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SECONDARY EDUCATION IN 1921 AND 1922

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CHAPTER XII.

SECONDARY EDUCATION.

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INTRODUCTION.

In the report of the Commissioner of Education for the year 1914 is the statement that so far as the number of secondary schools is concerned the great majority are undoubtedly continuing traditional activities without consideration of the needs of the pupils or the results actually obtained. This same assertion can be made to-day of many high schools, but not of so many as in 1914, for happily many of the high schools have within the past few years broken away from some of the traditional practices to which the Commissioner of Education referred. More schools are planning programs of study that consider the present and future needs of the high-school boy and girl and they are giving more attention to the results actually obtained. The small secondary school is gradually ceasing to be a mere college preparatory school, yet the program of studies in many of these schools is still based wholly upon the entrance requirements of certain colleges. The program of studies in many school systems, especially city-school systems, has been organized so as to include six years of secondary-school work, divided into two administrative units of three years each, the one unit known as the junior high school and the other as the senior high school. The reorganization of the schools on this plan is the outstanding achievement in secondary education within the past few years, although much remains to be done to perfect the reorganization.

Among other movements that have received the attention of secondary-school people are application of educational and mental tests to the secondary-school field; the homogeneous grouping of pupils; vocational education; extracurricular activities; the supervision of instruction; supervised study; pupil participation in school government; and the improvement of the small high school.

GROWTH OF PUBLIC HIGH SCHOOLS.

The growth of public high schools has been phenomenal. In 1900 only 0.68 per cent of the total population were enrolled in the public high schools of the country, while in 1920, or 20 years later, 1.76 per cent were enrolled. In 1900 only 3.3 per cent of the children enrolled in the elementary and high-school grades were in high school, while 10.2 per cent were enrolled in high schools in 1920. If data for the year 1922 were available they would probably show 12 or 13 per cent enrolled in high school, since the high-school enrollment has increased greatly within the past two years. Of the pupils enrolled in secondary schools, both public and private, the per cent enrolled in public high schools increased from 82.4 per cent in 1900 to 91 per cent in 1920. The per cent of increase in enrollment in the public high schools should, however, not be misconstrued to mean that the private high schools have not grown. The increase in enrollment in private high schools has about kept pace with the increase in population. The relative change is not due to an absolute decrease in the status of the private high schools but to the phenomenal growth of the public high schools.

Even with the increase in enrollment in both public and private high schools, there is still an army of 1,967,651 boys and girls from 14 to 17 years of age, inclusive, who were not in school. If these boys and girls could be brought into school about 65,000 additional classrooms would be necessary, counting 30 to a class; and about 4,000 additional high schools of 500 pupils each would be required.

Just why these boys and girls are not in school may be assigned to several causes; one is that some parents are not economically able to keep their childern in school; another cause is that the courses of study are not adapted to the needs and the intelligence of these children. Of course not all children 14 to 18 years of age will ever attend high school, but that more could attend is only too evident. That a larger percentage than formerly are attending, as is shown by the foregoing figures, is encouraging, and as courses of study are improved by providing for individual differences more fully than they do at present, more girls and boys will remain in high school.

SUPERVISION.

That high-school teachers, especially those in the smaller high schools, need supervision can not be questioned, since many of them have begun teaching in high schools without any experience in the elementary grades and without any professional preparation. Many do not have the least conception of modern educational methods. The methods which they tend to pursue are the only methods with which they are familiar, namely, those which are prevalent among

college professors, and which, however good they may be for college classes, are poorly adapted to high-school instruction. The point of view of such teachers tends to be that wherein the subject and its content are of paramount importance, often overshadowing interest in the pupil himself. Unless these teachers receive help, they continue in the use of their ineffective methods. The person to help them is the high-school principal; but too often the high-school principal has no great ability as a supervisor. He may know little of educational methods himself. To him supervision may mean clerical work, such as excusing absences, preparing schedules, making out report cards, running errands, and the like. All these things are necessary, but a principal should give considerable time to a systematic observation of teaching, to a diagnostic study of results, and to conferences with teachers concerning the teaching observed and the methods that should be used to secure better results.

Some high-school principals do not supervise, saying that each teacher is a specialist and should know more than they about the subject that he teaches. While the principal may not have so profound a knowledge of the subject as the teacher, he should be familiar enough with general and special methods of teaching to assist the teacher if he is failing to secure results. A few years ago only a very few high-school principals could be found who made any pretense to supervising or who knew how to supervise, largely from the fact that they themselves knew little but the academic subjects studied in college. Few had taken courses in secondary education. To-day, however, the younger high-school principals are entering upon their work more fully equipped than were the high-school principals of 10 years ago, and they are consequently giving more attention to the technical phases of high-school administration and supervision. But even now they give too little attention to the supervision of instruction.

A study made by the North Central Association of Colleges and Secondary Schools reveals some interesting practices:[1]

> The typical principal pays a visit to each classroom once in two weeks and stays from 15 to 20 minutes; he comments orally to the teachers on the work observed; offers constructive criticisms; supplements his visits with personal conferences; invites teachers to seek advice from superiors; and holds frequent teachers' meetings designed to consider and improve methods of teaching. To do this requires from one-tenth to one-fifth of all the available time. About three-fourths of the principals likewise make a practice of encouraging teachers to visit other teachers in their own buildings or in other systems; bring pressure to bear upon teachers to attend college or university summer sessions at least once in five years; and make increases in salaries rest in part upon continued systematic effort at self-improvement.

[1] Proc. 26th An. Meeting, N. Cen. Assoc. Col. and Sec. Schools, Part I, pp. 56–57.

On the other hand, only a variable minority of principals ever give demonstration lessons with the class at the time of their visits, conduct reading-circle or study clubs of high-school teachers, hold teachers' institutes oftener than once per year, or have any form of promotional examination for teachers. Only about half the principals ever participate at all in the class work witnessed during their visits of supervision or ask any questions of pupils or teachers.

In the newer fields of appraising, recording, and experimenting, only from about one-tenth to three-fifths of the principals make use of rating scales in order to measure the accomplishments of teachers and pupils. This, of course, is not surprising. That the majority of them are interested in the new scientific movement is evidenced by the fact that 87.6 per cent profess to be lending their support at present to the movement centering in scientific studies and experiments, while 42.9 per cent are actually carrying on, in their schools, studies and experiments of these kinds.

Few schools have as yet a bureau of statistical measurements or an educational or psychological clinic. Moreover, while 63.1 per cent make a practice of analyzing the data relating to the promotion, failure, and elimination of pupils and of formulating an age-grade report each year, only 35.1 per cent have any well-organized plan of education and vocational guidance, only 29.7 per cent have placement bureaus, and only 31 per cent have any plan of follow-up analyses and help. Only 45.4 per cent likewise make any study of the cost of instruction by subjects.

The small rural high school especially suffers from lack of supervision. The principal of such a school is often the principal of the elementary grades and teaches several classes a day, thus making it practically impossible for him to give much thought and attention to the supervision of either the elementary or the high-school teachers. The rural school survey of New York revealed the fact that the median principal in schools with a high-school enrollment under 50 gave only 10 minutes a day to supervision of high-school instruction, and that 78 principals in schools of this class gave no time to high-school classroom supervision. In the schools with a high-school enrollment of 50 and over the median principal gave 11 to 20 minutes to supervision of instruction in the high school. These conditions with respect to supervision are without doubt typical of the small high school in every section of the country. The New York rural-school survey committee says, regarding the supervision of high-school instruction in that State:

One of the most outstanding needs of the New York rural high school is that of supervision of classroom instruction. There is also need, in an almost equal degree, of supervision of school organization and the broader and more comprehensive phases of the work of the local school.

