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RURAL EDUCATION

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SPECIALIST IN RURAL SCHOOL PRACTICE
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[Advance Sheets from the Biennial Survey of Education
in the United States, 1916-1918]



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RURAL EDUCATION.

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Specialist in Rural School Practice.

CONTENTS.—Introductory—Administration and supervision of rural schools—Increased financial support for the rural schools—Teachers' salaries—Organization of the rural schools—Growth in rural high schools—Vocational education and the Smith-Hughes Act—The rural school course of study—Status of teachers for the rural schools—National Rural Teachers' Reading Circle—Commissions and committees organized for the advancement of rural education and life—Rural-school surveys—Publications on rural education of the Bureau of Education.

INTRODUCTORY.

Rural education and the war emergency.—The war has served to accentuate many marked weaknesses in our rural school system. For years devoted leaders in this important educational field have carried forward a propaganda to enlist local and national interest in the matter, and not altogether without success. In many sections of the country splendid schools have been organized that fit into every requirement of modern agricultural communities. Whole States are going through the process of reorganizing the primitive one-room schools for effective rural leadership; but, unfortunately, it can not be said that this movement has yet gone far enough to affect rural education fundamentally for the Nation as a whole.

The annual reports of the Commissioner of Education disclose that about one-half of the Nation's children are enrolled in the village and open-country schools. These twelve million children are laboring under distinct educational disadvantages. So far as the open-country schools are concerned, fully two hundred thousand of these schools may still be classed as one-room schools of pioneer type, which but poorly meet the needs of modern agricultural life. Their teachers are largely immature, inexperienced, poorly trained, and of limited vision of rural needs and problems. The school year is much shorter than it ought to be, enrollment of school population is in many States low, daily attendance is often irregular, and compulsory-attendance laws are not always enforced as they should be. The course of study in the small schools is often badly planned and the subjects poorly taught, and financially they are meagerly supported in comparison with what is invested in education elsewhere. Recent educational surveys have disclosed that in certain States the level of school education must be measured by about six and one-half years.

of school attendance for the villages and less than five years for the rural districts. Such limited education can not furnish the intelligent leadership required at this present time of entrance upon the new era of scientific agriculture.

A general reconstruction of rural education likely.—The world war brought home to the general public what educators have long known, that there are in the United States between five and a half and six million illiterate adults, and that more than one-half of these people live in rural sections where there are little or no school facilities. Likewise, there is a public realization that a large proportion of the ill-taught millions of aliens live in rural communities, left there largely to their own resources and inclinations in educational matters. In many States they are grouped in large settlements speaking foreign tongues and using their native language as a medium of instruction in the schools. This has delayed the assimilation process and has been at the root of many un-American practices disclosed by the war.

The war emergency, therefore, found rural education poorly organized to cope with the serious problems of war and the period of reconstruction that will follow the war. The period of isolation in American rural life is gone, and the period of international commercial agriculture is at hand. This demands an organized agricultural life based on the right type of educated leadership, and this can come only through the best kind of rural school education. The returning soldiers who have dealt with large issues, and others who have been drawn into great measures of industrial efficiency for war and peace, will not be content to go back to the old ways in rural communities. What is more, the women who have remained at home have in a measure stood still educationally while the men have grown. They also need the vitalizing influence of a new, much-embracing education.

Federal aid for rural education.—The problem of education in rural communities has attained too vast a magnitude to be left entirely to local and sectional control. The war emergency attracted many of the best teachers into Government activities; the draft called many of the men teachers to their country's standard. This left the rural schools shorthanded and manned largely by inexperienced teachers. To remedy these serious conditions is too much for the ordinary locality. It is a matter for national consideration. As it is national in scope, it requires national aid for satisfactory solution. Federal cooperation and financial aid for the development of rural education might well be extended to the several States on the basis of real merit, to include the following:

1. All-year schools organized to meet the needs of all the people, young and old alike.

2. Teachers of good academic and professional preparation and broad teaching experience.

3. Teaching process preparing the people to meet their responsibilities and opportunities of citizenship and helping them make a good living from the land.

ADMINISTRATION AND SUPERVISION OF RURAL SCHOOLS.

Progress in the administration of rural schools.—School organization in the United States has developed from the needs of community life in the different sections of the country. In pioneer days school organization was wholly a community enterprise, each group of families organizing and supporting its own school as best it could. From these often far-separated group centers, school organization began its outward development, coinciding as a rule ultimately with the geographical unit established for civil administration. Historically there have been given the country three distinct types of school organization—district, town (or township), and county.

The district, which was the original pioneer organization, still prevails in many sections of the country, chiefly in the Middle West and West. The town organization is the basis for school administration in all of New England, Pennsylvania, Indiana, and parts of Michigan, Iowa, and South Dakota. The county unit has prevailed from the first in the South and has more recently been extended in some form to several Middle Western and Western States.

The district unit, which in the early days was the only kind of organization possible, has largely outlived its usefulness as a unit of school organization and administration. Unquestionably it is the cause of much of the inefficient and ineffective schools to be found in many sections. In the States organized on the district basis the prevailing tendency is toward the county unit, which, if rightly organized, offers a large enough area for the introduction of equitable taxation and equalized educational opportunities.

However, the county unit must be planned to allow patrons of the schools a certain amount of local initiative and responsibility or it will fail because of too much central control, as the district unit has failed because of too much local control. Several States that are organized on the county basis have placed all educational matters, including taxation, in the hands of the single county board of education, leaving the local school communities without any direct representation or right to levy local taxes. This has proved an unfortunate practice in many places. The best plan appears to be to retain a representative for each school community who shall represent the needs of his own school before the county board. Likewise, while the county should properly be the unit for general taxation for ordi-

nary school maintenance, every local school community should have the right of taxation for extraordinary purposes, such as improving its school plant, buying sites and lands for agricultural experimentation, increasing teachers' salaries above the county maximum, etc.

At the present time 19 States are organized wholly or in part on the county unit basis for school administration. Of these Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, North Carolina, Tennessee, Utah, and New Mexico may be classed as of the pure county type; that is, in which practically the entire management of the schools rests with the county board of education, with such local assistance as has proved most advantageous. New Mexico is the last State to adopt the county unit. In 1915 the State legislature passed a county unit bill for tax purposes, and the legislature of 1917 made the county the unit for all administrative purposes as well. Says State Supt. J. Howard Wagner, speaking of the success of the new plan:

We now have the county board of education, which has charge of all the schools in the county. This is proving a wise provision, as it centralizes the administration of the county schools. It has already stopped all financial leaks, and better qualified teachers are being employed. It is a great deal more economical than the old system, as all counties are required to work under the budget system.

