## 340

G4
PUBLIC EDUCATION IN NORTH CAROLINA

A REPORT BY THE<br>STATE EDUCATIONAL COMMISSION<br>OF NORTH CAROLINA

GENERAL EDUCATION BOARD 6I BROADWAY, NEW YORK

$$
1921
$$

\%

## PUBLICATIONS OF THE GENERAL EDUCATION BOARD

## REPORTS:

THE GENERAL EDUCATION BOARD: AN ACCOUNT OF ITS activities, 1902-1914. cloth, 240 pages, witil 33 fúll-page illustrations and 31 maps.
ANNUAL REPORTS:
1914-1915; 1915-1916; 1916-1917; 1917-1918; 1918-1919; 1919-1920; 1920-1921.
STUDIES:
PUBLIC EDUCATION IN MARYLAND, BY ABRAHAN FLEXNER AND FRANK P. BACHMAN.
PUBLIC EDUCATION IN DELAWARE.
PUBLIC EDUCATION IN NORTH CAROLINA.
PRIVATE ENDOWMENT AND PUBLIC EDUCATION-A RFPORT ON THE USE OF THE HANDLEY FUND, WINCHESTER, VA.
TEACHER TRAINING DEPARTMENTS IN MINNESOTA HIGH SCHOOLS, BY LOTUS D. COFFMAN.
COLLEGE AND UNIVERSITY FINANCE, BY TREVOR ARNETT.*
'THE SURVEY OF THE GARY SCHOOLS:
THE GARY SCHOOLS: A GENERAL ACCOUNT, BY ABRAHAM FLEXNER AND FRANK P. BACHMAN.
ORGANIZATION AND ADMINISTRATION, BY GEORGE D. STRAYER AND FRANK P. BACHMAN.
COSTS, BY FRANK P. BACHMAN AND RALPH BOWMAN.
INDUSTRLAL WORK, BY CHARLES R. RICHARDS.
HOUSEHOLD ARTS, BY EVA W. WIIITE.
PIIYSICAL TRAINING AND PLAY, BY LEE F. HANMER.
SCIENCE TEACHING, BY OTIS W. CALDWELL.
MEASUREMENT OF CLASSROOM PRODUCTS, BY STUART A. COURTIS.

## OCCASIONAL PAPERS:

1. THE COUNTRY SCHOOL OF TO-MORROW, BY FREDERICK T. GATES.
2. CHANGES NEEDED IN AMERICAN SECONDARY EDUCATION, BY CHARLES W. ELIOT.
3. A MODERN SCHOOL, BY ABRAHAMI FLEXNER.
4. THE FUNCTION AND NEEDS OF SCHOOLS OF EDUCATION IN UNIVERSITIES AND COLLEGES, BY EDWIN A. ALDERMAN.
5. LATIN AND THE A. B. DEGREE, BY CHARLES W. ELIOT.
6. THE WORTH OF ANCIENT LITERATURE TO THE MODERN WORLD, BY VISCOUNT BRYCE.
7. TEACHERS' SALARIES IN AMERICAN COLLEGES AND UNIVERSITIES, BY TREVOR ARNETT.

* In Preparation

The REPORTS issued by the Board are official accounts of its activities and expenditures. The STUDIES represent work in the field of educational investigation and research which the Board has made possible by appropriations, defraying all or part of the expenses involved. The OCCASIONAL PAPERS are essays on matters of current educational discussion, presenting topics of immediate interest from various points of view. In issuing the STUDIES and OCCASIONAL PAPERS, the Board acts simply as publisher, assuming no responsibility for the opinions of the authors.

Any publication of the Board may be obtained on request.

# PUBLIC EDUCATION IN NORTH CAROLINA 

## TM

A REPORT OF THE<br>STATE EDUCATIONAL COMMISSION, OF NORTH CAROLINA<br>PREPARED UNDER THE DIRECTION OF THE COMMISSION BY THE GENERAL EDUCATION BOARD WITH AN INTRODUCTION BY THE<br>STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

```
GENERAL EDUCATION BOARD
    6i BROADWAY, NEW YORK
    I 921 .
```

$$
\begin{gathered}
L A 340 \\
C G^{4}
\end{gathered}
$$

sit
Publicher april. 6/1922.

## PREFACE

The Legislature of the State of North Carolina, at its session in 1917, passed an Act creating a State Educational Commission to be composed of five members appointed by the Governor for a term of two years. The General Assembly of 1919 continued this Commission for two years and similar action has recently been taken under the General Assembly of 1921.

The Act provided that the Commission should make a thorough study of the school laws of the state, a careful surrey of existing educational conditions, and a comparative study and investigation of the educational systems of other states; that the Commission should codify the public school laws of the state and make recommendation of such amendments, changes and additions to the school law as in its opinion may be needed, make a thorough study of the teacher training agencies in the state, and report its findings and recommendations to the General Assembly of 1921.

The Commission was made up of the following members: Robert H. Wright, chairman ; L. J. Bell, secretary ; N. W. Walker, C. E. Brewer and C. C. Wright.

The Commission invited the General Education Board to make the proposed survey and the present rolume embodies the report made to the Surrey Commission. The Introduction prepared by Dr. E. C. Brooks, State Superintendent of Education, outlines the legislation adopted by the General Assembly on the recommendation of the Commission.

## CONTENTS

Pages
Preface ..... V
Introduction ..... ix
PART I. THE SCHOOLS AS THEY ARE
I. Educational Progress ..... 3
II. Buildings and Equipiment. ..... 12
III. Courses of Study and Length of School Term ..... 23
IV. The Teachers ..... 41
V. Instruction ..... 58
Part II. Hindrances To development
VI. Administrative Handicaps ..... 83
VII. Limitations and Conflicting Develop- ments ..... 92
PART III. THE WAY OUT
VIII. Better Administration ..... 107
IX. Better Traneed Teachers ..... 116
X. Better Financlal Support ..... 128

## INTRODUCTION

The General Assembly of 1917 created a State Educational Commission, consisting of five members, to make a thorough survey of educational conditions and needs in North Carolina. To assist it in carrying out its objects the Commission obtained the services of the General Education Board, and also enlisted the help of all the school officials of the state. The survey was completed in October, 1920, and a report of the Commission's findings and recommendations submitted to the General Assembly of 1921.

The educational legislation of the General Assembly of 1921 followed in the main recommendations outlined in this report. It may be classified under the following heads: (1) State Administration; (2) City Administration; (3) County Administration; (4) Training of teachers; (5) High Schools; and (6) Administration of the Public School Fund.

## I. State Administration

The following new departments were created, and fairly liberal appropriations for their maintenance were authorized.

1. A Division of Teacher Training, having one director and not more than four supervisors and such assistants as may be necessary, consistent with the appropriation, which is $\$ 25,000$ annually.
2. A Division of Certification of Teachers, having one director and such clerks, stenographers, and assistants as may be necessary, consistent with the appropriation, which is $\$ 25,000$ annually.
3. A Division of Negro Education, having one director and such supervisors and assistants as may be necessary, consistent with the appropriation, which is $\$ 15,000$. This division is given charge of all normal schools, training schools, high schools, elementary schools, and teacher training departments for Negroes.
4. A Division of Physical Education, having one director and such assistants as may be necessary, consistent with the appropriation, which is $\$ 15,000$. The State Board of Education is authorized to accept any Federal funds for the encouragement of physical education and to make all needful rules and regulations for promoting physical education.
5. A Division of Schoolhouse Planning, having one director and such assistants as may be necessary, consistent with the appropriation, which is $\$ 10,000$.
6. A Division of Publication, having one director and such assistants as may be necessary. The State Board of Education is authorized to appropriate from the State Public School Fund such amount as may be necessary for this department.
7. A Division of Statistics, having one director and such clerical assistants as may be necessary, consistent with the appropriation, which is $\$ 5,000$.

## II. City Administration

The place of the city school in the state educational system has never been defined; accordingly, the General Assembly authorized the State Superintendent of Public Instruction to define a city school and the State Board of Education to amend city school charters in accordance with their needs. City schools hereafter will hold the same relationship to the State Department of Education as the county school unit holds. In other words, there may be two separate school units-the city school unit and the county school unit.

## III. County Administration

The General Assembly provided for the consolidation of schools in such a way as to make the county the unit of administration of all schools in the county, except the city schools, as defined by the State Superintendent of Public Instruction. The State Board of Education was authorized, under certain conditions, to charter, amend or annul charters of school districts within the county
system. But the State Board of Education cannot charter a school district without the approval of the county board of education. If the State Board charters a school district it becomes a city school unit. Otherwise the counties have the authority to consolidate in such a way as to bring all small, independent units under the county system.

## IV. Training of Teachers

While the survey was under way, the state certification plan was improved and a salary schedule was proposed, paralleling the certification plan. According to the proposed salary schedule, county and city will pay the highest salary to the teacher holding the highest certificate and the lowest salary to the teacher holding the lowest certificate. The special session of the General Assembly of 1920 accepted the proposed salary schedule. At once a demand arose on the part of teachers for further training, and over seven thousand attended summer school in order to raise the grade of the certificate held and command the correspondingly higher salary. Nothing has so stimulated the teaching profession as the Certification-Salary Plan.

In accordance with the recommendations of the State Educational Commission, the General Assembly provided for the enlargement of its normal schools. The Cullowhee Normal School, the Appalachian Training School, the three Negro Normal Schools, and the Normal School for the Indians were placed under the control of the State Board of Education; the sum of $\$ 500,000$ was appropriated for buildings and equipment, and the maintenance fund was more than doubled.

Moreover, the summer school program, which was such a success in the summer of 1920 , was enlarged. Two classes of summer schools have been provided-the state summer school and the county summer school. The state summer schools are conducted at the higher institutions of the state for a term of six or eight weeks. All teachers holding certificates of a certain class and grade are entitled to attend the state summer schools. County
summer schools of from six to twelve weeks are provided for teachers holding lower grades of certificates, and teachers receive no credit for attendance unless they attend the summer school which is provided for them in accordance with the kind of certificate held. Heretofore the state has paid one-half the cost of the county summer schools, but, according to the provision of the General Assembly, it can pay in the future as much as three-fourths of the cost when necessary.

## V. Higit Schools

The General Assembly provided for the consolidation of schools in such a way as to promote the development of high schools. The State Department of Education was authorized to standardize high schools, and the standards recommended by the Educational Commission have been adopted. The General Assembly appropriated $\$ 224,000$ to be spent in supplementing high school funds after the county and the district have reached a certain limit. This is for the purpose of equalizing the burden of support and of increasing the number of standard high schools in the rural districts.

## VI. Administration of the Public School Fund

One of the greatest changes made is in the manner of administering and safeguarding the public school funds. This is in accordance with the recommendations of the State Educational Commission and in brief is as follows:

On or before the first day of August of each year the county board of education of each county shall cause to be audited the books of the treasurer of the county school fund and the account of the county board of education, and shall provide for the cost of the same, where a county auditor is not provided by special statute, out of the incidental fund. The auditor's report shall show:
(1) The total amount belonging to the county for the six-months school term, as shown by the tax books; what part has been collected and deposited with the
treasurer for the current year; and what balance for the previous year has been collected or still remains uncollected by the tax collector.
(2) The number of schools in the county, other than city schools, supported in part by special local taxes; the number supported entirely from the funds appropriated from the state and county six-months school fund; and the total amount of special local taxes raised for schools and belonging to the credit of each special local tax district and how this fund has been disbursed.
(3) The salary, traveling expenses, clerical assistance, and other office expenses of the county superintendent and the county board of education.
(4) The total salaries paid teachers, supervisors, principals and all other employees employed in the county system, what part was paid out of the State and county six-months school funds, and what part was paid out of the special local tax funds.
(5) The amount of the incidental and building fund received, the source of the fund, and how it was disbursed.

The auditor shall compare the expenditures with the approved budget and report whether all salaries and other expenses have been paid in accordance with law, and by what amount the school fund received or to be received exceeds or falls short of the estimated amount needed, as set forth in the May budget.

The auditor's report shall be published in some newspaper circulating in the county, or in bulletin form, and one copy each shall be sent to the State Superintendent of Public Instruction, the chairman of the county board of commissioners, and the chairman of the county board of education.

In like manner and in similar detail, unless otherwise provided in special act, the board of education of each city school district shall cause to be audited the accounts of the treasurer and board of education of the respective city school district.

If the county board of education or city board of education shall fail to have all accounts audited as provided herein, the State Superintendent of Public Instruction shall notify the State Tax Commission, and said State Tax Commission shall send an auditor to said county or city and have the accounts audited in accordance with the provisions of this section, and all expenses for the same shall be paid by the county board of education or the city board of education, as the case may be. If the county superintendent of schools shall fail to keep the records of the county board of education in such manner that they may be audited in accordance with the provisions of this act, the State Board of Education may revoke his certificate. Moreover, if the Treasurer fails to keep all school funds in the manner prescribed by law, the board of education may sue on his bond and recover at any time such amount as may be due the schools on the Sheriff's receipt.

## Continuation of Educational Commission

The State Educational Commission was continued by the General Assembly of 1921. The Commission will coöperate with the State Department of Education in working out further basic changes essential to the proper development of the school system of the State; the Commission intends also to present to the legislature a complete systematization and codification of the public school laws.

(Signed) E. C. BROOKS<br>State Superintendent of Education

PART I
THE SCHOOLS AS THEY ARE CHAPTERS I-V

## I. EDUCATIONAL PROGRESS

THE maintenance of a free system of public schools seems today among the self-evident functions of a democratic goverment. But it has not always been so. Public education has had to win its way against severe opposition-nowhere, perhaps, against heavier odds than in our own state.

North Carolina was chiefly settled by the English, who brought with them deep-seated class distinctions, a repugnance to public taxation, and the firmly rooted belief that education is a private and not a public matter. Certain sections were settled more particularly by nonEnglish immigrants-for example, the Moravians settled in Forsyth, the Swiss in Craven, the Scotch-Irish in the southern and western sections, and the Germans in the south-central and western portions. These non-English, like the English, settlers believed that education belonged to the family and the church, and not to the state. Moreover, traditions and convictions were fortified by the mode of life and the isolation of the people, by slavery in the early days, and more recently by the presence of a large number of freedmen. Nevertheless, gradually the objections to public education gave way before an enlightened and democratic sentiment. It is difficult for the present generation to realize the greatness of the change which has been wrought. Only those of an older generation, who remember Dr. Wiley begging his fellow citizens to join in procuring legislative permission for Winston to organize public schools, even though prohibited from levying taxes to support them, can appreciate the distance traveled from that day to this, when Winston-Salem votes a bond issue of $\$ 800,000$ for public schools. An even more striking example of the change
wrought is Rocky Mount, voting a separate bond issue of $\$ 38,000$ for the erection of colored schools. In the development of this progressive educational sentiment have labored some of the noblest sons of the old North State-Vance, Jarvis, Aycock, Caldwell, Murphy, Battle, Wiley, McIver, Joyner, Graham, and many others.

## Expansion of the System

The public schools now include elementary schools, high schools, normal schools, agricultural and engineering colleges, the North Carolina College for Women, and the State University. The State University, the head of the system, was the first of these established, being chartered in 1789 and opened in 1795. The history of the University is in a way the history of the state, for its graduates have been intimately associated these hundred years with every movement for the economic, political, moral, and educational betterment of the commonwealth.
Fifty years elapsed between the founding of the University and the establishment of public elementary schools in 1839. Their establishment represented a tremendous advance in educational sentiment. For, while the State University was founded as a child of the state and under its control, the state did not assume responsibility for its support. In contrast, the state did assume responsibility for maintaining public elementary schools, as the law of 1839 recognized the right of the state to use state funds and to authorize the levy of local taxes in their behalf.

More than three-quarters of a century have therefore elapsed since the establishment of the first public elementary schools. In the meantime, selfish interests and prejudice have many times attacked this basic institution of democracy. Its foundations have frequently
been shaken, and often the work of years seemed lost. Yet, despite opposition to taxes, cold indifference, vested interests, class prejudice, the public elementary school has slowly but surely won its way with the people. To this deepening appreciation the 5,422 rural schoolhouses for white children in 1918, and the 2,316 for colored children, exclusive of the schools of the 136 specially chartered districts, are irrefutable witnesses.

The study program of the first public elementary schools as elsewhere was simple: It included the merest elements of an English education-reading, spelling, writing, and arithmetic, with an occasional class in grammar and geography. From time to time other studies have been added, so that now all public elementary schools must, according to the law, teach reading, spelling, writing, arithmetic, drawing, language lessons, and composition, English grammar, geography, history of North Carolina and of. the United States, the elements of agriculture, elementary physiology and hygiene, home economics for girls and manual training for boys.

The broadening of the elementary program is by no means the most significant extension of public education. Until recently, the public elementary school was a blind alley; it led nowhere, for there were no public high schools. Boys and girls desiring more than an English education were compelled to attend private academies or preparatory schools, which then existed in large numbers; ${ }^{1}$ but for the great majority the fees were prohibitive. However, as the public elementary schools developed, certain of the stronger-first the graded city schools and then an occasional rural school-provided some high school work. Yet, as late as 1886 there were only eight city schools in the state reporting high school instruc-

[^0]tion ${ }^{1}$ and only two went so far as the tenth grade. Nevertheless, the leaven was at work. Twenty years later (1906) practically all of the 78 specially chartered districts (city schools) supported some kind of high school, and 968 country white schools and 90 country colored schools were teaching some high school subjects. As to the enrollment at this time, there are no reliable data, but the Superintendent's report for 1902-1903 gives for the rural schools, 5,724 pupils studying algebra, 6,801 higher English, and 663 Latin.

With the need so obvious and pressing, the state undertook in 1907 to encourage the establishment of county high schools, and, through special financial aid, to lessen their local cost. The response was immediate; the high school inspector in 1908 reported 213 public high schools, 132 in the counties, and 81 in the cities and towns. The enrollment in 177 of those reporting was 6,398 . This, however, was merely the beginning. A decade later (1918) there were 209 county and 149 local and city high schools ${ }^{2}$ with a combined enrollment of 23,461 , these figures taking no account of scores of small schools giving some high school instruction.

Our public schools have developed in still other ways. Not the least of these is the lengthening of the school year, particularly in the rural schools. Our city schools, like city schools elsewhere, have always had a school year ranging from eight to ten months, the usual length. Accordingly, the city school year has undergone little change. At present the average is more than eight and one-half months for the 39 cities having a population (census of 1910) of 2,500 and over. The great change has come in the length of the rural school term. The average for

[^1]white schools in 1880 was only 48 days. Decade by decade this has slowly lengthened, rising to 73 in 1900, and to 116 in 1915; in no county in 1919, owing to the new school law, did the rural school term fall below 120 days, and in a number it was longer.

Measured alone by the average length of term, to say nothing of increased efficiency, the elementary school opportunities of rural boys and girls have, within the last forty years, increased about one and a half times.

The public school has also slowly extendedits benefits to a larger and larger proportion of the boys and girls of school age. This is shown in the increased per cent of the total school population going to school. The school population includes all children between six and twentyone years of age. It is not expected that all children of these ages will attend school-for example, children nineteen and twenty years old. The law merely keeps the door open to these older children. Nevertheless, any increase in the percentage of the entire group attending school indicates an increase in the attractive power of the school. On this basis the hold of the public school on the people of the state in 1880 was weak, as only 51 per cent of the total school population were in the public schools; by 1900, 58 per cent of the school population came under public school influence; by 1910, 71 per cent; and by 1918, 74 per cent. The school enrollment thus increased between 1880 and 1918147 per cent, whereas the school population increased only 68 per cent. ${ }^{1}$ In short, the public school now reaches annually, for periods of varying length, practically four out of every five of the white youth, and practically seven out of every ten colored youth of legal school age.

As a final instance of the development of the system,

[^2]we cite the establishment of institutions for the training of teachers. ${ }^{1}$ The teacher is always the essential factor in a good school. Obvious as this would seem, the American people as a whole have never appreciated it. Following the common practice, we launched our public school system but made no provision for the training of teachers. Despite the repeated solicitations of educators for the establishment of teacher training schools, the state took no step in this direction until 1877, when a summer school for white teachers at the University and a state colored normal school at Fayetteville were established. From time to time thereafter additional summer schools were organized-four for colored and eight for white teachers. From these beginnings grew the present teacher training facilities of the state, which comprise, for white teachers, the school of education at the University, the North Carolina College for Women (established in 1891), the Cullowhee Normal and Industrial School (1893), the Appalachian Training School (1903), and the East Carolina Teachers Training School (1907). The state now supports three schools for colored teachers-the state colored normal schools at Fayetteville, Elizabeth City, and Winston-Salem-and for the training of Indian teachers the Cherokee Indian Normal School at Pembroke. Besides these institutions, the state has recently established teacher training departments in twelve high schools, and six or eight week summer schools in most of the counties.

## Increased Financlal Support

The growth in public sentiment has expressed itself also in more and more liberal financial support of the public schools. For example, the total expenditure in

[^3]round terms for all public school purposes-state, county and local-was:
\[

$$
\begin{aligned}
& \text { In 1880------------------\$396,000.00 } \\
& \text { In 1890----------------- 787,000.00 } \\
& \text { In 1900------------------ } 1,092,000.00 \\
& \text { In 1910------------------ } 3,179,000.00 \\
& \text { In 1919----------------- 8, 105,000.00 }
\end{aligned}
$$
\]

or an increase of about 155 per cent in 1919 over 1910, and of about 642 per cent over 1900.