That State high-school inspectors can not supervise actual instruction is evident. About all they can do is to inspect and to pass upon the standing of the various high schools of their respective States and to outline courses of study. The New York school survey says regarding supervision by the State department of education:

In the first place, it can not keep closely enough in touch with the local teachers to be in a position to understand their weaknesses and strength, the necessary basis for constructive supervision. In the second place, it can not know local problems and conditions peculiar to communities. In the third place, it is not economical either of time or money for all supervisors to go out from the State office to all parts of the State. Finally, granting that the factor of distance could be overcome, the burden of efficient supervision would be so great as to require an unwieldly central organization.

In the smaller cities of the country, the high-school principal usually has an excellent opportunity for supervision, but as previously stated he does not usually make use of the opportunity, as he too often considers it more necessary to look after mechanical details. In these cities the high-school principal has practically all his time free from teaching and has the supervision of from 10 to 30 teachers. If a principal under such conditions fails to supervise instruction, he is evidently not prepared for the position.

In cities where the high schools are large the high-school principal too often makes supervision of instruction a secondary matter. The school survey report of Philadelphia says, regarding the supervision by principals in that city:

Here and there a principal has developed a professional school interest in teaching or has stimulated one or more heads of a department to effective supervision. But even the best principals have been too much burdened with administrative detail, much of which could well be delegated to others, to exercise the leadership that is necessary.

What is said regarding supervision of high-school instruction in Philadelphia can be equally well said regarding such supervision in many other cities.

The principal of a large high school can not get away from the fact any more than can the principal of a small high school that he is responsible for the character of the instruction in his school, provided of course that the board of education furnishes him with assistant principals to look after administrative details.

The Baltimore school survey report says, regarding the work of the high-school principal:

A major part of a principal's time should be spent in the improvement of instruction—either direct or indirect. The principal should be constantly active in stimulating and directing the teachers to select and organize subject matter better suited to clearly defined purposes of the school; and he should, after frequent visits to full-period recitations, encourage and assist teachers either individually or through teachers' meetings to grow in service. Indirectly, the principal should assist teachers through his cabinet of heads of departments. These heads need encouragement, stimulation, and coordination just as truly as do teachers, in order that they may be most effective. There is no one who can give them the desired help except the principal.

Supervision by department heads is a failure largely unless the principal keeps the main purpose of his office in mind; namely, that

of supervision. This fact is brought out in the school survey report of Philadelphia, which says:

The system of supervision through heads of departments has in a large percentage of cases failed in Philadelphia, chiefly because a majority of principals have not demanded, systematically encouraged, and made possible the recognition of professional supervision as the prime obligation of a department head.

VOCATIONAL EDUCATION.[2]

Within the past few years hundreds of high schools have organized vocational courses in agriculture, trades and industries, home economics, or business. Many schools, especially the larger high schools, have organized courses in several or all these subjects.

In 1916 the United States Bureau of Education made a study as to the nature of the agricultural instruction in the high schools of the country and found that many did not have a distinct purpose in their instruction; that 20 per cent of the schools confined their instruction to classroom work; that 50 per cent supplemented the classroom instruction with laboratory exercises and trips to farms; and that only 30 per cent combined classroom instruction and laboratory work with practical farm work. Since 1916 great forward steps have been taken in the teaching of agriculture in the secondary schools. The methods of teaching have been greatly improved and the courses of study better organized, so that vocational education in agriculture actually functions in the community and receives the support of farmers.

That vocational agriculture has made great strides it is only necessary to call attention to the number of high schools teaching agriculture in 1918 and in 1922 and to the number of students enrolled in the subject these two years. In 1918 only 609 schools, nearly all of which were all-day schools, received Federal aid for the teaching of agriculture, while 1,937 all-day schools received aid in 1922, an increase of 218 per cent. In addition there were 238 evening and part-time schools in 1922, making a total of 2,175 agricultural schools of all types. In 1918 there were only 15,453 pupils enrolled in vocational classes in agriculture, while at the close of the year 1922 there was a total enrollment of 59,276, or an increase of 284 per cent.

The increase in the enrollment in trade and industrial classes has also been great. In 1918 there were enrolled in Federally aided all-day trade unit schools 18,596 pupils, and 31,390 pupils in 1922, or an increase of 68 per cent.

Each year since 1917 has marked an increased interest in home-making education and in wider development of State programs. According to the sixth annual report of the Federal Board for Voca-

[2] For complete discussion of vocational education see sixth annual report of Federal Board for Vocational Education, upon which this brief account is based.

tional Education the year ended June 30, 1922, marks in many ways a more real development in vocational education in home economics than has been made in any other year. The report continues:

It takes much effort on the part of State departments of education to get over to the superintendents in the cities and small towns the real meaning of vocational education, and only time can demonstrate to them the value of this type of training. The reports from the States, in the main, show a support of the program which is based upon both knowledge of what vocational education in home economics can do and a real faith in the sort of education for the girls and women of the country.

The past year's reports show that every State has organized some type of vocational classes in home making to meet the needs of the girls and women. Forty-seven States are offering courses to approximately 26,000 girls of 14 to 18 years of age who are in school.

For many years the city high schools of the country and some small town and rural high schools have had courses in commercial education. These courses have, however, been confined largely to stenography, typewriting, and bookkeeping, and have only in some instances been what would be considered vocational. The Federal Board for Vocational Education says in its sixth annual report:

The courses were practically always confined to teaching bookkeeping or shorthand with related subjects, as if a knowledge of both or either of these subjects constituted the only information needed for success in the world of business occupations. The public schools, following the financially remunerative practice of the private schools, usually required pupils to take both bookkeeping and shorthand, although in the large cities there was but little demand for workers with a knowledge of both of these subjects. Further, the shorthand and bookkeeping, in most high schools, were taught the children in the first two years of the high-school course—that is, children who averaged 14 years in age and who therefore had completed two years of high-school work by the time they were 16—although business men do not employ 16-year-old boys and girls as either bookkeepers or stenographers. The bookkeeping as taught was highly technical and full of obsolete practices and usages and its value was much impaired because no preliminary instruction about business practices or usages was included; hence the pupils had no background for the extremely technical bookkeeping work required of them. In the shorthand classes the teachers apparently assumed that a knowledge of shorthand and typewriting per se was sufficient to transform a high-school sophomore into an efficient stenographer, as instruction in the general office duties of a stenographer was seldom given. Some of the more progressive schools did have classes in office practice, though usually these were open to the limited few only who were about to graduate.

The instruction in commercial subjects was almost never based upon local practices or adapted to local needs, and, since the teachers practically never had had business experience, it was extremely theoretical and frequently misleading. In addition to these immediate vocational shortcomings, the schools had never developed the related subjects necessary for an intelligent social and economic interpretation of the technical commercial work. The academically trained high-school principals usually prescribed for the commercial pupils a course of study which included a large amount of college

preparatory subjects entirely unrelated to either the life or business needs of the pupils.

Realizing the need of developing commercial courses really vocational in character, 15 cities now have full-time directors of commercial education. Several more are ready to appoint such directors, but have not because men with satisfactory training and experience could not be found. A few State departments of public instruction, in order to improve the commercial work in the high schools under their jurisdiction, have employed State directors of commercial education.

HOMOGENEOUS GROUPING.

Some high schools are beginning to group pupils according to the ability of the pupils to make progress. This plan is, however, confined mostly to the large high schools, and wherever it has been tried it has usually proved successful.

