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RURAL EDUCATION

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SIGNIFICANCE OF THE PROBLEM OF EDUCATING RURAL CHILDREN.

The significance of the efficiency of schools for rural children to the Nation as well as to the farm population may be judged in part by the number of children affected. Careful estimates made in the Bureau of Education, based on figures given in the United States Census Report for 1920, indicate that approximately 10,000,000 of the children of the country live in rural territory—that is, in the open country—that approximately 9,000,000 are enrolled, and approximately 7,000,000 are in average daily attendance in open-country schools.

In making the estimates quoted above the Bureau of Education considered the 9,000,000 people living in incorporated places below 2,500 as urban rather than rural, reversing the usual classification of the Bureau of the Census. It follows that of the 21,000,000 children (approximately) enrolled in all schools in the United States, 11,000,000 are in urban and 10,000,000 in rural territory—chiefly in open country and small village schools. Of the 11,000,000 urban children enrolled, approximately 9,000,000, nearly 79 per cent, are in average daily attendance, while in the open-country schools approximately 7,000,000, or 70 per cent, are in average daily attendance. The average number of days attended by each pupil enrolled in urban schools is 143, in open-country schools, 96. (Data are for the school year 1919–20.)

These figures in themselves indicate two important phases of the problem of educating rural children: First, the large number of children affected, namely, 47 per cent of the children enrolled in all

schools; and, second, the inequality of educational opportunity here shown in terms of school attendance and length of term.

The term "rural" applied to schools and children has been used loosely and has not a definite country-wide application. Some people think of rural schools as those of the one and two teacher variety located in the open country; to others, rural means all schools, regardless of size, located in the open country or attended chiefly by children living on the farms or coming from farm homes. Official statistics are based on the census differentiation between urban and rural, which is the 2,500-population line. All children living in places with fewer than that number of people are classed as rural; others as urban. It is apparent, however, that comparisons of rural and urban schools and conditions affecting them should be made on a different basis. In school organization, length of term, salary, and qualifications of teachers, school buildings and equipment, and other important educational factors, schools in the smaller towns, particularly those of between 1,500 and 2,500 population, approach more nearly city than open-country conditions. Therefore, rural-school data based on this differentiation can not be relied upon to show the situation as it exists in open-country schools, since they are materially influenced by the schools in the large group of cities and towns below 2,500 in population.

The education of the children enrolled in the open-country and village schools, whether one or two teacher or centralized, offers the most serious and difficult of our education problems. It is their welfare that is most affected by the conditions, policies, and progressive movements considered in this chapter and with which this discussion is chiefly concerned.

Concerning the country at large it must be admitted that we are making progress slowly in rural education, especially in view of the increased knowledge of and apparent interest in the subject.

Increased interest in and knowledge of rural-school conditions.—The general spread of the realization that better schools can and should be furnished rural children is fundamental in the progress made during the biennium. The idea of giving publicity to school conditions and needs is not new among the cities, but has only comparatively recently extended to rural communities. That country boys and girls are not getting fair treatment educationally; that rural people do not get from the State system or State educational institutions the same service that cities get; that they are deprived of the advantages of the public institutions of higher learning because of the poor resources of the lower schools; that they do not participate in the general benefits in proportion to the amount they

pay for school support; and that the farmer often pays more and receives less in education returns than his urban fellow citizen—these are comparatively new ideas to farm people.

For many years the root of the evil has been that the farmers themselves apparently did not realize the real conditions. Devoted reformers, philosophers, and educators have been traveling the length and breadth of the land preaching the inefficiency of the little old red schoolhouse. The farmer himself has not always responded to the appeal of others, nor has he taken the initiative in making demands for better schools and changed systems. A new order is upon us. Economic conditions and the aroused class consciousness among the farm group, manifested in political, social, and economic ways, have an educational significance. There is apparent a new demand from the farmers themselves in large numbers and in organized groups for a just share of the benefits of public education for their children.

The rural-school survey of New York is an example. The demand for this survey originated in a conference of farmers held at Cornell University. It was conducted under the direction of a committee composed largely of members of the farm organizations. Another instance is found in the activities of the Arkansas education commission appointed by the governor and made up in large part of farmers. It was primarily a farm group in a State predominantly agricultural economically which took the initiative and raised money to finance a complete survey of the State educational system.

There is also apparent a new interest on the part of school officials in the dissemination among farm people of more definite knowledge of their schools, not only that concerned with financial and administrative conditions, but that concerned with schoolroom practice, and supervision, also. Parent-teacher associations, school and community leagues, or other organizations known by various names are being formed in rural communities in nearly every State, which show an intimate interest in classroom work. There is noticeable a concerted effort on the part of public educational institutions, especially normal schools, of superintendents, supervisors, and teachers to show to their rural patrons the difference between good and bad teaching, and the meaning of professional supervision in the education of their children through actual demonstration of school work rather than through general propaganda.

More definite lines of progress.—The growth of large and important movements in education can not always be measured by time periods, especially when extending over so limited a period as two years. However, definite and tangible progress has been made

during the past two years in several ways. Among the most important are: (1) The tendency on the part of State departments to assume increased responsibility for rural schools; (2) increase in the number and scope of state-wide educational surveys with recommendations directed toward improvement of the rural school situation; (3) renewed interest in and directed effort toward the improvement of the administrative organization under which rural schools operate in order to insure or make possible more liberal support and modern administrative practice; (4) an increased appreciation of the dignity and importance of the office of the rural superintendent and the place of professional supervision in the improvement of rural schools; (5) increased facilities for preparing teachers for the special field of rural education in State and other teacher-preparing institutions, accompanied by a growth in professional spirit among those engaged in rural education; (6) the zeal with which a large number of States are centralizing and working for the centralization of several small schools into larger, more efficient ones; (7) renewed efforts to supply high-school facilities for rural children without taking them away from the farm; (8) concerted efforts in nearly all States to improve rural-school buildings and grounds, both as to sanitary conditions and those directly concerned with the use of buildings for school purposes; and (9) widespread efforts to revise and improve the curriculum more nearly to meet the needs of country children.

STATE DEPARTMENTS OF EDUCATION AND THE RURAL SCHOOLS.

Year by year State departments of education are devoting more and more time and attention to the rural schools under their direction and increasing the size of the rural school supervisory and inspectorial staff. The most progressive of the State superintendents have initiated during the biennium comprehensive state-wide campaigns for rural-school improvement, some extending over a period of years, others carried to a conclusion during the biennial period. Some State superintendents devote the major portion of their energy and that of their staff to the rural schools, considering their betterment the most important responsibility of the State department. Legislative programs fostered by the State department and devoted to the interests of the rural schools; enlargement of the State department staff through the formation of rural schools, divisions, or bureaus, or through the employment of additional rural-school supervisors as members of the regular staff; provision for state-wide educational surveys made at the suggestion of, or with the cooperation of, the State departments, are other evidences of this new spirit of leadership.

Maryland is among the States in which an organized program is being carried out under State department leadership, including comprehensive legislation of far-reaching importance passed in the summer of 1922. The State budget for public-school purposes in 1922 was increased 26 per cent, or from $2,750,000 to $3,500,000. The largest item in this increase is $727,000 to be used as an equalizing fund in 15 counties which can not on their own resources with the minimum tax carry out the proposed program for higher salaries and better-trained teachers. Since 1920 Maryland has classified and added to the number of high schools, with the purpose of providing high-school facilities for all children, rural and urban, and has added 50 per cent to the State aid for maintaining high schools.

Besides these accomplishments, the program of achievement for the biennium includes provision by law for a salary schedule based on academic and professional qualifications increasing salaries of teachers and raising the qualifications required all along the line and provision for financing and administering on a state-wide scale professional supervision of rural schools. For the first time every county has in service this year one or more supervisors or helping teachers. A new course of study for rural schools, a program for training teachers which is in harmony with the new certificating requirements and in the interest of which the State conducted a campaign for increased attendance at normal schools, a plan for training teachers in service, and one for improving rural school buildings are other features of the State department's program.

During the past two years the State department has added to its personnel a bureau of educational measurements. This bureau will assist county superintendents and supervisors during the present school year to improve the work in reading and arithmetic. Measurement of the work done in 12 counties of the State in reading, arithmetic, and spelling by the use of standard tests has been carried on since 1921 through an appropriation by the General Education Board. The legislature in 1922 provided $18,000 to continue this work and to study also attendance, promotion, and school efficiency.