Professional supervision of rural schools.—The teachers of the open county, whose problems are assuredly the most perplexing in the whole field of education, have suffered for want of expert professional supervision. If many have failed to achieve success, it has been, in large measure, because they have not had that close and expert guidance commonly found in large town and city schools. The whole plan of organization has been at fault, or perhaps, more correctly, circumstances beyond public control have conspired to make conditions what they are. Rural-school supervision in many States has been limited to incidental inspection. The newness of the country, the rapid westward expansion, and other transitions in rural life explain prevailing conditions; but the schools of the new era of scientific agriculture demand more than this perfunctory inspection. System is needed: There must be organization and leadership. This is particularly true at the present time when teachers' tasks are becoming greatly multiplied. The many war duties and the after-war reorganization require of the teachers real community leadership. To give them the necessary help there must be created a staff of school supervisors, both local and State, in addition to the county and district superintendents, who must continue to devote much of their time to office practice and mere school inspection.

Some real progress is being made in many States in professional supervision. In some there are expert supervisors working under

the direction of the county and district superintendents. In others there are the so-called "helping teachers," or "supervising teachers." Many State departments of education have added to the regular staff men and women who devote all their time to directing the work of the local supervisors. This is bearing good fruit.

Washington.—This State has organized its State department of education for the purpose of extending more effective help to rural life and education. There are now in the department one expert in rural education who devotes his entire time to work with the county superintendents, one community center organizer who plans the organization of rural communities with the school and teachers' home as center. There is also a State rural life commission centered in the department of education, and a boys' and girls' club worker who cooperates with the representatives of the Federal Government for the promotion of school and home projects.

Indiana.—Provision has been made for the appointment of elementary school supervisors in such a way that each county with 100 teachers or more must have at least one specially trained school supervisor in addition to the county superintendent, the attendance officer, and the statistical clerk. The first of these supervisors in each county shall under law have charge of the rural schools.

Kentucky.—This State has recently introduced professional supervision for both white and colored schools. At the present time 32 white supervisors are engaged in 24 counties. Eighteen colored supervisors likewise are at work in as many counties, where they are maintained by the General Education Board and the Jeanes Board. The latter devote practically all their time to supervision of vocational subjects.

West Virginia.—This State, which was one of the first to subdivide its counties for supervision purposes, has as many as four supervisors in certain counties. Good progress is reported.

Vermont.—Three years ago a law was enacted making provision for State-wide supervision of schools. All superintendents are now appointed and paid by the State board of education. The average salary of these superintendents during the past year has been about \$1,800, with an allowance of \$125 for expenses.

Montana.—This State is making good progress in school administration and supervision. Speaking on this subject, State Supt. May Trumper says:

The administration of the rural schools in Montana has been greatly improved because of the fact that we now have two rural school supervisors working in very close cooperation with the county superintendents. During the past year our rural school supervisors had visited practically all counties two times. They have held many community meetings, at which times many problems dealing with administration of rural schools have been discussed with trustees, county superintendents, and teachers.

Professional supervision typified in Jefferson County, Ala.—This county may be taken as typical of the best organization to attain professional supervision of schools and teachers. The plan is summarized in the following statement:

1. Subdivision of the county into 11 districts containing about 18 schools each. In charge of each of these districts is a supervising principal who devotes his entire time to supervision. He travels among the schools, directs teachers' meetings, reading circle work, makes requisitions for his supplies, conducts sample lessons, acts as critic teacher, etc. These supervisors made 6,605 visits last year.
2. An assistant superintendent is placed in charge of the department known as "Teacher Training in Service." He has meetings with his teachers on Saturdays, selects reading matter for them, has charge of the reading circle work for the county, assists in the employment of teachers, and determining the standard for employment.
3. The professional requirements have been increased until now it is necessary for one employed to teach in this county to hold a normal-school diploma or its equivalent, or, in lieu of this, a high-school diploma with two years successful experience elsewhere.
4. There are 12 consolidation schools, to which pupils are conveyed at public expense. There are also about 40 union schools; that is, schools made by the consolidation of two smaller schools, but without transportation. Of the 130 white schools, only 28 are one-teacher schools; of the 75 colored schools, only 35 are one-teacher schools.
5. During the year 64 night schools were conducted in rural districts for six weeks, using the teachers employed in day work, these teachers being paid at public expense; 1,230 pupils were enrolled in the high schools, 297 of these being illiterates, and 457 near-illiterates, as it was necessary for them to begin with the primer.
6. The county has two agricultural instructors under Smith-Hughes work, with a salary of \$2,400 each.
7. Four new eight-room consolidated schools have been built during the year, three of these being on the one-story extensible-unit plan. Fifteen other buildings have been remodeled or enlarged. Five acres of ground are required for each of these new buildings.

INCREASED FINANCIAL SUPPORT FOR THE RURAL SCHOOLS.

The most serious problem confronting the rural schools at this time of excessively high costs is financial. If rural children are to get opportunities for education equivalent to those afforded city children, much more money must be expended for their education than has been done in the past. Not alone is less money being expended, child for child, in rural communities than in the industrial places, but if rural children are to get this equal advantage, even more money must be expended than is now being invested on the education of city children, for the reason that education in rural communities will always be more expensive than in the larger schools in organized centers. In rural districts with the many school plants, the ratio of teachers to pupils will always continue larger than in the

cities. The upkeep, fuel, etc., cost more in the rural schools. Transportation facilities have to be provided and teachers' salaries increased if good teachers are to be obtained. In some sections rural teachers are beginning to be paid more than teachers of the grade schools, in order to keep them in the country schools at all.

There is urgent need for serious readjustment in the prevailing methods of school taxation. So long as schools are supported chiefly through local taxation it will be difficult to obtain funds required to give rural children the advantages equal to those enjoyed by city children. The country needs progressive legislation in this field. State, county, and local taxation should be resorted to. It is eminently fair that the State as a whole be taxed for the education of all of its citizens. This rate of taxation should not exceed in any case more than one-third of the entire school maintenance of the State and be distributed among the schools as an award of merit. The county may properly bear the main burden of taxation, this to be used for such general school maintenance as teachers' salary, upkeep of school property, etc., and should be apportioned on the basis of aggregate daily attendance and the number of teachers employed. Finally, the local school community should retain the right of levying taxes for extraordinary purposes, otherwise local initiative might die for want of proper stimulus.