If pupils of all degrees of ability are placed in the same section it is evident that some have too much to do and that others will find the tasks too easy. The slower children, nagged and threatened with failure, become discouraged, while the brighter children, not having enough to do to keep them busy, form bad habits of study and the habit of laziness. They get the notion that any task can be accomplished without work, that their brilliancy will carry them through. Not only is harm done by placing the slow and the bright child in the same section, but harm is done the average child by placing him in a section with the slow and the bright. He sees the slower pupils gaining promotion with a mere passing mark of 70 or 75, with work only three-fourths perfect, and the brighter pupils getting through with little work. The average child is therefore tempted to follow the example set by the bright child of doing little work, and of the slow child of making a mere passing mark.

If the pupils were divided into at least three groups—the slow, the normal, and the bright—each group could proceed at the pace of its ability. The slow group would cover a minimum amount, the normal group a little greater amount, and the bright group considerably more. Each group would be making practically the same grades. The overage and the bright child would have to work just as hard as the slow child to make a grade of 90 and to maintain their standing in their respective groups. By placing the slow children in one group it would be possible for them to make grades from 90 to 100. They would learn to do something well and not to be satisfied with a 70 per cent accomplishment.

Of course the plan of grouping pupils according to their ability is not practicable in the very small high school with an entering class

of only 20 or 30, but in a high school with an entering class of 75 three groups can be formed. Even in a school of this size the grouping could not continue throughout the four years owing to the fact that the upper classes would be too small to be divided into three groups, but in a school graduating 75 pupils a year the classes could be divided into three groups for at least the required subjects. In the large schools more than three groups could be formed to advantage. If there are 125 pupils in the first-year class they can be divided into five groups of 25 pupils each, thereby making the groups more nearly homogeneous than they would be if divided into only three groups.

This plan of grouping is applicable to all kinds of schools, elementary, junior high, and senior high, or the regular four-year high school. It is probably being tried more extensively in the junior high school than in the elementary or in the senior high school. Since one of the aims of the junior high school is to provide for individual differences, the plan of grouping pupils according to their ability is one way to realize the aim.

There are many difficulties to be overcome before the plan can be made successful. Some teachers oppose it, saying that if all the slow children are placed together there will be no enthusiasm or incentive, that the pride of the children will be hurt, and that they will be classed as the "dummies" of the school. There is also objection of the parents to be met who say that the plan is not democratic, since all children are "created equal." To the schoolman these objections may not seem valid, but before he can make a success of his plan he will have to meet all these objections.

The principal of the Edison Junior High School, Berkeley, Calif., who has been experimenting with homogeneous grouping of junior high-school pupils, says regarding the success of the plan:[3]

> With this method of classification the pupils are allowed to advance as rapidly as their powers permit; in fact, they classify themselves. They gain time. The old lock-step method is eliminated. They compete with their equals, thus deriving a sense of satisfaction through the knowledge and realization that they stand on a par with their classmates. This plan removes almost entirely the questions of discipline because when a pupil is kept busy he usually keeps out of mischief. A richer curriculum is offered to every pupil, with the result that he practically works up to his capacity in every respect. There are scarcely any failures—only those who lose out on account of absence.

The method of classifying pupils according to their ability is by no means uniform, as was found by August Dvorak, of the University of Minnesota, in a study[4] that he made of the practice of 86 junior

[3] Sierra Educational News, vol. 18, December, 1922.
[4] School Review, vol. 30, November, 1922.

high schools in classifying their pupils. In summarizing the result of his study Mr. Dvorak says:

> Junior high schools are more progressive in the use of scientific methods for measuring individual differences than are the traditional 8–4 schools; nevertheless, there is much room for improvement, since 12.5 per cent of the junior high schools studied are depending on random selection of teachers' judgments alone for the classification of pupils according to individual differences. One-third of the schools studied use standardized educational tests and one-half use standardized mental tests. However, inquiry discloses that months afterwards some of the tests were either unscored or untabulated. One may well question whether many junior high schools are going about the task of fulfilling the peculiar functions of recognizing individual differences in anything like the scientific way in which it should be and can be done in the present stage of development of tests.

The best method of tentatively classifying pupils into sections is by use of standardized mental tests. This can be done when the pupils enter high school if it has not been done before. If the pupils are first classified by means of mental tests, they can then afterwards be reclassified on the basis of the teacher's judgment and by means of educational tests. Experiments thus far conducted, however, reveal the fact that the mental tests are reliable enough for a first classification, and that it is seldom necessary to change pupils from one group to another after they have once been classified by means of mental tests.

PUPIL SELF-GOVERNMENT.

For many years there have been various attempts to organize high schools so that the government of the school would be largely in the hands of the pupils, but the failures have greatly outnumbered the successes. Indeed, what may be considered a successful self-governing school to-day may be considered a failure to-morrow, probably because of changes in the faculty or because a new principal takes charge. That high-school pupils should be given an opportunity to participate in the government of the school few will deny, but just to what extent is the question. Absolute self-government by high-school pupils is now considered impracticable, but some form of participation is practicable and desirable. Many schools find that student councils, elected by the students, are helpful to school morale and that they give the pupils an opportunity to participate in the government of the schools. Very few school principals would to-day advocate more than student cooperation. Possibly most of them would agree with the report of a committee, appointed by the State Department of Public Instruction of Massachusetts, to make recommendations regarding various high-school problems. The committee says regarding student participation in school government:[5]

[5] Manual.

A school should proceed cautiously in changing from a traditional form of school control to that form where the pupils share the responsibility. A school should also distinguish between student cooperation and student self-government. No doubt should be left in any minds that the school heads are the final authority and that counselors are advisers; that they are cooperating and suggesting measures for the good of all. For these reasons student cooperation in school government will probably be the phrase that will be least likely to upset the mental stability of the school children. In our opinion, student self-government is a pernicious phrase, as it conveys the idea of the pupils having been granted a power greater than that of the school authorities.

It would be highly advisable for a school adopting this form of control to work out with the advice of the principal a constitution to be adhered to by both principal and pupils. This constitution should give to the principal the power of vetoing the acts of the council. Provision should be made in the constitution for the removal of a member of the council by a majority vote of the council or by vote of the teacher and principal. The functions of the council should be to suggest and advise principal and pupils as to how the school may be improved.

The council should be composed of representatives from the different home rooms of the building. The members should be required to report to their respective home rooms the acts of the council and the reasons thereof. The principal or his representative should attend all council meetings. These meetings should be conducted strictly according to parliamentary procedure. The aim should be, always, education for citizenship and leadership. Student participation in school government is satisfactory only in so far as it accomplishes this.

SUPERVISED STUDY.

To affirm that supervised study has been introduced by comparatively few of the 17,000 or more public high schools of the country may be denied by its advocates, especially in view of the fact that its virtues have been set forth so many times in the classrooms of schools of education, from the platform, and through the columns of educational journals, and that its value has been demonstrated by numerous careful experiments; but reports from the high-school inspectors of three-fourths of the States indicate that supervised study is by no means general. To the question, To what extent has supervised study been introduced into the high schools of your States? the following are typical replies: "Not widely"; "about 25 per cent"; "only in the larger high schools"; "in some of the junior high schools but not extensively in the senior"; "don't know"; and "gaining way.". Only two of the 36 high-school inspectors report that supervised study has been very widely introduced in their respective States.

In general, supervised study has proved successful when tried under favorable conditions. The chief difficulty, according to the State high-school inspectors, is that few high-school principals and teachers, even after they understand the purpose of supervised study,

know how to teach pupils how to study, since it requires the mastery of a technique entirely different from that of "hearing lessons."