North Carolina is another State which has carried on a large program for rural-school improvement during the biennium. For several years there has been a State equalizing fund which has been expended in an effort to equalize educational opportunity and the burden of school support by assisting to finance the minimum constitutional term of six months. But, as the State superintendent says, "It is almost as necessary to provide assistance for increasing the term beyond six months as it is to give aid in maintaining the six months' term." To this end, during the biennial period just closed and in formulating plans for the future, improved methods of equalization have been practiced, and increased State funds for the purpose

have been secured. This has been done in part by a large State equalizing fund, by changes in the laws affecting the county tax rates, by special State aid for rural high schools, and through a State bond issue to assist in providing school buildings.

This provision for assisting in the erection of school buildings is unique among the States. The general assembly in 1921 authorized a bond issue of $5,000,000 as a special building fund. It is loaned to the counties for a period of 20 years, the county repaying one-twentieth of the principal and accrued interest annually. The State superintendent says:

> The counties for the first time in our history are now in a fair way to erect suitable buildings for all the children. They are providing large brick buildings with auditoriums for the rural consolidated schools through the aid of the special building fund. The entire building program under construction at this time is estimated to cost when completed about $25,000,000.

The State loan is, of course, augmented by local bond issues. The applications from the various counties far exceeded the $5,000,000, and a system of prorating among counties has been established. Of $3,500,000 provided of bonds sold and loaned at the time the latest report was received over three millions was loaned to small towns and villages and rural districts.

North Carolina is making progress also toward increasing the efficiency of its teachers by putting into operation gradually the provisions of the certification law passed in 1919. The State department, in cooperation with the institutions of higher learning, makes it possible for prospective teachers to meet the qualifications demanded by this law without creating a teacher shortage and for progressive teachers to increase their scholarship or professional training while in service. The number of teachers of standard grade—that is, high-school graduates with some professional training—has increased nearly 100 per cent in three years. The number of poorly qualified, nonstandard teachers was reduced from 64 per cent of the total in 1919 to 26 per cent in 1921. This was the result, says the State superintendent, of the promise given the teachers that efficiency would be rewarded. The State provided summer schools to give the teachers an opportunity to improve themselves; approximately 12,500 teachers attended during the past year.

The State program proposes also to improve the quality and amount of supervision given by both State and county and to assist county superintendents in securing better school organization, and in general administrative practice. A new State supervisor of rural schools and a new inspector of buildings and grounds have been added to the State department staff during the biennium.

Space forbids doing full justice to the programs of these and other States in which extensive programs prepared primarily for im-

proving conditions on a state-wide scale are planned and being carried out. It is possible only to suggest briefly through a few notable examples the new trend in the work of State departments of education.

Michigan has promulgated an extensive campaign for rural-school improvement during the biennium. In 1921 the State department was reorganized and all functions concerned with rural schools centralized in a division of rural education headed by a superintendent of rural education, who has four assistant superintendents of rural education. New teachers' salary and qualification requirements have been established, standards for school buildings raised, and the school term lengthened both by raising the legal minimum and by providing a State equalizing fund for that purpose assisting districts with low tax valuation and high rate.

Pennsylvania is another State in which an extensive campaign for school improvement is in progress on a state-wide scale. Consolidation of rural schools, higher qualified teachers, better salaries, increased support, and a greater degree of centralization are included in the general program. A large part of the responsibility of carrying out this program is assumed by the bureau of rural education, a division of the State department. There are in this bureau a chief and four assistants, the time of all of whom is devoted to rural schools.

State-wide educational campaigns, usually followed by efforts to secure legislation sweeping in its nature and in its effects on rural schools, have been directed by State departments of education in Indiana, Texas, Missouri, Arkansas, Oklahoma, Kentucky, New Mexico, Arizona, and Wyoming.

Increases in the State department staff.—Besides Michigan and Pennsylvania—with special divisions of rural education in the State department—the following States report increases in the size of the rural education staffs:

Arizona.—A new research specialist whose time is devoted in large part to rural schools.

Arkansas.—Added one rural supervisor, making a total of four such supervisors.

Delaware.—Reorganization of State department, all supervision under State direction, and department of research established for the purpose of advising with rural-school officers and increasing the efficiency of rural schools.

Idaho.—Two new State rural-school supervisors added to the State staff.

Kentucky.—Increased field force both by legislative appropriation and by assistance from the General Education Board.

North Dakota.—Additional State inspector of rural schools. The State now has three such inspectors.

Ohio.—Reorganization in the State department and increase in the size of the staff.

South Dakota.—Two assistants in rural supervision added in 1922; the State department has doubled in size during the past three years; there are now 20 people on the staff.

Vermont.—A new State supervisor of rural schools was provided for in 1921.

West Virginia.—Two new assistant State supervisors of rural schools, making in all three men who devote all their time to rural schools. In addition a division of sanitation and health in rural schools was established in the State department by the legislature in 1921. This division has been responsible for cleaning up insanitary conditions in rural schools and improving instruction in hygiene and sanitation.

Wisconsin.—The State superintendent says, "The entire State department of 22 members each in some way serves rural schools; three State rural supervisors spend their entire time with this work."

Wyoming.—A supervisor of rural schools has been added to the State department. The department has devoted itself during the biennium to special efforts to increase public interest in rural schools through community meetings and other means of publicity.

At the close of the biennial period under consideration, 33 States report 74 State rural supervisors or staff members doing work of the type usually called rural supervision.

EQUALIZING EDUCATIONAL OPPORTUNITY.

Equalization through increased State support.—Much of the legislation passed during the biennium was inspired by a desire to give rural children an opportunity for an education more nearly equal to that now furnished city children. The first requisite to an efficient school system is adequate support. While constitutions or statutes of all the States promise an equal opportunity for an education to all children within their borders, few, if any, of them have so far lived up to this promise. Education has been almost entirely a local matter, and the local unit which in thousands of instances is a district containing a one-room one-teacher school is free to have as good or as poor a school as its people are willing to maintain. The difference in opportunity offered is not confined to that between rural and city schools. Children living on neighboring farms are often so unequally provided for educationally that, while those in one family attend a school with adequate plant and facilities, trained teachers, and nine months' term, those of the family on the adjoining farm attend a one-room school with an untrained teacher in charge and a term of three or four months in length. Larger units of support and better administrative practice are needed to improve such school situations.

There is a growing belief that the State is the logical unit to assume a share of the burden of support large enough to guarantee at least a fixed minimum of schooling to all children within its boundaries. That this fact is more and more recognized is evidenced by the

trend among States, usually led by the State departments, to increase the amount and, if possible, the proportionate share of school support borne by the State. That these two are not necessarily the same thing is apparent. The cost of education has been rising as other costs rose. The unit of support most easily adaptable to changed conditions is, of course, the local one. State legislatures are often slow to act, but schools must not be closed while they deliberate nor during the long intervals between legislative sessions. Therefore, local units have found it necessary to assume an increasing burden and an increasing share of school support during recent years. This is true even in those cases in which the amount of State support has been increased.

In supplying funds for a certain minimum amount of education, the State must also assume the duty of setting up minimum standards which all schools must meet. Such standards may be based on various essentials, but the one most generally recognized is that of the qualified teacher. It follows then that, in seeking to equalize both educational opportunity and tax burden, one naturally looks upon salaries of teachers as one item of expense to be borne by the State with the corresponding demand of certain fixed minimum qualifications from those who receive them.

In considering equal educational facilities one also thinks at once of the number of children to be educated. The expense of conducting schools does not parallel attendance exactly, since a small school no less than a large school must have a teacher who is well qualified and sufficiently paid. However, average daily attendance, together with the number of days school is taught, usually grouped together as aggregate attendance, is an important item in estimating the expense of school maintenance.

Number of teachers and aggregate attendance are becoming of increasing importance in the distribution of State school funds and are replacing the inequitable method of distributing on the basis of per capita of school population regardless of whether or not children attend school. Another effort toward equalization adopted by some States is through providing State aid for weak districts, sometimes given for special purposes such as increasing the length of term or the salaries of teachers, sometimes as in Maryland apportioned to counties unable to reach State school standards on their own resources. State aid for the encouragement of certain specified progressive movements, such as providing buildings which comply with hygienic and sanitary requirements established by the State, or for consolidation or centralization of weak schools into larger ones, may or may not equalize educational opportunity, depending on local conditions and methods of distribution. Such aid for specific pur-

poses may apportion the State funds to schools or districts best able to carry their own burdens rather than to those least able to do so.

Increased State contributions to school support.—In general, the increases in State contributions to school support which have been made during the biennial period are intended to have an equalizing influence. Some are directly equalizing in their nature; others aim to encourage or promote particular measures which are believed to increase school efficiency. No effort is made to distinguish between equalizing and other funds in the summary given here of States reporting progress in this direction:

Alabama.—The State now provides a bonus fund of $100,000 for distribution by the State board of education, 80 per cent of which is to be used in lengthening the school term and otherwise meeting conditions in rural schools. A portion of the salaries of rural supervisors was paid from this fund also during the current year.