Increased State appropriations for the schools.—Practically all of the States that make use of State taxation for school purposes have been obliged recently to increase their levies greatly, and counties and local communities have followed suit in order to maintain the schools at the present standards of efficiency. Maryland reports its State appropriation for public schools increased in 1918 from \$1,750,000 to \$2,000,000. In addition to this, bonuses ranging from \$50 to \$100 are being paid teachers who remain in their schools throughout the year. North Dakota has increased the amount of State aid for standardization and consolidation of rural schools from \$120,000 to \$225,000. Other States are doing as much or more than these.

TEACHERS' SALARIES.

Public school teaching is the poorest paid of all professions, if the time and cost of professional preparation are taken in consideration. Because of this the American teacher is transient and of short tenure. Many teachers, unfortunately, make the calling a stepping stone to other life callings. At the present time, with its unprecedented opportunities in industrial activities, a serious exodus from the profession is threatened. Indeed, many teachers, particularly rural teachers, have already abandoned teaching for other activities. (See

the chapter on Preparation of Public School Teachers, Biennial Survey of Education, 1916-1918. Many States, in their efforts to stop the exodus, have taken steps to increase their teachers' salaries liberally, although even larger increases will be necessary to keep the best men and women in the schools. The following are some of the increases in salary lists reported to the bureau for the year 1918:

Maine.—Salaries increased about 25 per cent.

Montana.—Very few schools pay less than \$70 per month in rural communities. Most of the schools range from \$85 to \$100 per month or more for experienced teachers.

Maryland.—The legislature of 1918 increased the minimum salary for high-school teachers from \$600 to \$800 for the different kinds of certificates. White elementary-school teachers of three, five, and eight years' experience will receive salary increases based on kind of certificate and length of experience, as follows:

Salaries of elementary-school teachers.

Grade of certificate.	Beginning teachers.	Three years' experience.	Five years' experience.	Eight years' experience.
Third.....	\$400	\$425	\$450	\$475
Second.....	450	475	500	525
First.....	500	525	550	575
Principal.....	550	575	600	625

Kentucky.—A law has recently been passed placing the minimum salary for teachers of the second class at \$45, and of the first class at \$55.

Pennsylvania.—The following minimum salaries have been adopted: Provisional certificate, \$45 per month; professional and normal-school certificate, \$55 per month; permanent certificate, \$60 per month. The salaries of teachers in rural community vocational schools have risen steadily. Principals of vocational high schools receive from \$1,200 to \$1,800, teachers of agriculture from \$1,200 to \$2,000. Vocational supervisors and home-economics teachers receive \$100 per month, and other teachers of this type of rural school from \$75 to \$125 per month.

Washington.—Increases in teachers' salaries for 1918 range from 15 to 20 per cent. Teachers are generally being engaged by the year instead of for a nine months' period.

Wyoming.—Salaries of rural teachers range as a minimum from \$70 to \$90 per month and as a maximum from \$100 to \$125 per month.

Vermont.—There has been an increase the past year of about 12 per cent in the salaries of rural-school teachers. These teachers are now almost invariably employed by the year.

ORGANIZATION OF THE RURAL SCHOOLS.

Improvement of one-teacher schools where centralization is impracticable.—There are probably 212,000 schools of the one-teacher type still in use in rural communities, the only means of education open to the large majority of rural children. It is now accepted as good national policy to reorganize the small schools to meet the needs of the new era of commercial agriculture. Many of these schools can never be converted into large centralized schools for topographical and other reasons. In broken mountain districts or in sections of the country cut by streams and ragged coast lines, or in sparsely settled regions, such reorganization is seldom feasible and should not be urged. If, on the other hand, these natural obstacles do not exist, the centralization movement should be championed rationally and emphatically. The changing conditions leading to modern country life have proved utterly beyond the abilities of the small one-teacher school. Nowadays it is necessary to charge the school with a multitude of responsibilities which formerly devolved on the home. Only where there are exceptional teachers in charge of the small school can this become a truly community school. In many instances it fails in the larger purpose and remains an institution furnishing at best a meager measure of the fundamental subjects.

Reasonable standards.—For the future it would seem that a really effective one-teacher school should be standardized around such educational essentials as these:

1. A teacher with specialized preparation and willingness to make rural community teaching his permanent occupation.
2. A school plant organized on the all-year plan, equipped to provide an education fully related to rural life and its needs.
3. A course of instruction and methods of teaching in accord with the needs and nature of agricultural people.

Looking toward the all-year school.—The new standard requires, first of all, a teacher who has preferably had his professional training in one of the special schools for rural teachers, a person of rural mind and in love with rural life, who understands its difficult problems. He must be hired by the year, living at the school in a home provided by the community. The school premises should contain 5 acres or more of land, preferably more. The school building should be planned with full equipment for experimental agriculture and gardening, home economics, and manual training. There should also be ample room for community rallies. The chief departure in the new school plant is the teacher's cottage.

Some real progress has been made the last few years in the construction of homes in connection with such schools as these. The State of Washington reports 196 teachers' cottages erected and many

others underway. Many of these form a part of the one-teacher school plants, while others are erected at the consolidated schools. Wyoming reports that many cottages have been erected during the past year. Texas now counts upward of 200 cottages, and several other States are accomplishing almost as much. All-year schools of this type would hold out real inducements to strong married teachers to take charge of the schools and would make it quite possible for the teacher to conduct many outdoor activities of the school during the summer months.

A better type of school consolidation.—It is probably safe to say that the period of experimentation in school consolidation has passed. The movement has now been accepted as good national policy. The important thing at the present time is to see that school consolidation shall come in its best form. Otherwise, little will be gained by displacing the old type of education. There are about 10,500 consolidated schools in the United States in 1918. These are schools with two or more teachers, resulting from the centralization of two or more schools, providing facilities of the graded-school type. The most satisfactory type of consolidated school is planned to give the rural community just the kind of education required by an agricultural population. Broadly cultural and yet practical; preparing them for happy, wholesome, remunerative living on the land. Many of the early consolidated schools were planned as big graded schools offering courses of study in no wise adapted to the needs of rural districts. The new schools are organized with a view to preparing for the new agricultural era a permanent farming population of highest ideals. The last two years have witnessed the organization of many exceptional schools of this type. The brief statement of the Sargent Consolidated School in Colorado which follows is typical of what is being accomplished in many States:

The Sargent Consolidated School, a Colorado county life institution.—It takes time to complete such a school plant as that of the Sargent Consolidated School, and it was not until January, 1918, that the new building was occupied, being then unfinished. It was dedicated and christened April 23, at which time 50 autos were parked on the grounds and more than 500 enthusiastic country people were packed into the large school and community auditorium to witness the event to which they had looked forward with so much pleasure.