Figure 1
Growth in Total Public School Expenditures

The most healthy public schools depend on local taxes for the major part of their support. It is therefore interesting to note that an increasing proportion of school funds is derived from local taxes, that is, taxes other than state and county. For instance, in 1903 local taxes produced only 12 per cent of the total current school revenues, whereas ten years later, in 1913, 32 per cent and in 1918 34 per cent were so derived. As elsewhere, willingness to pay local school taxes developed earlier and is stronger in the cities than in the rural sections. For example, in 1918 the cities raised locally 60 per cent of their total current school revenue, as against 20 per cent in the counties

The increased financial support of the schools shows itself particularly in the increase in the annual current expenditure per pupil in average daily attendance, and in the increased investment in school property, such as grounds, buildings, and equipment. The annual current expenditure per pupil in average daily attendance was, for city and county :

$$
\begin{aligned}
& \text { In 1880------------------------- } 2.10 \\
& \text { In 1890--------------------------- } 3.48 \\
& \text { In 1900---------------------------- } 4.43
\end{aligned}
$$

$$
\begin{aligned}
& \text { In 1918------------------------- } 12.64
\end{aligned}
$$

with an annual current per pupil expenditure in the cities of $\$ 20.68$, and in the rural districts of $\$ 10.63$.


Figure 2
Growth in Current Expenditures per Pupil in Average Daily Attendance
On the other hand, the capital investment in school property was:

In $1880, \$ 227,404.00$ or $\$ .88$ per pupil enrolled
In 1890, $\quad 792,304.00$ or 2.43 per pupil enrolled
In 1900, $1,115,250.00$ or 2.72 per pupil enrolled
In 1910, $5,862,969.00$ or 11.27 per pupil enrolled
In 1918, $14,303,503.00$ or 22.50 per pupil enrolled
For the cities alone the investment per pupil enrolled was, in $1918, \$ 54.92$ and for the rural districts, $\$ 15.12$.


Figure 3
Growth in Value of School Property per Pupil Enrolled
From the preceding account, it is clear that the public schools are firmly established, that they are constantly reaching out to meet more and more adequately the needs of a developing commonwealth, and that their financial support is increasingly liberal. Public education in North Carolina has, therefore, made marked progress, especially within the last twenty years. Of this progress the fullest and frankest acknowledgment should be made. On the other hand, careful investigation reveals serious defects and hindrances. The present report undertakes to present the facts as they are, and to offer recommendations for the improvement of our public school system. We will, therefore, in succession (1) describe the schools as they are, including the character of the buildings, courses of study and length of term, the training of the teachers, and the quality of the instruction; (2) inquire into such hindrances as have limited their service and retarded their development; and (3) point out what steps should be taken at this time to widen their influence and increase their efficiency, particularly in so far as this can be accomplished through legislation and state action.

## II. BUILDINGS AND EQUIPMENT

OUR public school buildings may be divided, for purposes of description, into rural schoolhouses, those under county boards of education, and city schoolhouses, those of specially chartered districts. ${ }^{1}$

## Rural Schoolhouses ${ }^{2}$

At the end of the school year 1917-1918 there were in the state 7,738 rural schoolhouses, of which 5,422 were for white and 2,316 were for colored children. Few white schoolhouses and less than half of the colored schoolhouses are more than twenty years old, for, since 1900, 5,070 new rural schoolhouses for white and 1,293 for colored children have been erected. It might, therefore, be expected that at least the rural white schools would have good plants, and that approximately half of the colored schoolhouses would be of recent design. This, however, is not the case. For, from the revival of interest in public education after 1876 until very recently, the paramount question before rural school authorities was not how well, but how cheaply could building be done; it was not for them a question of building a modern schoolhouse, but of procuring any schoolhouse at all that would shelter the pupils and keep the schools going.
As a rule, the funds available were extremely small. For example, the average value of grounds, buildings, and equipment of rural schoolhouses in 1880 was about $\$ 50$; in 1890 , about $\$ 130$; in 1900 , $\$ 160$; in $1910, \$ 420$;

[^4]and in $1918, \$ 1,000$. For the corresponding period the average value of white rural schoolhouses rose from $\$ 50$ in 1880 to $\$ 1,290$ in 1918; and of colored schoolhouses, from $\$ 50$ in 1880 to $\$ 350$ in 1918.

This increased outlay per rural schoolhouse appears, first, in the character of the buildings erected, that is, whether brick, frame or log. In 1890, for example, 29 per cent of all rural schoolhouses were log; in 1918, less than 3 per cent, with less than 1 per cent log for white children and 7 per cent for colored children. At the same time the percentage of frame houses rose from 71 per cent in 1890 to 95 per cent in 1918.

There has been a corresponding improvement in school furniture. Since 1905 home-made benches have practically disappeared from white schools, while the percentage of schools with home-made desks has decreased from 60 to 22 , and the number furnished with patent desks has increased from 19 to 74 per cent. Similarly in colored schools: In 1905, 44 per cent were seated with homemade benches, in 1918, 15 per cent, while the percentage furnished with patent desks has risen from 3 to 32 per cent.

The rural school situation is thus in general encouraging. Not only are larger sums being spent per rural schoolhouse, but these are being built more and more substantially and are being more and more fittingly furnished.

## Smaller Rural Schoolhouses

Of the 7,738 rural schoolhouses in 1918, 60 per cent, or 4,643 , were one room schools; 28 per cent, or 2,167 , were two room schools; 7 per cent, or 541 , were three room schools, and 5 per cent, or 387, were schools of four or more rooms. ${ }^{1}$

[^5]In describing the smaller rural schools-those having three rooms or less-it should be held in mind, as stated above, that they were mostly built at a time when severe economy was necessary. Only recently has it been possible to give weight to the sanitary, educational, and social requirements of a good rural school. Consequently, a majority of the rural schoolhouses-probably three-fourths-are unsatisfactory. Only the newer buildings, those erected within the last five or six years, approximate acceptable standards.
The older one room buildings are one story, box-like structures, differing from each other chiefly in size. Usually unpainted and in ill repair, their weatherbeaten exteriors present a cheerless picture. Nor are they more cheerful within. Ordinarily there is but a single room, seldom a vestibule or cloak room. The hats and coats of the children hang from nails driven into the walls. The windows, on three sides, if not on four, give a crosswork of light and shade that is not only trying to the eyes but accentuates the smoky, brown ugliness of the ceilings and walls. The walls are usually of natural pine, rarely plastered, and less often decorated. The old-fashioned "long John" stove radiates its cheer on a chilly day from its place of honor in the center of the room; but even the kindly stove all too often becomes a torment. The windfall pine fuel makes a quick but transitory heat, so that at one moment the room is hot to suffocation and a half hour later cold to the point of discomfort. Even when the room is seemingly comfortable, the children may be half hot and half cold. They may be comfortable about the head and shoulders, and at the same time the cold winds, sweeping under the schoolhouse-which is without proper underpinning-up through the floor and into the classroom may be biting at their feet and legs. While some children enjoy the comforts of patent desks and

occasionally of patent single desks, others quite as often must sit six weary hours a day on home-made desks and sometimes even on home-made benches. Home-made desks and benches are particularly common in colored schools. Seldom are there adequate provisions for drinking water or for the washing of hands and face, to say nothing of adequate toilet facilities. There is now active an excellent piece of new legislation requiring the construction at all schoolhouses of sanitary privies, one for boys and one for girls. At present, however, taking the rural schools as a whole, probably less than 60 per cent have adequate toilet provisions, and probably half of the outhouses are dilapidated, disreputable, and filthy beyond belief.
The teacher's lot in these older one room rural schools is uninviting. She may have a table or desk on which to work and a chair to sit on, but she can not count on having them. Rarely is she provided with a set of textbooks in use, unless she purchases them out of her meager pay. Of general educational equipment there is littleperhaps a small strip of composition blackboard or a patch of painted wall, occasionally a map of North Carolina, and not infrequently a small, ill-kept and much worn school library. A young inexperienced girl, placed in one of these shed-like, poorly heated, poorly ventilated, and poorly equipped schoolhouses, is expected to conduct a school.

Moreover, in far too many cases the teacher is expected to do the janitor work. The sweeping is usually done at the noon hour; the cloud of dust thus raised is breathed by pupils returning from their noon play. She is also expected to prepare the fuel. The windfall pine is hauled to the schoolhouse and usually thrown on the ground outside (woodsheds are rare), and the teacher depends on
the older boys to cut it into stove lengths. A corner of the schoolroom provides the only storage for fuel against storm and rain.

The sites of these older schools-in fact, of almost all the rural schools-vary in size from one to two acres; they are usually well located, on a main traveled road, but the grounds are as a rule unimproved and without play apparatus. Even when the teacher seeks to improve the grounds, nature in seven or eight months undoes more than she can do in the course of a school year of four or five months, with the result that, while many of the rural schools are picturesque in their setting, surrounded by beautiful trees, the great majority have only a bare spot in front of the schoolhouse for play, with the forest and underbrush crowding in on all sides.

The above descriptions answer also for the older two and three room schoolhouses, which are, usually, one room buildings with an additional room or two tacked on. The new rooms are sometimes put at the side of the original room, sometimes at the rear, and sometimes crosswise at the rear. Whatever the method of enlargement, the additions have the same defects as the original structure-they are poorly lighted, poorly ventilated, poorly heated, poorly equipped-while the new rooms usually decrease rather than add to the fitness of the original room. Frequently some of its windows are closed, so that it is still more inadequately lighted; sliding doors are often placed between the original room and one or both of the new rooms to provide an auditorium for school and community gatherings. Such a meeting place is much to be desired; nevertheless, the sliding doors not infrequently reduce the blackboard space and increase the general ugliness of the original room.

The newer rural schoolhouses-those erected within the last five or six years-are different. These newer

structures number about a fourth ${ }^{1}$ of all the small rural schools, and most of them, especially the Rosenwald colored schools, ${ }^{2}$ represent a decided advance over the older buildings just described. They are architecturally pleasing, being painted, and having entrance porches, vestibules, and cloak rooms. They are usually plastered and decorated, equipped with composition blackboards, seated with either double or single patent desks, and fairly well provided with educational equipment. These newer school buildings are thus a great credit to the state. However, even some of these are too cheaply built for permanency and leave much to be desired in the way of lighting, heating, ventilation, toilet and sanitary arrangements. Of the very best of the newly built structures, few, with the exception of some of the Rosenwald schools, have a workroom for boys and girls, a place for serving hot luncheons to children, or a place for play in bad weather, while the patent heater is practically unknown.

## Larger Rural Schoolhouses

The larger rural schoolhouses, that is, those having four or more rooms and located, mostly, in consolidated and special tax districts, are of three principal types: (1) rambling, one story buildings that have grown into four, five, and even six teacher schools by the addition of one or more rooms at a time to an original one or two room school; (2) two story frame structures of a half dozen classrooms; and (3) brick buildings.

The larger rural schoolhouses of the first type have most of the defects of the older one room school and some

[^6]besides. They are, however, generally seated with patent desks, fairly well equipped with instructional materials, and usually have cloak rooms and outside toilets. Nevertheless, they are frequently less pleasing - in external appearance than their older prototype, the lighting is often poorer, the fire hazard from the single stove is greater and the building as a whole noisier, more confused, and more untidy. Buildings of this type are usually occupied by mill children or colored children. Such buildings can not be condemned too strongly, representing, as they sometimes do, not so much a lack of means, as indifference to the rights of children and a desire to escape school taxes.

The second type, or the large two story frame structure, provides for both a rural elementary and high school, and has an auditorium for school and community gatherings. As a rule they displaced one or two room schools and in many instances were a tremendous local advance in school facilities. They likewise represent an awakened interest in public education and were often erected at great financial sacrifice. Some of them are attractive from the outside, but few from within. Almost without exception they violate the principles of good lighting, heating, and ventilation, and the fire hazard, separate stoves being used, is very great. However, in most localities they have served their generation and must soon give way before the rising demand for more appropriate school buildings.

The final type is the large brick structure of the consolidated or special tax district. Of these larger and more substantial buildings there is at least one in a majority of the counties. Some of them are located in the open country and some in villages. They are mainly of recent date, and some of them are extremely well planned, following the latest ideas of schoolhouse construction. The classrooms are properly lighted from one side, ap-


TYPICAL RURAL SCHOOL OUTHOUSES
propriately furnished with single patent desks, bookcases, teacher's desk and chair, and well provided with instructional materials. They are heated by steam or hot air, artificially ventilated, and have inside sanitary lavatories and toilets. Besides the usual classrooms, there are one or more offices and teachers' rooms, a library, science laboratories, cooking room, workshop, the needed ${ }^{\circ}$ storerooms, and an auditorium; in no instance, however, is there a gymnasium. In connection with the best of these schools, when in the open country, there are dormitories for boys and girls, and occasionally appropriate teachers' homes. Such buildings are an honor to any community and represent the high-water mark of rural educational sentiment.

However, of these larger rural brick buildings only a few possess the merits just enumerated. Many of them have been built too cheaply for permanency and are faulty in construction, with bad classroom arrangement and lighting, poor ventilation, insanitary lavatory and toilet facilities; not infrequently too much has been sacrificed, we believe, to the auditorium. In consequence of the defects of many of these larger brick buildings most of them will need to be replaced at no distant date, if the children of these prosperous and progressive communities are to be comfortably and healthfully housed.

The sites of these schools comprise from six to ten acres, and in the case of the so-called farm life schools there is usually a good-sized farm besides. Sites of such size are ample for all school purposes, providing ample grounds, play space, athletic fields, and demonstration plots. So far little has been done to develop the play and athletic opportunities of these sites, and few are furnished with play apparatus. Since the modern school is expected not only to educate and refine the children but also the adult population, the schoolhouse and grounds
should be an object lesson to all. In these respects little can be expected under present conditions from the smaller and older rural schools, but the larger and best of the rural schools should be models of cleanliness, order, and beauty. Although most of the larger schools are new, yet it would seem that more could have been done than has been done to beautify them. Within sight of many are vines, shrubs, and trees of rare beauty-jasmine, honeysuckle, azaleas, rhododendrons, dogwood, redbud, holly, scarlet maple, gum trees, pines, etc. With such beautiful material at hand, teachers and pupils, working together, might make the school grounds of the state renowned, and not only add to the attractiveness of the schools themselves, but also strongly influence the movement for better and more attractive homes.

## City Schoolhouses ${ }^{1}$

The schoolhouses of the cities may be divided into.older and newer structures. The older structures, whether they be in the smaller or the larger cities, represent mostly buildings erected at the time the graded schools were organized, and were built chiefly between 1890 and 1910.

When the graded schools of the cities were first organized, the financial strain of providing quarters and maintaining the schools was great. Consequently, with few exceptions, the buildings erected prior to 1910, although generally of brick, are very poor. Again, the original defects of these buildings have in many instances been aggravated by additions made to accommodate increased enrollments, so that almost all the older buildings are now antiquated and unsatisfactory.

Among the newer structures, erected within the last half dozen years, are some excellent buildings. These

[^7]

BETTER TYPE ONE ROOM RURAL SCHOOLS
present a beautiful exterior and interior appearance, are properly lighted, heated, and ventilated, and are provided with modern conveniences, including well equipped and ample play space, well planned and improved grounds, and occasionally a gymnasium. Yet not infrequently even these newer buildings have been built too cheaply and in many instances have not been carefully planned. Defects due to lack of funds could not be avoided, but expert advice could have prevented some of them. Probably three-fourths of all the city schoolhouses of the state, especially those for colored children, should, for sanitary and other reasons, be replaced.

This, however, is not the only problem facing the cities. Playgrounds are now a recognized essential of a good school. Only the most progressive cities have recognized this requirement, and only a few schools, for example, those at Wilmington and Winston-Salem, have grounds ample for play purposes. Fortunately, in most cities play space can still be procured on reasonable terms, and no new building should be erected on grounds that do not afford children ample opportunity for free physical development.

To summarize: Within recent years great advances have been made throughout the state in public school buildings. These are being more substantially built, and better equipped. Nevertheless, the school building situation is now extremely acute, first, because of the crowded condition, especially in the cities, and, second, because of unsatisfactory sanitary conditions. Probably three-fourths of all the rural and city schoolhouses now standing should be replaced.

The people of the state are aroused to the unsatisfactory character of their schoolhouses; they are likewise desirous of rebuilding them and making them the best possible.

Unquestionably, North Carolina has entered on the greatest and most extensive school building program of its history.

Before the state goes too far, should not earnest consideration be given to the following questions?-

1. Is it wise for North Carolina to continue to build only for the present? Has not North Carolina reached the point in its financial development where it can build permanently? Its entire rural school plant has practically been rebuilt twice within the memory of men now living; first, between 1876 and 1900, and for the second time since 1900, with probably three-fourths of all rural schoolhouses again ready to be displaced for the third time. The loss to the cities for this same cause has also been great, but probably not relatively so great as in the rural districts. For the state as a whole, out of the present total investment of more than fourteen millions in public school buildings, probably half, if not more, has been lost because buildings have been constructed too cheaply, and with too little reference to sound principles.
2. Is it wise for the State of North Carolina, facing an enormous expenditure for public school buildings in the immediate future, to permit rural districts and cities to go forward with buildings which are defective in arrangement, lighting, heating, ventilation, personal service facilities, etc.? Has not the time come when the state, through the state department of education, working in co-operation with county and city boards of education, should exercise supervision over the planning and erection of all schoolhouses, to the end that these may be built in conformity to well accepted sanitary, educational, and social requirements, and that the health of the children and the purse of the taxpayers may both be safeguarded?

## III. COURSES OF STUDY AND LENGTH OF THE SCHOOL TERM

QUITE as important as good buildings and good equipment in the make-up of a good school are the course of study and the length of school term.

## The Elementary Course of Study

The course of study under which the elementary schools now operate, issued in 1904, was revised in 1909, in 1917, and in 1919. Despite these revisions, its essential character has remained throughout the same. When first outlined, in 1904, work was prescribed in seven different studies, all to be taught in each of seven grades, but with varying emphasis. The several studies were as follows:

1. Reading
a. Spelling
b. Literature
2. Language
3. Drawing
4. Arithmetic
5. History
6. Geography
7. General: Health talks and current history

The revision of 1909 included nine required studies: spelling was separated from reading, physiology substituted for health talks, and agriculture added. The revision of 1919 required ten studies, handwriting being elevated to a formal place in the program; in addition, courses were outlined for the teaching of sewing and cooking to girls in the sixth and seventh grades, which, along with agriculture and manual training, became required studies in 1917.

The number of studies to be taught in each of the several grades of the elementary schools is large; but the number is not uncommonly large, for not infrequently music, free play and physical education are also required. The amount and character of the subject matter prescribed, the methods of presentation and helps suggested compare favorably with similar efforts elsewhere The North Carolina course has, however, the weakness of most seven year programs; that is, about the same amount of work is crowded into seven school years as is ordinarily found in eight year programs.

The several courses prescribed for the elementary schools of North Carolina also contain definite rules for the advancement of children from grade to grade. These are as follows:
"If the school year is not long enough to complete the course in each grade the work should be continued in the next year until it is completed, and the classes show a knowledge sufficient to warrant promotion. Children should not be permitted to pass from one grade to another until such evidence is given. Reading and language should be the basis of promotion in the first three grades. The work as outlined for each grade can be completed in about eight months.'

Whether the state in its attempt to improve rural schools should have adopted a standard seven year course, involving an eight months' school year and regular attendance, is not at issue. We can not, however, pass over certain conditions that existed in 1904 and mostly continue to exist, and other conditions that have resulted from the effort of the rural schools to follow a standard seven year program, which affect unfavorably their present efficiency.

Even in large schools the modern elementary program imposes a heavy burden upon teachers. If burdensome

in large schools, where a teacher seldom has children of more than two grades and the work is often departmentalized, what must it be in one and two room schools, where one teacher either has all seven grades and a primer class besides, or, at the very least, not less than three or four different grades? ${ }^{1}$ An investigation by the state department in 1904 showed that where one teacher taught all the required studies, the number of daily recitations varied from thirty-five to fifty-five. At the present time the usual number ranges from twenty-five to thirty-five; this allows about ten minutes for each recitation. A teacher can do little in so brief a period. Moreover, the situation is aggravated by the short school year and irregular attendance. Naturally, the shorter the term and the poorer the attendance, the less accomplished; and the more studies attempted, the less achieved in each.

In 1904, when the present course of study was first issued, the specially chartered or city schools were the only schools in the state that had an eight months' term. Of the 97 counties at that time, 30 had a school term of less than four months, 51 between four and five months, 13 between five and six months, 1 between six and seven months, and 2 a school term of more than seven months. Attendance was also poor; in the cities, 71 per cent for white and 57 per cent for colored children, and in the rural schools 59 per cent for white children and 56 per cent for colored. Thus, city teachers in 1904 even in white schools had, on the average, approximately only 121 days and rural white teachers approximately 50 days to complete an annual program calling for an average attendance of at least 144 days. ${ }^{2}$ Obviously, the

[^8]course of study of 1904 was ill adapted to actual conditions. It was, in fact, little more than a goal to work toward.
Judged alone by the length of the school year, the specially chartered or city schools should now be able to follow the state course of study. Rural conditions, except in special tax districts, are, however, still unfavorable to this endeavor. Even in 191761 of the hundred counties had less than a six months' school. The recent constitutional amendment will help, and yet it will doubtless be some years before any large number of the counties have an eight months' term. Unless a simplified course of study is prescribed, rural teachers will as a rule continue to face impossible conditions-be called upon, as they are, to attempt in six months what, it is officially acknowledged, can not be accomplished in less than eight or nine months.
Those in authority were not unaware of how poorly the course of study of 1904 and its revisions met the actual conditions, but they did not feel that they could begin at the bottom and build up. With new-born enthusiasm for education, the people demanded schools, and commonly supposed that one teacher, or certainly two, could cover the elementary and secondary field. To dampen their ardor by telling them that the simplest good high school requires at least three teachers, and that a single teacher with a four months' school term could not possibly give half of a good elementary education would have been perhaps too discouraging. Nevertheless, the state superintendent could not refrain from uttering a solemn warning against attempting too much. In his report for 1907, and frequently thereafter, he says:
"The law now wisely forbids the teaching of any high school subjects in any school having only one teacher. It requires, however, the teaching of thirteen subjects in these one-teacher schools. It is absolutely
impossible for one teacher, with as many children as are to be found in the average rural school in seven grades, to do thorough work in so many subjects. It seems to me that the number of required subjects should be reduced and that the teacher in every one-teacher school should be required to devote more time-in fact, most of the time-to teaching thoroughly these fundamental essentials of reading, writing, arithmetic, and spelling. It is folly to attempt the impossible. In my opinion, at least the first four years of the elementary school with only one teacher should be devoted almost exclusively to these four subjects, sandwiching in just enough of geography, mainly in the form of nature study, talks on everyday hygiene, etc. to give a little variety to the course and to furnish some foundation for a little more extensive work in these and kindred subjects later."