Arizona.—There has been a large increase in the State fund apportioned for schools. It now reaches $25 per child in average daily attendance. The amount contributed by the State to each county, combined with the amount received from county taxation, is large enough for each one-teacher school to receive a minimum of $1,500 and each two-teacher school a minimum of $3,000 per annum.

California.—Both State and county contributions to school support have been materially increased since 1919. In 1920 provision was made for rural-school supervisors whose salaries are to be paid in large part from State funds. Under the terms of this law 50 new rural supervisors are employed.

Connecticut.—State aid toward teachers' salaries has been increased and high-school tuition and conveyance allowance also under certain conditions. The result is that the State now pays as high as 76 per cent of the teachers' salaries in some instances.

Illinois.—$2,000,000 was added to the State distribution fund in 1920. This fund now amounts to $8,000,000 per annum.

Indiana.—A law passed in 1921 provides for a State school levy of 7 cents on each $100 taxable valuation, of which 30 per cent is used to extend to eight months the school term of school corporations unable without aid to provide more than three or four months of school per year. This money may be used also for school supplies, transfers, and transportation.

Maine.—In 1921 a State school fund was provided to be used as an equalizing fund, giving rural districts a larger share of State money. This fund is distributed according to the number of teachers, the average daily attendance, and the scholastic population. In addition there was provided an equalizing fund to be distributed among towns having a high taxation rate and also a special fund which the State superintendent may use for the promotion of special measures.

Mississippi.—The legislative sessions of 1920 and 1922 made appropriations to equalize school terms throughout the State. As a result several of the poor white counties received practically twice as much from the State as formerly. They are thereby enabled to pay better salaries and to provide longer school terms.

Missouri.—The general assembly of 1921 passed a rural aid law increasing the amount received from the State and increasing the number of districts eligible to receive it. The basis of distribution is tax valuation.

Nebraska.—In 1921 State aid was provided for weak districts in which local taxation does not supply sufficient funds for carrying on school the required length of term. This aid is expected to enable all the schools to have a nine months' term.

New Jersey.—The legislature of 1921 provided special aid for needy rural sections and appropriated for this purpose a fund of $100,000.

Oregon.—There is a $2,000,000 increase in tax levy, which is state-wide and is apportioned according to the number of teachers employed.

Pennsylvania.—Fifty per cent of the teachers' salaries in fourth-class districts—that is, rural districts—are now paid from State funds. There is additional special State aid for transportation.

Rhode Island.—The State superintendent says: "We have set our faces firmly toward a standard quality for all schools. The word 'rural' is not used in our rules or regulations." The State appropriations favor small towns. There is an emergency appropriation for the support of poor schools and a bonus to promote consolidation.

Texas.—During the two years just passed the legislature appropriated $1,500,000 and $1,000,000, respectively, to be distributed to rural schools. This is in addition to the per capita State fund of $13 for 1921 and $10 for 1922. The State department explains that the distribution fund has diminished in this period, because in 1920 the 5-mill limitation on local tax rate was removed, and districts were enabled to raise more through local taxation than before.

Utah.—In 1921 for the first time the schools became the beneficiaries of a recent constitutional amendment providing annually $25 per capita from the State school fund for every child of school age.

Vermont.—The State rebate for rural teachers' salaries was increased during the biennium; the amount of this reimbursement to towns made by the State varies according to the training and experience of the teachers employed. For 1921 and 1922 it was from $2 to $6 per week per teacher.

West Virginia.—State support for schools was increased in the State from $516,000 in 1921 to $1,375,000 in 1922. This State support has enabled poor districts to maintain their schools 7 months in 1921, 7½ months in 1922, and will enable them to maintain schools 8 months in 1923.

Wisconsin.—The salaries of rural supervising teachers has been paid from State sources since 1916. During the present biennial period the salaries of these teachers were increased, resulting in an expenditure of more than $200,000 for rural supervision by the State during the past year. Special State aid is given also to children living over 2 miles from the elementary school and over 3 miles from a union free high school to assist in paying the necessary expense involved in school attendance.

Wyoming.—Fifty per cent of the Government oil royalty fund is given for the support of schools in this State. Last year, 1920–21, the amount equaled $196 per elementary and $285 per high school teacher. This year, 1921–22, the amount is approximately $250 and $400, respectively. Since this fund is distributed according to the number of teachers employed, it partakes of the nature of an equalizing fund and assists the small isolated rural districts materially.

Equalization through the larger unit for administrative organization.—Considerable progress has been made in enlarging the units for school administration either by fundamental changes in the administrative organization, usually brought about by legislative ac-

tion or constitutional amendment, or by centralization of small units into larger ones.

Historically, the development of schools from pioneer days and conditions has given the country four rather distinct types of organization for the administration of rural schools: The district, the New England town, the township, and the county. The district, which was the original pioneer type, still prevails with little or no significant alteration in the majority of States, particularly in the West and Middle West. The town is the basis of organization in all of the New England States; the township in Pennsylvania, Indiana, New Jersey, Ohio, and sections of Michigan, Iowa, and the Dakotas. West Virginia, in which the magisterial districts resemble in certain essentials the township organization, is sometimes included in this group. The county is the prevailing unit in the South, and the plan is being extended somewhat in the Western States.

There is general agreement among authorities on school administration and students of rural-school conditions that the small district, often containing only one school, is too small and ineffective to serve as the unit for school administration; that neither equitable distribution of tax burden nor equality of educational opportunity can be secured where it prevails, except under unusual conditions, and that it is responsible for the slow progress made by rural communities in meeting the demands of modern educational ideals.

On the other hand, the county unit may be of such a nature that it starves local initiative, responsibility, and pride in school progress. For those States in which the county is the civil unit the best solution seems to be a county unit which provides in its organization sufficient centralization for efficiency in management and retains enough local initiative and responsibility for the attainment of standards beyond the minimum set up for all schools to meet.

Some form of the county unit organization for school administration is now found in 21 States. The form differs somewhat in each as to methods of support, powers of boards of education, selection of superintendent, and the like. In most cases cities and towns exceeding a certain designated population are independent as to the management of schools and sometimes for taxation purposes. In the most centralized of the county-unit States all of the schools are under the direction of one board, usually called the county board of education.

Progress during the period.—During the biennial period just closed "campaigns" for the promotion of the county-unit idea among rural people were conducted in a number of States, culminating in most cases in an effort to secure legislation providing for or favorable to an improved unit of administrative organization. In

Oregon a law, local option in character, was secured. Four counties are now organized under its provision. In Arizona the law providing for reorganization with the county as the unit for school administration was secured but was defective. No attempt was made to put it into operation. In Missouri a bill was enacted into law providing for the county unit, but was defeated at the polls on referendum. In Virginia the effort was successful, and the county organization now prevails.

SUPERVISION OF RURAL SCHOOLS.

Supervision, as understood in well-organized city systems and as distinguished from the annual visitation of schools practiced by many county and other rural superintendents, is comparatively new in rural communities. In 25 States the superintendent is still an elective officer; in 15 of them the term is only two years. The short, uncertain tenure, long distances to travel in reaching isolated schools, excessive number of teachers to supervise, and exacting administrative duties, all combine to make the superintendent a school visitor rather than a supervisor. The statutory provision common in many States that the superintendent shall visit each school at least once a year shows the conception of the duties of the office which has until recent years been the accepted one.

During the past 10 years a different conception of the functions and responsibilities of the county superintendency has been growing among school officials and in popular favor. The more progressive counties recognize a differentiation between administrative and supervisory duties, and that professional supervision is of primary importance in increasing the efficiency of the school system. Assistants to the county superintendent, whose duties are chiefly supervising classroom instruction and allied functions, are employed in an increasing number of rural school systems. A few States, through legislative act or authority vested in State departments, recognize the importance of professional supervision for rural schools to the extent of providing for it on a state-wide scale.

During the school year 1921–22 a study was made in the Bureau of Education[1] of the general status of professional supervision of rural schools in the United States. Approximately 1,000 supervisors (not including administrative officers or clerical assistants) were engaged in supervising the rural schools. At that time Ohio had the largest number of supervisory assistants, namely, 214, and paid the highest median salary, namely, $2,500. It does not necessarily follow that there are more supervisors in proportion to the number of schools and teachers than in some other States, particu-

[1] U. S. Bu. of Educ. Bull., 1922, No. 10.

larly New Jersey, Delaware, certain of the New England States, and Maryland.

The salaries of supervisory assistants reported at the time the study was made varied widely in the different States and among counties in the same States. The median salary in the majority of the States reported was between $1,500 and $1,800 per year. The highest salary paid to any supervisory assistant reported was $6,500. During the past year since the reports were made to the bureau, salaries of supervisors have been increased throughout the States of Wisconsin, New Jersey, and Maryland, and in a number of the counties employing supervisors in the other States.