This fine modern \$35,000 school building was scarcely finished when another bond issue for \$18,000 was voted. With this an 8-room building is being erected to serve as a home for the superintendent. The contract is also let for a 10-room teacherage for the other eight teachers, and the plans are drawn and approved for a garage, 40 by 70 feet, with a gymnasium in the basement.

In this most modern and up-to-date rural school plant \$53,000 has already been expended or contracted for. These people have not only provided for the present, but have anticipated their future needs for years to come. The building itself is complete in every detail. It is a beautiful structure, well designed for all the lines of work that should be carried on in a modern rural

school. It has standard classrooms sufficient to accommodate 500 children. It has a large school and community auditorium for both school and neighborhood meetings. It has well-equipped agricultural and domestic science laboratories, and a manual-training shop, these three lines of work being introduced the first year. Thirty boys, each of whom owns a registered gilt, have organized a pig club. Already pigpens and chicken coops dot the rear of the 10-acre school site. A gasoline engine furnishes water under pressure for drinking fountains, lavatories, and toilets, and generates electricity for lighting the building, as well as for charging the storage batteries of the auto busses used in transportation. It is still further utilized as laboratory equipment in the study of electricity and auto repairs.

The first year 208 children enrolled, 30 of these being in the new high school.

At present 320 school children live in the district, and it is estimated that 300 of these will be in school next year, with 50 in the high school.

Last year 180 children were transported to and from school in five large Studebaker busses, a few riding 14 miles each way. Two more busses of the same kind have been purchased, and next year at least 240 children will be transported.

All the nine teachers, each of whom has had either a college or normal training, are nicely and comfortably provided for in the two large new teacherages now being erected by the district. No more itinerant teachers, coming into the district Monday morning and returning to some town early Friday afternoon, for this district. They are expected to live in the district and to identify themselves with the community life therein. Moreover, each teacher will be employed because of some special preparation and fitness for work in a rural school and rural community. The superintendent is a young man with a vision, and already has earned a reputation as a community builder.

This school has also been approved for Federal aid in home economics under the Smith-Hughes Act.

The following summary by States gives some idea of the progress in a few of the States making reports for 1918:

The New England section of States centralizes its rural schools more generally by closing unnecessary small schools and conveying children at public expense to the remaining schools. This tends to remedy teacher shortage, and at the same time provides a better graded school as well. Maine reports having closed many schools during the year, conveying the children to stronger and better schools. Rhode Island reports that school consolidation has progressed as far as it can in the State without overdoing consolidation to the detriment of some of the schools. South Dakota, a State in which school consolidation is of recent origin, reports 42 new consolidated schools.

Maryland and Kentucky, like New England, depend more on closing the small unnecessary schools and conveying the children to larger schools of one and two teachers. Kentucky thus has only 79 consolidated schools, 12 of them with transportation, while it has 1,084 rural schools with two or more teachers. These are of the so called union-school type.

In New Mexico school consolidation is making rapid progress, particularly in the irrigated sections, where many large fine consolidated schools have been organized during the last biennium.

Washington has steadily increased the number of its consolidated schools, there now being 22 such institutions in the State. "It is true in this connection," says the State superintendent of education, "that good roads follow consolidation of school districts in very many instances."

In North Dakota 52 consolidated schools have opened their doors during the year and 60 new consolidations were voted. The total number of consolidated schools in actual operation are 447.

West Virginia has established 120 consolidated schools, 20 being organized during 1918.

Pennsylvania, on account of its difficult topography, has made somewhat slow progress in consolidation of schools. However, as may be seen from the following summary, compiled by the State board of education, some real progress is being made:

Number of one-room schools in the State.....	9,875
Number of two-room schools in the State.....	1,320
Number of one-room schools having an average attendance of 12 or less... 1,715	
Number of townships where complete consolidation would be feasible... 552	
Number of schools or schoolrooms closed as a result of consolidation in the last 10 years.....	715
Number of the above that were one-room schools.....	684
Number of pupils being transported to centralized consolidated or joint schools.....	6,201
Number of vans, coaches, or wagons used for transportation.....	326

The consolidated schools of Iowa are, most of them, of excellent type. The legal provision for State aid requires a large land area to be used for playgrounds and experimental purposes. This has, from the first, given the consolidated schools of the State a decided agricultural bent. Many of the schools are township-consolidated schools; i. e., they serve the educational purposes of an entire congressional township. Many of them have well-organized four-year high-school departments. The following is a summary of school consolidation in the State:

Up to June 30, 1917, 225 consolidated districts were organized.

Thirty-five thousand boys and girls have passed from the one-room school to a standard graded school.

The advantages of the standard high school have been given to 6,500 boys and girls.

About 3,700 of these high-school boys and girls are from rural districts.

The new schools furnish high-school facilities not alone for their own district but for neighboring districts which pay tuition.

Better grade teachers are secured by the payment of about \$5 per month on the average above what is paid in the one-room schools, and this at a less average cost per pupil.

About \$5,000,000 have been expended for new buildings, grounds, and equipment.

The equipment of these schools is equal to that found in the best city independent districts.

The course of study has been revised to give at least one year of industrial training in the subjects of manual training, domestic science, and agriculture, under the direction of a trained teacher.

In a number of instances special classes have been organized for the instruction of older boys and girls who have dropped out of the one-room school without completing the eighth-grade work.

This work has been carried in the form of winter courses extending from December 1 to March 15.

Two hundred and forty-five thousand dollars has been expended for State aid for consolidation. No money expended by the State has brought greater returns than this.

The State aid has not been given these districts as a gratuity but in return for the expenditure of a much larger amount on the part of local districts for school purposes. The schools have become demonstration schools for the State of Iowa and are thus encouraging other communities to reorganize their small schools.

GROWTH IN RURAL HIGH SCHOOLS.