In some schools supervised study has been attempted in large study halls, but anyone who has ever presided over a large study hall knows that the teacher in charge can do little more than keep order. Supervised study in the sense of teaching children how to study is impossible in a hall where children from all grades assemble and where some are studying one subject and some another. The most successful plan is that of the lengthened period of 60 or more minutes divided so as to afford an opportunity to the teacher of directing the preparation of the lessons he has assigned, but this plan has failed in some schools because the teachers use the entire period for the usual recitation; and again, in other schools, the period allotted to supervised study has been used as a time to coach the slower pupils, the teacher not understanding the difference between coaching and directed study.

Although supervised study in the real sense of the term has not been introduced by many of the high schools of the country, it is evident that more and more schools will introduce it as the principals and teachers fully understand its purpose and its technique. At present the junior high school offers the best opportunity in the secondary field for directed study, and it is here that its value will best be demonstrated.

EXTRACURRICULAR ACTIVITIES.

One of the hopeful signs in secondary education is that numerous activities that assist in developing the intellectual, physical, and social needs of the pupils are being introduced. These activities are usually termed extracurricular, but some of them tend to develop the pupils more than some of the regular curricular activities in that they make the school work more vital. To not a few principals and teachers this may seem heretical, for the idea still persists in many quarters that children go to school to study from books and that the extracurricular activities are "fads" and "frills." However they may be considered, they have found their way into the high schools and will remain there. The only thing to do is to guide and direct them.

The social activities have probably received the greatest share of criticism and condemnation. In many instances the social impulses of the students have been so restricted that extraneous activities, such as the high-school fraternity, came into existence. The attempt to dam up the social impulses of high-school pupils has proved as futile as any attempt would be to dam up a mighty river, which, if it can not flow in its natural channel, will find other channels. High-

school principals are gradually coming to realize the fact that their pupils must have a certain amount of social life and are attempting to provide something more wholesome than the commercial dance hall or the high-school fraternity clubroom.

Another extracurricular activity that has occupied the attention of high-school principals and teachers is athletics—but athletics in all schools is here to stay. At first only a few pupils participated; now a large number are participating from the fact that all kinds of games have been introduced. It is no longer football alone, but basketball, tennis, track, hockey, etc. Most schools have made great strides in the management and control of athletics. Once anyone enrolled in high school, no matter how many times he failed in his class, was permitted to take part in athletic contests; now a pupil in order to qualify must make a certain class standing.

The problem of athletic activities is being solved by making them a part of the general scheme of physical education which is being introduced as a part of the regular curriculum, so athletics may not be regarded entirely as an extracurricular but as a curricular activity.

Besides the social and athletic activities of the high schools there are organizations and clubs of various kinds that play an important part in the all-round development of the pupils and that make school work more interesting. Among the organizations and clubs that have found their way—in some cases, fought their way—into the high schools are dramatic associations, high-school orchestras, debating teams, science clubs, radio clubs, French clubs, kodak clubs, etc. While all these are classed as extracurricular, each of them is helping to vitalize some subject and to make it of some use to the pupil while in school.

The dramatic association and the debating teams are great assets to the English department; the science club to the science department, the French or Spanish club to the modern language department, and so on throughout the list. In fact, every extracurricular activity can in some way be coordinated with some department. This is well illustrated by the correlation of extracurricular activities with the department of business education in the high school of Meriden, Conn., which, as described in the School Review[6] of November, 1922, has cooperated with all the organizations of the schools in the management of their business matters. Concerts, plays, athletic contests, dues, subscriptions, and all other affairs involving business relation are managed according to business methods, and all returns are accurately accounted for. It is evident that valuable training is thus secured by the participators in these ac-

[6] The Correlation of Extracurricular Activities with the Department of Business Education.

tivities and that real business experience is gained by the students who are definitely preparing for a business career.

Since many of the extracurricular activities have a real educational value, the question is often raised as to whether pupils participating in them should receive extra credits toward graduation. Some schools are granting such credits. "About as satisfactory a plan as any to be found," says Jesse Davis,[7] principal of the Central High School of Grand Rapids, Mich., "is to make certain allowances of time and material in those subjects which deal most directly with the nature of the 'outside' or 'social' work." By this method of granting credits the pupils taking part in debates, in editing the school paper, or in dramatics are given credit by the English department, and those pupils who take active part in the French, science, and other clubs are given credit by their respective departments. Work done on the athletic field is given credit by the director of physical education. The problem at present is that of working out the amount of credits to be allowed. As the educational value of many of these activities are recognized they will be considered not entirely extracurricular but as partly curricular and in some cases entirely curricular.

HIGH-SCHOOL FRATERNITIES.

Although the high-school fraternity is here discussed under the heading of extracurricular activities, it should not really be considered an extracurricular activity but rather as an extraneous one, since there is no relation whatever between the high-school secret organization and the curriculum.

So inimical have high-school secret societies become to the democratic American high school that State legislatures have enacted laws prohibiting them and school boards in States having no legislation on the subject have formulated rules to govern the high-school fraternity. Nineteen States now have laws forbidding such organizations in high schools. These are California, Colorado, Indiana, Iowa, Illinois, Kansas, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Jersey, Ohio, Oklahoma, Oregon, Rhode Island, Vermont, and Washington. In most of these States the district school boards are charged with the responsibility of keeping secret societies out of the schools and are granted powers to expel pupils who persist in maintaining such organizations.

In Iowa and Minnesota the law forbids not only secret societies but any organization not sanctioned by the school authorities. In Washington the law will not allow the State board of education to accredit any private academy where such societies exist.

[7] The Modern High School, Johnson and others.

The New York City Board of Education, considering high-school secret societies inimical to the school system of that city, has requested the State commissioner of education to recommend to the legislature the passing of a law prohibiting such societies and providing penalties for pupils connected with them. The aim of the New York school authorities is to suppress any organization which seeks to organize and perpetuate itself by taking in students upon the basis of the decision of members of the organization, rather than from the free choice of pupils otherwise qualified to belong to it.

High-school fraternities in the District of Columbia were so undermining the democratic high-school idea of equal opportunity for all students that the board of education adopted a rule prohibiting members of any high-school organization not approved by the faculty from participating in athletics and other extracurricular activities.

Although many State legislatures have enacted laws prohibiting high-school fraternities, these organizations still exist in some of these States. For example, the high-school principals of Oakland, Calif., call attention to the fact that when the law prohibiting high-school fraternities in that State was passed 21 high-school secret societies in Oakland went at least into temporary eclipse, but that the school authorities have been made aware through various channels that organizations of this character exist among the students of the Oakland high schools as clandestine and illegal groups.

It is the belief of the Oakland high-school principals that membership in such an organization, under the present conditions, is bound to be a serious handicap to the development of that manhood which fathers and mothers covet for their children.

The problem of entirely eliminating high-school fraternities is one difficult of solution. While there may be enough public sentiment in a State to enact a law prohibiting high-school fraternities, there are always communities where the sentiment is not strong enough to eliminate such organizations. Often parents can see no harm in their children belonging to these secret societies, so the first step toward abolishing them is to awaken parents to the fact that such organizations tend to make discipline difficult and to undermine that democratic spirit which the public school fosters.

The solution lies partly in cooperation between parent and teacher. If parents refuse to cooperate, drastic measures should not be wanting to prohibit students from being members of such an undemocratic organization as a high-school fraternity. That there is no place for such an organization in the American high schools is the opinion of all school superintendents, high-school principals, and teachers, though many of them belong to college fraternities which usually have a different motive from that of high-school fraternities.

Of course, mere legislation will not eliminate the high-school fraternity. As the superintendent of schools of Duluth, Minn., says in his report for 1920:

> To legislate them out of existence is impossible. Where they have existed for years they can not be merely displaced; they must be replaced if they are to be removed. The fraternity question is only a comparatively minor feature. The major one is the proper provision for an administration of the social life of the student body and the social objectives of secondary education.