Under present conditions it is not surprising that the great majority of the rural schools can not and do not carry out the state course of study. Their actual study program, while based on the state course, is extremely narrow, particularly in the one room schools. It consists, in grades $1,2,3$, and 4 , almost exclusively of reading, writing, spelling, and arithmetic; seldom indeed in these grades is there instruction in drawing, music, history, geography, physiology, or agriculture. The three R's are likewise prominent in the day's work of the more favored pupils who reach grades 5, 6, and 7; however, attention is given in these grades to geography and physiology, and a little to history, with an occasional reading lesson in agriculture. Cooking and sewing for girls and handwork for boys are almost unknown in the white schools, but a little in these activities is frequently attempted under the direction of the Jeanes teachers in colored schools. While a few counties are introducing medical inspection, and two or three have play directors, in most schools nothing is done for the physical life of
the children. It is generally agreed that the state should provide for the children of the cpen country the advantages of a diversified school program. But the most competent to judge hold that it is impracticable to secure everything in the small rural school. The excellent new compulsory attendance law providing attendance officers will better conditions, as also would a longer school year, a simpler course of study and fewer grades, but these will never do away with the need of consolidating small rural schools wherever possible.
Even the larger rural and city schools have difficulty in carrying out the present course of study. This is not due to the shortness of the school year-for the school year in such schools is usually eight to nine monthsbut, in the larger rural schools, to the irregularity of attendance, and, in the city schools, more particularly to the shortness of the school day in the three lower grades. Principally for these reasons, even in the larger rural and city schools the first three grades rarely include more than reading, spelling, language, writing, and arithmetic, with a little singing and drawing.
More than this might reasonably be expected of the cities but for the shortened school day in the lower grades. A single long session of three and a half to four and a half hours, with thirty or forty minutes at noon for luncheon at school, does not suffice for more. ${ }^{1}$ A school day of this length and character is objectionable, first on physical grounds, because it violates well established laws of health and of physical development, and second, on educational grounds, because it makes impossible, owing to the lack of time, a modern primary program, including besides the fundamentals, music, free play, physical education, handwork, and elementary school science.

[^9]

Reading, spelling, writing, and arithmetic also make up the bulk of the upper grade instruction in both the larger rural and city schools, although considerably more time is given in the larger schools to physiology, geography, and history, and occasionally something worth while is done in agriculture. In a few drawing receives commendable attention; in still fewer manual training is provided for boys and cooking and sewing for girls-more frequently, however, in colored than in white schools. Free play and physical education are neglected, with some notable exceptions, among which are Asheville, WinstonSalem, and Wilmington.

## Pupil Progress in the Elementary School

How successful the elementary schools are in carrying out their narrow and formal course of study will be considered in the chapter on instruction. In this connection we must point out the immediate consequence of a shortened school year and poor attendance when promotion is based on standards that presuppose good attendance during a longer term. Obviously, large numbers of pupils must, under these conditions, fail to pass. They therefore either drop out of school or repeat the grade in which they fail.
If children entered school at about six years of age, and advanced regularly, there would be almost as many children in one grade as another, and all the children in the same grade would be about the same age. As a matter of fact, approximately a third of all the children in our rural white elementary schools are in the first grade, and approximately a half in grades 1 and 2.1 The ages of a single class in these grades often range from kinder-

[^10]garten to first year high school. For example, one primary class was made up as follows:

2 children six years of age
4 children seven years of age
3 children eight years of age
6 children nine years of age
2 children ten years of age
1 child eleven years of age
1 child twelve years of age
1 child thirteen years of age
The congestion of children in the lower grades, and the striking difference in the ages of children in the same grade, clearly demonstrate that children do not pass smoothly through the schools, going at regular annual intervals from one grade to the next. They mostly remain in each of the three lower grades two and sometimes three years, and it is not uncommon for the children to spend two or three years in a higher grade.

How far in the school rural white children on the average actually advance it is impossible to state with certainty. The data at hand ${ }^{1}$ suggest that approximately

| Grade | AGES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 120 | 21 |  |
| 1 | 23 | 465 | 463 | 341 | 174 | 91 | 37 | 21 |  |  | 3 | 1 | 1 |  |  |  |  | 1,634 |
| 2 |  | 4 | 61 | 207 | 168 | 117 | 54 | 34 |  | 14 | 2 |  | 1 | 1 |  |  |  | 680 |
| 3 |  | 1 | 6 | 70 | 149 | 185 | 105 | 74 |  | 13 | 6 | 1 |  |  |  |  |  | 652 |
|  |  |  |  | 7 | 63 | 128 | 176 | 125 | 77 | 29 | 13 | 5 |  |  |  |  |  | 623 |
| 5 |  |  |  | 1 | 6 | 50 | 124 | 132 | 87 | 45 | 18 | 6 | 2 | 1 |  |  |  | 472 |
|  |  |  |  |  |  | 5 | 38 | 08 | 124 | 93 |  | 29 | 8 | 4 | 1 |  |  | 455 |
|  |  |  |  |  |  |  | 2 | 25 |  | 68 | 67 | 48 | 23 | 9 | 4 | 2 |  | 304 |
| Total Elementary | 23 | 470 | 530 | 626 | 560 | 576 | 536 | 509 | 415 | 264 | 164 | 90 | 35 | 15 | 5 | 2 |  | 4,820 |
| 1st High.-..........-- |  |  |  |  |  |  |  | $1$ | $10$ | 20 | $24$ | 31 |  |  |  |  |  | 122 |
| 2d High_----------- |  |  |  |  |  |  |  |  | 1 | 5 | $7$ | 29 |  | 10 |  | 1 |  | 73 |
| 3d High. |  |  |  |  |  |  |  |  |  | 1 | 4 |  |  |  |  | 2 | 1 | 36 |
| 4th High. |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 | 5 | 6 | 7 | 38 |
| Total High.---..- |  |  |  |  |  |  |  | 1 | 11 | 26 | 35 | 67 | 67 | 30 | 15 | 9 | 8 | 269 |
| Grand Total | 23 | 470 | 530 | 626 | 560 | 576 | 536 | 510 | 426 | 290 | 199 | 57 | 102 | 45 | 20 | 11 | 8 | 5.089 |

50 per cent of them never go beyond the sixth grade. That is, about half the children miss altogether the richer portions of the school program, including literature, advanced geography, history-studies that make for personal and civic ideals. Their entire school life is thus spent in the mastery of the mere technique of reading, writing, and arithmetic, and even this they accomplish sometimes with so little success that after a few years out of school some may be classed as illiterates.

Conditions in the cities are better, but even in the cities there is sad irregularity in pupil advancement. For example, in June, 1919, some thirteen year old white children were found in the first grade, while athers of the same age had reached the third year of high school-a gross difference of nine years in school progress among children of the same age. In fact, the 3,934 thirteen year old children of the larger cities of the state were, in June, 1919, scattered among the different grades as follows:

> 21 in the the first grade
> 45 in the second grade
> 137 in the third grade
> 285 in the fourth grade
> 689 in the fifth grade
> 1,042 in the sixth grade
> 1,056 in the seventh grade
> 552 in the first year of high school
> 101 in the second year of high school
> 6 in the third year of high school

If these thirteen year old children had all entered school at the same age and had advanced regularly, none of them would be below the seventh grade; as it is, over half of them are below that grade.

At the same time 14,750 , or 37 per cent of the entire elementary school enrollment of the larger cities, were behind the grade they should be in for their age. Of


Distribution of White Thirteen Year Old Children of Cities, by Grades
these, 7,745 were behind one grade; 4,110, two grades; 1,805 , three grades; 744, four grades; and 346, five or more grades. ${ }^{1}$ In their discouragement, they leave school altogether; approximately 25 per cent of all the children of the larger cities drop out before they are fourteen years old, and approximately 35 per cent never go beyond the sixth grade; they therefore enter on the duties and obligations of personal and civic life in command only of the rudiments of the three R's.

With approximately half of the white rural population and approximately a third of the white city population with a sixth grade education or less, and this, as we shall see, of poor quality, we face a serious situation, calling for heroic action. The rural school year and the city school day should be lengthened; all children, rural and city, should be gotten into school as soon after six years

[^11]of age as is possible, and kept regularly in attendance; small rural schools should be consolidated, and an elementary course of study better adapted to prevailing rural conditions should be provided.

## The High School Course of Study

The high schools are laboring under similar unfavorable conditions. When, in 1908, the high school became a recognized part of the general school organization, there were in operation 132 county and 81 city or town high schools, a total of 213 . Ten years later, 1918, the county high schools numbered 209, the city or local, 149, a total

of 358 . There were, in addition, literally hundreds of one and two teacher elementary schools giving some high school instruction. ${ }^{1}$
If all these high schools were well maintained, well organized, and well equipped, the state would indeed be well supplied. But is it? Moved by community rivalry and spurred on not infrequently by an ambitious principal or teacher, each considerable community wants its own high school. Its school must offer as extended a program, attempt to do as much as any neighboring school, irrespective of obvious differences in resources, such as building facilities, length of term, number of teachers, and equipment. The result has been needless multiplication and the establishment of scores of high schools under unfavorable conditions. The establishment of high schools under unfavorable conditions is in itself not significant, for the way to begin is to begin; but the overweening ambition of high schools unfavorably circumstanced is indeed a matter that demands attention.
We do not wish to lay down the conditions that should control the establishment of high schools and what they should attempt. There are, however, well defined requirements, as respects length of school year and the number of teachers to be employed, generally recognized as essential to the satisfactory conduct of a standard high school, that is, a high school offering a four year course of study. As suggested by the state school authorities and laid down later by the University of North Carolina, these essential requirements are approximately as follows: a high school year of from thirty-two to thirty-six weeks, a four year course, and not less than three full time teachers.
Few schools in 1908 could meet these standards, and only a few reported four years courses-five in the counties

[^12]


OLD TYPE MEDIUM SIZED RURAL SCHOOLS
and nine in the cities and towns. In 1918, 127 in the counties and 98 in the cities and towns carried four year programs. Of these only 30 in the counties and only 74 in the cities and towns had terms of thirty-two to thirtysix weeks and three or more teachers. While it is therefore correct to report North Carolina as having a total of 358 public high schools, there are in the entire state probably not more than 104 capable of giving four years of satisfactory high school instruction, even though there are 225 which attempt four year programs. On the basis of the accredited high school list of the University of North Carolina, 12 counties have both city and rural standard four year high schools; 3 counties have only rural; 46 have only city; and 39 counties have neither rural nor city; that is, 85 counties have no standard rural high schools. This woeful lack of standard rural high schools largely explains why the National Bureau of Education ranks North Carolina third from the bottom among the states in high school enrollment. Much progress has, indeed, been made in a decade, but there is a long way yet to go before the state can be said to possess a sound or adequate high school system.

In considering the high schools, it should be remembered that each specially chartered district, until 1919-1920, bore the entire expense of its high school and its will was law. Each was free, if it so desired, to establish a high school, to adopt its own course of study, determine the length of the course, fix the length of the high school term, and employ such high school teachers as it saw fit. Under this reign of high school freedom, all kinds of city and town high schools grew up. Some have two, some three, and some four year courses; the high school term ranges from twenty-eight to thirty-eight weeks, and 4 have a single teacher.

Of the rural high schools, the state authorities have had supervision, until recently, of only those receiving
state aid-the so-called county high schools. The regulations imposed on these county high schools have had to do chiefly with their establishment and the granting to them of state aid. Owing to their rapid development and the many problems related to their establishment, it was impossible to supervise them closely, although as much as possible was done to regulate their organization and to promote their efficiency.

For the use of county high schools and for any others that might choose to adopt them, three courses of study were outlined: (1) a classical course; (2) a Latin-scientific course; and (3) a modern language course. ${ }^{1}$ These are all four year courses, calling for a thirty-six week school year. These outlines conform to good high school practice and remain much today as when first prescribed.

In undertaking to carry four year standard courses, the high schools of the state, whether county or city or town, were in about the same position as the elementary schools when they attempted corresponding standard courses; that is, the high schools were greatly disadvantaged by shortness of term, lack of teachers, and inadequate equipment. For example, when these standard courses, calling for a thirty-six week high school term, were first outlined in 1907 , only 40 of the 177 public high schools reporting had thirty-six week terms, and as late as 1917-1918 only 47 of the 358 could boast a school year of such length. Thus, through all these years, the majority of public high schools have striven to do a third to a fourth more in a given time than is commonly undertaken, and they have attempted this, too, with pupils who have had only a seven year elementary training.

Moreover, in most instances, the inadequacy of the teaching force still further lowered the quality of the

[^13]instruction. The state authorities suggested in 1910 that high schools with one teacher should not attempt more than a two year course. If no electives were offered, two teachers might undertake a four year program, but if electives were offered, three teachers were held to be required. In 1917-1918 almost a third of all public high schools had less than two teachers. Yet few of these schools limited their program to two years; a majority carried three year and some attempted four year programs. On the other hand, very few two teacher schools fail to offer electives, so that we find two teachers generally attempting what state school authorities hold should not be undertaken by less than three.

The Latin-scientific course is usually found in one teacher schools; schools of two or more teachers generally offer both the Latin-scientific and modern language courses, while farm life schools and schools having agricultural and home economics departments follow either the farm life or rural life curriculum, and offer, besides, the Latin-scientific course. But whatever the course supposedly followed, outside of a half dozen farm life schools, a score of county schools having agricultural and home economics departments, and fifteen to twenty of the largest city high schools, all the rest teach in varying proportion about the same things, chiefly Latin, English, mathematics, and modern languages, with some history and a little science. For example, in 1917-1918 14,993 children studied Latin, as against 2,688 in American history and 217 in North Carolina history. At the same time 3,368 pursued French, as compared with 3,820 in home economics, 1,037 in agriculture, 1,453 in physics, 656 in botany, and 108 in sociology. Greater emphasis on history and civics, on home economics, agriculture, and science - in a word, on the more modern and the more practical activities-is much to be desired. The colleges of the state have also a duty to perform in
this connection, for much of the emphasis upon the more formal studies by the high schools is due to the character of the prevailing college entrance requirements.

State authorities have not been unmindful of these unsatisfactory conditions. They have earnestly discouraged the organization of small rural high schools; but in these efforts they have been greatly handicapped, for the high school law of 1907 permitted the organization of county high schools on impossible terms. The local community had only to raise by taxation, private subscription or otherwise, $\$ 250$ annually for instructionto be duplicated by the state-and to maintain a seven months' high school term. On such simple conditions, as many as four so-called state high schools might be established in any one county.

As a substitute for the small high school, state authorities urged the establishment of county farm life schools ${ }^{-}$ a central high school to serve the entire county. At the present time there is only one such school in the state, that in Craven County, although there are a few others that serve a county-wide purpose. To the same end, the way was opened for the establishment of special departments of agriculture and of the household arts. ${ }^{2}$ Twenty-nine high schools in twenty-two counties now have such departments, and by reason of the SmithHughes funds available for industrial work the number will doubtless increase rapidly in the immediate future.

A decrease in the number of small high schools is much to be desired. An efficient high school can not be maintained at every crossroad; the cost is prohibitive. The time is undoubtedly at hand when every county should be laid off into high school districts, each large enough to warrant development of a high school with not less

[^14]

Richmond County

NEW TYPE MEDIUM SIZED RURAL SCHOOLS
than five or six teachers. For boys and girls living beyond reach of a district high school, dormitories should be erected at a central school, thus offering at a minimum cost good high school advantages to all the children of the county.

State school officials have also labored in other ways to improve the situation. In 1917 the high school law was so revised that it prohibited the granting of state aid to any rural high school having an average daily attendance of less than twenty pupils, and the amount of state aid above the minimum of $\$ 200$ to be granted to any school was conditioned, first, on average daily attendance; second, on the number of full time high school teachers employed; and, third, on the grade and character of the work done-powerful incentives to improvement. The state board of education also evolved a comprehensive plan for classifying rural high schools, so that each might know its ranking as determined by its resources and the quality of its instruction. The war, however, interfered with the execution of this plan.

In the meantime, a new epoch in high school development has dawned. A supreme court decision of 1917 made the high school an integral part of the public school system, so that high schools may be supported hereafter by public taxation in the same manner as elementary schools. Carrying out the spirit of this decision, all former distinctions were abolished in 1919 between stateaided or county high schools and other high schools, such as local, city, or town. The state now shares equally and alike in the support of all. The high schools are now also to have the entire time of the state high school inspector, attached to the state department of education.

Sharing as the state now does in the financial support of all high schools, its supervisory authority should be exercised over all-rural, city, and town. High school instruction should be completely eliminated from one,
two, and three teacher elementary schools; small high schools should be abolished and the development of large district high schools insisted upon; schools should be limited in their curricula on the basis of the length of term and the number of teachers employed, and they should be classified and ranked according to their resources and the grade and quality of their instruction; courses of study should be devised particularly adapted to the needs of rural children and to working conditions that obtain in the rural high schools. All high sehools should use the same record system. The state should issue all diplomas, and these should show precisely what the pupil has done, and the rank and grade of the school. And the non-technical colleges of the state ought to provide a general college course to which graduates of standard high schools may be admitted without condition, irrespective of the particular high school course pursued.

## IV. THE TEACHERS

GOOD TEACHERS are able to overcome partly even such great handicaps as poor buildings, inadequate equipment, short school terms, poor attendance, and ill adapted courses of study. The hope of a state lies, therefore, fundamentally in its teachers. If its teachers are superior, the work of the schools, even under adverse conditions, may be fairly satisfactory. If, however, its teachers as a body are ill prepared and inexperienced, then a state has little reason to expect efficiency. What is the preparation and experience of our teachers?

The general situation is easily described. Of the 12,622 white teachers and principals in service in 1919-1920, only 2,549 , or 20 per cent, hold professional certificates, that is, certificates showing satisfactory training for teaching. On the other hand only 245 of the 3,690 colored teachers, or 7 per cent, hold such certificates and can be said to be properly prepared for their work.

However, any statement about the preparation of teachers should also take account of the actual grade of school work they have completed. After repeated efforts detailed information as to preparation and experience was procured from 9,800 out of 11,712 white teachers, and from $2,357^{1}$ out of 3,251 colored teachers in service in 1918-1919.

## Preparation of Colored Teachers

From the data sought, it should have been possible to determine the number of teachers who had not gone further than the elementary school, the number stopping

[^15]with the high school, the number taking full normal school courses, etc. But in the case of the colored teachers the data obtained could not be satisfactorily tabulated. A teacher might report, for example, that she had attended college for a given period, but from the facts furnished we were often unable to determine whether she was in the elementary, the high school, or the college department; or she might report graduation, but we were generally unable to tell whether this was from the college proper or from the preparatory school.

Roughly tabulated, the returns from the 2,357 colored teachers reporting show their schooling to be as follows:

|  | Public <br> Elementary <br> School Only | County Training Schools | State Training Schools | Private <br> Schools in State | Schools <br> Outside <br> the State | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Attending | 406 | 10 | 197 | 667 | 134 | 1,414 |
| Attending and graduat'g ${ }^{1}$ |  | 7 | 148 | 648 | 140 | 943 |
| Total | 406 | 17 | 345 | 1,315 | 274 | 2,357 |

From these data it appears that 17 per cent of the colored teachers have not gone further than the public elementary school, that 43 per cent have probably had more than an elementary schooling but less than a high school course, ${ }^{2}$ that 35 per cent have had probably the equivalent of a high school education, ${ }^{3}$ and that 5 per cent have graduated from schools claiming college rank.

[^16]
## Preparation of High School Teachers

The tabulation of returns made by white teachers was also difficult. The 888 high school teachers reporting show education and training approximately as follows:

| Number | Per Cent |
| :---: | :---: |
| Part high school.-..--.-.-.- 16 | 1.8 |
| Full high school.----------- 45 | 5.1 |
| Part normal school--------- 3 | . 3 |
| Full normal school.-.-.-.-- 26 | 2.9 |
| Part college--------------- 259 | 29.2 |
| Full college or more_.---.-- 526 | 59.2 |
| Unclassified and unknown..- 13 | 1.5 |



Figure 5 Preparation of White High School Teachers

These figuresindicate that 59 per cent of the high school teachers reporting had four years in college or more, sufficient, if bona fide college work, to enable them to meet the usual minimum standards for high school teaching. But 78 of those reporting four years in college are graduates of what are known as "B" or non-standard colleges, and have not had full college courses. If these
non-standard college graduates are eliminated, it leaves North Carolina, on the basis of our returns, with 50 per cent of its high school teachers able to meet the usual requirements for high school teaching. We are, therefore, certainly within the facts in saying that at least a half of all the high school teachers of the state are without adequate preparation. At that, the high school situation is encouraging, for such a proportion of unprepared high school teachers, while lamentable, is not uncommon.