One of the most urgent problems in rural education is to provide the people with easily accessible rural high schools. The percentage of country people educated in secondary schools of rural type is disappointingly small, in contrast with those who have similar facilities at the industrial centers. Rural people who are favorably situated with regard to town high-school facilities take advantage of the latter, although this school often tends to draw the farming class away from agricultural activities into other callings. It is well to reemphasize here that city high schools are organized for city children. Similarly, rural high schools should be organized for rural children. Some people, and farmers among them, hold the false opinion that to differentiate between city and country people in educational affairs is a discrimination against country children. This knowledge is based on the assumption that city life is superior to country life, which, to those who understand it best, is really the only normal American life there is.

The present movement is to establish rural high schools of an agricultural type in the open country or in the rural villages. The purpose is to organize the course of study to suit the needs of its agricultural environment.

Many States report good progress in establishment of rural high schools during the year. Many of these offer night-school courses for adults, including aliens, who may here obtain their first lessons in American citizenship, short courses for people beyond school age during the winter months, extension courses planned in cooperation with the State colleges, and other progressive activities for the whole community.

The ultimate solution of rural school organization in rural communities will probably be the adoption of the 6, 3, and 3 plan. That is to say, a plan to reduce the number of years in the one-teacher schools to six, which will make it possible to lengthen class recitations and accordingly help the teacher to provide more and better instruction for the several pupils than in the past. The more favored localities will plan to offer a prevocational junior high-school course of three years, in addition to the six years of elementary-school work. Many of these will be open country schools. Finally, a few centers will offer both junior and senior high-school work of an agricultural type—this chiefly in the towns.

West Virginia.—The State board of education has recently adopted a sweeping 6, 3, and 3 plan for the organization of all the schools of the State. This will mean the establishment of junior high schools in a large number of small places which have been unable to afford high-school facilities or which have sought to solve the difficulty by organizing one, two, or three year high schools of the old type, looking toward college entrance. Under the new plan it will be possible to help both those who plan to go to college and the much larger number who will go from school direct to their life work.

Vermont.—Dr. Milo B. Hillegas, State commissioner of education, says:

In Vermont the junior high school is helping in the solution of this problem. During 1916-17 there were 12 of these schools in successful operation in our State and their appeal to parents and children was sufficient to produce a steady increase in their enrollment and attendance. A considerable number of those who had previously left school returned, and virtually no students dropped out except as they moved from the town.

The chief aims of the Vermont junior high schools may be stated as follows:¹

The work of the junior high school is planned for the best interest of the pupils who do not intend or expect to go to college.

The work in the junior high school, so far as possible, recognizes material aptitudes and individual differences of ability in the pupils.

The studies in the junior high school utilize local interest and opportunities.

The work in the junior high school prepares for central or senior high school, and thus for college. It need not, however, include the work ordinarily given in the first and second years of high school.

In other words, to quote further from a recent report on Vermont junior high schools:²

The fundamental purpose underlying the establishment and maintenance of junior high schools in Vermont is the extension of the educational opportunities

¹ See Vermont Junior High Schools. State board of education Bul. No. 1, 1918, p. 8.

² Same, p. 8.

of each individual boy and girl in the State in the light of our professional educational aim—social efficiency. This means that the work must be planned to suit the individual needs of the pupils. It means that the school has just as much responsibility in equipping for their life work, to the greatest possible extent, those large groups of children who drop out of school early as it has in equipping the few who plan to enter college. It means the provision of nourishing, worthwhile study material for the gifted pupil quite as much as the discovery of the most promising field of activity for and to the dull pupil and the development of such abilities and skills as he may possess.

VOCATIONAL EDUCATION AND THE SMITH-HUGHES ACT.

The so-called industrial subjects, including agriculture, home economics, and handwork of boys and girls, which have been making good progress in many States during recent years, have received a new stimulus with the recent passage of the Smith-Hughes Act. While aid is granted under the new law only to persons about 14 years of age, i. e., for secondary training, a marked stimulus has been given the industrial subjects in elementary schools as well, since these prepare for the more advanced and concrete work in the high schools. The new Federal aid is a powerful instrument in organizing good rural high schools in communities which could otherwise have no such facilities. At least two States (Massachusetts and Pennsylvania) have had to make little or no modification in their established vocational schools to obtain the new aid, as these States have been organized on a thoroughgoing State-wide basis for several years.

These two States might well be used as models for other States in which vocational education is not so well established or developed. Accordingly, a somewhat detailed statement of the organization and progress of this type of education in the two States is given herewith. The discussion of the Massachusetts plan has been prepared by Dr. Rufus W. Stimson, agent of the Massachusetts State Board of Education. The statement of the Pennsylvania plan is from the pen of State Supt. Nathan C. Schaeffer.

PROGRESS OF VOCATIONAL EDUCATION IN RURAL COMMUNITIES IN MASSACHUSETTS UNDER THE SMITH-HUGHES ACT.

The Massachusetts home-project plan of vocational agricultural education required no modification in order to meet the conditions of the Smith-Hughes Act. The plan has become somewhat widely known through Bulletin 570 of the United States Bureau of Education and bulletins of the Massachusetts Board of Education, as the "Home Project Plan of Teaching Agriculture." Ten years of experience with this plan have simply led to greater and greater confidence in both its pedagogic and its practical validity.

The home-project plan is a plan of earning and learning. Accurate records of productivity have been kept by pupils from the beginning. Comparative tables have been published from year to year, in which have been shown the earnings of pupils from farm and from nonfarm work. The ratio year by year has continued to be outstandingly favorable to farming. In 1917 reliable re-

turns were made by 511 boys and 7 girls, or by a total of 518 vocational agricultural pupils. Their earnings from farm work amounted to \$111,500.87, and from other work to \$8,808.16. Figures for preceding years were as follows:

Earnings of pupils.

	Boys.	Girls.	Total.	Farm work.	Other work.
Totals for 1912.....	66	4	70	\$9,754.28	\$1,345.89
Totals for 1913.....	86	8	94	15,399.90	2,582.01
Totals for 1914.....	230	8	238	27,934.47	4,124.08
Totals for 1915.....	413	5	418	51,279.89	4,974.88
Totals for 1916.....	489	8	497	75,766.53	8,408.90

If the ratios were reversed it would be a fair presumption that agriculture were not the main, but decidedly the minor, interest of the pupils. Direct "learning" gains can not be measured in dollars and cents, and are difficult of precise measurement in other terms. Those who have given but little thought to the methods of instruction used have sometimes argued that the principal aim in Massachusetts was the dollar or the earning. In Massachusetts we have frankly accepted as a challenge to our best endeavors the reasonable expectation that if our instruction in agriculture is sound, is worth while, it ought to yield a profit from year to year; but, having accepted this challenge, we have by no means neglected the other challenges of vocational education.