The substitution of legitimate activities has done much to help eradicate the high-school fraternity, especially where the school board rules that a member of a high-school secret organization can not take part in any school activity, such as athletics, debating, dramatics, and the like. If such ruling is not made, all these activities are usually dominated by the selfish interests of the fraternities, so that they do not act as a substitute but simply give the fraternities greater opportunity to secure more honor for their members.

HONOR SOCIETIES.

For some years various local honor societies have existed in some of the high schools of the country, but only recently has there been any effort made to organize a national secondary school honor society. That there is a place for such a society is the opinion of the many high-school principals who have expressed the conviction that not only the pupils who excel in athletics but the pupils who excel in other activities should receive honors. The first step taken to organize a national high-school honor society was at a meeting of the National Association of Secondary School Principals in Chicago in 1919, when a committee was appointed to formulate rules and regulations for the organization of an honor society. After making a careful study of various local honor societies, and after considering the numerous suggestions of high-school principals in all parts of the country, the committee presented a constitution which was adopted at the meeting of secondary-school principals in Atlantic City in 1921.

Among the ideals of the founders of this society are: (1) To make a democratic society which shall recognize those finer qualities of kindness and unselfishness which should be encouraged in all high-school students; (2) to make clear that character and moral attitude is the very highest quality in the development of youth; (3) to recognize the effective and worth-while individual in the activities of school and life; and (4) to emphasize good scholarship that it may always stand out as a basis and foundation for distinction and achievement.

The following are the steps to be taken in each high school for the selection of candidates and finally members of the society.

1. The students who constitute the upper quartile in scholarship of the class are first selected as candidates.

2. Out of this quartile each high-school principal shall determine a method of selecting the requisite 15 per cent of the class which the constitution provides for election to membership.

3. In making this selection the qualities of character, initiative, school leadership, and distinguished service to the school form the basis upon which the selection is actually made.

Since the adoption of the National High School Honor Society by the Association of Secondary School Principals more than 50 representative high schools have elected the requisite number from their graduating classes as members of this National High School Honor Society. Only high schools fully accredited by such standardizing agency as the North Central Association of Colleges and Secondary Schools may elect students as members of this society.

THE SMALL HIGH SCHOOL.

Of the total number of public high schools in the United States, a little more than 50 per cent have an enrollment of fewer than 50 pupils. It is evident that these small high schools have their own particular problem of organization, one of which is the small classes, or sections, which predominate. In a survey made of the organization and administration of the high schools in Connecticut it was found that over 22 per cent of the classes had 5 pupils or fewer, that 50 per cent of the classes average from 1 to 10 pupils, and that 80 per cent have fewer than 20 pupils. Similar conditions prevail in New York State, as is shown by the recent school survey. One hundred and eighty-four rural high schools were selected at random, and represented schools of each type on the basis of the number of pupils enrolled. The data for these 184 high schools show that (1) the median class in schools with an enrollment under 50 has 6.8 pupils; (2) the median class in schools with an enrollment between 50 and 99 has 11.6 pupils; and (3) the median class in schools with over 100 pupils has 17.2 pupils. This condition prevails in the small high schools of every State, but in many instances the schools could be so organized that there would be more pupils in a class. The small high school, offering several curriculums or many electives, will necessarily have very small classes. Just how far a high school should go in the matter of offering various curriculums is a question. The State supervisor of secondary education in Connecticut says, regarding the offering of more than one curriculum in the small high school:

We may well question the advisability of offering more than one curriculum in a school of less than 100 pupils. At present many communities feel that

they must maintain the tradition that the high school must serve as a preparatory school for a certain few exclusive colleges. This sentiment is the cause of most of the problems facing the small high school. Such a school should first meet the needs of the majority of the pupils in the community. A single curriculum can be made to serve this purpose with economy and efficiency.

Some high-school principals are solving the problem of extremely small classes by alternating certain subjects, but unfortunately not all principals have their schools so organized that certain subjects may be offered every other year. It is still the practice in some small high schools to teach physics and chemistry the same year when they could be taught every other year just as effectively. The following plan of alternation, suggested by the department of public instruction of Ohio, shows how it is possible to offer a number of subjects in a small high school without multiplying the number of classes. The following suggested arrangement of the curriculum is for use with three teachers:

Offerings for odd years.

FRESHMAN YEAR.

1. English I, R.
2. General science, R.
3. Manual arts (boys), E.
4. Home economics—sewing and cooking (girls), E.
5. Algebra, E.
6. Agriculture, E.
7. Latin I, E.

SOPHOMORE YEAR.

8. English II, R.
2c. General science, R.
3c. Manual arts (boys), E.
4c. Home economics—sewing and cooking (girls), E.
5c. Algebra, E.
6c. Agriculture, E.
9. Latin II, E.
10. Ancient and early European history, E. (to end of seventeenth century).

Offerings for even years.

FRESHMAN YEAR.

1. English I, R.
2. Occupations, ½ (boys), R.
3c. Home sanitation and hygiene, ½ (girls), R.
2s. Community civics, ½ R.
4. Biology, E.
5. Latin I, E.
6. Business practice and commercial arithmetic, E, or bookkeeping, E.

SOPHOMORE YEAR.

7. English II, R.
2c. Occupations, ½ (boys), R.
3. Home sanitation and hygiene, ½ (girls), R.
2sc. Community civics, ½ R.
4c. Biology, E.
8. Latin II, E.
6c. Business practice and commercial arithmetic or bookkeeping, E.
9. Plane geometry, E.
10. Advanced home economics, E.
11. Ancient and early European history, E.

Offerings for odd years—Continued.

JUNIOR YEAR.

11. English III, R.
12. American history ½, R.
12s. Problems of American democracy or civics, ½, R.
13. Physics, E.
14. Advanced agriculture, E.
15. Advanced manual arts, E.
16. Foreign language I, E.
17. Advanced algebra, ½, E.
17s. Solid geometry, ½, E.

SENIOR YEAR.

11c. English III, R.
12c. American history, ½, R.
12sc. Problems of American democracy or civics, ½, R.
13c. Physics, E.
14c. Advanced agriculture, E.
15c. Advanced manual arts, E.
17c. Advanced algebra, ½, E.
17sc. Solid geometry, ½, E.
18. Foreign language II, E.

Offerings for even years—Continued.

JUNIOR YEAR.

12. English IV, R.
13. Modern European history, R.
9c. Plane geometry, E.
10c. Advanced home economics, E.
14. Chemistry, E.
15. Foreign language, E.
16. Commercial subjects, E.
17. Economics or American government, ½, E.
17s. Social problems, ½, E.

SENIOR YEAR.

12c. English IV, R.
13c. Modern European history, R.
14c. Chemistry, E.
16c. Commercial subjects, E.
17c. Economics or American government, ½, E.
17sc. Social problems, ½, E.
18. Foreign language, E.

From the foregoing it will be noted that exactly the time of three teachers is called for in both odd and even years, since 18 different units of subject matter are presented in each. The letter "c" indicates a subject in which a class is combined with the preceding class which bears the same number, as 2c with 2, etc. Subjects marked 2 and 2s, for instance, are subjects which extend only over a semester and can both be taught by the same teacher, since one follows the other.

In following the pupils' progress through high school it is necessary to treat the above schedule as a checkerboard and move diagonally. A pupil who enters high school in any odd year such as the present one, 1923, will take the freshman subjects inclosed in the ruled square. Moving diagonally, his sophomore subjects will be the ones inside the quadrangle; diagonally again, and we find his junior program within the ruled lines; so likewise is his senior work within the ruled lines. A freshman who starts his work in any even year, as 1922, will follow the subjects outlined in the open sections above. Starting in the upper right-hand section, his course moves diagonally to the left, then to the right, and finally to the left (diagonally in each case).