## Preparation of Elementary Teachers

The returns from the elementary teachers show their education to be as follows:


The outstanding fact about these returns is the large proportion of elementary teachers who have received their training in college-approximately 34 per cent. This is unusual, but the explanation is simple. Colleges, particularly private colleges with preparatory departments, have for years been relatively numerous, and many of them claim to prepare both elementary and high school teachers. It is thus natural that our teachers should enter the profession by way of the college, and not by way of the normal school-a reversal of common practice.

From the returns themselves it would appear that almost a third of the white elementary teachers reporting
are able to meet the usual minimum requirements for elementary school work, that is, they have had at least two years of normal school training or the equivalent time in college. Among these are included 565 reporting two years or more in normal school, 827 reporting two years in college, 488 reporting three years, and 793


Figure 6
Preparation of White Elementary School Teachers
reporting four years or more. If, however, we analyze the preparation of the 565 teachers reporting two or more years in normal school, we find that only 167 of these have had really standard training, that is, normal school training based on graduation from a four year high school. Again, probably not more than 512 of the 827 reporting
two years in college have had the equivalent in time of two years above a standard high school.

But the length of the training of these elementary teachers reporting college attendance is not the only question involved; more important is the character of their training. Good elementary teacher training involves concentration on the subject matter and methods of teaching the common school studies-reading, spelling, writing, arithmetic, geography, history, etc. The time of college students is consumed mostly by English, ancient and modern foreign languages, and mathematics. Even if college students elect professional work in the junior and senior years, this has to do usually with teaching in the high school rather than in the elementary school. College trained teachers thus enter the elementary schools as a rule without adequate professional preparation for the work they undertake, so that they can not ordinarily be reckoned as well trained elementary teachers.

But let us put aside all questions as to the ability of the ordinary college to train elementary teachers, and accept as meeting the usual elementary standards the 793 reporting four years or more in college, the 488 reporting three years, the 512 out of the 827 reporting two years, and the 167 of the 565 reporting two years or more in normal schools. These together make a total of 1,960 , equal to 22 per cent of all reporting, that might be reckoned as well trained. On this basis it would appear that approximately four-fifths of all white elementary teachers now in service are without adequate preparation. Of these four-fifths, about 43 per cent, or a third of the entire elementary teaching body, are woefully unprepared, having attended only an elementary school or having gone only a short way in high school. The great majority of this last named group are in the rural schools.

## Experience, Tenure and Age of Teachers

Our teachers are likewise inexperienced. Of the white teachers reporting a half have served less than five years, a fourth between five and nine years, and a fourth have been in schools ten years or more. Rural teachers are less experienced than city teachers. Of the rural teachers reporting, 54 per cent have taught less than five years, and 20 per cent were in their first year, whereas in the specially chartered districts, only 36 per cent have served less than five years, and only eight per cent were teaching for the first time. Colored teachers are somewhat more experienced than white teachers, and yet 11 per cent of those reporting were beginners.

Our teachers are also extremely mobile, that is, they move freely from school to school, with the result they are seldom anchored at one place long enough to know either pupils or parents, or to become identified with the interests of the community. For example, 52 pei cent of all white teachers reporting were in new positions, which means, with only 18 per cent of them beginners, that approximately 42 per cent of all old teachers had taken new positions in 1918-1919. Rural schools as usual suffer most. Fifty-five per cent of the rural teachers reporting were in new fields, so that with only 20 per cent of them beginners, approximately 44 per cent of old teachers must have shifted, as compared with approximately 35 per cent in the cities. It is, therefore, not surprising that only 10 per cent of all white teachers have been in their present positions five years or more. Colored teachers appear to move a little less frequently.

On the other hand, we have few immature teachers. Out of the 888 high school teachers reporting, only 24 were under twenty-one years of age, and all but 54 of the 1,518 city elementary teachers were twenty-one or over. As might be expected, the percentage of immature teachers is highest in the rural schools, but even there
only 19 per cent of those reporting were under twentyone. In the colored schools less than 10 per cent might be called immature.

## Teachers' Salaries

There are three obvious reasons why approximately half of the high school teachers and approximately fourfifths of the elementary teachers are unprepared, and why the teaching body as a whole is inexperienced and unstable. The prime reason is the low salaries paid. Teachers' salaries are low everywhere, but those in our state have for years been almost the very lowest in the United States. Even as late as 1917-1918, the average annual salary of rural white teachers was only $\$ 276$, and of rural colored teachers $\$ 140$. At the same time city white teachers received annually on the average only $\$ 532$, and city colored teachers $\$ 276$. Even at these salaries, teaching to some was undoubtedly a serious business, but for the great majority it was merely a makeshift, to be followed until something better turned up.

The legislature of 1919 attempted to meet these deplorable conditions. The salaries of teachers holding county and city certificates (second grade certificates) were raised from $\$ 35$ to $\$ 45$, and the salaries of those holding state certificates were increased from 10 to 25 per cent. Despite these increases, the salaries of most teachers remained pitiably low, particularly in the rural districts. For example, the average annual salaries of rural elementary teachers for 1919-1920 were as follows: white, $\$ 430$; colored, $\$ 295$.

The salaries provided by the legislature of 1919 were neither sufficient to prevent the further depletion of the teaching staff, nor to induce young people to enter the profession. Far-reaching measures were necessary if the schools were to be saved from the impending crisis.


Pitt County


Polk County

The efforts of those in authority to meet this critical situation culminated in the legislation of August, 1920.

This legislation is a long step forward. First, the salaries guaranteed are closely linked, in each instance, with prescribed academic and professional preparation. The longer and more specialized the training required, the larger the initial salary guaranteed. For example, holders of county and city certificates (second grade certificates) are guaranteed only $\$ 45$ a month, whereas properly trained elementary and high school teachers are guaranteed an initial monthly salary of $\$ 90$ and $\$ 100$ respectively.

Second, all teachers holding state certificates are guaranteed for a period of four years after the first, an annual increase of $\$ 5$ per month. These guaranteed annual increases, small as they are, along with the guaranteed minimum initial monthly salary, will do something to hold teachers in service, and to prevent them from shifting from school to school.

## The Certification of Teachers

The prevailing way of certificating teachers has also contributed to the present unpreparedness of the teaching body. A certification system, well devised and executed, can do much, by holding right standards before teachers, to stimulate proper preparation. But with salaries low, with little distinction in pay or otherwise between the trained and the untrained, with teachers scarce, our certificating authorities have been able to do little to foster teacher training, while the conditions under which certificates were issued minimized even the little they could do.

Prior to 1917 there were 237 gateways to teaching. Certificates were issued by 100 county superintendents, 136 superintendents of specially chartered districts, and the old state board of examiners; and, of course, there were as many standards as there were certificating bodies.

To correct this chaotic condition, the present state board of examiners and institute conductors was created in 1917. The bill creating this board was a compromise. The county and city superintendents were left supreme in the field of second and third grade certificates, thus keeping alive 236 different certificating authorities. The influence of these local authorities is great, for over a third of the entire teaching force hold certificates issued by them. To be sure, the state has for years discriminated in salary against holders of such certificates; nevertheless, the relative number will doubtless be large for years to come.
Despite the large proportion of teachers thus certificated by local authorities, there is not now a single line of law or regulation governing the issuance of such certificates; that is, laws or regulations prescribing the subjects in which examinations shall be held, periods of validity, and conditions of renewal. Each superintendent is a law unto himself. The result is that certificates of these grades are often handed out by superintendents without even the semblance of an examination. When certificates can be had for the asking, obviously there is little incentive to thorough preparation. Quite properly the holders of such certificates are called the "lost third" of the teaching body, and they will doubtless remain "lost" until brought under the supervision of a central board.

On the other hand, the law of 1917 gave the state board of examiners and institute conductors control of all certificates above second and third grade. However, it was understood that holders of certificates from the old state board of examiners and all holders of first grade county certificates should receive new state certificates without examination. This "gentlemen's agreement" extended also to certificates issued by the superintendents of specially chartered districts. Under this agreement the state
board has issued to the holders of all such certificates a state certificate of the particular kind and grade recommended by the respective city superintendents. It was only just that holders of old state certificates should receive new state certificates of equal tenure and validity, but it was surely unwise to tie the hands of the state board of examiners, as was done in the case of holders of first grade county certificates and teachers in specially chartered districts.

The new state board of examiners was thus gravely handicapped at birth, and it faced an impossible situation besides. A thoroughgoing certification system is effective only when salaries are attractive. When salaries are deplorably low, the standards for certificates set up by the state board of examiners must of necessity be correspondingly low; hence, efforts that can be made under these conditions to elevate teacher training avail little.

The board's opportunity to do a piece of constructive work came with the special session of the general assembly of 1920, and well did they respond. Basing their new certification scheme on the minimum salaries guaranteed by the new salary law, they laid down specific academic and professional requirements for each kind and grade of certificate needed in the entire school system. These requirements are defined in terms of work completed in school, for which credit is awarded toward graduation from a course regularly offered by the given institution. Once a teacher obtains a standard certificate, she is forever relieved from all further examinations or -preparatory work. The former plan of allowing home and reading circle work to count on renewals and on raising certificates to a higher grade was abandoned. Nonstandard certificates may now be renewed or raised to a higher grade only by actual school attendance either in regular term or during the summer.

The new certification scheme is thus founded on well 92468-5
accepted principles, and is destined to exert a profound influence for good. In the first place, it sets before the people the academic and professional preparation needed by each kind of well trained teacher. To teachers themselves it makes clear the specific preparation required to secure a given certificate. Prospective teachers, expecting to enter the elementary schools, will no longer study methods of teaching high school subjects, but will focus their attention on the academic and professional subjects prescribed for the particular elementary certificate which they desire. Similarly with prospective high school teachers. Finally, the scheme incidentally points the way for both public and private teacher training institutions. So little was formerly required of teachers that the institutions of the state generally undertook to train all kinds of teachers, with the result that teachers were rarely well prepared for any particular field. The new certification scheme does not lay down specific teacher training courses, but it does prescribe the general requirements of such courses. The effect of this will eventually be that each institution will concentrate upon the particular kind of teacher training it is best equipped to do.

To carry this certification scheme to its logical conclusion, the salaries of teachers for each grade of certificate will, as we shall point out later, need to be made still more attractive and to be placed on an annual basis. Also, the certification of all teachers, even the lowest grade of city and county teachers, should be put in the hands of the state board of examiners. Thus to do away with the other 236 certificating authorities is the surest and quickest way to eliminate favoritism and chaos, to reach the present "lost third," and to elevate the entire teaching force.

The mechanism provided for the operation of the new certification system is seriously defective. As now or-

ganized, the state board of examiners and institute conductors consists of six members, besides the state superintendent, and the supervisor of Negro and Indian normal schools, ex officio secretary. The $\$ 25,000$ annually appropriated provides salaries for the six regular members; but little remains for incidental expenses and clerical assistance. The actual annual expense of the board approximates $\$ 30,000$. A far more effective organization would be provided if a division of certification were created within the state department of education. At the head of this division there should be a director, who should be provided with an ample clerical force, and temporary help in the preparation and reading of examination questions. Such an organization would not only be more efficient than the present organization, but less expensive; at the same time it would free the remaining members of the present board for other important work, for example, the supervision of teacher training departments in high schools and county summer training schools, which are so rapidly displacing the old county institutes.

## Teacher Training Facilities

Nothing can possibly take the place of liberal salaries and a sound certification system in fostering proper teacher preparation. Yet strong teacher training institutions, readily accessible, will increase materially the number of well trained teachers.

Under present conditions, there are needed annually approximately 150 new high school teachers, and approximately 2,000 new white and 350 new colored elementary teachers, merely to take the place of those who yearly leave the system. These numbers take no account of the new county and city superintendents and the new supervisors annually required, and they would be greatly augmented if any consistent effort were made to reduce
the present proportion of ill prepared teachers. On the other hand, it must not be forgotten that the teaching body tends to become more stable, as it is more highly trained.
If both state and private institutions are considered, the present high school teacher training facilities answer fairly well and could be made adequate for immediate needs. The State University should furnish at least 25 high school teachers annually, and the North Carolina College for Women, 50. Seven private "A" colleges having educational departments graduated from these departments in June, 1919, 71 students who expected to teach. Altogether there are now available approximately 150 high school teachers annually, and doubtless this number will increase under the spur of higher salaries. Probably few of these graduates could at the moment meet the requirements of the highest high school certificate in the new certification scheme. It would, however, be a short step for most of these institutions so to strengthen their professional high school courses that their graduates could qualify for the certificate in question. Moreover, the "B" colleges, for reasons to appear later, will doubtless train more high school teachers in the future than in the past. This will further increase the supply, even though these "B" college graduates may not be able to secure the highest grade of high school certificate. The prospect for an abundant supply of well trained and fairly well trained high school teachers is, therefore, promising.
The elementary teacher training problem is not so easily solved. In the past certain of the private colleges, particularly those of, "B" grade, trained elementary teachers. Students doing chiefly regular college work can not now meet the requirements for high grade elementary certificates as laid down in the new certification scheme; such work counts to greater advantage toward a high
school certificate. In a word, under the new certification scheme, college students can obtain higher certificates for teaching in high schools than in elementary schools, and for this reason they will receive higher salaries as high school teachers than as elementary school teachers. The colleges will therefore tend to abandon elementary teacher training in favor of the preparation of high school teachers. Hence, private colleges are no longer to be counted among the elementary teacher training assets of the state. There is, however, one private institution which may be so counted-the Normal and Collegiate Institute at Asheville, which graduates about 50 elementary teachers a year and has trained 165 elementary teachers now in the field.

On the other hand, the state supports four institutions devoted wholly or in part to the training of elementary teachers-the North Carolina College for Women, the East Carolina Teachers Training School, the Appalachian Training School, and the Cullowhee Normal and Industrial School. To what extent are these institutions able to meet the elementary teacher training needs of the state? As pointed out above, the elementary schools now require approximately 2,000 new teachers annually merely to fill the places of those who drop out. All the teachers now in service, graduate and non-graduate, who received their major training in these state supported schools aggregate only $1,262 .{ }^{1}$ These 1,262 teachers, the combined product of all these institutions for years, thus barely equal three-fifths of the new teachers required in a single year. Nothing could depict more clearly the utter inadequacy of the present provisions for the training of elementary teachers, unless it be the

[^17]further fact that all these institutions together graduate less than 200 elementary teachers a year, scarcely a tenth of the number now needed.

Within the last year several high school teacher training departments have been established-twelve in all. Such departments usually take tenth and eleventh grade high school pupils and give them simple, practical instruction in teaching as a part of their high school course. County summer training schools have also been generally organized, offering a six or eight weeks' course to prospective teachers. These are valuable means of giving beginners a little professional training, but both are probably temporary and are not to be reckoned as permanent factors in elementary teacher training.
Private schools play even a larger role in the training of colored teachers than in the training of white teachers. Thirteen of the thirty colored colleges and academies of the state maintain normal departments. Much of the work of these private schools is weak, but they are doing the best they can with their limited resources, and the state would be in a sorry plight without them. For, of the 2,357 colored teachers reporting to us, over half received in private schools such training as they have enjoyed.

On its part, the state supports three colored training schools-one at Elizabeth City, one at Fayetteville, and one at Winston-Salem. These schools are all small, and, together, have in the field 295 former students, 135 of whom are graduates. They turn out annually about 35 graduates, which is approximately one-tenth of the new colored teachers now required. ${ }^{1}$ There are also in the state 18 publicly supported county training schools

[^18]for colored teachers. These schools aim to provide high school opportunities for colored boys and girls and training for rural school teachers. Although of very great promise, they are of too recent origin to have become a factor in training colored teachers.

To summarize, our teachers are, as a body, ill prepared, inexperienced, and unstable. The reasons for this unsatisfactory condition are low salaries, a poor certification system, and inadequate teacher training institutions. The new salary law and new certification scheme are long steps in the right direction, but before conditions will materially improve, salaries for those having proper preparation will need to be still further increased, existing teacher training institutions enlarged and strengthened in ways to be pointed out later, and new ones established, particularly for the training of rural elementary teachers.

## V. INSTRUCTION

GOOD teaching gives children the kind of knowledge and the kind of power that are constantly needed, in daily life. It trains them to read, to spell, to figure, to observe, and to think. Unfortunately, most teaching is not of this quality. Most teaching leans too heavily on memory or rote work, and so tends to stifle rather than to develop the child's intelligence.

For example, in our smaller schools, with rare exceptions, teaching consists in assigning lessons in textbooks, helping children to pronounce difficult words and solve difficult problems, and hearing them repeat in a mechanical way what they can remember of the printed page. Rarely are questions asked that arouse curiosity or provoke thought, that illuminate the text by an appeal to experience, or that point out the value of what is learned because of its usefulness in life. The teaching in these smaller schools is thus on the whole deadening in its effect.

In our larger schools-rural and city-there is here and there some excellent teaching, but, even in these larger schools, the majority of the teachers do little more than assign lessons and hear children recite. Many of these teachers do not lack the capacity to do better work, but being neither stimulated nor guided by trained supervisors they have fallen into routine and formal methods of instruction.

With the teaching in our schools on the whole of poor quality, it is inevitable that the results achieved should be unsatisfactory. In fact, many children are now learning so little in school, particularly in the small rural [58]
schools, that a few years hence they will have forgotten most of what they memorized and will quite properly be classed as illiterates.

These somewhat sweeping and unfavorable opinions are the result of wide observation in the classrooms of North Carolina and other states. Fortunately, however, we need not ask the public simply to take our word as to the quality of the teaching in our schools. Written and other tests have been devised, by means of which the efficiency of teaching can be measured, and the efficiency of teaching in different places and under different conditions can be compared. In February and March, 1920, more than 10,000 children in different counties and cities of North Carolina were thus tested or measured. It is believed that the results from these tests furnish a fair sample of the kind of education now given by the public schools of the state.

Four counties were originally selected in which to give the tests-McDowell, R swan, Wake, and Pitt. The school officials consulted agreed that each of these counties was somewhat better than the average county of its respective section-Mountain, Piedmont, Central, and Tidewater-and that the results of the tests in these counties would be somewhat better than the average for the state. To the four counties originally chosen Halifax was added later, as were also the cities of Asheville, Greensboro, and Wilmington.

In order that our data might be complete so far as they went, effort was made to test the children in every elementary school and every high school in the above named originally selected counties. Few even of the one room schools were omitted. ${ }^{1}$ In the elementary schools the

[^19]tests were given chiefly in the fifth and seventh grades. The fifth grade was selected because large numbers of children drop out of school before or by the time they have completed this grade, and the achievements of fifth grade children, therefore, are an index to the preparation for life of children thus dropping out of school. On the other hand, the seventh grade represents the final year in the grades, and the achievements of seventh grade children accordingly represent the maximum product of the North Carolina elementary schools. In addition to the tests given in the fifth and seventh grades, a special reading test was given to primary children in a few city and county schools, and high school pupils were tested in reading, algebra, and Latin.

## Reading

Reading is the most important skill that the elementary schools seek to impart. Therefore, in testing the achievements of the schools, primary attention was given to reading.

## Reading in the Primary Grades

To teach children to read is not only the main task of the first and second grades of the elementary school, but it makes large demands upon both teacher and pupils in grades 3 and 4. A public school system which achieves a creditable record in this crucial phase of its work is likely to do well in other respects also. To fail at this critical point means inefficiency in all more advanced instruction.
As a measure of how well our schools are teaching children to read, a simple reading test ${ }^{1}$ was given in Raleigh to approximately 1,000 school children and to about 800 rural school children in one, two, three, and four teacher schools. First, second, and third grade

[^20]

OLD TYPE LARGE RURAL SCHOOLS
children were tested. The results of these tests at Raleigh show good work in the third grade. The second grade, however, falls considerably short of the achievements of good schools in other states, and in the first grade the results are decidedly below what they should be.

The poorest work was found in one teacher rural schools, where third grade children did little more than one-half as well as good second grade children should do, and where fourth grade children read little better than good second grade children. In the two and three teacher schools the results were slightly better. But satisfactory results are approached only in the four teacher schools, where third grade children approximate the normal achievement of children of this grade. Rural children, especially in one, two, and three teacher schools, are thus far below where they should be in reading ability; the handicap of their poor instruction will be lifelong, and it will be severe.

## Reading in the Fifth and Seventh Grades

The ability to read and understand simple prose of the type found in school readers and in the textbooks on informational studies, such as history and geography, becomes increasingly important in the intermediate and grammar grades. Accordingly, a reading test ${ }^{1}$ was given to more than 5,000 children in grades 5 and 7 . The following is an illustrative paragraph from the test, representing seventh grade difficulties, and the questions the pupils were expected to answer after having read the paragraph:

Hay-fever is a very painful though not a dangerous disease. It is like a very severe cold in the head, except that it lasts much longer. The nose runs; the eyes are sore; the person sneezes; he feels unable to think or work.

[^21]> Sometimes he has great difficulty in breathing. Hay fever is not caused by hay, but by the pollen from certain weeds and flowers. Only a small number of people get this disease, perhaps one person in fifty. Most of those who get it can avoid it by going to live in certain places during the summer and fall. Almost everyone can find some place where he does not suffer from hay-fever.
> What is the cause of hay-fever?
> How large a percentage of people get hay-fever?
> During what seasons of the year would a person have the disease described in the paragraph?