Pupils are admitted, on reaching their fourteenth birthdays, to the advantages of vocational agricultural education, provided they can establish a reasonable presumption that they can profit from it. Academic standards such as have determined admission to high school have not been enforced. In most cases, however, vocational pupils could have entered high schools without conditions, and the grade of mental ability and the rate of progress among agricultural pupils have compared favorably with those of other pupils of high-school age.

The vocational agricultural schools and departments in high schools are suffering, as are other schools and departments of education, from the war. Returns for 1918 will not be filed until about November 1. It is more than likely that a 30 per cent shrinkage of enrollment will be shown by those returns.

The principal forward step in Massachusetts in connection with the receipt of Smith-Hughes funds for vocational agricultural education is the establishment of a new agricultural teacher training plan. This is a sort of project plan of teaching teachers how to teach agriculture after they have been appointed for service. The instruction will be itinerant—from teacher to teacher and from school to school. One man is devoting his time exclusively to this work. No two schools are alike. Agricultural departments in high schools differ from the schools and from each other. The teacher trainer is studying the conditions under which each must do his work and is helping each teacher on the spot better and better to meet the conditions with which he is confronted.

Twenty special war-emergency departments have been approved in which State-aided agricultural instructors are supervising war gardening by adults. Last year 2,549 adults grew war-garden products to the value of \$78,180.71, of which, products to the value of \$45,083.50 were for home use and the remainder for sale or exchange. State aid for such work was approved in the cases of eight towns and cities. During 1918 the number of towns and cities receiving State aid has been increased to 20, and the products bid fair to be increased proportionately.

RURAL COMMUNITY VOCATIONAL SCHOOLS IN PENNSYLVANIA.

Twenty-three agricultural high schools, commonly known as rural community vocational schools, have been established in the rural districts of Pennsylvania. Each one of these schools is practically an agricultural continuation school, as the farmers' boys enrolled therein are continuing their education while being regularly employed on the farms. In all of these vocational schools night schools were held during the winter for farmers and their sons who were beyond school age. These courses usually extended through a period of six weeks. In one or two of the schools short courses were conducted during the winter for young men who previously dropped out of school but who wished to continue their education along agricultural lines during the winter months. The State College of Agriculture cooperated very effectively in the operation of the night schools by furnishing many speakers and teachers.

Forty-two rural communities have established vocational agricultural education for boys, and 33 rural communities have also established vocational home-making education for girls. The war has prevented the rapid development of this work by calling many of our agricultural instructors into military service. Plans are being effected for a broad development of this work immediately upon the close of the war.

Rural districts establishing and operating rural community vocational schools have invariably increased the tenure of office of their teachers by employing the principal of the school for a period of 10 or 12 months per year, and the agriculture teacher always for a 12 months' period. Many of these teachers are given a three-year contract. Salaries of teachers in these rural community vocational schools have risen quite steadily. The principal of the high school now usually receives from \$1,200 to \$1,800 per year; the teacher of agriculture \$1,200 to \$2,000 per year; the vocational supervisor of home making about \$100 per month; and assistant teachers in the academic department from \$75 to \$125 per month.

The rural community vocational school has a staff of teachers ranging from three to six in number, the number depending upon the size of the student body. About 75 per cent of these teachers are college graduates.

Plans are now being developed and will this month be submitted to the State board of education for the training of vocational teachers of agriculture and teachers of home economics in vocational schools.

The most encouraging part of our plan for rural community vocational education seems to lie in the fact that we are securing teachers who are better prepared for their work and who are being paid higher salaries with longer tenures of office.

THE RURAL SCHOOL COURSE OF STUDY.

The reorganization of the course of study for rural schools is probably the most important phase of rural education that engrosses the time of rural educators at the present time. Readjustments are gradually taking place in the materials and methods of the rural schools, but such a hold has tradition on what is taught and learned in the schools that the process of change has been exceedingly slow. In the past, progress in teaching rural school subjects from the occupational point of view has been hindered greatly by inflexible established State courses of study, which are usually planned alike for all elementary schools, whether in town or in country.

Fortunately, many States are beginning to plan distinctive courses for the rural schools. Louisiana has attained marked success in its rural schools under a very progressive course of study planned several years ago. Montana has recently published a course of study covering all the fundamental subjects and vocational subjects usually taught in the rural schools. Other States are planning similar courses for their rural schools.

Meanwhile, several committees have been organized, or are being organized, for the purpose of making a fundamental study of the entire field of rural education.¹ In the same connection should be mentioned the innovation recently made for the study of rural education by the rural education department of Teachers College, Columbia University. This embraces a cooperative plan of education between Teachers College and two New Jersey counties, the schools of which will be used as practice schools and study laboratories for the development of the best teaching practice and study course for rural schools.

STATUS OF TEACHERS FOR THE RURAL SCHOOLS.

Effect of the war on teacher supply.—A study made by the rural school division of the bureau indicates clearly the serious proportions reached in the dwindling of the supply of rural teachers. Partial returns have been completed from 1,150 out of 2,964 counties in the 48 States. According to the figures returned, these 1,150 counties report a shortage of 10,456 rural teachers and 2,004 other teachers. Only one State, California, reports no teacher shortage, either rural or urban. On the basis of the counties compiled to date, there is probably a shortage of about 27,000 rural teachers and at least 5,000 other teachers. The bureau estimate for past years places the annual number of new rural teachers at 87,500. The proportion of beginning teachers for the year 1918-19 is abnormally large. In some counties the superintendents report as high as 85 per cent of teachers without previous experience. The median for experienced teachers for the country at large is 19 per cent. On the basis of figures returned, at least 125,000 inexperienced teachers will be employed in rural communities. In addition to this, the rural schools are losing most of the small number of men teachers. The 1,150 counties reporting have lost 1,955 men. Indeed, 41 per cent of all men who taught in rural schools one year ago seem to have left the profession. The reports from Connecticut indicate that the few men who have taught in the rural schools will all be replaced with women teachers for the current school year.

¹ Notably may be mentioned the Bureau of Education committee on rural school courses of study, and the educational committee of the recently organized National Rural Life Commission.

