most frequently required in the junior high school grades and

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elective in the senior high school grades. About a fifth of the schools maintain special classes for pupils having certain defects. The five kinds of classes reported by the largest numbers of schools are (1) sight-saving, (2) defective speech, (3) tuberculosis or open-air, (4) lip-reading, and (5) nutrition.

More than half of the schools indicate that home projects in health are carried on. The health habits of pupils are studied specifically in about 60 per cent of the schools, and suggestions made for the improvement or change of practices considered undesirable. Tests intended to determine the health knowledge, habits, and attitudes of pupils are administered in slightly more than a third of the schools, which indicates that the study of the health habits of individual pupils reported to be made by 60 per cent of the schools is probably often of a cursory nature.

In a fourth of the schools effort is made to measure the results of health instruction. Among the schools reporting some type of measurement, three methods are mentioned most frequently, namely, frequent physical examinations and check-ups in corrections made, individual charts and follow-up work, and tests and records. Some of these may or may not apply strictly to the measurement of health instruction.

Twenty-five different kinds of health services were reported to be rendered by the schools. Chief among these are free immunization for pupils—for example, for diphtheria and smallpox—and free milk for malnourished pupils. A few schools are attempting to meet special needs growing out of the present difficult economic situation. Among 19 special health activities fostered among the pupils, four are reported by larger numbers of schools than any of the others. These four are (1) health poster making, (2) health plays and programs, (3) physical safety measures, and (4) hikes and excursions. Summer camps in the outlying countryside and excursions in national parks are becoming more and more popular among the schools.

Many hindrances to health work were enumerated by the schools, chief among these being lack of cooperation by

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parents, lack of facilities at school, ignorance and superstition of parents, and poor home conditions. Fewer helps than hindrances to health work were enumerated. The four helps mentioned by the largest numbers of schools are cooperation and encouragement of parents, cooperation of city or community agencies, healthful conditions in the community, and good home conditions. The fact that a close tie-up with the home is essential to a successful program of health in the schools is outstanding in the data supplied by the schools.

Only about a third of the schools are satisfied with their present health programs. The six desired changes in, or additions to, the present program mentioned by the largest numbers of schools are: (1) Added facilities at school; (2) full-time or part-time nurse or physician; (3) corrective work; (4) definite course in health, sanitation, etc.; (5) more teachers; and (6) more follow-up work in the home. One junior high school reported a need for, and a prospect of getting a health education building. Another junior high school cited the need for teachers who are trained in health sports.

1. PHYSICAL EDUCATION

Only a few trends in physical education, based on the data gathered for this study, can be given here. In the first place, the trend in the type of work offered in physical education has been for some time and still is, away from calisthenics and formalized drill and toward games and free play. Consequently, in matters of equipment, this changes the chief interest from heavy apparatus in the gymnasium to sufficient space and facilities for games, both indoor and outdoor.

The requirement concerning the training of workers in this field is coming to be more and more specialized. It is not uncommon at present for schools to require that all instructors in physical education must have majored in that field. Some States require certification in physical education just as in other subjects. In many schools instructors in physical education are assisted by pupils who act as group leaders. These leaders are usually trained for their work in special classes.

Increasing interest is being shown by the schools in the physical activities of pupils during out-of-school hours.

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The objective of making healthful recreation habitual to children, of developing desirable traits of character, and of learning games which can be played during adult life has led the schools in increasing numbers to supply playground supervisors after school in the evenings, on Saturdays, and during summers.

Finally, schools in general are giving more attention to corrective and follow-up work in physical education. There is a definite feeling that the work of examining and instructing should be carried to its logical and fruitful conclusion.

3. A FEW GENERAL IMPLICATIONS

It has been notable throughout this investigation that, among the types of schools, the group of junior high schools is distinctly in the lead in the scope and effectiveness of the work done in both health and physical education. In almost every phase of this inquiry this group of schools has been out in front, and when unusual or innovational features have been called for, more responses were received from these schools than from those in any other group. The objective of health in secondary schools is being made an effective part of the educational program, especially at the junior high school level.

An outstanding trend among the schools is the tendency to unite under a single administrative head all the physical activities fostered. This includes health work, physical education, intramural athletics, and interscholastic athletics. Health work is plainly understood in most schools to include more than health examinations and health instruction. Health habits are fundamental. Actual health can not be taught. It can be developed only by participating in healthful activities.

Two shortcomings were reported by workers in health and physical education more frequently than any others. These probably indicate the trend which work in this field will take in the future. They are the tasks which lie ahead. One of these shortcomings is the lack of effective programs of correction in physical education and of proper follow-up of facts brought to light through various tests and physical

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examinations. The other shortcoming is the failure to measure the effectiveness of the general programs in this field, the methods of instruction, and the materials used. The work in health and physical education, comparatively new so far as occupying a definite place in the secondary-school curriculum is concerned, has made large gains, even while other more traditional subjects were losing in prominence. What is done in this field should be rendered indispensable because it is being guided and tested in its progress.



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