In order to meet this test, a child must be able to read and to understand what he has read-which, by the way, is just what he must be able to do when he studies his lessons in history, geography, or science. The results from the test show that the best work in reading is done in the larger cities-Asheville, Raleigh, Salisbury, and Wilmington-and the next best in the middle sized cities. But this so-called "best" work is itself poor, for the scores in both groups of cities and in practically every individual city fall considerably below the normal score for seventh grade pupils in an eight grade system. ${ }^{1}$ In fact, our seventh grade city school children read no better than good sixth grade children elsewhere, and appear to be two years behind the standard reading achievements of children who complete an eight year program. The record for grade 5 in city schools is somewhat better, being only slightly lower than the standard score for this grade.

But the worst conditions are found in the rural schools. In no case did any group of seventh grade rural children in any of the four selected counties equal the standard for grade 6. The seventh grade scores for all the counties approximate the standard score for grade 5 , and the fifth grade scores are about equal to what third grades

[^22]SUMMARY OF NORTH CAROLINA FIFTH GRADE SCORES AND SCORES OF SIMILAR SCHOOLS IN VIRGINIA

| Kind of School | Number of Pupils Tested in North Carolina | Median Age of Pupils Tested in North Carolina | "Thorndike" Reading |  | Spelling |  | Addition |  | Multiplication |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | North Carolina | Virginia | North Carolina | Virginia | North Carolina | Virginia | North Carolina | Virginia |
| Rural |  |  |  |  |  |  |  |  |  |  |
| 1 Teacher | 190 | $12 \mathrm{yr} .81 / 2 \mathrm{mos}$. | 4.38 | 5.4 | 40.0\% | 56.8\% | 9.5 | 11.2 | 8.8 | 10.4 |
| 2 Teacher. | 512 | 12 "11" | 4.38 | 5.3 | 36.0 |  | 9.6 | 11.2 | 7.6 | 10.1 |
| 3 Teacher | 291 | 12 " $101 / 2$ " | 4.65 | 5.4 | 48.0 |  | 10.4 | 10.2 | 8.04 | 10.2 |
| 4 Teacher | 457 | 12 , $31 / 2$ " | 5.43 | 5.6 | 50.5 | 61.5 | 11.1 | 13.8 | 9.2 | 10.7 |
| Small City (Second Half) | 379 | 11 " $101 / 2$ " | 5.47 | 5.4 | 63.75 | 61.5 | 12.7 | 12.7 | 10.7 |  |
| Large City (Second Half). | 876 | 11 " $51 / 2$ " | 5.51 | 5.6 | 65.5 | 68.3 | 11.3 | 14.4 | 10.25 |  |
| General Standard-Grade 5 General Standard-Grade 6. |  |  | 5.76.5 |  | $66 \%$$79 \%$ |  | 1416 |  | 11 |  |
|  |  |  | 15 |  |  |  |  |  |
|  |  |  |  |  | 6.5 |  |  |  | 16 |  |

should make. In general, therefore, the reading capacity of fifth and seventh grade rural pupils is fully two years below the achievement of good fifth and seventh grade city schools in general, and one year or more behind the achievement of the children of corresponding grades in the better city schools of North Carolina.

The case, however, appears even more critical when the ages of the rural children are considered. The median age, or average age, of the seventh grade children in the larger cities of North Carolina is about thirteen and a half years. Pupils in the corresponding grade in one, two, and three teacher rural schools are almost two years older. To put it differently, the 217 seventh grade children examined in one teacher schools show a median or average age of about fifteen years and three months, which is approximately two years more than the median or ayerage age of the 630 seventh grade children of the larger cities, and, besides, these same rural children are almost a year behind in reading. Combining these facts, it would appear that these 217 seventh grade children in the one room rural schools are at least three years short in their reading achievements of the children in our city schools. Where such conditions prevail, there can be little effective instruction in informational subjects, such as history and geography. The validity of this inference appears in the results for the examination in United States history to be described later.

In light of the fact that 50 per cent of the rural school children of our state never go beyond the sixth grade, the overwhelming significance of the reading situation becomes clear. Men may differ about the importance of teaching young people the subjects of algebra and Latin, but there can be no difference of opinion among intelligent men as to the importance of teaching the children of our democracy to read the. English language.

## High School Reading

While there is general acceptance of the importance of reading in the elementary grades, little attention is paid anywhere to continuing in the high school instruction of children in the mastery of the printed page. Yet there can be little doubt that such mastery, or its absence, influences all phases of high school instruction. To test the achievement of our high schools at this critical point, a silent reading test was given near the close of the school year to more than 1,300 eighth grade pupils (first year high school). The same test was also given to more than 2,000 students in the upper high school grades and in the first year of a few of the standard colleges of the state. ${ }^{1}$
When the results for our first year high school students are figured on the basis of the entire test, it is evident that they finish accurately less than 50 per cent of the test. It might appear that this low per cent of accuracy was due to the great length of the test, as students generally were unable to complete the entire test in the fortyfive minutes allotted. However, when the results for accuracy are figured wholly on the basis of the questions which the pupils attempted, the per cent of accuracy for these first year high school pupils is but little higher. When compared with the results from corresponding grades in schools outside the state, the North Carolina scores are always lower. The larger North Carolina cities scored 48.3 per cent of correct responses; St. Paul scored 55.4, Kansas City, Missouri, 59.4, and Boulder, Colorado, 64.
The percentage scores for students in the second, third, and fourth high school years increase, partly, no doubt, because the poorer readers drop out of school or lag behind,

[^23]SUMMARY OF NORTH CAROLINA SEVENTH GRADE SCORES AND SCORES OF SIMILAR SCHOOLS IN VIRGINIA

|  | Number of | Median Age | "Thorndik | ' Reading |  |  |  |  | Multip | cation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | North Carolina | North Carolina | North Carolina | Virginia | North Carolina | Virgiria | North Carolina | Virginia | North Carolina | Virginia |
| Rural |  |  |  |  |  |  |  |  |  |  |
| 1 Teacher-------- | 217 | 15 yrs. 3 mos. | 5.70 |  | 29.0 | 52.6\% | 12.3 | 13.6 | 12.3 | 14.1 |
| 2 Teacher-.--- | 317 | 15 " $21 / 2$ " | 5.73 | 6.7 | 20.5 |  | 12.7 | 14.8 | 12.1 | 14.8 |
| 3 Teacher.- | 217 | 15 " 3 mos. | 5.64 | 6.2 | 20.5 |  | 13.0 | 14.4 | 12.6 | 15.2 |
| 4 Teacher-- | 381 | 14 " $31 / 2$ " | 5.78 | 6.9 | 25.0 | 58.7 | 14.1 | 15.2 | 13.1 | 14.5 |
| Small City (Second Half) | 322 | 13 " 10 mos . | 6.28 | 6.9 | 38.0 | 58.7 | 15.0 | 15.2 | 14.2 |  |
| Large City (Second Half) | 630 | 13 " 5 " | 6.40 | 7.3 | 33.5 | 63.1 | 15.0 | 15.9 | 14.1 |  |
|  |  |  | 7.07.5 |  | 50\% |  | 18 |  | 17 |  |
|  |  |  | 66\% | 18.5 |  | 18 |  |

and partly because high school education improves reading capacity. What is true of the scores for the larger cities in these upper high school grades is correspondingly true for upper grades in the rural high schools. Even so, the 119 high school seniors in the rural high schools of McDowell, Pitt, Rowan, and Wake counties score less than do the freshmen in any high school reported from outside the state. What high school graduation from such schools means in terms of the mastery of knowledge it is difficult to understand.

## Spelling

To find out how well North Carolina children spell, two lists of 20 words each were given to the fifth and seventh grades, respectively, in the school examined. The words for the fifth grade were as follows: ${ }^{1}$ forenoon, neighbor, salary, visitor, machine, success, honor, promise, busy, different, attention, education, director, together, service, general, lawyer, soldier, tobacco, treason. Those for the seventh grade were: ${ }^{2}$ immediate, convenient, receipt, preliminary, disappoint, annual, committee, architecture, artificial, beneficial, colonel, contagious, development, familiar, financier, intelligent, opportunity, peculiar, persevere, treachery.

Fifth grade children in the larger and medium sized cities fell but little short of the grade standard ( 66 per cent). None of the rural schools, however, even approximates satisfactory results. The fifth grade pupils in one teacher schools spell, on the average, only 8 of the 20 words correctly, whereas the standard calls for 13 . The two and three teacher schools did somewhat better, but even the four teacher schools fell 15 per cent below the standard.

[^24]SUMMARY OF HIGH SCHOOL READING SCORES-SECOND HALF OF YEAR

|  | First Year |  |  | Second Year |  |  | Third Year |  |  | Fourth Year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kind of School | Number Tested | $\mathrm{A}^{1}$ <br> Method <br> of Scoring | B ${ }^{2}$ Method of Scoring | Number Tested | A Method of Scoring | B Method of Scoring | Number <br> Tested | $\begin{array}{\|c\|} \text { A } \\ \text { Method } \\ \text { of } \\ \text { Scoring } \end{array}$ | B Method of Scoring | Number <br> Tested | A Method of Scoring | B Method of Scoring |
| North Carolina: Rural. $\qquad$ Small City Large City | $\begin{aligned} & 425 \\ & 231 \\ & 652 \end{aligned}$ | $\begin{aligned} & 33.7 \\ & 42.1 \\ & 48.3 \end{aligned}$ | $\begin{aligned} & 42.8 \\ & 46.9 \\ & 53.8 \end{aligned}$ | $\begin{aligned} & 262 \\ & 150 \\ & 523 \end{aligned}$ | $\begin{aligned} & 36.3 \\ & 44.8 \\ & 60.4 \end{aligned}$ | $\begin{aligned} & 49.7 \\ & 56.0 \\ & 62.5 \end{aligned}$ | $\begin{aligned} & 124 \\ & 131 \\ & 347 \end{aligned}$ | $\begin{aligned} & 44.4 \\ & 45.4 \\ & 67.2 \end{aligned}$ | $\begin{aligned} & 58.1 \\ & 56.6 \\ & 70.4 \end{aligned}$ | $\begin{array}{r} 119 \\ 99 \\ 253 \end{array}$ | $\begin{aligned} & 44.7 \\ & 62.1 \\ & 71.2 \end{aligned}$ | $\begin{aligned} & 60.8 \\ & 67.3 \\ & 73.0 \end{aligned}$ |
| Kansas City, Mo Boulder, Colo <br> St. Paul, Minn |  | $\begin{aligned} & 59.4 \\ & 64.0 \\ & 55.4^{*} \end{aligned}$ | $\begin{aligned} & 64.2 \\ & 71.0 \\ & 61.8 \end{aligned}$ |  | 683 | 72.3 |  | 64.7 | 70.5 |  | 68.7 | 72.3 |

[^25]The results for the seventh grade indicate that the words chosen for the test were too difficult. Nevertheless, on the basis of the results derived from tests given elsewhere throughout the country, it was reasonable to expect that our city children would spell at least half of the 20 words correctly. No North Carolina school group equaled this expectation. In general, the city schools spell correctly less than 8 words and the rural schools less than 6 in 20 . While the city schools achieve the best results even their achievement falls so far short as to prove the poor quality of the spelling instruction.

## Arithmetic

Hardly less important than the ability to read is the ability to handle the fundamental operations of arithmetic. To measure the efficiency with which our schools teach arithmetic, fifth and seventh grade children were tested in addition and in multiplication. ${ }^{1}$ The test consisted of a series of problems in addition and multiplication, beginning with very simple problems and advancing to more difficult ones. Nineteen problems were given in addition, and 20 in multiplication. The measure of a pupil's ability is the number of problems solved cor-

[^26]rectly in ten minutes. The following are representative of those in addition:

| 2 | 23 | \$8.00 | \$ . 49 |
| :---: | :---: | :---: | :---: |
| 3 | 25 | 5.75 | . 28 |
|  | 16 | 2.33 | . 63 |
|  |  | 4.16 | . 95 |
|  |  | . 94 | 1.69 |
|  |  | 6.32 | . 22 |
|  |  |  | . 33 |
|  |  |  | . 36 |
|  |  |  | 1.01 |
|  |  |  | . 56 |
|  |  |  | . 88 |
|  |  |  | . 75 |
|  |  |  | . 56 |
|  |  |  | 1.10 |
|  |  |  | . 18 |
|  |  |  | . 56 |

The following are representative of those in multiplication

| $3 \times 7=$ | 50 | 8754 | 16 |  | $21 / 2 \times 31 / 2=$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 | 8 |  |  |  |  |

The normal addition score in November for seventh grade children in northern and western cities having eight year systems is 18 problems. The seventh grade children in larger and smaller cities of North Carolina tested in February and March made a score of 15 problems, which means that they are about a year and a half below where such children should be; indeed, in no instance did the seventh grade children of any city reach the standard for sixth grade children of good schools. As in reading, the best work of rural children was in the four teacher
SUMMARY OF HISTORY SCORES MADE BY PUPILS IN SECOND HALF OF GRADE VII.

| Kind of School | Number of Pupils Taking Test |  | Median Ages of Pupils Taking Test |  | Scores <br> Information Questions |  |  | Scores Thought Questions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boys | Girls | Boys | Girls | Boys | Girls | Total | Boys | Girls | Total |
| Rural |  |  |  |  |  |  |  |  |  |  |
| 1 Teacher- | 37 | 69 | $15 \mathrm{yrs}$.4 mos . | $15 \mathrm{yrs} .1 \frac{1}{3}$ mos. | 6.6 | 6.9 | 6.7 | 3.4 |  |  |
| 2 Teacher | 101 | 182 | 15 " 2 " | $15 " 5 "$ | 6.6 | 7.6 | 7.1 | 6.0 | 3.8 3.7 | 3.75 4.0 |
| 3 Teacher | 89 | 111 | 15 "3 " | $15 " 5$ | 7.1 | 9.4 | 8.6 | 5.0 | 6.0 | 5.8 |
| 4 Teacher | 145 | 159 | $14{ }^{\prime \prime} 4$ | 14 " $1{ }^{\frac{1}{2}}$ " | 10.4 | 9.1 | 9.7 | 7.5 | 7.5 | 7.5 |
| Small City..-- | 150 | 194 | 14 " $1{ }^{\frac{1}{2}}{ }^{\prime \prime}$ | $13 " 5$ " | 12.4 | 11.0 |  |  |  |  |
| Large City..... | 304 | 320 | 13 " $6 \frac{1}{4}$ | $13 " 4$ " | 13.2 | 12.2 | 12.4 12.5 | 12.5 12.8 | 11.8 11.1 | 12.1 12.2 |

schools, where seventh grade children made a score of 14 problems, only one problem below the score of the larger and smaller cities. The poorest work was in the one teacher schools, where the score was 12 problems, which shows that seventh grade children in these schools have little more than fourth grade ability in addition, when measured by the achievement of children in good schools.

Similarly, in multiplication the seventh grade achievement of children in the larger and smaller city schools is slightly less than the normal achievement of the sixth grade in good schools. In the one, two, and three teacher schools, the seventh grade made scores only a little better than the standard score for grade 5 .
When, in connection with these scores in addition and multiplication, one considers that in every grade the rural school children are one, two, sometimes three years older than they ought to be, the full meaning of the poor results becomes apparent. Here and there a child of unusual ability may achieve for himself what the schools fail to give him, but the great mass of children who leave these schools will go through life weighed down by their poor schooling.

## History

Outstanding dates like 1492, 1776, and 1860, the names of men like Columbus, Washington, Jefferson, Lee, Grant, and Lincoln, and inventions like the cotton gin, telegraph, and locomotive represent to educated persons the course of events leading up to our present American life. Few will deny that the merits of, an educational system must in part be judged by the amount of such historical knowledge it imparts. Accordingly, about 2,000 seventh grade pupils were tested in United States history. Two types of questions were used-informational questions, and questions that required the child to employ his powers of thought.


Jamestow:-Gulford County


Bladenboro-Bladen County

NEW TYPE LARGE RURAL SCHOOLS

Although the state course of study calls for the systematic teaching of American history as early as the sixth grade, it does not appear that our children have any general mastery of the subject comparable with their grades. For seventh grade children in Asheville, Raleigh, Salisbury, and Wilmington fall very much below children in good schools elsewhere even on the informational questions. ${ }^{1}$ The highest record on such questions was made by Raleigh, yet even there the score made by the seventh grade children is below the standard for the sixth grade.

The results in rural schools were still more unsatisfactory, as seventh grade rural children did only about half as well as sixth grade children are expected to do. Think of sixteen year old boys who believe that Thomas Jefferson was the president of the Southern Confederacy, that Andrew Jackson invented the telegraph, and that the chief result of the Revolutionary War was the freeing of slaves!

The various types of schools did even less well on the thought questions. In no single school, rural or city, does the achievement of the children on these thought questions exceed the standard for the sixth grade, and the smaller the school the less satisfactory the results.

## Algebra

As stated before, tests were also given in high schools. The results achieved in high school reading were reported in connection with the reading in the elementary schools. It remains to describe the results in algebra and Latin. Most of our high school students begin the study of algebra in their first year, and second year pupils are supposed to devote one-fourth of their entire school time to this subject. To measure the result of this very

[^27]considerable effort, about 1,700 students were tested, including all the pupils who were studying algebra at the time the tests were given. ${ }^{1}$

Owing to the different lengths of time that different groups had studied algebra, it was found convenient to tabulate and report them in six separate divisions, according to the length of time the pupils have pursued the subject. Judged by accepted standards, the algebra results, achieved in our high schools are far below what they should be. For example, children in the rural high sçhools who have studied algebra more than a year achieved results in addition which should be achieved in from three to five months. Even in the larger city high schools students who have studied algebra for more than a year only slightly exceed the standard for pupils who have pursued the subject less than six months.

City high school pupils do better than rural high school pupils in the solution of equations and formulas. However, in neither case do the achievements in the solution of equations and formulas by students who have studied algebra from eleven to fourteen months exceed the scores of pupils in good schools who have studied the subject only from six to eight months.

Whatever differences of opinion may exist with regard to the desirability of the extensive teaching of algebra in high schools, there will probably be general agreement that if algebra is to be studied at all, its fundamentals should be thoroughly taught. By some it is argued that skill in the fundamental operations may be sacrificed until pupils have acquired a real interest in what algebraic processes mean; but even the advocates of postponement would hardly argue that pupils should go on for six, nine, eleven, and even twenty months in the subject without a real mastery of the fundamental skills involved.

[^28]SUMMARY OF ALGEBRA SCORES BY HIGH SCHOOL PUPILS WHO HAVE STUDIED ALGEBRA VARYING LENGTHS OF TIME

| Kind of School | From 3 to 5 months |  |  | From 6 to 8 months |  |  | From 9 to 10 months |  |  | From 11 to 14 mos. |  |  | From 15 to 20 mos . |  |  | From 21 to 24 mos. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \text { Num- } \\ \text { ber } \\ \text { of } \\ \text { Pupils } \\ \text { Tested } \end{array}\right\|$ | Addition and Sub-traction | Equation and Formula | Number of Pupils Tested | $\begin{aligned} & \text { Addi- } \\ & \text { tion } \\ & \text { and } \\ & \text { Sub- } \\ & \text { trac- } \\ & \text { tion } \end{aligned}$ | Equation and Formula | Number of Pupils Tcsted | Addi- <br> tion <br> and <br> Sub- <br> trac- <br> tion | Equation and Formula | Number of Pupils Tested | Addi- <br> tion <br> and <br> Sub- <br> trac- <br> tion | Equation and Formula | Number of Pupils Tested | Addition and Sub-traction | Equation and Formula | Number of Pupils Tested | Addi- <br> tion <br> and <br> Sub- <br> trac- <br> tion | Equation and Formula |
| Rural |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina | 152 | 3.3 | 3.2 | 130 | 3.7 | 4.2 | 60 | 4.5 | 4.7 | 154 | 4.9 | 4.9 | 95 | 5.6 | 6.0 | 10 | 5.7 | 5.0 |
| Virginia. |  |  |  |  | 5.2 | 4.6 |  | 5.9 | 5.8 |  |  |  |  |  |  |  |  |  |
| Small City_ | 49 |  |  | 16 |  | 2.8 | 78 | 3.9 | 1.5 | 109 | 4.3 | 5.1 | 108 | 4.8 | 5.7 | 26 | 4.4 | 6.3 |
| North Carolina Virginia | 49 | 2.9 3.4 | 3.1 3.7 | 16 | 5.4 5.6 | 6.1 | 7 | 5.0 | 1.5 | 109 | 4.3 | 5.1 | 108 | 4.8 | 5.7 |  |  |  |
| Large City |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina | 179 | 3.6 | 3.3 | 179 | 3.9 | 4.5 |  |  |  | 337 | 5.4 | 5.5 | 70 | 5.2 | 5.8 |  |  |  |
| Virginia.- |  | 3.4 | 3.7 |  | 5.6 | 6.1 |  | 5.0 | 5.1 |  |  |  |  |  |  |  |  |  |
| Hotz Standard. |  | 5.0 | 4.9 |  | 6.8 | 7.1 |  | 7.9 | 7.8 |  |  |  |  |  |  |  |  |  |

If children can not or do not learn to add and subtract quickly and accurately by algebraic methods, and if they can not easily solve simple equations and readily resolve simple formulas, there can be no mastery of the more difficult algebraic principles. North Carolina high school pupils do not even learn the elements of the subject as well as they are mastered by the better taught high school pupils in other states.