Even before the war the most difficult phase of the whole educational problem was how to get and retain in the profession an ample staff of well-prepared rural teachers. Since the country's entrance into the war the problem has become greatly intensified. Now is the time therefore to drive home to the people what is necessary before better things can be attained in the field of professional rural teaching. The public will have to become fully aware of their responsibility toward the teachers; they will have to make the schools and housing conditions more attractive than they now are, and in other ways make feasible long, well-paid tenures in the same community. The Government must, by legal enactment, safeguard the profession and offer special inducements to all teachers to equip themselves well for their profession as a life work. With this as a basis, the teachers will be more ready than now to strive to attain genuine professional standards of teaching.

Teaching rewards.—Teaching rewards should bear a definite relation to the experience and time incurred in securing the teaching certificate. Salaries ought, accordingly, to be based on the kind of certificate held. There should in every State be a legal minimum salary for each type of certificate. Similarly a second year in the same school community ought to be awarded with a State grant of a definite sum, say \$5 per month; a third year with double the above sum; and the fourth and each subsequent year with treble the first sum. These bonuses should always be in addition to the salaries paid by the local community.

As has been pointed out elsewhere in this chapter, several States have already adopted the plan of scaling salaries on the length of experience and the kind of teaching credentials held by the teachers. Wisconsin, Indiana, and Maryland are among the States basing their salary scales on the degree and kind of professional preparation and tenure in the same community.

Paradoxical as it may seem at first thought, the remedy for an ample supply of well-prepared teachers should be sought in gradually increased professional requirements of all rural teachers. While during the war period it was impracticable to legislate against admission to the teaching ranks by the ordinary examination route, the present is the right time to look forward to ending this practice as soon as possible. The teacher in the effective rural community school of the future may be expected to come into the profession from the professional teacher-training schools only. This, together with increased salaries and improved living conditions, will help to dignify the profession and place it on the higher level which should always have held, but which in recent years seems to have been largely lost to the American teacher.

Professional requirements.—Many States are steadily increasing the professional requirements of all teachers. The normal requirement recently laid down by the Bureau of Education in its State surveys is being adopted in several sections in the country. (See the chapters on Preparation of Public-School Teachers, Biennial Survey of Education, 1916-1918.) This standard requires that all public-school teachers must, as a minimum, have completed a four-year high-school course and have had, in addition thereto, at least one year of professional training. This includes rural schools teachers as well as other teachers.

In order to reach these standards by a time fixed by law, several States, through their normal schools and other teacher-training institutions, have established interesting and profitable extension services over the State, for the teachers who are unable to attend the normal school regularly. The first State to enact a movement of this kind was probably Iowa, which, through the State Teachers' College at Cedar Falls, has organized a State-wide service of this kind. The Bureau of Education, in its surveys of education in North Dakota, Washington, and Arizona, has recommended similar extension services for these States, which are just getting underway.

Schools preparing rural teachers.—During the school year ending 1915 the 273 public and private normal schools enrolled 100,325 students and graduated a total of 21,944. It is quite certain that most of these teachers found positions in towns and cities, as did most of those who graduated from the schools of education in universities and colleges. The agricultural colleges have also done something for the preparation of secondary-school teachers in agriculture and teachers for some of the strongest consolidated schools.

The largest immediate supply of rural teachers comes from the training departments of the high schools in many States. Next in point of numbers stand the normal schools; then, in the order mentioned, the schools of education in colleges and universities and the agricultural colleges. A study¹ recently made by the Bureau of Education on rural-teacher preparation in county training schools and high schools discloses that 21 States in 1915-16 were preparing teachers for rural communities in 1,493 county normal schools and high-school training departments and classes, which enrolled a total of 27,111 students. From these schools 16,626 teachers were graduated in 1917. Since that time Montana has organized similar classes in 11 schools, with an aggregate attendance of 200 students.

The real hope of the country for an ample supply of well-trained rural teachers still rests with the public normal schools. A few years ago these institutions were devoting most of their energies to train-

¹ Bulletin, 1917, No. 31.

ing city and town teachers. During the past few years there has been a marked change in the disposition of the normal schools in this regard. Many of them, established in agricultural sections of the country, have reorganized their work to meet the demands for the new type of rural teachers. In many schools this reorganization has come as well organized, distinctive rural-school departments in charge of a director and assistants. In other schools the work has not gone quite so far and is being offered as special courses for rural teachers, given chiefly during the summer sessions. Experience with the two types of organization demonstrates quite clearly that the only worth-while organization is the special rural teacher-training department. Up to the present time 122 rural-school departments have been established in the normal schools. Many of the departments are in charge of a director, who usually teaches rural sociology and economics, and one or two other instructors, one of whom is a rural critic teacher. Altogether 84 of these departments make use of rural practice schools, either erected on the campus or located in near-by country districts; 97 other normal schools offer specific courses for training rural teachers, some limiting the courses to the summer sessions. The above enumeration shows an increase of almost 100 per cent in these facilities over what the schools offered in 1915, but even with such progress there is much still to be done, as many of the schools do not realize the far-reaching importance of the work of these specialized departments and do not support them as liberally as should be done to make the work in every respect satisfactory.

NATIONAL RURAL TEACHERS' READING CIRCLE.

The National Rural Teachers' Reading Circle was organized by the Bureau of Education in 1915 in cooperation with an advisory committee of the State superintendents of public instruction. The purpose is to be of direct assistance to the thousands of progressive serious-minded rural teachers of the country who desire guidance in their study to improve themselves professionally. Never in the history of our country was there so great a demand for well-prepared rural teachers and supervisors as at the present time. It is to assist in finding and equipping these educators that the Bureau of Education organized the reading circle work three years ago.

The American farmers are doing their great share in winning the war through increased production from the land. After the war is won the rural population must take an equally vital part in the economic reconstruction that is sure to follow. This calls for a new type of leadership, cultured and educated in practical phases of modern scientific agriculture. The most important and indispensable agent in the attainment of this task will be the rural teacher. Without the

well-educated, broad-minded, sympathetic teacher any system of education can only be a lifeless mechanism.

Therefore, the public must look to the country teachers and their preparation and see to it that they shall be men and women of the best native ability, the most thorough education, and the highest degree of professional knowledge and skill. Since the time of organization a large number of progressive rural teachers of the country have become members of the reading circle. No attempt has been made to draw to the circle large numbers; the aim has been rather to list a few leaders from each county in the several States. Results have been very satisfactory. Of the number matriculated a large percentage have completed the work and have received the commissioner's certificate.