Progress during the biennium.—During the past two years California secured a law establishing professional supervision for rural schools. The State is responsible for a large part of the salaries provided. Under the provision of this law (passed in 1921) 50 supervisors were reported employed in the fall of 1922.

The Maryland law, enacted in 1922, increases the number and salaries of supervisors and fixes the number according to teachers to be supervised, the minimum being one supervisor for every 40 teachers. Two-thirds of the salary is to come from State appropriation.

Increases in salaries of all supervisory assistants are reported from Wisconsin and New Jersey; of those in certain counties from several other States. Increases in the number of supervisors are reported from some of the county unit States. Alabama, for example, reports an increase of 10 county supervisors since 1920.

Exclusive of the New England States, Ohio, Maryland, Delaware, New Jersey, Wisconsin, Alabama, Utah, and Louisiana apparently lead in their approach to professional supervision of rural schools which is both state-wide in scope and adequate as to number of teachers per supervisor.

RURAL TEACHERS—THEIR CERTIFICATION, PREPARATION, SALARY, AND CONDITIONS UNDER WHICH THEY WORK.

The urgency of the need for an adequately prepared staff of teachers for the rural schools of the Nation continues practically unabated except in isolated instances. As ideals and standards are raised through better administrative organization and practice, increase in the number of consolidated schools, extension of professional supervision and the like, there is an accompanying demand for teachers who can accomplish the ideals and live up to the standards for which improved conditions are advocated. The requirements of modern education are more complicated and difficult of accomplishment than ever before. Good buildings and grounds, improved plans for school organization and the like furnish the

necessary setting for efficiency, but only qualified administrative officers and teachers insure that high quality of instruction which is the sine qua non of efficiency in any school system.

Reports of three state-wide surveys made or published during the biennium give information on the academic and professional training of rural teachers, showing the following conditions:

In Arkansas, of 1,460 rural teachers reporting, 25 per cent had completed four years of high school; 12 per cent had one year of normal training; 6 per cent had two or more years of normal training but not in all cases beyond high-school graduation.

In Oklahoma, of 1,910 rural teachers reporting, 45 per cent had completed a four-year high-school course; 5 per cent had completed one year of normal training; 2 per cent had completed two or more years of normal-school training.

In New York, of 1,729 teachers in one and two teacher schools reporting, 54 per cent had completed four years of high school; 5 per cent had completed one year of normal training; 6 per cent had completed two or more years.[2]

These data correspond rather closely to those of like nature gathered for other States during the biennium preceding and to those shown by earlier studies and survey reports. They indicate no significant improvement in the educational and professional preparation of the rural teachers of the country. Some States have made considerable progress; nearly all have made some. Considering the problem and its solution in its nation-wide application, however, we have only scratched the surface.

The question of securing efficient teachers for the country's rural schools is many-sided. The main factors involved in the teacher situation may be briefly stated as follows:

1. Certification laws, which raise the standard for all certificates, particularly those of the lowest grade. The terms of such laws should be that only candidates with a reasonable amount of academic and professional preparation are permitted to teach in any school.

2. Facilities for offering specialized preparation to prospective rural-school teachers, including abundant opportunity for observation and practice in the different types of rural schools.

3. Salaries, working and living conditions, and professional status, which will offer sufficient emolument and a satisfying field of work to young people choosing a vocation.

4. The inevitable corollary to these, appreciation of and demand for professionally prepared teachers on the part of farm people, patrons, and school officers.

[2] Rural-school survey of New York, pp. 41, 51, and 52.

Progress during the biennium.—During the two-year period just closed 25 States reported to the Bureau of Education some progress toward improving the qualifications for certificating rural teachers. This progress is a result of laws passed in 1919 and 1921, or regulations of the State department made or put into operation during that time. The States reporting changes in the laws gradually increasing the qualifications demanded and generally looking toward a minimum of two-year courses above high-school graduation as the final standard to be attained and the ultimate elimination of examination as the method of securing certificates are: Arizona, Pennsylvania, Idaho, Ohio, Oregon, New Hampshire, North Carolina, and Wyoming.

States in which laws were passed involving the principle of gradually increasing requirements but with qualifications not so high as those required in the States above mentioned are: Missouri, Montana, and Kentucky. Kentucky requires one year of high school and five weeks normal training as a beginning prerequisite, and increases the minimum each year up to 1926; Missouri establishes increasing requirements culminating in high-school graduation as a prerequisite by 1927; Montana establishes immediately the prerequisite of two years high school and five weeks professional training. In Maryland a State appropriation of $12,000 is provided for giving professional courses to teachers in their home communities.

A few States report that they are now back to pre-war standards through the discontinuance of the practice of issuing temporary and emergency certificates. Two report the discontinuance of one or more of the lower grades of certificates. Others make the general statement that standards have improved, but give no definite information concerning the methods of improvement.

FACILITIES FOR PREPARING RURAL TEACHERS.

Facilities for the preparation of teachers for work in rural schools are still inadequate in the majority of States. While there are exceptional institutions making excellent and constantly improving progress in this particular line of achievement, few, if any, States have adequate facilities or are training the number of teachers really needed. This inadequacy is apparent in numbers enrolled in rural courses, in the quality of the courses given, entrance requirements, and provision for observation and practice. In too many instances rural-teacher preparing courses are unformulated as to content and indefinite in aim. It is even probable that the percentage of graduates from the two-year courses in normal schools who go into the rural schools is decreasing. A study recently made of the percentage of normal-school graduates who enter the rural schools shows that

approximately 10 per cent entered in 1910, 9 per cent in 1915, and 6 per cent in 1920,[3] indicating not only a decrease but showing also how small a percentage of normal-school graduates even begin their work in the rural schools. Studies made of the preparation of rural teachers in service and data on this subject set forth in State surveys confirm the findings of this study. There is apparently no doubt as to the need of a greater number of prepared teachers in the rural schools and of a more determined effort on the part of teacher-preparing institutions to meet this need.

An examination of catalogues of teacher-preparing institutions, later verified by questionnaires made in the summer of 1922, shows that there are approximately 100 institutions in 33 States maintaining departments or offering courses specially designed for the preparation of teachers for rural schools. Of these institutions, 25 reported observation and practice schools located on the campus or in adjacent rural territory. Approximately one-fourth of the institutions reporting offer *some* rural-school courses entrance requirements to which are lower than graduation from a four-year high school. No definite and complete data on enrollment in these courses or percentage of those enrolled who teach in rural schools are at present obtainable. Such reports as are available indicate that the enrollment is small in the majority of schools during the regular terms. During the summer terms, however, there is a large and constantly increasing attendance of teachers from rural communities.

The attendance at normal schools, particularly at summer courses, enrollment in extension courses, reading and special courses, are all materially increased when laws requiring higher qualifications for certification are passed. No alarming shortage in the teacher supply follows the increase in requirements so far as information is obtainable. Indeed, the contrary seems to have resulted in some cases. As an example of this, a report from the State department of Ohio, a State in which the minimum prerequisite for certification has just been raised to 36 weeks beyond graduation from a four-year high school, states: "For the first time Ohio can say that there are a sufficient number of teachers for the schools." Raising the requirements gradually, giving ample notice to all new teachers as well as those already employed, and providing facilities by which new and prospective teachers can secure the required preparation apparently works no undue hardship either to schools or teachers.

Progress during the biennium.—Massachusetts has recently designated two of its nine normal schools to give special attention to the training of rural teachers. Attendance at the normal schools increased during the year (1921–22) from 2,000 to 3,000.

[3] The Output of Professional Teachers. Benson. p. 6.

Maryland, during the past two years, carried on a systematic campaign under the direction of the State board of education to increase attendance at normal schools. Representatives of the State department and the normal schools addressed high-school pupils and citizens concerning the possibilities of teaching as a promising field in which young men and women could find a life vocation. A moving picture was prepared for this purpose and shown widely throughout the State. Maryland also established one new State normal school.

Montana, Idaho, and several other States report that State supervisors spend a large part of their time training teachers in service.

In New Hampshire the interesting experiment is being tried of extending the service of the teacher-preparing institutions to the remote sections of the State by establishing short courses for teachers in these sections during the winter holidays.

In Wyoming a plan somewhat similar is in operation. The State university (the only public teacher-preparing institution in the State) holds summer sessions in rural sections remote from the seat of the university.

Montana holds three regional summer schools in remote sections under the direction of the State normal school.

Oregon reports that all rural-teacher courses in normal schools require six weeks of practice teaching in rural training schools.