## Latin

High school students were also examined in Latin. A simple examination in this subject was given to about 500 students who had studied it more than two years. The papers were graded by disinterested teachers of the subject who unite in pronouncing the results "lamentable." Only 23 per cent of those examined made a mark of 50 per cent or better. If we take 60 per cent as the passing mark, only 14 per cent passed the examination. It is obvious that the teaching is extremely inefficient, partly, no doubt, because so many teachers are untrained, partly, also, because the high schools are forced by colleges and universities to attempt more work than students or teachers can successfully perform. There must be better teachers of course, but the colleges must co-operate with the schools by so scaling down their requirements that they can be honestly and efficiently met. A less pretentious requirement, more adequately met, will raise, not lower, the standards and ideals of both high schools and colleges.

## Larger School Units

The results of the tests, particularly in the elementary schools, show clearly the beneficial effects of large schools. The large schools not only achieved higher scores for the several grades in the subjects tested, but they move their children along through the grades more regularly, so
that thirteen year old children in our city systems are from two to three years beyond children of like age in our smaller rural schools. Such facts point to only one conclusion-viz., that the cities and towns have better schools.

The truth of this conclusion is evident in the results achieved in the rural schools of various sizes. The average age of seventh grade pupils in one teacher schools is about fifteen years and three months, which is approximately one year greater than the average age of seventh grade pupils in four teacher schools. The scores of these two groups in reading are practically the same, which means, when age is taken into consideration, that the one teacher schools have failed by as much as one year in doing as well by their pupils as the four teacher schools. The same story is repeated in addition, multiplication, spelling, and United States history.

The difference between the achievements of rural school and city school children, and between the large and small rural school children is, of course, not only a result of better gradation and better instruction, but is also due to the greater length of the school year and more regular attendance. As previously pointed out, city schools have a school year ranging from eight and a half to nine months; many of the larger rural schools have a school year of similar length, but in one room schools, until the present year, the term has been only four and a half months-it is now six months. Obviously, it is impossible for teachers in the smaller rural schools to do, with less regular attendance, as much for their children in six months as the teachers in the larger rural and city schools do for their children in eight to nine months.

The superior results achieved in the larger elementary schools, both rural and city, are an unanswerable argument for school consolidation. The full value of consolidation begins to be realized only in schools employing four or

78 Public Education in North Carolina
SUMMARY OF NORTH CAROLINA HIGH SCHOOL LATIN SCORES

| Period of Preparation | Number <br> Examined | Percentage Scores |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 90-100 | 75-89 | 60-74 | 50-59 | 40-49 | 0-39 | 60-100 | 50-100 | 40-100 |
| 2-3 years <br> (19-27 mos. inc.) | 268 | 0 | 2 | 11 | 24 | 38 | 193 | 13 | 37 | 75 |
| $\begin{aligned} & 3-4 \text { years } \\ & \quad(28-36 \mathrm{mos} . \text { inc. }) . \end{aligned}$ | 158 | 2 | 10 | 17 | 15 | 28 | 86 | 29 | 44 | 72 |
| Over 4 years.-(37-52 mos. inc.) | 68 | 0 | 14 | 12 | 8 | 13 | 21 | 26 | 34 | 47 |
| Total.. | 494 | 2 | 26 | 40 | 47 | 79 | 300 | 68 | 115 | 194 |

more teachers, though even the two and three teacher schools possess certain advantages over the one room school. In a state like ours there will always be a large number of one room rural schools, and these should be made as efficient as possible. But every effort should be exerted to consolidate these small schools into large units, and the unit aimed at should not be less than four teachers.
What is true of elementary schools is equally true of high schools. The results of all our tests point unmistakably to the advantage of the large high school, which makes possible the employment of better teachers, the better classification of children, and the development of a more effective school life. Just as we should, as far as possible, eliminate the small rural elementary school through consolidation, so we should eliminate the small rural high school by similar process. Indeed, it might well be argued that high school consolidation is even more necessary than elementary school consolidation; for a small elementary school, though undesirable and relatively inefficient, can and must occasionally be resorted to. But a small high school simply can not be efficient; one or two teachers can not be provided with the facilities required for high school work, nor can so small a number of teachers carry the varied load of instruction contained within even an unpretentious high school curriculum. Fortunately, high school consolidation is in some respects a comparatively simple matter; the pupils, being older, can be transported longer distances, and can even board at centrally located county institutions.

To summarize, our study of the quality of instruction now offered in the public schools of North Carolina confirms the impression made by the study of the separate items that go to constitute a public school system. We have admitted ungrudgingly the great progress made in
a brief period. None the less, as things now stand, despite all that has been accomplished, the state possesses the outline or skeleton of a school system rather than a developed school system. Buildings are still mainly poor, teachers are still mainly untrained, financial support is still inadequate, supervision is still ineffective. It follows, as the present chapter shows, that instruction is, in general, of inferior quality. In elementary schools, as in high schools, pupils do not learn thoroughly the fundamental things which the schools are designed to teach; the results, compared with the results obtained elsewhere in the United States-whether cities, towns, or rural districtsare uniformly to the disadvantage of North Carolina.

## PART II

HINDRANCES TO DEVELOPMENT
CHAPTERS VI-VII

## VI. ADMINISTRATIVE HANDICAPS

WE have been engaged thus far in describing the schools as they are; it is next in order to consider the steps to be taken to improve them. If, however, we turn aside and consider a few of the major hindrances that have retarded school progress, we shall be better able to appreciate the reasons for some of the conditions that now exist and we shall also be better able to appreciate the need of certain changes in the constitution and laws of the state affecting the administration and organization of the schools. Among the hindrances to be considered in this chapter are the handicaps on effective administration.

The administrative handicaps on our public school system spring, in the first instance, from the educational provisions of the state constitution. The schools operate under the constitution of 1876 , as amended. This places on the general assembly the responsibility of providing a uniform and free system of public schools. If the constitution of 1876 had also safeguarded the perpetuity and inviolability of the Literary Fund, and then stopped, it would have conformed to the best present day practice. But like most constitutions of that time, it did not stop with these provisions. It provided, in addition, for an ex officio state board of education, composed of the governor, lieutenant-governor, secretary of state, treasurer, auditor, superintendent of public instruction, and attorney general, with the governor as president, and the state superintendent as secretary, of the board, and for the election of the state superintendent of public instruction at the same time and in the same manner as other state officers. Like other officers similarly elected, the state superintendent is an executive of the state and a member of the council of state.

It is not surprising that the convention of 1876 thought an ex officio board would answer as the centralizing and directive head of the public schools, for it was difficult, to say the least, in 1876 to foretell the demands of the schools in 1921. Nor is it surprising that the powers of the board were not clearly defined, for the proper powers of such a board were then little understood. Whatever the full scope of the powers conferred, they extend in two separate, though related, directions: first, over the operation and conduct of the schools themselves, and, second, over the management and administration of the state educational fund. For the board is vested with "full power to legislate and make all needful rules and regulations in relation to free public schools and the educational fund of the state." At the same time, the board is limited in the exercise of its "full power," because it is made responsible and subordinate to the general assembly-"all acts, rules and regulations of said board may be altered, amended, or replaced by the general assembly."
Accordingly, the general assembly has never hesitated to add to or subtract from the powers actually exercised by the state board of education. This is illustrated in the management of the Literary Fund. From the very beginning the general assembly prescribed the type of securities in which the board should invest the principal, determined also the manner of apportioning the income therefrom among the counties, and in 1903 completely changed the use of this fund, providing that the income therefrom should no longer be distributed among the counties for current school expenses, but that both principal and interest should thereafter constitute a permanent revolving fund to be loaned to county boards of education for the erection of school buildings.

The general assembly has pursued a similar policy with the educational powers of the board. Legislative pro-
visions for the selection of textbooks are typical. At one time the general assembly authorized the state board of education to prescribe these. Later it limited the power of the board to that of recommendation, afterward restored the power of adoption and later divided this with a subcommission appointed by the governor and state superintendent, and, finally, in 1919, provided an independent body, to be appointed by the state superintendent, to choose textbooks for high schools.

In the exercise of its authority, the general assembly has apparently had due regard for what would seem to be the board's constitutional powers over the state educational fund, but it has not shown similar consideration for what would seem to be the board's constitutional rights in the management of educational affairs. New administrative officers and boards are created, now independent of, now subordinate to, the state board. For example, the state board of education is authorized to prescribe rules and regulations for conducting schools to teach adult illiterates and to spend annually not more than $\$ 5,000$ in the organization and administration of this work under the direction of the state superintendent. In contrast, the state board of vocational education is an independent creation, exercising large powers: it prescribes courses of study, certificates teachers, and expends public money. The college commission regulating degrees is likewise an independent body, as is also the high school textbook commission, and the commission on instruction in agriculture, manual training, and home economics. The board of trustees of the Appalachian Training School is not only an independent, but a selfperpetuating body. On the other hand, the state board of education appoints the trustees of the Cherokee Indian Normal School, the East Carolina Teachers Training School, and, with the advice and consent of the senate, those of the State College for Women and the Cullowhee

Normal and Industrial School. The state board of examiners and institute conductors is a unique complex. The state superintendent is an ex officio member and president, and the superintendent of Negro normal schools and the Cherokee Indian Normal School and supervisor of teacher training is ex officio secretary; the governor appoints six regular members. The state board fixes the salaries of the several regular members on the recommendation of the executive committee of the North Carolina Teachers Assembly, and the state board may dismiss them for cause, with right of appeal to the courts.

This variable policy on the part of the general assembly has had a twofold effect. On the one hand, it has prevented the development in the state board of education of a strong sense of stewardship and a keen sense of responsibility for the schools; the board has performed such duties as the law imposed, but our schools have never felt the unifying and directive influence of a determined, progressive board at their head.

The fact that the board is ex officio has probably prevented the general assembly from giving it adequate and appropriate powers. Its members are without exception state officers, elected on a party platform, and committed to an administration program. Moreover, with the specific duties of their respective offices to perform, it is difficult for them to give the needed time and thought to the solution of the intricate problems involved in the creation and general management of a comprehensive state school system.

The unstable character of an ex officio board counts also against it. In order to secure stability and continuity of policy, the membership of a board of education should be liable only to gradual change. The danger is always present that the membership of the present board, including the state superintendent, may change completely and abruptly at the end of each four years, thus opening
the way for passing political upheavals to influence or alter the educational policies of the state. ${ }^{1}$

For these and other reasons, the state constitution should be so amended as to permit the general assembly to create a state board of education free from such defects and dangers. In the meanwhile, the fullest use should be made of the present board.

Again, the ever-changing policies of the legislature have resulted in such a confusion of unrelated activities and boards as to render effective administration extremely difficult. There are now, as has been stated, a half dozen unrelated and independent bodies, each heading some part of the system, each working in its own way in the management of an enterprise that, in the last analysis, depends for success upon unity of aim and program.

One illustration-the high schools-will suffice to make clear the confusion and division of authority. Until 1919, the state board of education prescribed the rules and regulations for establishing and maintaining the socalled state high schools. Now the board only apportions state funds to them. The state superintendent prescribes rules and regulations as to organization and courses of study, and, along with a commission appointed by himself, selects the textbooks. The state board of vocational education has charge of vocational instruction, while another commission prescribes general courses for agriculture, manual training, and home economics. The state board of examiners certificates the teachers. And, finally, the high schools are inspected by an official appointed by the state superintendent.

With no single body legally responsible for the schools as a whole, and rarely for any one entire field of activity, a unified policy can not be devised or pursued. The

[^29]schools will continue to suffer under this handicap until all the agencies sharing authority with the state board are abolished, and the state board becomes, as would seem to be the intent of the constitution, the unifying, directive head of the system.
There is a further handicap to be considered-divided administrative leadership. The constitutional provisions for a state board of education and for a superintendent of public instruction would seem to imply that the state superintendent is to be the executive officer of the state board and the responsible administrative head of the public schools. The general assembly has, however, not endowed the state superintendent with such powers and authority.

His election by popular vote may have caused the general assembly to hesitate. Certainly, the increasing complexity of public education, its increasing cost, the growing amount of technical experience and knowledge required for scientific administration have rendered progressively unsatisfactory the selection of a state superintendent by popular election. The office is now and always has been open to any respectable citizen, irrespective of educational qualifications. Moreover, to place the state superintendent on the same platform as other state officials, bind him to party pledges, and make him a member of the council of state, identifies him with active politiss, and endangers the independent administration of the schools. The best man obtainable is none too good to fill so high an office. Appropriate safeguards should be thrown around it, and the state superintendent should be free to administer the schools in the interest of all the children of all the people of the state, regardless of party politics.
For two decades we have been spared the possible vicious effects of electing the state superintendent, but future experience may not be so fortunate. The present
state superintendent and his predecessor were both appointed to fill unexpired terms; otherwise probably neither would have been a candidate. Experience has proved that appointment by a responsible board is far the surest means of securing and retaining a competent state superintendent. In order to free the office from all political connection, and to secure the best man available, there should be eliminated from the constitution all sections relating to the election and duties of the state superintendent. In the meantime, legislation is required to define the necessary professional qualifications of the incumbent, and the salary of the office should be increased. A state superintendent has no other business or vocation, and can not afford to serve the state, however great the privilege and honor, if living conditions compel him to spend more than he receives. A salary of $\$ 4,000$, to say nothing of $\$ 3,000$, is inadequate; county and city superintendents frequently receive more. His salary might properly be doubled, and certainly should not be less than $\$ 6,000$. For example, Maryland pays $\$ 8,000$, and New Jersey, \$10,000.

These limitations surrounding the office of the state superintendent are not the only hindrances to effective management of our schools. As stated above, administrative responsibility is now scattered among many agencies and boards. In certain instances the state superintendent acts as the executive officer of the state board; for example, in making loans from the state literary fund, in apportioning state school funds, in establishing schools for adult illiterates, and in school extension work. Quite as often, the law authorizes or designates another agent, as in the supervision of colored normal schools and the selection of elementary textbooks. In other instances, even though the state board manages the funds appropriated, activities are inaugurated, such as the preparation of schoolhouse plans for which no one is appar-
ently responsible. Executive authority in those parts of the system not under the state board is similarly scattered. In some instances the state superintendent is authorized to act as an independent agent; for example, in prescribing rules and regulations as to the organization and courses of study for high schools, for the conduct of rural libraries, and for the management of the Cullowhee Normal and Industrial School. In still others, he becomes the executive officer of independent boards; for example, the state board of vocational education.

Working through these several minor boards, as well as the state board of education, a forceful state superintendent may give a certain consistency to the management of the schools. At best, however, he is compelled to operate amid conditions that are highly unfavorable to efficiency. Nor can the disadvantages be completely overcome, unless these independent agencies and boards are stripped of their legal administrative powers and the state superintendent is made the executive officer of the state board of education, the responsible administrative head of the system.

Thus to centralize executive authority will not only insure a better administration of the schools, but will also simplify the administrative machinery. Independent boards and agencies will disappear and their functions will be taken over by divisions in the office of the state department of education; the heads of divisions will be appointed by the state board of education and will be responsible to the board through the state superintendent, its executive officer.

To conclude, before the way is open for the most effective type of state school organization and administration it will be necessary to eliminate from the constitution all sections relating to the state board of education and to the superintendent of public instruction, replacing them by a provision giving the legislature the power needed to


Hanes School-Forsyth County


Spray-Rockingham County


Consolidated School-Wake County


Farm Life School-Craven County
create the necessary instruments Meanwhile, many of the present administrative handicaps are due quite as much to statutory as to constitutional limitations. Even as the constitution stands, the state board of education can, through well considered legislation, be made the real head of the public school system, the state superintendent can be made its executive officer, with complete administrative responsibility, and the office can be properly safeguarded and the salary increased, thus guaranteeing to the schools freedom from politics and greater unity of policy and effectiveness of management.

## VII. LIMITATIONS AND CONFLICTING DEVELOPMENTS

THE CONSTITUTION of 1876, as amended, recognized the county as the chief local unit of school administration. The county commissioners were made responsible for maintaining schools adequate in number and conveniently located for at least six months ${ }^{1}$ in every school year. Their "general supervision and control" of the schools is, however, subject to the discretion of the general assembly.

In the exercise of this discretionary power, and in the effort to comply with the constitutional mandate as to the minimum length of school term, political and economic conditions have at times led to compromises; a lack of supporting public sentiment has often delayed appropriate legislation or prevented it from becoming effective. Now one plan, now another has been followed. The result is a number of serious statutory limitations on school progress, and a number of cross-developments; for example, the development side by side of two mutually exclusive systems of local school administration, the county system and the district system.

Tradition favored a county school system. In a fully developed county system, a single central koard controls and supervises through its agents all the schools of a county, except those of large cities, and all property in the county is taxed for the support of all the schools of the county, to the end that all the children of the county may enjoy similar educational opportunities. This type of organization has more and more come to be recommended by those who have seriously studied the needs of rural states.

[^30]In adopting a county form of school organization we were, therefore, wise and fortunate. But we have developed neither the financial nor the educational possibilities of such a system.
For example, at no time has the county assumed full responsibility for providing all s:hools with suitable buildings and equipment. ${ }^{1}$ The township or the district has always shared in this responsibility. Prior to 1901 the money raised by state and county taxes, along with other school revenues, and apportioned to the townships or districts, was supposed to be sufficient to care for current school expenses, such as teachers' salaries, fuel, etc., and also sufficient to provide suitable grounds, buildings, and equipment. But this was rarely the case. The money so apportioned was not adequate, in most instances, even to maintain the schools for the minimum term of four months. indeed, in 1901, 74 of the 97 counties required aid from the equalization fund to bring their school terms up to the constitutional minimum. Since 1901, county boards have reserved from moneys in hand, before apportionment, a specific proportion as a building and repair fund, but in no instance could they contribute more than a half of the cost of a new school building. ${ }^{2}$
As the districts were not permitted to tax themselves for school purposes prior to $1901,{ }^{3}$ the needed local funds for school buildings were usually raised by private subscription. When this method failed, the sehool term was at times shortened, or school was abandoned altogether, and the local authorities used the county apportionment to provide needed schoolhouses. Since 1301 approximately 2,000 districts have voted a special tax

[^31]to supplement the county apportionment, but about 6,000 other districts refuse to sanction such a tax, and remain dependent on private generosity for their half of any building funds. Thus, the greatest institution of democracy-the public school-continues in three-fourths of the districts of the state on a semi-charitable basis. Under these circumstances it is not surprising that our schools are inadequately housed and poorly equipped.

There is, however, a growing sense of the need of the county's assuming full responsibility for the material equipment of all schools. The legislation of 1901, permitting the county boards to reserve a building and repair fund, was a step in this direction; the legislation of 1911, permitting counties to vote a county-wide additional special tax, was a further advance; and the final legislative step was taken in 1915, when counties were authorized to vote county bonds for school buildings. But an aroused public sentiment is required to give effect to this legislation. To date, only three countiesBeaufort, New Hanover, and Wilson-have sanctioned a county-wide additional special tax, and New Hanover stands alone in voting a county bond issue to carry out a county-wide building program.

In the meantime, help is promised from another source. A recent supreme court decision sustains the position of the Alamance county board of education, holding that schoolhouses are an essential part of a school. This decision covers repairs and additions to old buildings. Should it also cover new buildings and grounds, as interpreted by the attorney-general, county boards of education can assume full responsibility for the material equipment of all the schools of the county, and secure the levy of the needed taxes therefor, if they are so minded, without submitting the question to popular vote. Whatever the final interpretation of this decision, this should be clear: Until county boards of education can assume
responsibility for the material equipment of all schools, the possibilities of a county school system can not be realized, and districts, lying side by side, will continue the one to have a model plant, the other, the poorest kind of a schoolhouse.

There is another equally serious limitation on the full development of our county system. County boards of education are not authorized to assume financial responsibility for more than a six months' school term. A term of this length is inadequate. Thoughtful citizens of the state appreciate this fact, but the constitution in most instances estops county boards of education from financing a longer uniform term without the approval of the people. The result is a wide variation in school terms. For example, in the cities, the average length approximates eight and a half months; in the 2,000 special tax districts, between seven and eight months; and in the other 6,000 districts, six months for the first time this year, except in a few counties. These inequalities are of long standing and inflict a great injustice on the children of the less progressive districts. To eliminate them, the general assembly in 1917 authorized the levy of a county-wide additional special school tax, but, as stated abve, up to date only three counties have taken favorable action.

On the other hand, the restricted financial powers of county boards of education have lent strength to two movements which further complicate the situationthe formation of special tax districts, and the organization of specially chartered or city districts.

Even in states having a highly developed county system, cities of size are generally organized as separate districts. The number of city or specially chartered districts in North Carolina is, however, unusual. Progressive communities chafed under the slow development of the county schools. To gain relief, they petitioned the general assembly for special school charters. Altogether, there
are now 136 such charters alive, 27 of which were issued between 1875 and 1899 and 109 since 1901 . These city districts range in size from Winston-Salem to three teacher centers.
The charters of city districts differ from one another in important details, and, along with their respective amendments, constitute a mass of special school legislation of which no one knows the extent. ${ }^{1}$ These charters bear, however, certain common marks worthy of note. Most of them are drawn without regard to the relation that should exist between city school districts and a state school system. Not until 1901 were city districts required to make reports; at that time they were also brought under the general supervision of the state department of education. But long after that, they failed to make reports, certificated their own teachers, fixed salaries and adopted textbooks, without regard to the general school laws or rulings of the state board of education. Indeed, only recently have they come into anything like intimate relationship with the state department of education.