The problem of the program of studies in the small high school is one of great concern to many State high-school inspectors. They realize that the high school should not have as its main object the preparation of pupils for college, since only a comparatively few of those entering high school go to college, and that possibly more boys and girls would remain in high school if it offered a program of studies not entirely college preparatory in content.

That preparation for college has been the chief object in many small schools is only too evident. Then, too, greater emphasis is placed upon the older or more traditional subjects, as Latin and mathematics, rather than upon many of the newer subjects for which many colleges give credit. These facts were brought out in the study of the rural high schools of New York by the school survey committee, which says:

> The study of the curriculum content of the rural high schools shows that it is designed primarily to prepare pupils for college. Its program of studies, in the main, contains only the older, more traditional, college preparatory subjects and only in a small degree the newer college preparatory subjects.

What is said of the small high school in New York can without doubt be said of this type of school in most other States.

In some sections of the more densely populated States some of the small high schools could well be consolidated. In a certain county, where the township and borough system of administration obtains, there are four high schools within less than a 3-mile radius, one is in a city with a high-school enrollment of 600, another in a township with a high-school enrollment of about 300, and the other two are very small three-year high schools in two little towns. These two should be abandoned and the tuition of the children paid to one or the other high schools, or the school district should be made such as to include these smaller towns, one of which is adjacent to the city in question and the other was once a part of the township in which the township high school is located.

In many States there are schools with one or two teachers who are attempting to do not only elementary school work but also one or two years of high-school work. One State high-school inspector points out that in some counties in his State there are many such schools, and that the solution is consolidation, so that the children may have the advantage of a real high school.

In States having the township or district school system the best plan is to permit the union of two or more townships or districts for high-school purposes. Several States have had legislation to this effect, and others have recently enacted such legislation. In States where the county unit of school administration obtains there should be less difficulty in the matter of consolidating the schools, so that

there may be several standard high schools instead of a weak high school in nearly every neighborhood.

In place of the two or three year high school in each neighborhood the junior high school would, in some instances, be much more desirable, as is pointed out in the section on junior high schools of this report.

THE JUNIOR HIGH SCHOOL.

The junior high school was for many years a mere conception. Finally it became a reality in a few school systems, but in some without very clearly defined aims. Today junior high schools are numbered by the hundreds. Five hundred and seventy-five cities having a population of 2,500 and over report such schools. If all cities having such schools had reported, there would without doubt be several hundred more to add to the list. Just how many there are in places of less than 2,500 population is not known, but there are at least several hundred. Some schools called junior high schools should not be so classed. For instance, one city reporting junior high schools has such schools only in name. The superintendent in that city says that unfortunately the name "junior high school" was attached to the departmentalized seventh and eighth grades before the aims of the junior high school were clearly defined.

Even if some schools claiming to be junior high schools can not be so classified, the development of the junior high school within the past two or three years has been remarkable. For instance, there were in Pennsylvania, in 1922, 52 such schools that could be classified as real junior high schools, 25 of them being in cities, 13 in small towns or boroughs, and 14 in the rural districts. During the year 1922–23, 54 more are to be opened, 12 in cities, 21 in small towns or boroughs, and 21 in the rural districts. From these figures it is seen that in Pennsylvania in 1922–23 there are 37 junior high schools in operation in the cities of the State, 34 in the towns, and 35 in the rural communities, or a total of 106, with an approximate enrollment of 60,000 pupils. Practically all the increase in the number of junior high schools in Pennsylvania has come about within the last two or three years. Other examples of like nature could be given to show the almost phenomenal growth of this type of school.

In some States the development of the junior high school has been slow owing to the fact that legislation is needed before the junior high school can become a part of the school system, the school laws recognizing only eight elementary grades and four high-school grades. Some States have enacted legislation recognizing the junior high school. Among these States are Alabama, California, Florida,

Indiana, Michigan, New Hampshire, Ohio, West Virginia, and Wisconsin.

In some States legislation is not necessary, since the State departments or the local school boards have power to organize the schools in such a way as to permit of the establishment of junior high schools.

The junior high school is far beyond the experimental stage, in so far as the value of such schools is concerned. In no case, so far as the records of this bureau show, has any real junior high school been considered a failure. The reports are all in favor of such schools. Many school superintendents who have organized one or two such schools are planning to organize more, and many of those who have not organized junior high schools are planning to do so at the earliest possible moment. Such schools can not be organized in a day. New buildings have to be erected or old ones remodeled. Instance after instance could be cited where superintendents are planning a building program to provide for junior high schools.

In brief, the junior high school is here and it is here to stay. No one who has given the subject any thought would advocate a return to the traditional plan of organization. That the junior high school is as yet by no means a perfect school the most ardent advocates admit. There are still many problems to solve, but with the intensive study that is now applied to the junior high school there can be no question regarding the solution of these problems.

Many schools of education are studying the junior high school and offering suggestions for its improvement. State departments of education are also giving much thought to the junior high school organization, and several have prepared suggestive programs of studies and have made recommendations regarding it. The Pennsylvania State department of education has organized a junior high school bureau whose scope of work is the organization of junior high schools in communities varying in size from the largest city to the small rural organization of three or four teachers; the classification of junior high schools in all systems is also one of the functions of that bureau. The junior high school director gives much time to the work of acquainting superintendents, principals, teachers, members of boards of education, and the community with the purposes of the junior high school and its organization. The bureau also serves as a clearing house for the experience of junior high schools in various sections of the State. Without doubt, a bureau in each State department of education would greatly assist in solving the problems confronting the junior high school.

ORGANIZATION.

The usual junior high-school organization includes grades 7, 8, and 9. There are some, however, which include grades 6, 7, and 8, and a few, grades 7, 8, 9, and 10. There are also other variations. In some instances, the junior high school is combined with the senior high school, making a six-year organization. This plan of organization is, however, recommended only for the smaller communities, rural consolidated school districts, villages, and the smaller cities.

The Pennsylvania State department of public instruction says, regarding the organization of the junior high school:

> 1. These grades (7, 8, and 9) may be segregated as a distinct school unit where practicable. 2. These grades be included with the tenth, eleventh, and twelfth years, forming thereby a six-year secondary school unit. This type of organization may be advisable for smaller cities, boroughs, and larger rural communities because of the economy of administration and reciprocal gains to both junior and senior units. These gains arise by reason of the increased total enrollment and the greater flexibility consequent to a larger organization. 3. Grades 7–10 may be classified as a junior high school, provided the conversion of an existing second or third class high school into a junior high school is dependent upon this type of organization, and provided, also, that in each case clear evidence is presented to the department of the necessity of including the tenth year.

THE PROGRAM OF STUDIES.

The program of studies of the junior high school is in a constant state of revision. At first when the aims of the junior high school were not as clearly defined as they are now there was but little attempt to reorganize the program of studies. Possibly a foreign language and algebra and a few other subjects were offered as electives, but the required subjects were practically the same in content as those of the old seventh and eighth grades. Now the aim is to make a survey of the chief departments of human knowledge. The work of the junior high-school period, then, can well comprise courses in English literature, general social science, general mathematics, general science, foreign languages for those desiring such, music, art, physical education, and the practical arts. By pursuing such courses a pupil has landmarks of the chief fields of knowledge established, which serve to orient him. Such a survey, extensive and popular, is better adapted to the adolescent than an intensive and narrow scholarly course, for children 12 to 15 years of age generally demand change, variety, and human interest rather than completeness and logical arrangement. It is now pretty well agreed that courses of study planned to give a general survey are much better than the traditional seventh and eighth grade courses for those who do not continue in school after

the ninth grade, and that for those who remain throughout the senior high school such general courses give the best introduction to the more intensive work of the senior high school.