Among the States reporting large increases in attendance of rural-school teachers at regular or summer normal schools are the following:

Alabama: 7,000 teachers attending summer schools (1922). *Arizona:* Very large increase due to the regulations of the new certification law. *Arkansas:* Six weeks' intensive training schools for rural teachers are established each spring at each of the four State agricultural high schools. *California, Connecticut, Florida, Kentucky, Maine, New Hampshire,* and *Oklahoma* report large increases in attendance of rural teachers at regular and summer sessions. *Kentucky* reports also two new normal schools. *Michigan:* Four State normal schools have established rural departments (the summer schools in these departments enrolled 1,800). *Virginia:* Over 8,000 teachers attended summer school at State normals and teachers' colleges.

Teacher training in high schools.—In 21 States courses given in county normal training schools, teacher or normal training classes in high schools or in connection with high schools, are officially recognized in the certification laws. The courses may be given as part of the regular high-school course or may constitute a year's work in addition to the four high-school years. In some cases the courses are under the direction of an inspector or supervisor from the State department and are aided by State funds; in others they are maintained by the high schools themselves, independently of State aid. The following

are the States which recognize normal training of secondary grade are given in connection with high schools as fulfilling the requirements for one or more kinds of teaching certificates: Kansas, Iowa, Missouri, Michigan, Wisconsin, Minnesota, South Dakota, Nebraska, Montana, Wyoming, Oklahoma, Vermont, Ohio, Nevada, Oregon, New Hampshire, New York, North Dakota, Virginia, Arkansas, and West Virginia. A few other States legally recognize teacher-training work in high schools, but do not issue certificates on the basis of such work. Among the States reporting improvement in facilities for carrying on teacher training in high schools or county training schools during the biennium are the following:

Kentucky.—A State appropriation of $50,000 to assist in financing county training schools; an increase in attendance in such schools.

Michigan.—County normal training classes are established in all counties except those in which there are State normal schools with special courses for rural teachers; 1,200 teachers have been trained in these schools since 1920.

Missouri.—The number of high schools giving teacher-training work increased from 107 to 129 during the two-year period.

Montana now has 23 high schools giving two-year teacher-training courses.

South Dakota has 54 high schools giving normal training work.

Vermont has 15 one-year teacher-training classes in high schools.

RURAL TEACHERS' SALARIES.

The effort to keep the schools open during and following the war exodus from the teaching profession into industrial life had two results, that of increasing teachers' salaries and of lowering the standard of qualifications demanded of applicants for certification. The prevalent economic depression among farmers is leading to a demand for, and in some instances has resulted in, decreases in the salary scale during the past two years. In many States school officials are obliged to make a determined stand to preserve the status quo in school expenditures. Salaries of rural teachers, therefore, have not increased on the whole during the biennial period. Increases previously granted rarely equalled the cost of living, consequently any decrease would be disastrous.

An investigation of salaries paid to rural teachers was made in the Bureau of Education in February, 1922. Forty-three per cent of the total number of county and other rural school superintendents reported on the salaries paid to approximately 127,000 teachers. Of these, 55 per cent were in one-teacher schools. The results of this study with some comparisons of salaries among the different types of schools are summarized briefly as follows:

In each of six States the teachers of one-room schools received a median salary between $300 and $400. In the same States the median salaries of teachers in consolidated schools varied from $600 to $1,000.

Corresponding figures for other groups are: In each of four States, one-room schools, median between $400 and $500; consolidated schools, medians varying from $500 to $900. In three States, one-room schools, median between $500 and $600; in consolidated schools, median varying from $500 to $900. In five States, one-teacher schools, median $600 to $700; in consolidated schools median varying from $700 to $1,000. In six States, one-teacher schools, median between $700 and $800; consolidated schools, median varying from $900 to $1,400. In 11 States, one-teacher schools, median $800 to $900; in consolidated schools, median varying from $900 to $1,300. In six States in which the median salary in one-teacher schools is between $900 and $1,000 the lowest median for teachers in consolidated schools is between $1,100 and $1,200 and the highest median between $1,600 and $1,700. In five States only did the median salary of teachers of one-room schools exceed $1,000. In these States the median salaries for teachers in consolidated schools varied from $900 to $1,400.

This study also shows that in nearly all of the States the median salary of teachers in the two and three room schools is approximately $100 a year higher than that paid in one-room schools. In most of the States the median salary for consolidated schools is from $200 to $500 higher than that in one-teacher schools. In the village schools salaries are not generally higher than those paid in consolidated schools except in a few States where there is a decided difference in favor of the village schools.

The median salaries here given are near the average salaries for the groups. Approximately one-half the teachers reporting in each group received lower, and one-half higher, salaries, than those given. In 19 States the teachers in the lowest salary groups in one and two teacher schools received less than $300 a year.

A similar study of the salaries of teachers in city schools made during the same school year shows that the median salary in cities of 2,500 to 10,000 in population is between $1,000 and $1,100; in cities of from 10,000 to 25,000 population, between $1,200 and $1,300; in cities between 25,000 and 100,000 population, between $1,800 and $1,900.

Comparing the salaries received in cities of 2,500 to 10,000 in population with those paid in consolidated rural schools it is found that the latter received from $100 to $500 a year less than the salaries paid in these cities. In other words, the city teachers received from 20 to 60 per cent more for similar services. It is well known that elementary teachers in the very large cities receive very much higher salaries than those paid in the smaller ones.

No one will contend that the salaries paid city teachers are too high. The services of these teachers are responsible for the efficient standards reached by city schools and for the fact that the quality of the instruction given in city schools, wherever measured by standard tests, is uniformly higher than in rural schools. If our country children are ever to have educational opportunities comparable to those provided for urban children, we must find money enough to pay salaries which are comparable to those paid in cities.

Several States have provided State salary schedules based on academic and professional qualifications measured by the grade of certificate. New laws of the kind indicated or salary increases through revision of old laws are reported from Pennsylvania, Ohio, North Carolina, Indiana, Missouri, Maryland, Mississippi, Rhode Island, West Virginia, South Dakota, and New Hampshire. The following States report increased salaries during the biennial period: Connecticut (average in small towns $1,000 a year), Kentucky, Maine, Massachusetts (as a result of increased aid for rural communities, elementary salaries in 127 rural towns have increased from an average of $455 in 1915–16 to $769 in 1920 and $933 in 1921), New Jersey, and Virginia. The following States report definite salary schedules or a minimum salary law state-wide in its effect: California, Colorado, Delaware, Indiana, Maryland, Mississippi, Ohio, North Carolina, Pennsylvania, Rhode Island, and West Virginia. Idaho and Texas are the only States which report a reduction in rural teachers' salaries. In North Dakota a minimum salary law passed in 1921 was repealed by referendum vote.

WORKING CONDITIONS AND PROFESSIONAL STATUS OF RURAL TEACHERS.

Living conditions a serious problem.—The general changes in rural life and conditions in farm homes; the scarcity of farm labor, resulting in the necessity for the farmer and his family to assume increased burdens of farm work; increase in the number of farms under tenant management; and general economic conditions have resulted in a serious shortage of good boarding places for teachers in the country schools. Probably the best remedy yet found is the teachers' home or teachers' cottage owned or rented by boards of school trustees. In 1921 reports sent to the Bureau of Education indicated that there were at least 3,000 cottages owned or controlled by school boards, housing approximately 12,000 teachers.

The advantages of provisions of the kind described, where teachers can have privacy and live under independent and dignified conditions, are too obvious to need comment. The influence of supplying comfortable living accommodations at district expense on the quality

of service rendered, on the tenure of the teaching staff, and as a partial remedy for the present high cost of living is reported by county superintendents as eminently gratifying in practically all cases.

The number of schools in districts which provide living accommodations for teachers has increased during the biennial period just closed. Incomplete reports received from the States indicate that upward of 1,000 new homes were built during the period. Texas and Oklahoma together have nearly a thousand teachers' cottages. Colorado, North Carolina, Washington, Iowa, and Kansas report substantial growth in the movement.

Professional status of rural teachers.—Gradual but significant improvement of the conditions under which rural teachers work is one of the promising signs of a new status of rural education. Many factors combine to this end. Every influence that improves rural economic conditions, rural school organization, school buildings, salaries of teachers, and the like has its effect on the professional spirit and status of the teachers. Among them, improved administrative practice, which follows the appointment of professional administrative officers, and the employment of supervisors are perhaps the most powerful factors involved. Professional supervision has for one of its most important objectives that of giving to the rural teacher an opportunity for professional growth. It presupposes group organization and solidarity, participation of teachers in formulating and carrying out the educational policies of the system in which they work, and fosters a professional spirit among all the teachers of the system. There is being developed in many rural school systems an esprit de corps among rural teachers not surpassed in the best-organized city systems.