These city charters are distinctly inadequate as guides in the development of modern city schools. They ordinarily provide for a board of education, the establishment of graded schools, the employment of a superintendent and teachers, and bestow on the voters of the district the right to vote school taxes up to a specified limit; but they do not clearly define the powers and duties of the board of education, the relation between the board of education and the superintendent, the duties and powers of the superintendent, the status of the teachersin short, the details upon which the modern city school really depends.

Written by different men, at different times and under

[^32]different circumstances, the specific provisions of these city charters vary enormously and without reason. For example, the maximum property tax that may be voted ranges from a total annual tax of $\$ 50$ to an annual levy of $\$ 1.25$ on each $\$ 100$ of assessed property value. The boards range in membership from 3 to 24 persons. They are selected in various ways: by county boards of education; by county boards of education and county superintendents; by town commissioners; by town commissioners and county boards of education; by city aldermen; by city aldermen and local boards of education; while in 30 instances they are elected by the people, and in 24 the members nominated in the original charter select their own successors. Self-perpetuating boards are obviously indefensible.
Charters issued prior to 1901 were undoubtedly a boon to the cities getting them, but most of the districts that received charters after 1901 might better have remained under the county system. ${ }^{1}$ Moreover, the creation of so many small special districts reacted unfavorably on the county unit. It reduced the resources of the county, lowered its dignity and prestige, and eliminated a most active and progressive influence for better schools.

In order to operate their schools successfully and yet independently of the county system, cities must be of good size and financially able, after bearing their due proportion of county and state school taxes, to support schools on a modern basis. There are, perhaps, between 20 and 30 of our cities so circumstanced that they should be permitted to continue as separate districts. However, in that event, there should be provided for all these districts a single, unified code adapted to the needs of modern city systems. Such a code will remedy the present legal confusion, simplify administration, increase public in-

[^33]terest, and bring city school legislation into conformity with the constitutional mandate requiring the establishment of a "uniform system of public schools." The remaining specially chartered districts-numbering approximately 100 -should be returned to the county system.
This will be to the advantage of all concerned. The county will gain in resources, prestige, and progressiveness, and will be better able to employ the highest type of superintendent and supervisor, thus securing a better administration and supcrvision of its own schools, and of the schools of the former small specially chartered districts. When these small specially chartered districts are rejoined to the county, they will become special tax districts, of which there are already approximately 2,000 .
Special tax districts, as suggested, are integral parts of the county school system. Such districts vote an additional special tax, beyond the state and county school tax, for the supplementary support of their schools. As a means of increasing local rural school support, special tax districts have proved a great success. For example, the amount levied locally in rural districts rose from $\$ 16,000$ in 1901 to $\$ 810,000$ in 1918. They have also been the chief means of arousing renewed interest in rural education, and of effecting consolidations. The best rural schools of the state are found in these special tax districts.

Despite the immediately favorable results following the creation of special tax districts, their formation has caused wide differences in educational opportunity, and produced a condition which threatens to hinder future progress. The law of 1901 removed all limits on the bounds that the county board of education might set for a special tax district. With this freedom and under the impelling desire to secure better schools, the school districts in most counties have been gerrymandered beyond relief. Special tax district lines include or exclude
farms, according as the owner is favorable or unfavorable; they extend far up and down railroads, and far up and down rich river valleys-anywhere to enclose taxable property, particularly of corporations, that may accrue to the benefit of the particular district. As a result, the special districts, although they number only about a fourth of all the school districts of the state, possess the bulk of the taxable wealth of the state.

The formation of special tax districts has thus introduced most of the objectionable features of the antiquated district system. There are rich districts and poor districts, good schools and poor schools, literate and illiterate sections; in short, educational development has been spotty and uneven. Moreover, for the poorer districts there is under present conditions little hope. It may be possible for the county boards of education under a liberal interpretation of the supreme court decision cited above to provide these districts with adequate schoolhouses and appropriate equipment at county expense, but is is, ordinarily, impossible for county boards to extend their school terms beyond six months, and they are mostly unable to help themselves. The more forwardlooking districts long since preëmpted much of the valuable property and particularly the corporate wealth that might properly have fallen to the less favored, so that even if the poorer districts were favorable to a supplementary tax at a high rate, the amount of money so raised would be very small, because the value of the property on which it could be levied is so limited.
Such educational inequalities render the county system a nominal affair. A county-wide additional special school tax would correct conditions, but the special tax districts, as a rule, bar the way to this. Districts that have long enjoyed exclusively the benefits of wealth, even though they may have no more right to it than a neighboring district, are reluctant to share its benefits.

To redistrict the counties with a view to a more equitable distribution of taxable and especially of corporate property is impracticable. A constitutional amendment extending the compulsory school term to at least eight or nine months is the most direct course, but probably could not be carried, following so closely the recent extension from four to six months. County boards can, however, be empowered to assume full financial responsibility for the schoolhouses and school equipment, and the state can throw more of the responsibility for a six months' term on the counties, using state funds more largely to make uniform and extend the school term. The further creation of special tax districts can be stopped and their present powers limited, and all can join in developing sentiment for county-wide additional special school taxes and schoolhouse bond issues. Otherwise there will continue to exist side by side a quasi-county system and a close and exclusive district system, with glaring inequalities.

We have not only failed to develop the financial and hence the educational possibilities of a county school system, but have also failed to develop the progressive leadership needed to operate such a system successfully. In the first place, our county boards of education have not commanded the full confidence of the people. We have experimented with almost every known method of selecting them, except selection by the qualified voters of the county at separate, non-partisan elections. ${ }^{1}$ For example, our county commissioners have at two different times acted as an ex officio board of education; at one time county boards of education were appointed by the justices of the peace and county commissioners; at another, by the general assembly, and now by the general assembly on nomination at party primaries. None of these methods

[^34]

Farm Life School-Craven County


Consolidated School-Wilson County
provides for the exercise by the people of a direct voice in the management of their schools or affords an adequate safeguard against partisan control.

Again, in the exercise of leadership and in the management of the schools, county boards of education have been seriously handicapped by their inability to provide proper administrative and supervisory staffs. Up to 1903 three dollars per day was the maximum salary allowed by law to county superintendents. Between 1903 and 1917 the wealthier counties were free to employ county superintendents and to fix their salaries, but the poorer counties, those having a school fund of less than $\$ 15,000$-numbering 65 in 1903-were limited to a maximum of $\$ 600$. In neither instance were provisions made for supervisors. While the average salary of county superintendents rose gradually from $\$ 796$ in 1910 to $\$ 1,298$ in 1918, only with the passage of the new budget law of 1919 , when the state assumed half and in certain instances more than half, of their salaries, has even the highest of these salaries been attractive to trained and experienced men.

Inasmuch as the state until recently placed so little emphasis on effective administration and supervision, county boards of education generally looked upon supervision as unnecessary and took only a limited view of the field and function of the county superintendent. His duties as they conceived of them were chiefly clerical. Accordingly, a preacher, a lawyer, a doctor, a real estate agent, a merchant, a farmer, in fact, anyone fairly well educated and with a little free time to dispose of was acceptable. As late as 1912 half of the county superintendents gave only part time to the schools, and even now 17 counties have part-time superintendents.

Moreover, the office has until lately been exposed to every kind of personal and political influence. County superintendents were not required until 1917 to hold
certificates. Prior thereto good moral character and two years' experience as a teacher at some time in the candidate's career were the only requirements imposed. In consequence, not more than 40 of the 100 county superintendents now in office can possibly be said to be trained for their work. Twenty have not had the equivalent of high school education, and the remaining 40 only from one to two years in college.

On the other hand, few county boards employ supervisors to assist the county superintendent. Johnson County was the first to engage one, in 1912. Up to 1919 25 other counties have employed supervisors for one or more years, and in 191914 counties were employing them. Supervision is not an established policy; a county may have it this year and abandon it next. The facts are, well qualified supervisors are not available, county boards do not appreciate their value, and, not being directly authorized to employ them, they hesitate to incur the additional expense. The state superintendent received in 1919 a small fund with which he has been able to cooperate with a few counties-some 23 -in providing supervisory officers, the state paying one-half the salary; but if supervision is to become general and effective within the immediate future, the state will have to bear a considerable part of the cost in all counties.

County boards of education thus have as their executive officers superintendents who in many instances know little more about the schools than the board members themselves, and, with the exceptions cited, are without supervisors. Under these circumstances, the administration and supervision of the schools is necessarily weak, and the boards themselves, without professional guidance and stimulation, not infrequently do no more than the people demand, instead of pressing, as a county board of education should, the claims of the schools to the last point the people will accept.

To summarize, we have a so-called county school system, but we are far from realizing its financial and educational possibilities. This is due to constitutional and statutory limitations, to the development of an unusual number of small city and special tax districts, and to a lack of supporting public sentiment. A constit:tional amendment increasing the compulsory school year to eight or nine months would eliminate most of the hindrances to the full development of a county system. If such an amendment is not practicable, then appropriate legislation should stop the formation of special tax districts, reduce the number of specially chartered districts, provide a single unified code for large cities, and throw a larger proportion of the burden of a six months' school on the counties and cities. The county should also assume a larger responsibility especially for school buildings, and effort should be concentrated on developing sentiment for county-wide additional special taxes and bond issues. The people should obtain a more direct voice in the control of their schools, and school management should be freed from partisan politics. Finally, the state should co-operate more generously in providing boards of education with adequate and appropriately trained administrative and supervisory staffs.

## PART III <br> THE WAY OUT <br> CHAPTERS VIII-X

## VIII. BETTER ADMINISTRATION

THE WAY to improve our schools is clearly through better administration, better trained teachers, and better financial support. Each of these topics will be considered in turn.

## Improved State Administration

At the head of the public school system stands the state board of education, including among its members the state superintendent.

An ex officio state board of education, as has been pointed out, is not the approved type of board. For this reason the constitution should be amended so as to permit the general assembly to create a lay board composed of five or seven citizens, to be appointed by the governor for prolonged terms, expiring at different times, so as to guarantee stability and continuity of educational policies.

In the meantime, the present board should be made responsible for the general administration of the entire public school system. All other state boards should be dispensed with-boards, for example, such as the state board of vocational education, the commission on instruction in agriculture, manual training, and home economics, the state board of examiners and institute conductors, the state textbook sub-commission, and in certain instances state normal school boards, such, for example, as the board of the Cullowhee Normal and Industrial School, of the Appalachian Training School, of the Cherokee Indian Normal Sehool, and the boards of the three state normal schools for Negroes. On the abolition of these agencies, the state board will assume the responsibility, through its executive officer, the state superin-
tendent, for formulating rules and regulations affecting the organization and management of the public schools, the erection of school buildings, the certification of teachers, the management of the minor normal schools and of teacher training in general; that is, the state board will then exercise, through the state superintendent, the powers usually and properly so exercised.

In a soundly organized edurational system, the lay board, above mentioned, selects its exesutive officer, known as the state superintendent, and fixes his salary. This official advises the board on technical matters, represents it in dealing with the public, the legislature, and all parts of the school system, and is responsible for carrying out policies determined by the board. The present state board, however, does not possess an executive officer in this sense of the term. The state superintendent is chosen by the people, to whom he is responsible, and though, in effect, he is the executive of the state board, his relation to it has not been conceived from that point of view. The law should therefore be modified in this respect; in addition, no time should be lost in amending the constitution so as to permit the appointment of the state superintendent by the lay board of education above described. This amendment will not only tend to remove the office from politics, but will also place the board and its executive officer in a correct relation to each other.

A state superintendent can not personally perform all the duties that fall to his lot as executive officer of a state board of education. To be effective, he must be provided with a competent clerical and professional staff. Too often important duties are imposed on him and no provision made for performing them. A single example will illustrate what has repeatedly happened. Since 1868, the state superintendent has been authorized to approve the plans for all schoolbouses erected by county
boards of education, and since 1903 county boards of education have been forbidden to expend public money on schoolhouses not built according to plans so approved. The state superintendent has, however, never been in position to enforce this excellent law; he has never been able to do much more than, at long intervals, to publish and distribute acceptable plans. No one knows how much money has been spent on rural schoolhouses during the last sixty years. Their present value is approximately $\$ 6,000,000$, a considerable part of which has doubtless been wasted or ineffectually spent because of the lack of proper supervision ${ }^{\text {. }}$.

State superintendents are thus frequently left without appropriate staffs, doubtless partly because the people are unable to appreciate the magnitude of their task and partly because the people do not understand their supervisory function. The superintendent's staff should care for the clerical details of the office, such as correspondence and the collection and tabulation of data regarding enrollment, attendance, and expenditures; it should see that the laws and rules and regulations of the state board of education are observed, that the conditions for participating in the state school fund and in special funds and appropriations, such as the equalization, building loan, and Smith-Hughes funds, are met; it should study the work and the needs of the schools, and publish reports thereon; it should also labor with the people directly, explaining the educational policies and plans of the state, helping to arouse local public sentiment, to effect consolidations and to plan buildings and grounds, advising with superintendents and teachers with regard to the organization of their schools, courses of study, classification of pupils, methods of teaching-

[^35]in short, serving the people at all times and in all ways in the interest of better schools.
There is a growing appreciation of the value of such centrally directed administrative service. For example, provision was made in 1901 for a supervisor of colored normal schools. More recently, when school extension work, instruction for adult illiterates, and vocational education were inaugurated, a director was provided in each instance. However, the state superintendent appreciated the imperative need of professional assistance long before the state was persuaded of its importance. From private agencies he obtained funds which enabled him to appoint a part-time high school supervisor in 1907, a white rural school supervisor in 1910, and a colored rural school agent in 1914. These agencies still bear the entire expense of maintaining these supervisors, including their salaries, traveling expenses, and stenographic help. Their work has been invaluable and is now well established; its importance is generally recognized; the time has come when the state should and can assume financial responsibility for it.
The staff required by a state department of education varies with the size of the system, its organization, and stage of development. To equip properly our state department of education for the great work that lies immediately before it would require approximately the following stenographic, clerical, and professional assistants:

1. Office of state superintendent, having, besides the state superintendent, a secretary, a stenographer, and supply clerk.
2. Division of schoolhouse planning, with a director, one assistant, two draftsmen, and a stenographer.
3. Division of teachers' certificates, with a director, two assistants, three clerks, two stenographers, and temporary readers.


Statesville-Iredell Colnty


Sanford-Lee County
4. Division of supervision, with at least five supervisors and three stenographers, in charge of:
a. White elementary schools;
b. Colored elementary schools;
c. High schools;
d. Vocational instruction;
e. Minor normal schools and teacher training;
f. Instruction of adult illiterates.
5. Division of school extension work, with a director, two assistants, and a stenographer.
6. Division of state school funds and school records, with a director, three assistants, four clerks, and one stenographer, in charge of:
a. School funds, budgets, and accounting;
b. School records and reports;
c. School tests and measurements.

The total expenditure for general administration in 1918-1919, exclusive of postage and printing, was $\$ 43,-$ 648. Of this the state paid $\$ 33,103$, and outside agencies $\$ 10,545$. The cost of a departmeni such as that outlined above would approximate $\$ 125,000$ annually, representing an administrative cost of between 1 and 2 per cent on total school expenditures. No successful business operates with anything like so small an overhead charge. To save on administration is to waste in the end, for good administration vitalizes the whole system, and secures the largest return on all other expenditures. The special session of the general assembly of 1920 appropriated $\$ 10,000$ to establish a division of schoolhouse planning and $\$ 5,000$ for the better supervision of state school funds. The general assembly of 1921 should go still further, and that of 1923 should see the above program well toward completion.

## Improved County Administration

Better county administration is as imperative as better state administration, for the state can not and ought not to administer the schools directly. At present, few county boards do more than look after the routine of the schools. The majority of the county superintendents are without proper qualifications, a fifth are parttime officers, only a third have clerks, and 23 have at present supervisors.

The first step in elevating county boards of education to a position of influence is to set them in right relation to the people and to their problems. This will call for a change in the present method of electing county board members.

The second step is to provide county boards with competent executives in the person of the county superintendent. The office of county superintendent must be placed on a strictly professional basis, that is, such professional preparations and experience should be required of all incumbents and future aspirants as will safeguard efficiency and eliminate all who rely for appointment on other than professional qualifications. The office must also be made attractive. Among other things, the term of appointment should be lengthened to at least four years so as to guarantee permanency and allow time to demonstrate ability in the development and execution of policies, and the salary should be sufficient to encourage young men and women to make the necessary preparation, to keep them contented and enthusiastic, and hold them in service. The equipment of the office should correspond to the needs of the work. The counties should assume all necessary expenses incurred in the performance of professional duties; under no circumstances should such expenses be regarded as a part of the superintendent's salary, and proper provision
should be made for clerical details. No county should have less than one stenographic and clerical assistant, and in the very largest counties there should be at least two.

In the 15 counties having less than 50 teachers, white and colored, a county superintendent, properly provided with office help, should be able to administer the schools effectively if one supervisor is provided for each two such counties. In the 22 counties having between 50 and 75 teachers, the superintendent should have at least one supervisor; in the 40 counties having between 75 and 125 teachers, at least two; in the 18 counties having between 125 and 175 teachers, at least three; and in the 5 counties having over 175 teachers, at least four.

The cost of the above plan would doubtless be three times the present expenditure, or approximately $\$ 1,-$ 000,000 annually, but this expense should not be borne entirely by the counties. The state quite properly undertook in 1919 to pay half, and in some instances more than half, the salaries of all county superintendents, and half the salary of one supervisor in a limited number of counties, 23 in all. State school funds can not be used to better advantage than in procuring good supervision of instruction. The state should, therefore, place supervisors on the same basis as superintendents, paying at least half, and when necessary even more than half, the salaries of supervisors, thus reducing the local expense of efficient school administration.

However, improvement in county administration will necessarily be slow. Even if ample funds were at hand, properly trained county superintendents and supervisors are not now available from among the teachers of the state and it would be impracticable to import any considerable number from the outside. Properly qualified county superintendents and supervisors have to be educated, and this will take time. In the meanwhile,
the employment of competent and adequate clerical and professional staffs should be made mandatory upon all county boards of education, but the date at which this mandatory provision shall take effect in so far as it has to do with the employment of supervisors, should be left to the discretion and recommendation of the state board of education. The position of county superintendent as well as that of supervisor should be rendered secure and attractive, and their selection should be subject to the approval of the state superintendent. Finally, every means should be employed-even to the county board's paying the school expenses of one or more of its teachers-to encourage young men and women of promise to prepare for these important fields of service. Competent county superintendents should come first, for it is futile to introduce supervision unless the superintendent is efficient and appreciative.

## Improved City Administration

There is equal need of improved city administration. For the small specially chartered districts, this will be achieved by placing them under county management, thus securing for them, as has been pointed out above, a higher type of administration and supervision than they can afford as long as they operate independently.

In the larger cities, the problem of better administration is not so much a question of better superintendents as a question of better organization and better working conditions. The superintendents of the larger cities are men of the highest personal qualities and professional spirit, although in a few instances they lack preparation and experience; summer work at a good university will go far to correct these defects. Proper organization and working conditions can be secured through repealing the thousand and oné special city school laws, and enacting, instead, a single, unified code for all cities.

This code should provide, on the one hand, for the election of city school board members at large at a separate, non-partisan school election with nomination by petition, the names of the candidates being entered alphabetically on the non-partisan ballot. It should define the duties and powers of the board of education, the duties and powers of the superintendent, the status of teachers, etc.-all in harmony with the provisions governing the general state system.

To protect the interests of the state and to make sure that the funds available for school purposes are sufficient to guarantee proper administration and supervision and the highest type of public schools, the code should lay down certain minimum requirements that cities must meet and fulfill in order to operate as city school districts. For example, the buildings, grounds, and equipment should conform to the rules and regulations of the state board of education; an elementary school of at least seven grades and a standard four year high school should be maintained; a superintendent, and, in cities having more than 30 teachers, at least one supervisor, holding the highest grade of superintendent's and supervisor's certificates, should be employed, as well as a high school principal, and an elementary school principal for each elementary school of the usual size; all new high school teachers should hold the highest grade of high school teacher's certificate, and all new elementary teachers, at least a "C" grade elementary teacher's certificate; city elementary and high schools should be in session not less than 180 days annually, etc.

While city school districts would be free to exceed these minimum requirements and to develop along lines of local interest, the proposed code would give unity and strength to their systems.

## IX. BETTER TRAINED TEACHERS

IMPROVED state, county, and city administration will secure an economical and efficient management of the schools, but the efforts of superintendents and supervisors to improve classroom conditions will be ineffective unless they have experienced and well trained teachers as co-workers. Our teachers, as we have seen, are not well trained; they are so lacking in preparation that, whatever the other needs of the schools, the need of efficient teachers is paramount.

The way to get and hold well trained teachers is simple. Their tenure must be secure, their salaries attractive, and appropriate teacher training institutions must be readily accessible.

The general assembly of 1919 and the special session of 1920 , as stated before, materially increased the pay of teachers, and the new certification system guarantees the higher salaries to the teachers who are best prepared. These higher salaries and the new certification scheme will hearten the well trained teachers now in service, but the salaries offered are not yet sufficient to induce the ill prepared to get the additional training required for high grade certificates, or to induce sufficiently large numbers of young people to qualify themselves in the future. It is still the unprepared who are really favored.