The subcommittee on junior high schools, in its report made to the National Council of Education in 1922, said regarding the junior high-school program of studies:

> The junior high-school program of studies should be a resultant of several forces. It should be made up, in part, of a continuation of the elementary-school curriculum, but a review of these courses, i. e., a new view through articulation of elementary and secondary courses; in part, a preview of secondary school courses of study, but a rearrangement of such courses in their simpler aspects, deferring the refinements to later senior high-school grades; in part, a prevocational content from the industrial and commercial fields; and, finally, a liberal amount of social science methods and social and civic activities to the end of giving to the early adolescent a "self-conscious adjustment."

The tendency is to adopt the single curriculum with constants and variables and to make the work uniform in the seventh grade and especially in the low seventh. The seventh grade should be a period of adjustment to a new school organization and to a new type of school. The subcommittee on junior high schools in its report says, regarding electives in the low seventh grade:

> It would seem wise, therefore, to subject him (the adolescent of 12 years of age), during this first semester, to as little change as possible in his program of studies. Such change as is advisable should be restricted to the inevitable modification in the courses of study which are consequent to enlarge school facilities and departmentalization. There should be no change in the program of studies occasioned by the introduction of electives. * * *
>
> In the latter half of the decade of actual operation of the junior high school there has been a marked tendency to defer electives from the middle of the seventh year to the beginning, and at present in a less degree to the middle, of the eighth year. This tendency has been largely due * * * to a growing appreciation of the fact that one predominant objective of the junior high school is the exploration of individual differences, and of the fact that discovery of aptitude must precede even provisional electives. Part of the time previously given to electives has gradually been surrendered to general courses for exploration and preview. It is pertinent to add that this development makes a very large contribution to the realization of the chief mission of the junior high school to the public-school system as the unit of transition.

QUALIFYING TEACHERS FOR JUNIOR HIGH SCHOOLS.

One of the big problems at present in the administration of the junior high school is that of finding teachers qualified for this new type of school. The seventh and eighth grade teachers being accustomed to reviewing the work of the elementary schools and having but little forward look either as to the child's success in high school or out are evidently not fully prepared by experience to teach the junior high-school subjects. Neither are the regular high-school

teachers, as a rule, prepared either by training or experience for junior high-school work, since they use methods of teaching entirely unsuited to boys and girls 12 to 15 years of age. Their work is a more specialized one than that of the junior high school. Even if they were prepared to teach junior high-school subjects, it would be impossible to find a sufficient number, since the regular high school is itself demanding better qualified teachers. The colleges have not yet begun to graduate many persons who have made a study of the aims and methods of the junior high school. Therefore, the only practicable thing to do is to select the best prepared teachers in the seventh and eighth grades for the junior high school, but even these should not be taken over into the new organization until they have met all the requirements. If qualified teachers can not be found, the feasible thing for a community to do is to delay the organization of a junior high school until such teachers can be obtained. One reason why some school superintendents have been slow to introduce the junior high school is because they realize that it would be a failure without teachers who know its aims and methods.

In a study made by T. W. Gosling, formerly supervisor of secondary education of Wisconsin, he arrives at the conclusion that the best plan in securing junior high-school teachers is to select them from groups of successful elementary-school teachers, saying:[3]

Both theory and experience indicate the desirability of making the first appointments to newly organized junior high schools from groups of successful elementary-school teachers. These teachers, especially if they are selected from the seventh and eighth grades, will have the initial advantage, a very considerable advantage, of having dealt with pupils who are of junior high-school age. They will know at first hand some of the problems which they will meet in the new organization. Furthermore, elementary teachers as a group are more likely than senior high-school teachers to have had training in pedagogical methods and in the history of education. Training of this kind will be of inestimable value to the members of a junior high-school staff. If to these qualities of successful experience and of pedagogical training can be added those other qualities which come from adequate scholastic preparation in college and university, from the youthful spirit, and from natural or cultivated social vision, we shall have almost ideal fitness for junior high-school work. The senior high school, too, sometimes has in its corps a teacher who possesses all the qualities we have mentioned. The best senior high schools have many such teachers. When the conditions are right both the senior high school and the elementary school should be called upon to assign the members of their staff to places where they can do the most good. Fortunately, some school systems, especially in the larger cities, are able to find among the teachers already in service a sufficient number with the necessary qualifications to fill the new positions in their junior high-school organization.

In many small communities, however, and in some large cities where the standards of appointment have not brought teachers of high endowments into the elementary schools, the problem of making the first appointments to

[3] Eighteenth Yearbook of the National Society for the Study of Education.

the junior high school will be more difficult. It is scarcely worth while to undertake the task of organizing the junior high school, with all of its complex problems, unless the teachers who are to be selected for the work show some promise of grasping the meaning of their new responsibilities and unless they possess some ability to measure up to their new obligations. Native ability, especially if it be easily adaptable to new conditions, sometimes may be accepted as a substitute for specific training. Each superintendent who plans to establish a junior high school will do well to consider the availability for appointment of the teachers who are already doing work in the upper grades, especially in the seventh and eighth grades. Unless he can find promising, even if untrained, material in this group, he most likely will do well to postpone the institution of his plan to a more favorable time.

A plan adopted in several cities is to provide special courses in junior high-school methods for those teachers who wish to qualify for junior high-school positions. In Boston a progressive series of courses for grades 7, 8, and 9 began in 1917. Since that time 110 high-school teachers and 1,520 elementary and intermediate teachers have availed themselves of the instruction offered in these courses. During the year 1921–22 six improvement courses were offered. Attendance was limited to teachers or prospective teachers of grades 7, 8, and 9.

In Washington, D. C., teachers may qualify for junior high-school work by attending summer courses given by the best instructors available under the auspices of the board of education.

Courses were offered for the first time during the summer of 1922 with a good attendance. It is expected as a result of these courses that enough teachers in the school system of the District of Columbia will qualify to fill any positions that may become vacant in the two junior high schools. It is expected also that more of the seventh and eighth grade teachers will avail themselves of the courses offered by the board of education so that they will be eligible for appointment by the time additional junior high schools may be opened.

Evidently some such plan as that adopted in Boston and the District of Columbia is at present the only solution of the problem of securing qualified junior high-school teachers.

JUNIOR HIGH-SCHOOL HOUSING AND EQUIPMENT.

The junior high-school building should be built around the program of studies. If it is not, the junior high school may prove a failure. Indeed, many schools called junior high schools are not living up to the name from the fact that they are housed in buildings that do not permit the introduction of a junior high-school program of studies. The old type of building, with a seat for each child that no other child may use and with nothing but classrooms for academic subjects, does not meet the requirements. There must be, in addition to regular classrooms, about an equal number of special rooms, such

as shops of various kinds, a library, science laboratories, a gymnasium, an auditorium, and a playground. The State superintendent of public instruction of Oregon says, regarding the building and equipment of junior high schools:[9]

> The building and equipment of the junior high school should be little inferior, if any, to that of the senior high school. It has been the practice in American public schools to erect large and beautiful high schools for the minority who continue through them and to house the larger number of students in the upper grades—most of whom are at the age of educational crisis and many of whom are receiving the last they shall ever receive in the way of school training—in buildings designed and equipped for elementary education [which, as a rule, the State superintendent might have added, are poorly designed for elementary education]. Socializing activities and exercises have been all but impossible for the want of an auditorium. Textbook teaching has been relied upon as a sole means of education because of the lack of means of visual education, and inadequacy of library facilities. Science instruction has been confined to reading material and manual training; household arts have been taught under discouraging circumstances. These conditions can not continue to obtain if we are to have genuine junior high schools.