Special departments or courses have in recent years been established in State teacher-preparing institutions in at least 33 States. In the majority of cases and with increasing frequency entrance requirements are the same for rural as for city preparatory courses. A number of State and privately supported universities and teachers' colleges have established graduate courses, as well as courses leading to the bachelor's degree, designed for the preparation of teachers, supervisors, and administrative officers for the special field of rural education. Many of these institutions have their rural clubs and rural department publications, and in other ways foster a professional group spirit among the prospective rural teachers.

In the National Education Association, in every State teachers' association, there are departments or sections where workers in the field of rural education meet to discuss their common problems and for social and recreational purposes. The department of

rural education of the National Education Association supports a journal designed for use of rural administrative and supervisory school officials.

State supervisors of rural schools who circulate freely among county superintendents and rural teachers as representatives of the State department in rural communities and who lead in promoting measures for rural-school improvement, encourage the growth of professional spirit and of satisfaction in educational achievement. The organization of teachers' councils in a number of rural counties, thus offering opportunity for the development of leadership and initiative; the opening up of large consolidated schools where salaries and opportunities for service are equal to those offered in urban schools; the creating of new supervisory positions and positions in teacher-preparing institutions to which successful rural teachers may aspire, increase the possibilities and opportunities for professional advancement and encourage specialization in the field of rural education. These are among the influences which develop a better professional spirit and status for rural teachers and which exert a significant effect on the rural-teacher situation.

CENTRALIZATION OR CONSOLIDATION OF RURAL SCHOOLS.

The movement generally known throughout the country as "consolidation" of rural schools, a term used differently in the various States but connoting a similar thing; namely, that of getting rural children together in groups larger than is generally possible in small one-teacher schools, is perhaps the most marked of all the progressive movements now being advocated for the improvement of rural schools. Consolidation in its best form and as promoted by its most ambitious advocates is coming to mean uniting enough territory to provide a large group of children, including those in both secondary and elementary grades; a modern building representing a good type of architecture, commodious, convenient, appropriate to its purpose, and built to suit modern hygienic ideals and to fit modern educational practice. However, neither the term nor the movement is limited to its most approved aspect. To bring together even a few isolated small schools, thereby making for increased efficiency of school work and wider contacts for rural children, is considered by many advocates of centralization a worthy effort. Different forms of centralization, whether of all or some of the 12 grades, even the means of preventing decentralization, are denominated and considered as forms of consolidation. The Utah county-district and the Michigan movement toward the township unit are sometimes called by the general term consolidation.

The centralization movement began early, as one would naturally expect, in the New England States, not so much by consolidating small districts as by abolishing them and uniting the territory into one district—i. e., a town. The laws concerning it date as far back as that enacted in Massachusetts in 1838. Horace Mann, Henry Barnard, and Horace Eaton were among the educators who early discerned the ineffectiveness of the small school and advocated better conditions through a larger or centralized unit. Transportation laws came early also in the same State. In Massachusetts there has been legal provision for it since 1869, or approximately 53 years. Maine, Michigan, New York, and Ohio had all enacted laws providing for consolidation in some form before the Civil War. Some of these early laws are very similar to those of more recent date placed on the statute books of newer States.

In most parts of New England, where at all feasible, the consolidation idea has attained solidity, permanence, and success. In 1920 Massachusetts had probably a lower percentage of the total number of children enrolled in one-teacher schools than any other State. Most of its towns are transporting children to schools either within or without their borders.

In general, the movement for centralizing schools has attained a marked degree of success. It grew slowly for many years, however. Its greatest growth has come within the past 15 years, and many States did not pass permissive or favorable laws until after 1910. Since then the idea has grown over a wide extent of territory, covering the country more or less intensively, and on the whole apparently attaining success through merit of so high a type that it could not long remain unrecognized.

The movement has now spread in some degree at least to all of the States. The following account of growth in a few States presents the conditions somewhat as they are found in others:

Of the Central and Eastern States, Indiana has made notable progress in consolidating schools and eliminating those with one or two teachers. The work of centralizing began about 1876. In the years between 1890 and 1920 the school enrollment for the State increased by approximately 54,000; the number of school buildings decreased from 9,907 to 7,981; the number of one-room schools from 8,853 to 4,880. By 1920 all but 3 of the 92 counties had effected some consolidation. The number of consolidated schools reported was one-seventh of the total number in the State; the amount spent for transportation nearly two million dollars and increasing at about the rate of half a million per year. The State department reports in 1922 six counties completely or nearly completely consolidated.

Other Central States have made similar if not so favorable achievements. Ohio, like Indiana, has a number of counties in which consolidation is complete, or practically so. A recent report from this State shows that in 13 leading counties the number of one-room schools decreased from 1,029 in 1914 to 236 in 1922. The number of centralized and consolidated schools in these same counties in 1922 was 231. Data for the State as a whole show the elimination of 1,150 one-teacher, one-room schools during 1919–20 and 1921–22. They report 200,000 pupils transported to and from consolidated and centralized schools in 1921–22 who were taught by about 8,000 well trained and qualified teachers.

In a number of States in which consolidation has not made favorable progress in the past, as well as in others in which it has done so, systematic work is being done, state-wide in extent, to promote either the extent of the movement or the quality of the work done in the consolidated schools, or both. Iowa, Kansas, Michigan, Oklahoma, Pennsylvania, and Wisconsin are among those which are very active and report a number of good consolidations in progress.

A report of consolidation in Michigan, June 30, 1922, states that 425 districts have been consolidated since April, 1919, with a total valuation of approximately $182,000,000 and an enrollment of 17,329 children.

In Pennsylvania, State aid for transportation has increased from $86,132 in 1919–20 to $245,904 in 1920–21.

In the Southern States, substantial achievement is reported. Alabama, Louisiana, Mississippi, and North Carolina are among those in which state-wide progress is most apparent. Typical of reports from these States is the following:

Alabama.—There have been built 130 new consolidated buildings during the year just passed at a cost of $1,500,000. These buildings have 500 classrooms and accommodate approximately 15,000 children; 50 or more of them have 5 or more standard classrooms, manual training and home-economics rooms, and good auditoria with a capacity of 500 to 800; 12 of them are brick and classed among the best in the State. Seventy-five per cent of the counties have from 1 to 10 consolidated schools. Montgomery County is the one most successful in effecting perfect consolidation. During the past year more than $400,000 has been invested in five consolidated buildings in that county, completing the scheme of housing all white children of the county in 15 consolidated buildings. Through the excellent system of transportation every white child may attend either an elementary or a high school and stay home at night. More than 30 motor busses are now in use, and some children are transported 20 miles to school.

In the West, where sparsity of population and natural conditions are not favorable to consolidation except in certain sections, a fine type of the large consolidated school is springing up in some dis-

tricts. Though the number is not large, the quality of the buildings and equipment and the grade of instruction given are exceptional. The following from Colorado indicates the trend of the movement in that State and is not unlike that in others:

One of the best of the consolidated schools is at Johnstown, in the western part of the county. It is in a fine farming and leading dairy district of the State.

The new building cost $160,000. Three separate bond issues were voted for its erection and completion, and all carried unanimously. It is intended for a junior and senior high school and a general community center. It has a fine arrangement for classrooms, laboratories for physics, chemistry, vocational agriculture and home making, offices, pure running water, electric li[illegible] a moving picture projector, and all the other equipment of a first-class [illegible]rn school. The school and community auditorium will seat more than [illegible] people, and the stage serves also as a large and well-arranged gymnasium.

The district also has a commodious grade building that might have been used for several years for both high school and grade purposes and a good garage to properly house its fleet of motor busses.

Colorado has 138 consolidated schools in 38 of its 63 counties.

Oregon and Wyoming both report substantial progress in 1921-22 in new consolidations and increased number of pupils transported.

The progress made difficult to estimate.—Any survey of progress in consolidation based on the number of schools, number of consolidations, or comparative estimates of rapidity with which the movement is spreading in States, is difficult because of the differing conceptions of the meaning of terms and because of a variety of differing conditions furthering or limiting achievement, as the case may be. That the movement is taking on more substantial form in size and expenditure, as well as quality of service rendered, has been indicated above.

If decrease in the number of one-room schools is a just criterion by which to judge, some idea of its extent may be gained from facts disclosed by a study made in the Bureau of Education. In 33 States for which comparisons may be made, the number of one-room schools decreased 17,635 in the decade 1910 to 1920. This is a decrease of about 11 per cent in the 10-year period. As a result of the same study, it is estimated that there are in the country at least 12,000 consolidated schools. In so far as transportation expenditures tell the story, the facts from the same study are as follows:

Forty States spent for transportation in 1920 about $14,500,000. If complete reports for all of them were available, the amount would probably reach, in 1922, above $17,500,000. Indiana spent most, $2,000,000; Ohio and Iowa each more than $1,000,000; Minnesota, Massachusetts, New Jersey, and North Dakota, well up to

the million mark. The number of children transported in 1920 was probably more than half a million.