The reading circle is without cost to the members aside from procuring the necessary books, which may be furnished from the publishers at regular retail rates or they may be secured through local libraries, or in other ways. There is no restriction as to membership, although it is highly desirable that applicants have a liberal acquaintance with the best literary works, past and present.

The books for this period reflect largely the new conditions in education due to the unprecedented changes going on in the world today. They are classified under six heads as nonprofessional books of cultural value, civic and patriotic readings, educational classics, general principles and methods of education, rural education, and rural-life problems.

The work is intended as a two-year reading course, although it may be completed by the industrious teacher in a shorter time. To those who give satisfactory evidence of having read intelligently not less than four books from the general-culture list and three books from each of the other five lists—19 books in all—within the two years of the time of registering will be awarded a National Rural Teachers' Reading Circle Certificate signed by the United States Commissioner of Education.

COMMISSIONS AND COMMITTEES ORGANIZED FOR THE ADVANCEMENT OF RURAL EDUCATION AND LIFE

Several commissions have been organized during the year for the advancement of rural education and life. The most important of these organizations are here noticed.

The National Country Life Commission.—The first steps toward organization were taken by a number of educators interested in following up the work done by the original commission on country life appointed by President Roosevelt in 1908. A permanent organization was formed at Pittsburgh, June 29, 1918.

The general program and objectives of the commission have since that time been definitely settled and committees have been appointed. These include the following committees: I. Means of communication. II. Home making. III. Means of education. IV. Rural government. V. Health and sanitation. VI. Recreation. VII. Country planning. VIII. Morals and religion. IX. Country life objectives and values.

These committees are most of them divided into subcommittees. The committee on means of education is subdivided as follows: (a) Rural, elementary and secondary schools; (b) Agricultural education; (c) Adult education.

The central purpose of the commission is to make a study of the important problems in rural life, what principles govern their solution, and what steps should be taken now toward meeting them. Plans are underway to prepare a statement of the whole rural problem, including references to easily available literature on this subject for the use of school officials, elementary schools, high schools, granges, farmers' unions, rural women's clubs, farm bureaus, and other country organizations. Dr. Kenyon L. Butterfield, president of the Massachusetts Agricultural College, Amherst, is general chairman of the commission, and Dwight Sanderson, United States Department of Agriculture, secretary.

Committee on study of consolidation and rural high schools in the United States and Canada.—This committee was organized by the section of State supervisors of the National Education Association, at its Kansas City meeting. The work has gradually been expanded from a rather small effort to a most thoroughgoing study of school consolidation and rural high-school organization in all the American States and the nine Canadian Provinces. The central committee consists of H. W. Foght, chairman; S. B. McCready, Toronto, Canada; Leo Driver, Winchester, Ind.; Miss Charl Williams, Memphis, Tenn.; J. M. Foote, Baton Rouge, La., and C. G. Sargent, Fort Collins, Colo. This committee is working in cooperation with a larger committee of 57 educators, representing the several State departments of education and Canadian provincial ministries of education.

The work of this committee is now well underway. It is the committee's purpose to report at the Chicago meeting of the Department of Superintendence in February, 1919. The scope of the work will include statistical data from all the States and Provinces, together with intensive studies of 19 counties and a large number of individual schools. The results of the study will be published as a bulletin by the Bureau of Education.

The Bureau of Education committee on rural school course of study.—The Bureau of Education has worked on the reorganization of the rural school course of study for several years. The bureau spe-

cialists are working in cooperation with an outside committee of educators selected from the several sections of the country at large.

This committee has undertaken a searching study of rural education. The plan underway is first to organize the content of the course of study, based on cultural and occupational needs. This subject matter is then to be tested and worked out in practice schools at several places over the country.

The committee on rural education appointed by the National Education Association at its regular summer session.—The committee comprises representative educators headed by State Supt. J. Y. Joyner, of North Carolina. The purpose of this committee is to make a searching study of rural education in all its several phases.

RURAL-SCHOOL SURVEYS.

Several important school surveys have been completed within the last biennium which have emphasized various phases of rural education. Among them may be mentioned the following State-wide studies made under the direction of the Bureau of Education:

A survey of the educational institutions of the State of Washington.

Educational survey of Wyoming.

Educational conditions in Arizona.

Educational survey of Tennessee.

Educational survey of the schools of South Dakota.

While all these surveys give space to the rural schools, the subject is notably emphasized in the studies of Wyoming, Arizona, South Dakota, and Tennessee. Some instructive age-grade statistics, included in the surveys, show graphically that the present system of school education in country districts is much less effective than the schools in the incorporated places, the number of overage pupils being fully 25 per cent greater in the rural communities than in the towns and cities.

Self-surveys of rural schools have been promoted in a number of States, notably in Minnesota, Wisconsin, Missouri, and Montana. The tabulations and conclusions of these surveys may be procured by addressing the several State departments concerned.

PUBLICATIONS ON RURAL EDUCATION OF THE BUREAU OF EDUCATION.

A number of publications on rural and agricultural education have been compiled and distributed by the Bureau of Education during the past year. These publications include occasional bulletins and rural-school letters and circulars published by the bureau and pamphlets and brochures published by other governmental and private

organizations but distributed by the bureau. Much of this material deals with timely topics of the war emergency. Bulletins of the bureau on rural and agricultural education published since the last report on rural education are as follows:

Bulletin, 1916, No. 26. A Survey of Educational Institutions of the State of Washington.

Bulletin, 1916, No. 29. Educational Survey of Wyoming.

Bulletin, 1916, No. 41. Agricultural and Rural Extension Schools in Ireland.

Bulletin, 1916, No. 44. The District Agricultural Schools of Georgia.

Bulletin, 1916, No. 48. Rural-School Supervision.

Bulletin, 1917, No. 5. Report of Inquiry into the Administration and Support of the Colorado School System.

Bulletin, 1917, No. 31. Rural-Teacher Preparation in County Training Schools and High Schools.

Bulletin, 1917, No. 33. A Comparison of the Salaries of Rural and Urban Superintendents of Schools.

Bulletin, 1917, No. 35. The Township and Community High-School Movement in Illinois.

Bulletin, 1917, No. 44. Educational Conditions in Arizona.

Bulletin, 1918, No. 3. Agricultural Instruction in the High Schools of Six Eastern States.

Bulletin, 1918, No. 27. Rural-Teacher Preparation in Normal Schools.

Bulletin, 1918, No. 81. Educational System of South Dakota.