The Pennsylvania State department of public instruction recommends that in addition to classrooms and home rooms that there be included facilities for industrial arts or agriculture, home economics, an auditorium, a gymnasium, and a library; but that where equipment facilities in the smaller schools are lacking for industrial arts, agriculture, and home economics, the organization should not be delayed for this reason, provided a room for industrial arts or agriculture and a room for cooking and sewing are available, since instruction in these branches may temporarily be restricted, if local conditions necessitate, to an informational character with practical applications carried out at home or by junior projects out of school. The Pennsylvania State department also suggests that where an auditorium and a gymnasium can not be provided two or more adjoining rooms, by means of movable seats, be opened together for assembly, playroom, and gymnasium; and that in buildings where neither the auditorium nor the gymnasium can be provided the auditorium floors be level and equipped with movable seats, so that the auditorium may be easily and quickly converted into a playroom or a gymnasium. The Commission on the Reorganization of Secondary Education also calls attention to the fact that a single large room in the small high schools may serve as a gymnasium and auditorium, saying:[10]

> The superiority of one large room for both gymnasium and auditorium over two smaller rooms is readily understood. A small gymnasium is of little value and an auditorium with a capacity of less than 500 is limited as to service.

[9] Course of Study for Junior High Schools of Oregon.
[10] U. S. Bureau of Education, Bulletin, 1922, No. 23.

Detroit may be given as an example of a city that has worked out a junior high-school building program to meet all the needs of a modern junior high-school program. The matter of buildings was not left entirely to the architects to plan, but in planning the details of the various instructional and noninstructional rooms educational specifications were furnished by the various departments of instruction concerned. These were incorporated into the plans of the architects and engineers and checked therein by the departments of instruction, so that the buildings as to their instructional features represent the best ideas of all the departments of instruction in the city.

The junior high-school plans of Detroit are so devised that the buildings can be built as a unit to house 1,200, 1,500, or 1,800 pupils. A building to accommodate 1,800 pupils has 26 classrooms, each of which accommodates 35 pupils. The 26 rooms, therefore, accommodate one-half the school. The special facility rooms accommodate the other half.

It is generally agreed that the junior high school should be housed in a building of its own. This plan, however, is not always the most practical one, or at least not in the small cities where one building for both the junior and senior high school or even for all the grades from the kindergarten up is the most practicable. If the total enrollment for all the grades in a small city is 1,000, there would be approximately 190 in the seventh, eighth, and ninth grades and 65 in the tenth, eleventh, and twelfth grades. It is at once evident that it would be very uneconomical to have two separate buildings for each group. In fact, it would be uneconomical to have more than one building for all the children, especially if the elementary-school children are to have the advantages of playrooms and other special facilities, as they should have. In the small city, enrolling only a few hundred or even 1,000 children, all of them from the first grade up could use the special facilities, while with more than one building it would be impossible to provide special rooms in each building because of the cost.

In practice 37 per cent of 199 cities between 2,500 and 25,000 population have the junior high school housed in a separate building, 33 per cent in the senior high-school building, and 30 per cent in an elementary-school building.

In the larger cities the plan of having a separate junior high-school building is general. In those cities the senior high schools are large and it would be impracticable and unwise to have the junior high-school pupils in the building with them. On the other hand, there are usually not enough children of junior high-school age in any of the elementary-school buildings to justify the organization of a junior high school in these buildings. Thus it would

appear, as a rule, that the best plan for the large city is to erect separate junior high-school buildings, just as Detroit and many other large cities are doing.

JUNIOR HIGH SCHOOLS FOR RURAL COMMUNITIES.

The junior high-school movement is by no means confined to cities. Already many rural and village communities have successfully organized such schools. There can be no question regarding the desirability of organizing junior high schools in rural and village communities, since they will help solve several problems, one of which is the problem of small one and two year high schools. The county superintendent of Allegheny County, Pa., says in regard to this matter:[11]

> The conversion of such schools (second and third class high schools) into first-class junior high schools will not only bring school facilities up to date in the districts where these schools linger but wherever established the junior high school will also tend to relieve the crowding of neighboring senior high schools.

If junior high schools were scattered throughout a county they could act as "feeders" to one or two senior high schools. Several State high-school inspectors report that this is the plan adopted in their States. The State high-school inspector of Georgia makes the following recommendation regarding the establishment of rural junior high schools in that State:

> There should be located in different parts of the county high schools offering two and three year high-school courses embracing the eighth and ninth grades or the eighth, ninth, and tenth, on the 7–2 or 7–3 plan. Whenever advisable, the junior plan of organization may be adopted and the 6–3 or the 6–4 plan may be used. The latter schools would include the seventh, eighth, and ninth grades or the seventh, eighth, ninth, and tenth. In some cases the sixth grade may be added to these schools, especially the overage pupils of this grade. Schools of this type should include all the elementary grades supported by pupils from the immediate territory. These schools when thus organized should require the whole time of one teacher of high-school subjects or time of one and a half or two teachers if the work is continued through the tenth grade.
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> These junior high schools should receive pupils from a half dozen one or two teacher schools, transportation being furnished in case of pupils living too far to walk.
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> The number of these schools should be determined by the high-school population, by the accessibility of the school, and also by the ability of the community to support and equip. The number of these schools may be increased as the population and financial conditions justify. Pupils upon the completion of two or three year high schools should enter creditably the central senior high school of the county, and continue their studies through the eleventh grade. These schools may be organized on the 7–4 or the 6–3–2 plan. The lower grades of this school should be open to all the pupils of the ele-

[11] School Report of Allegheny County, 1921–22.

mentary grades in the immediate territory and the upper grades to pupils from all parts of the county. Transportation by means of a truck or else a small per diem of 10 to 20 cents per day should be furnished by the county authorities.

The average county is not able to support more than one or two well-equipped high schools. It is better, therefore, to have one strong, well-equipped school of this kind receiving its pupils from all parts of the county than a larger number poorly equipped and attempting the impossible. The county superintendent, with the aid and assistance of the principal of the senior high school, should supervise all the high schools under his jurisdiction, advising at times with the State high-school supervisor in reference thereto. Meetings should be called from time to time of the high-school teachers of the county in order to bring about proper articulation and correlation of the schools of the county. There should be occasionally uniform tests prepared for the schools. There should also be uniform loose-leaf records of each pupil in the high school of the county, these to be deposited at the end of the term with the county superintendent. As far as possible uniform textbooks should be used in each county. The result of the organization should be, instead of an independent number of isolated schools in each county, a well-organized system of interrelated schools.

The State department of public instruction of Wisconsin makes a similar recommendation, saying:[12]

The junior high-school movement ought to be of even greater value to rural districts than it is to cities. The next development in organization should reach out into the rural districts and provide junior high-school facilities in those sections where it is not yet advisable to establish the junior high school. By a consolidation of schools it would be possible to develop a fine type of junior high school in the open country. When public sentiment awakens to the importance of consolidation the rural junior high school will offer an excellent type of organization. If the consolidation includes a sufficient amount of territory and of population, the six-year secondary school will be recommended.

The rural school-survey committee of New York says that the organization of secondary education with the junior high school as the first unit should be of great value to that State; that it is suited particularly to offer the rural pupil the opportunity of richer and more varied subject matter two years earlier than is at present possible; that it should bring closer together the elementary school and the high school and operate to reduce the elimination of rural pupils before reaching the high school; that it should make high-school education more available to rural pupils in many communities by permitting the organization of a junior high school where the community is too small to maintain a four-year high school; and that in these smaller communities it would bring together a body of pupils large enough to make possible a better corps of teachers.

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[12] Educational Progress in Wisconsin. Report of the State Department of Public Instruction of Wisconsin, 1921.