Present tendencies.—One wonders why so palpably effective a movement and one so universally satisfactory when fairly tried out should have spread so slowly from auspicious early beginnings. In the Central and Middle Western States, where good progress has been made, albeit slow in most cases, consolidation has literally fought its way through, surmounting difficulties of great variety, including an experience from the lower through the higher courts in a number of States. At present public opinion continues to grow steadily more favorable. The time has even come in some States when school officials must guide and control rather than encourage sentiment that consolidation may not come too rapidly. The question now is not so much to promote consolidation but so to meet the difficulties potential to the situation effected as to insure the utmost efficiency. The size and support of the central unit; distribution of schools so as to serve the greatest number of children and leave no isolated and hopeless small districts out of reach of its benefits; professional preparation of the administrative and supervisory teaching staffs are among the large problems to which educational officials must now turn their attention.

A late manifestation of the growth of centralization and the effort to guide it intelligently is shown by the interest of county and State school officials in the formulation of plans designed to lay off into centralized units larger tracts of territory. Adoption of plans for county-wide consolidation are advocated (or even larger units) before any particular consolidation is initiated. County surveys for the purpose of planning these larger projects are more and more common, usually made or participated in by educational specialists, particularly State education officials. In at least one State consideration is now given to the enactment of a law, state-wide in scope, making it mandatory on county boards and superintendents to have such surveys made and county-wide plans approved before further consolidation is effected. These few instances indicate the trend in the direction of warding off possible discrimination against children in these backward communities where social or economic conditions or prejudice may result in increase of consolidation among progressive communities to the exclusion of children less fortunately located.

The new tendency is toward scientific study of the special problems which the ever-growing number of consolidated schools raise. It is admitted that their administration and organization require breadth of vision and ability not exceeded by the demands of any other system. That they offer problems different from those involved in the administration of small rural or large city schools is also apparent.

These and similar problems of great variety and importance must be solved in the near future.

HIGH-SCHOOL FACILITIES FOR RURAL CHILDREN.

The problem of giving farm children an opportunity for secondary education offers grave difficulties and is still an insurmountable one in many rural communities. Formerly a farmer considered it necessary, when his children reached high-school age, to make some arrangement to send them to a near-by town or city. Sometimes the farmer left the farm entirely, sold or rented it, and moved to the city; sometimes the mother and children or perhaps the children alone left for the nearest or most convenient town in which there was a high school to keep house or board during the school year; sometimes the children were sent to a boarding school. In recent years organized efforts have been made to prevent this exodus from the farm and to establish high schools within reach of rural children in which they can secure a secondary education while spending their nights under the home roof.

Some definite accomplishments toward the extension of high-school advantages to rural children during the biennium are:

(1) An increase in the number of high schools within reach of rural children, generally through some form of centralization.

(2) Additional provisions, usually legal ones, for assisting children of farmers to attend high schools in larger numbers through State, county, or local payment of tuition, board, or transportation of pupils from districts in which there are no high schools to those in which there are. Transportation or other expenses are allowed also in an increasing number of instances to children living at long distances from established or accredited high schools.

(3) Increase in the number of States giving State aid to assist high schools or in the amount given by the State for this purpose. Sometimes State aid is given to establish the high school through assistance in securing a building; sometimes it is given for maintenance; sometimes for tuition or transportation.

(4) The rise of the junior high school in rural districts. New Hampshire, Alabama, and Oregon are conspicuous in this movement. The significance of the junior high school for rural education lies in the relief it affords elementary schools and the large number of students reached in the upper grades with an enriched educational content.

(5) Spread of vocational guidance work in secondary schools. Several States now outline vocational guidance in the high-school manuals.

(6) Spread of vocational agricultural education through larger numbers of high-school students and to a greater number of boys that are not enrolled in high schools, through part-time work.

(7) Unusual interest in reorganization of secondary curricula in line with the recommendations of the reorganization series of bulletins published by the Bureau of Education. Noteworthy studies have been completed or are in progress in practically all States.

(8) Rapid development of a prevocational program of agriculture as a phase of the Smith-Hughes service.

A number of States report to the Bureau of Education progress made in supplying facilities for secondary education of rural children during the biennium.

In Alabama, in the division of secondary education, much progress has been made. The rate of growth in the high schools of the State during the past few years has been more rapid than in any other part of the public-school system. The number of accredited high schools has increased from 149 in 1920 to 184 in 1922; attendance in 1920–21 was 29 per cent greater than in 1919–20, and that in 1921–22 was 20 per cent greater than that in 1920–21.

Michigan provides high-school facilities for rural children in the following ways: (1) Through consolidation; high schools are thereby established in the home district; (2) through establishment of State-aided agricultural schools; (3) through a law providing for the payment of tuition for children residing in a district which does not support a high school to the high school supported in a neighboring district. The amount of tuition a district may pay was raised by the last legislature from $25 to $60 per pupil per year. Local voters may at an annual election raise this amount.

In Tennessee the number of county high schools increased during the biennium from 496 to 533; the number of teachers employed from 1,010 to 1,474; the annual salary from $756 to $1,188; the total enrollment from 19,215 to 29,681; the total number of graduates from 1,703 to 2,802. In 1912 the enrollment in county high schools for white children was 2 per cent of the total enrollment. In 1922 it had increased to 7 per cent.

Other States which report an increase in the number of rural high schools or in the high-school attendance from rural communities generally through some form of centralization are Colorado, Indiana, Iowa, Maryland, Ohio, Missouri, Oklahoma, Virginia, and West Virginia.

Virginia and Indiana report a high school in nearly every county. Virginia reports an increase in high-school enrollment of 10,000 during the biennial period. Ohio an increase of 20,000 pupils. In South Carolina the number of four-year high schools increased ap-

proximately 39 per cent from 1920 to 1921; the enrollment increased 31 per cent from 1917 to 1921. These increases were almost wholly in rural and village districts.

A few States report that high-school facilities are furnished to every rural child in the State. They are New Jersey, where a greater proportion of children in high school come from rural than from city communities; New Hampshire, where a high school is within walking distance of every child; Ohio; Rhode Island; Utah, where one to six high schools are in every county district; Vermont; Connecticut, where few if any rural children are deprived of a high-school education.

The following States report the *number* of rural high schools: Idaho, 25; Kentucky, 500; Oregon, 46 (an increase of 7 over the preceding year; South Dakota (an increase of 36 high schools during the year).

The States which report an increased attendance at high school because of the payment of tuition or transportation charges from district, county, or State funds under new laws or because of increases in the amount allowed for these purposes are Connecticut, Delaware (State pays), Maine, Massachusetts (towns pay both tuition and transportation), Minnesota (State pays tuition), Nebraska, Oregon (county fund), South Dakota, Vermont (up to $60 per year), Wisconsin, Wyoming.

The amount of State aid granted to high schools has been increased in Maryland and North Carolina.

Washington reports an increased attendance of rural children in high schools and California a new State course of study for high schools.

AGRICULTURAL EDUCATION IN RURAL SCHOOLS.

SECONDARY SCHOOLS.

Agricultural education in rural secondary schools is becoming more of the vocational type. In the year 1920–21 there were in the United States 1,721 schools offering vocational agriculture under provisions of the Smith-Hughes Act. The enrollment of students in these schools had grown from 15,453 in 1918 to 42,169 in 1921. Evening schools, part-time schools, and all-day schools are represented. Approximately 80 per cent of the schools were rural high schools, located in purely rural communities, and the students reached were largely from rural districts.

The outstanding developments in secondary vocational agriculture are a more careful statement of objectives, organization of subject matter on the basis of farm enterprises, development of part-time instruction, and itinerant teaching.

Objectives.—In the "Report of Fifth Regional Conference," held at Portland, Oreg., June 5–9, 1922, the following statement of objectives is given:

> It is the purpose of vocational courses in agriculture to aid in developing a type of American farmer who possesses managerial ability and business capacity, an aptitude for farming, and the necessary technical knowledge and skill to produce and market his products, and also one who is capable of adapting himself to our constantly changing social and economic life.

This statement places the leaders in vocational agricultural education among those who plead for a broad educational background in training rural boys. The charge that everything is to be sacrificed for productive skills in educating rural boys can not be sustained in the light of this statement. Undoubtedly out of this clear statement of purpose is going to come extensive reorganization of the content of courses, so that this broader purpose may be realized.

Reorganization of subject matter.—Subject teaching in secondary vocational agriculture is passing. Instead of teaching soils, farm crops, animal husbandry, horticulture, and farm mechanics, specific farm enterprises, such as poultry production, swine production, corn production, and cotton production, are taught. Subject matter is organized about enterprises rather than by subjects, and the details of organization depend upon the jobs of the enterprise and the natural sequence of jobs becomes the sequence of subject-matter organization.

Secondary teachers.—The teacher-training programs are developing in harmony with the statement of purpose and the tendency in subject-matter organization. Further, there is a tendency through the itinerant teacher trainer to give close supervision to the beginning teacher of a definitely constructive kind.

In purely technical agriculture the prospective teacher is giving more time to rural sociology and economics. More intensive study of particular rural problems is required, and more attention is being given to survey methods as a means of determining the content of local courses.

Part-time instruction.—The present drive in secondary vocational agriculture is to reach the group of 1,937,978 boys between 14 and 20 years of age in rural communities and the age group, 20–44, numbering 8,889,244 adult farmers who are not enrolled in an all-day school. Of this number, 11,072 were reached in 1921. This means that only one out of every 997 boys is at present being reached in part-time work. One out of 32½ rural boys enrolled in school is reached in all-day classes. It is felt that this group not in school offers the biggest challenge to vocational education in agriculture.

Itinerant teaching.—Itinerant teaching in vocational agriculture has been practiced from the beginnings in 1918 in sections of the country. This type of teaching in which one teacher serves several contiguous schools has proved its worth.

ELEMENTARY-SCHOOL AGRICULTURE.

Instruction in elementary rural school agriculture is a highly variable factor. Teachers are poorly trained, conditions under which teaching must be done are bad, and until recently less attention has been given to subject-matter organization, methods, and supervision of instruction than in secondary and collegiate agriculture. The present, however, sees an increased interest in agriculture for the elementary rural school. The interest is being manifested through the Smith-Hughes organization, through the club work of the Department of Agriculture in cooperation with the extension departments of the State agricultural colleges, and through State school officials.

There is a growing realization that vocational work in secondary schools is largely dependent for success upon the attitude toward agricultural instruction shown by students who have been introduced to agriculture in the elementary school through classroom instruction or club work. The Federal board and numerous State departments are stressing prevocational agriculture. Definite organization for teaching of prevocational agriculture to children of elementary-school age through junior projects is found in Missouri, Pennsylvania, Oregon, New York, and Oklahoma.

RURAL SCHOOL BUILDINGS.

Increased knowledge of the effects which the selection of the school site, arrangement of rooms, sanitation, ventilation, heating, and general hygiene of the school building have on the health and school progress of children has practically revolutionized our ideals in regard to the whole matter of building and equipping schoolhouses. Country children have apparently profited least from this increased knowledge. While indifference on the part of rural communities and a general lack of enlightened public opinion are largely to blame, a contributing cause of this neglect is found in the financial aspect of the question. This is an important one in small rural communities. Where large building plans are projected, as is done in cities and towns, the employment of trained specialists in school architecture is the accepted procedure. Small buildings, whether homes or schools, representing the expenditure of small sums of money, are believed not to warrant employment of such specialists. Local contractors, builders, or school trustees are often not familiar

with modern standards for school buildings; and small school buildings especially continue to be built without regard to appearance, the demands of modern methods of teaching, or general hygienic considerations.

Surveys of rural school conditions, made during the past five years, have given considerable attention to the discussion of rural school buildings, and have done much to enlighten general public opinion on the subject and to call the attention of school officers to the fact that school buildings of the prevailing type often menace the health, morals, and educational welfare of country children. Leaflets and pamphlets on the subject of school buildings are now issued by nearly all State departments of education. Teacher-preparing institutions and social and community organizations are assisting in spreading health propaganda and explaining the serious results of neglecting hygienic provisions when building schoolhouses. Excellent score cards for scoring or grading rural school buildings are now available, and a number of States issue officially cards for this purpose. Handsome new buildings, such as are constantly being built in increasing numbers as the centralizing movement gains in extent and popularity, serve to raise the standards and to improve the taste and ideals of the people in communities other than those in which they are located. These and other factors tending toward substantial improvement are of growing and noticeable importance.

There are at least four organized direct efforts toward improving the quality of rural school buildings worthy of mention. In each of these some substantial progress has been made during the biennium. Briefly, these efforts are:

(1) Through statutory provision to the effect that all plans for school buildings must be approved and buildings regularly inspected by State officials, usually those connected with the State department of education. If one can judge by the reports of recent surveys and current literature on this subject, this method is one which apparently meets the greatest favor with school and health authorities. It presupposes not only centralizing of authority for approval and inspection of buildings in the State department, but also adequate appropriations for the subsequent enforcement of these provisions.

(2) Through the promotion of centralization of small schools. This pooling of effort and resources makes it possible to obtain the money necessary to provide modern school buildings.

(3) Through State appropriations for building purposes. Sometimes the money is apportioned to districts whose financial condition is such as to make the provision of good buildings a hardship on the community. This form of distribution is usually called State aid for building purposes. In some States money is loaned to

school districts at a low rate of interest. In this way a continuing fund is provided to promote better rural school buildings.

(4) Through a plan commonly called standardization of school buildings, generally promoted by State departments of education through statutory provision or otherwise. School buildings meeting certain prescribed requirements may receive State aid or a plate or other mark of distinction.

In judging progress during a short period it must be remembered that many States have an excessive number of one-teacher buildings, hundreds, even thousands, of which are of the old box-car type. Even log cabins are not entirely obsolete. Twelve States have from 6,000 to 10,000 one-room schools. To modernize or replace all of these that need either is a gigantic task. A quotation from a letter from a State rural school supervisor described conditions in his State which are not unlike those prevailing in others. He says:

> Literally thousands of schoolhouses, shanties of the pioneer type of 50 years ago, have been torn down during the past six years. In their place are found modern school buildings constructed with proper regard to light, heat, ventilation, and the like. Great as has been the progress, there are yet very many buildings of the old type. In almost every county there are rural communities in which will be seen comfortable homes, commodious barns, improved highways, auto transportation, and telephone connection, but which permit the old shoe-box schoolhouse to mar the landscape—a clear case of suspended development.

The State Department of Idaho sends the encouraging report that all old buildings have been remodeled for correct lighting. In that State, schoolhouse plans must be approved by the State board of education. Other States reporting new laws or amendments to the old ones, with provisions for State inspection, are Michigan, Maine, Kentucky, and Washington. In the two former States, plans for new buildings, or extensive repairs, must be approved by the State superintendent. In Kentucky, county boards of education are required to submit plans to the State department for approval. In this State, the three State rural supervisors have enforced State regulations, and significant advancements have been attained during the past two years. In Washington, plans for schoolhouses must be approved by the county superintendent; plans for teachers' cottages and community buildings, by the State board of health.

Minnesota, South Dakota, West Virginia, Wyoming, and Texas report either an increase in the number of standardized schools, or an increase in the amount appropriated for State aid to rural districts for schoolhouse building during the biennium.

STATE COURSES OF STUDY.

In view of the importance of State courses of study to rural schools, it is gratifying to learn that there has been during the

biennium just closed increased attention given to them and their relation to rural life and adaptation to use in one-teacher and other small rural schools. Several States are now engaged in preparing State courses in which the effort is directed toward teaching the elementary subjects in their relations to the lives of rural children. North Carolina has arranged to try out and experiment with the course during the process of its formulation, so that changes may be made based on the results of experimentation with the outlines in rural schools under supervision before they are adopted as part of the accepted course. Illinois has for a decade or more published a course of study providing for alternation of grades in small schools, especially one and two teacher schools. During the past year there was issued from the State department a pamphlet designed to improve organization and instruction in these schools. Definite suggestions and directions are given to assist teachers to overcome the usual multiplicity of classes in one-teacher schools through grouping of grades and classes and adjustable recitation periods.

Among the other States which in their course of study provide for the organization of one-teacher schools on the four and five group method are New Jersey, Connecticut, Montana, and Wisconsin.

Wyoming reports the publication of its first course prepared especially for rural schools. Maryland reports a complete new course for rural schools based on a plan of class grouping. In Maine a course of study adapted to the needs of country children is in preparation. Michigan reports a new special course for rural schools with supplementary bulletins on special subjects. In Massachusetts a new course has just been prepared for the special needs of the rural schools. Kentucky is reorganizing both elementary and secondary State courses in an effort to adapt them more nearly to the needs of rural children. Texas reports "encouragement of a course correlated with home and farm interests." Virginia, South Dakota, Oklahoma, New Hampshire, Mississippi, Minnesota, Delaware, Alabama, Arizona, Colorado, Connecticut, and Oregon report either new or revised courses of study made or completed during the biennium. The Montana State course is based on alternation and combination of classes. Utah reports a uniform course of study throughout the "35 rural consolidated districts."

In all, 25 States reported to the Bureau of Education that some sort of concerted effort was made during the biennium toward improving and adapting State courses of study to the needs of rural schools.