For example, an inexperienced high school graduate, with six weeks of professional preparation at a summer school, is paid $\$ 65$ per month, with $\$ 5$ per month increase each year after the first for four years. Hence, a high school graduate working eight months a year will earn in five years a total of $\$ 3,000$. On the other hand, a graduate of a standard normal school, that is, a graduate of a high school who has completed successfully two [116]
years' work in a normal school, receives an initial salary of $\$ 90$ per month, with $\$ 5$ per month increase each year after the first for four years. At these rates, for eight months a year, the normal school graduate will earn in five years-two years in normal school and three years in teaching-a total of $\$ 2,280$. Deducting $\$ 700$, the estimated cost of a standard normal school education, the normal school graduate at the end of five years is $\$ 1,420$ poorer financially by reason of having prepared herself for teaching than if she had entered the work directly from the high school, and she is approximately $\$ 820$ poorer financially even if $\$ 300$ a year is allowed the high school graduate for maintenance during the two years the normal school graduate is in school. Nor will the normal school graduate ordinarily make up this loss, for only a small proportion of teachers remain in the schools more than five or six years. The financial disparity between the high school graduate and the college graduate is even greater. The salaries of the well trained should be raised at least sufficiently to place them on a financial parity with the untrained. Otherwise, the schools will remain in unskilled hands.

The present salary schedule has other discouraging aspects. The proposed salaries are computed, for example, on a monthly basis. Accordingly, the salary received will vary with the length of the school term, which may be as little as six months or as much as ten months. With such uncertainty as to salary, young people can not be expected to prepare themselves thoroughly for teaching, nor will well trained teachers endure these conditions. Such teachers must be guaranteed at least an annual minimum wage. This is only just, for they should not be expected to teach school six months and then be forced to spend the other six months in a factory or store in order to piece out a precarious living. To place the salaries of all professionally trained teachers, that is,
those holding standard state certificates, on an annual basis will, of course, put the short term school at a disadvantage. However, when rural school authorities find that they must pay a well trained teacher as much for a six months' school as for a nine months' school, the natural tendency will be to lengthen the rural school term. Unless this is done, we can not expect to have well trained rural teachers or good rural schools.

## Improved Teacher Training Facilities

Next to good salaries and a good certification system, the most important factor in securing well trained teachers is adequate and appropriate teacher training facilities. Our teacher training facilities are, as we have seen, inadequate. We should be able to train, to the extent needed, every type of superintendent, supervisor, principal, and teacher required by the public schools. To afford such a range and variety of training, existing institutions will need to be enlarged and strengthened, new ones established, and, in order that unnecessary overlapping and duplication may be avoided, the specific work to be undertaken by each will have to be clearly defined.

Among the existing teacher training institutions, the State University is the oldest. Courses for teachers were established there in 1877, both in regular term and in summer. The summer school has always been well attended, particularly in recent years; the enrollment in 1920 was 1,200 . The attendance on educational courses in the regular term has not been so large, and the graduates have been relatively few in number. There were, in 1917-1918, altogether 86 of the University's graduates, including those from other departments, in public school work; 25 were in rural schools, 31 in city schools, 19 were county superintendents, and 11 city superintendents. However, the service of the University to the public
schools can not be measured by the number of teachers it has turned out. Its graduates have always exercised an influence out of proportion to their number.

The commanding position of the University among the schools of the state, the character of its student body, the probability that a larger proportion of its graduates will, in the future, become teachers, the past service of its graduates-all favor the development at the University of a school of education comparable to similar schools elsewhere, and the general assembly is under obligation to develop such a department.

The University has quite properly never attempted to furnish regular courses for elementary teachers, and should not do so in the future. Its efforts should be concentrated entirely on the preparation of high school teachers and principals, elementary principals and supervisors-provided women are admitted to the University in numbers-and on the training of county and city superintendents. There should also be further developed, as a part of the school of education, an extension division, equipped to make special studies, to test the achievements of pupils, and to advise with school officials regarding policies and plans.

The North Carolina College for Women, established in 1891, is the only state institution of college grade open to women ${ }^{1}$. It has a dual function, offering college opportunities to women, and training teachers. Nevertheless, all graduates, except those who pay tuition, are required to teach at least two years. There were, in 1917-1918, 303 graduates in service.

The efforts of the Women's College in its teacher training work have been concentrated thus far chiefly on the preparation of elementary and high school teachers. The demands for specialized teacher training are

[^36]now increasingly urgent. The public schools require, to an extent formerly unknown, competent elementary and high school principals, special teachers, and well trained supervisors, and women in increasing numbers are aspiring to and being appointed to these positions.

The North Carolina College for Women should be able to meet these pressing demands; but to offer proper courses for elementary teachers-probably both a two year and a four year course-strong courses for high school teachers, for teachers of the household and the fine arts, of public school music and physical education, for elementary and high school principals, and for elementary supervisors, will call for increased support in the course of a reasonable period. It will be necessary; on the one hand, to enlarge the academic faculty, if it is to give the requisite academic instruction, and, on the other, to enlarge the professional faculty, and improve the facilities for practice teaching. To accomplish this larger work as economically as possible, particularly the training of special teachers and of elementary and high school principals and supervisors, the student body should be enlarged, and additional dormitories and classrooms will have to be provided accordingly.

The East Carolina Teachers Training School, established in 1907, was founded for the sole purpose of training elementary teachers. This purpose has been kept constantly in mind and well fulfilled. Its professional course covers two years based on graduation from a four year high school. When the new dormitory is completed it will have capacity for 300 students; it had, in 19171918, 159 graduates in the field.

In view of the growing demand for well trained elementary school principals and supervisors, and the further fact that the present two year course no longer qualifies its graduates, under the new certification scheme, for the highest grace of elementary teacher's
certificate, the time has undoubtedly come when the East Carolina Teachers Training School should be raised in rank so that it may offer four year as well as two year professional courses. Its work, however, should still be limited to the elementary school field, that is, to the training of elementary school teachers, principals, and supervisors. That this may be done economically, and the teacher training facilities of the state increased, the capacity of the school should be doubled.

If the school of education at the State University, the North Carolina College for Women, and the East Carolina Teachers Training School are enlarged and their work developed as we have indicated, the state would have three teacher training institutions of high order admitting only graduates of standard four year high schools. These three institutions thus enlarged and developed would, along with the private colleges, be able to train the city and county superintendents, the supervisors, the elementary and high school principals, and the high school teachers needed in the schools of the state. They would also be able to turn out annually probably 400 well trained elementary teachers having had either two or four year courses. While 400 well trained elementary teachers are only a fifth of the new white elementary teachers required annually, it would nevertheless be futile at this time to establish additional teacher training institutions requiring for admission graduation from standard four year high schools, for probably the total number of graduates from standard four year high schools does not now exceed 1,800 annually, ${ }^{1}$ and the three state institutions already considered, along with the private colleges offering courses in education. can for some years probably care for all of these who seek

[^37]to prepare for teaching,. Such other teacher training institutions as the state should maintain for the proper preparation of the remaining 1,600 white elementary teachers must for the present necessarily be of lower grade, that is, admit students who have had less than a standard four year high school course.

The Appalachian Training School and the Cullowhee Normal and Industrial School are practically schools of this non-standard type. The Appalachian Training School has done invaluable work for the surrounding sections, but it is not a normal school in the accepted sense of the term; it is rather a regional high school, doing teacher training incidentally. The same is true of Cullowhee, although Cullowhee has recently attempted to develop a two year teacher training course beyond the high school. The impossibility of developing such a course is apparent when account is taken of the fact that there are only three counties-Cherokee, Haywood, and Buncombe-in the entire mountain region that maintain standard high schools. Boone had in 1917191843 former students teaching, and Cullowhee, 75.
However valuable these two schools have been as regional high schools, the time has come for a reorganization of their work. Henceforth their energies should be devoted entirely to training elementary teachers, leaving all high school instruction, as such, to high schools that should be established in the mountain sections. These schools should be modified to conform to the type of normal school common a decade ago and still found in the Middle West. That is, they should admit students who have completed the seventh grade of the elementary school and graduates of non-standard high schools, and give them a two, three, or four year course planned to meet the needs of elementary teachers. No graduates from standard four year high schools should be admitted; such graduates should go to Chapel Hill, to Greensboro,


Hanes School-Forsyth County


Cornelius Harnett school-Whmington
or to Greenville, or to private colleges offering courses in education. On the other hand, these minor normal schools should not be a blind alley; the way should be open for their graduates to enter without loss the higher institutions of the state, both public and private. Both schools are well located to serve their respective sections, and, if properly developed and equipped, should graduate at least 100 elementary teachers a year.
This would still leave 1,500 of the 2,000 white teachers required annually unprovided for. How are they to be trained? Among the immediate means available is the further extension of county summer schools and of high school training departments. County summer schools are valuable in reaching young people without high school advantages who are teaching for the first or second time, and who would otherwise ordinarily enter the classroom without any special preparation. High school training departments, on the other hand, reach tenth and eleventh grade high school students. The work of such departments generally covers two years and is included as a part of the last two years of the regular high school course. It covers a thoroughgoing study of most of the common school subjects and a limited amount of professional work, including observation and practice teaching. Students taking such a course usually enter the rural schools and are far better equipped for such an undertaking than if they had had only six weeks in a standard summer school. Indeed, many students so prepared develop into excellent teachers. Twenty-two states now maintain high school training departments, and they are generally recognized as one of the most effective and cheapest means of reaching large numbers of prospective rural teachers ${ }^{1}$.

[^38]While county summer schools and high school training departments should be used extensively for the time being, they are temporary expedients. The final solution of the problem of elementary teacher training is the timeworn recommendation that the state establish ten additional normal schools of the type suggested for Boone and Cullowhee, with the understanding that they are to be raised, one by one, to standard normal schools whenever this step is justified by the increased number of graduates from four year high schools, and by the demand for teachers holding the higher grades of elementary certificates. A single normal school of the type contemplated, accommodating 600 students and training 150 teachers a year, would cost, for plant, probably $\$ 500,000$, and for current maintenance, about $\$ 75,000$.
It would be inadvisable for the state to attempt to establish at one stroke ten such schools, but we believe that the general assembly of 1921 should provide for at least one. Otherwise there will be no state teacher training institution east of the mountains to care for the boys and girls who are without home high school opportunities, or for those in the 26 counties having no standard high schools, either city or rural, or for those in the 70 counties having no standard rural high schools who have completed one, two, three, and four year courses in non-standard high schools and who expect to teach. As intimated, this school should be located east of the mountains, and should prepare teachers solely for the rural schools.

What was said above about the Appalachian Training School and the Cullowhee Normal and Industrial School applies with equal force to the three colored normal schools. The school at Winston-Salem is the best of these, but even Winston-Salem has much to do before it will be a real normal school, while the work of the

Elizabeth City and Fayetteville schools should be completely reorganized and redirected. Colored students desiring a high school education should enter the colored high schools of the cities, or the county training schools, or one of the many private colored schools; the efforts of the state normal schools should be centered on the training of colored elementary teachers. The new dormitories at Elizabeth City and Fayetteville, and the new science building at Winston-Salem add to the respective resources of these schools, but their facilities and current support will need to be further increased if they are to do efficient teacher training and provide anything like the 350 new colored teachers required annually. As a temporary assistance to this end, the number of colored county summer schools should also be increased and the state should co-operate actively in the development of the county training schools now maintained in 19 counties.

The Cherokee Indian Normal School stands by itself and presents a unique and difficult problem. This socalled normal school has three regular teachers and a part time music teacher, and an enrollment of 151 pupils, with 4 above the seventh grade. The main building is a dilapidated frame structure of four classrooms and an auditorium. There is also a dormitory, with places for 24 students, completed in 1916; this provides the principal and teachers with comfortable quarters, but there has never been but one boarding student. As a public school, the Cherokee Normal is doing an excellent service, although recently crippled by the diversion of $\$ 500$ of its meager fund of $\$ 3,100$ to the public school at Chapel; as an institution to train Indian teachers for the 3,000 Indian children of the state, it is a failure.

Finally, there is need of a change in the management of state teacher training institutions. When teacher training institutions are well established and their main
purpose can not easily be subordinated to local interests, it may be well enough for them to have separate local managing boards. Even in such instances, there should be uniformity in the size of the managing boards, length of term, and method of appointment. The state board of education should appoint the respective local board members, and also have final approval of the teacher training courses offered. When teacher training institutions are small and local interests can easily divert them from the purpose for which they are maintained, it is contrary to the best interests of the state to place their management in the hands of local boards. To the end that the minor normal schools may be rigorously held to the purposes for which they are maintained and to the specific work allotted them in a general and unified teacher training program, we would recommend that the local managing boards of the Appalachian Training School, the Cullowhee Normal and Industrial School, of the three colored normal schools (Winston-Salem, Elizabeth City, and Fayetteville), and of the Cherokee Indian Normal School be abolished, and that the general management of these schools be vested in the state board of education, with an able and competent supervisor, working under the state superintendent, in direct charge.

It is a simple matter of legislation to improve the administration of existing teacher training institutions, but to carry out the teacher training program outlined above is a large task, which can not, for financial reasons, if no other, be accomplished at a single stroke. The general assembly of 1921 should, we believe, confine its efforts chiefly to enlarging, strengthening, and redirecting the work of existing institutions and providing more liberally for county summer schools and high school training departments. In addition, provision should be made for the establishment of at least one normal school of the type suggested, which would admit students of
less than high school preparation and train them for teaching in the rural schools. Though one additional normal school will not meet present needs, it is probably all that can be undertaken now. Other similar schools should be established in the near future, and, indeed, they must be established if the rural schools are to have well trained teachers.

## X. BETTER FINANCIAL SUPPORT

OUR educational progress is obviously conditioned on more liberal financial support. There is not a branch of the system that does not require larger expenditures. More money is needed for grounds, buildings, and equipment, more money to lengthen the school term and broaden school programs, more money for teachers' salaries, more money for teacher training institutions, more money for administration and super-vision-how much more, no one can tell. One thing is certain-it will require more than three times the present amount even to bring present expenditures up to the country-wide average, ${ }^{1}$ and there is no reason to suppose that good schools can be maintained more cheaply in North Carolina than elsewhere.

Some doubtless feel that public school tax burdens are already heavy enough; in isolated instances they probably are, but in the state as a whole public school taxes are low. Surely our state, fourth in agriculture and eleventh in the amount of internal revenue and income and excess profits taxes paid, will not much longer permit itself to be ranked near the bottom in public school education and in public school efficiency. Others may think that recent progress has been so great as to leave little to be done to raise our schools to the level of the very best. Our recent progress has, indeed, been rapid and gratifying, but the progress of other states has been equally rapid, leaving us in 1918 practically in the same relative position among the states educationally as in 1890.

[^39]The financial support of the public schools is derived, first, from the state literary fund. This comprises an interest-bearing principal of about $\$ 1,300,000$. Since 1903, the literary fund and current interest therefrom, with the exception of $\$ 2,000$ appropriated annually for schoolhouse plans, has constituted a revolving building loan fund, from which the state board of education makes loans, at a low rate of interest, to boards of education of the less favored counties, for the erection of schoolhouses. No better use could be made of this permanent fund than to employ it in financing new school buildings, and, if possible, it should be increased by legislative appropriations.

The principal of this fund has always been held sacred, at times under most trying conditions, but it is still true that any general assembly, if so minded, might dissipate it. Dr. Joyner called attention to this fact in 1903, saying: "The use of this sacred fund for any temporary purpose would, as I see it, be a drive against past, present, and future generations." It is of course improbable that the fund will be diverted from its proper use. There would be an advantage, however, in so amending the constitution as to make the principal inviolable.

All other financial support comes from public school taxes, including special school district taxes, county school taxes, and a state school tax, and from minor appropriations from the general treasury, and from fines and forfeitures which go to the counties. The returns from the state school tax, levied on all the taxable property in the state, make up the state public school fund, and it is of this that we wish to speak in particular.

The state public school fund amounted, in 1919-1920, to $\$ 3,500,000$. What is left of this fund, after deducting minor appropriations for medical inspection and free dental clinics, rural libraries, agriculture, the state board
of examiners, teacher training, etc., is apportioned among the counties and cities to provide a six months' school.

The minor appropriations from the state public school fund are in certain instances for selected activities, for which the counties and cities are primarily responsible, but in which the state wishes to arouse special interestfor example, medical inspection and rural libraries. In such instances the state usually bears half the cost and the county or city the other half. In other instances these minor appropriations are for functions that properly belong to the state-for example, the certification of teachers-and the state rightly assumes the entire burden. Ordinarily, appropriations for teacher training are made direct to institutions and from the general treasury. The general assembly of 1919, however, made an appropriation for teacher training from the state public school fund, placing this appropriation at the disposal of the state superintendent. It has been wisely used to organize county summer schools for teachers and to establish teacher training departments in high schools, the state sharing the expense with the local authorities. However, to call upon local authorities to share in the cost of even these temporary means of training teachers is, we believe, an unwise practice. Teacher training is a recognized state function, and the state should assume complete financial responsibility for it. The appropriation for this particular work should be large enough to enable the state superintendent to conduct, without expense to local authorities, a county summer school for teachers wherever needed, and to establish a high school training department wherever conditions are favorable. Otherwise, it may be impossible to establish them where conditions are most favorable and where they can do the most good.

In apportioning to the counties and cities what remains of the state public school fund after all minor appro-
priations are deducted, the state seeks, so far as possible (a) to equalize school tax burdens, (b) to equalize school opportunities, and (c) to equalize efficiency-all approved and worthy ends.

School tax burdens are notoriously unequal, and arise because the cost of maintaining schools is practically uniform from city to city and from county to county, whereas the taxable wealth back of each child to be educated varies enormously from city to city and from county to county. Accordingly, if the entire burden of maintaining a six months' school rests upon the respective cities and counties, there will be the widest differences in the tax rates required to provide the needed funds; the rate in one city or county may be 35 cents, and in another, 70 cents.

The state attempts to reduce such inequalities for the first three months of a six months' school. It apportions from the state public school fund to each county and to each city an amount sufficient to pay for three months the salaries of all teachers of every sort, and one-half the annual salaries of the county superintendents and onethird the annual salaries of the city superintendents. The respective counties and cities have paid into this fund at the same rate and in proportion to their taxable property, and each thus shares alike in it.

The state also endeavors to equalize, so far as is practicable, the financial sacrifice for the second three months. For example, when a county has levied a specified school tax rate, which approximates the average county rate necessary to raise sufficient funds, along with what is received from the state, to maintain a six months' school, and such county finds itself unable to maintain its schools six months, the state makes an additional apportionment from the state public school fund sufficient to keep the schools open the minimum term.

In thus apportioning its public school fund, the state
has this further end in view-the equalization of educational opportunities. All children, irrespective of whether they live in Ashe or in New Hanover are now guaranteed at least a six months' school. The state can not, however, stop here. In the past, we have condoned intolerable differences in the length of school terms. The cities provided eight or nine months' schooling, some counties seven or eight months', and other counties only four months'; in short, a child's educational opportunities varied according as he chanced to live in one place or another. These same intolerable differences will continue, unless the state attempts to equalize opportunities beyond six months, for some counties will provide eight or nine months, and others will be content with six. A part of the old equalization fund was for a time used to lengthen the school term beyond the constitutional minimum of four months, and there is no reason why a part of the state public school fund might not now be similarly employed, provided it were sufficiently increased. It would probably be impracticable to attempt at one stroke actually to equalize the length of school term, but a beginning should be made. The limit of equalization might well be fixed for the present at six and a half months, later raised to seven, and so on until all the children of the state enjoy a standard school year of eight or nine months. Such action would serve the best interests of both present and future generations, and would at the same time mean the gradual elimination of special tax districts, the stumbling block to a county-wide special school tax and to the development of efficient county school systems.

There is a further serious limitation on present practice. The state makes no distinction between elementary schools and high schools; it assumes responsibility for the salaries of the teachers of both for three months, and the city or county, with the exception noted above,
for the period beyond three months. Owing to the greater cost of high schools, this arrangement works to the educational disadvantage of the children in the less wealthy counties. To do creditable work, high schools must have a term of at least eight months. The expense of maintaining them entirely from local funds, in most cases for not less than five months and in all for not less than two months, will be extremely burdensome to the less prosperous counties, and particularly to those requiring an additional apportionment to maintain their schools six months. Many counties will not undertake it. As previously pointed out, 39 counties are now without standard high schools of any kind, and 85 have no standard rural high schools. High schools are essential if the state is to enjoy enlightened leadership, and if the schools are to have well trained teachers. If good high schools are to be brought within the reach of all children, the state will need to contribute more largely than now to their support. On the basis of the best practice elsewhere, it will need, at least for the present, to contribute not less than half of the total instructional cost, and in the poorer counties, after they have done their full financial duty, as much more as is necessary to maintain a standard school. The special session of the general assembly of 1920 wisely put the state superintendent in a position to initiate this policy in a limited number of cases. However, if its high school support is increased, it will be incumbent upon the state to exercise a more watchful care over the establishment and location of high schools, the length of high school term, the quality and number of teachers employed, programs of study, and the quality of work.

The present use of the state public school fund tends also to equalize differences in school efficiency. These are as glaring as the differences in length of school term and school tax burden. Up to a six months' term the
less prosperous counties are now able to employ well qualified teachers. They are, however, at a disadvantage when they seek to pay higher salaries than the state shares in, and particularly so when they attempt to extend the school term beyond six months. Nevertheless, that the less prosperous counties are now practically on a plane of equality for even six months with the more favored counties is a tremendous educational advance.
The state's assumption of one-half the salary of all county superintendents works to the same end. But here again the less prosperous counties will ordinarily be heavily handicapped. Even half the salary of a competent superintendent, along with his incidental expenses, is a heavy burden to many of them. Educational efficiency is impossible without proper leadership. Appreciating this fact, the state superintendent has interpreted the equalization provision of the six months' school law as extending to county superintendents. Accordingly, he has assisted the several counties beyond one-half of the superintendent's salary in the same proportion as the respective counties participate in the equalization fund to maintain a six months' school. Competent superintendents are thus brought more nearly within the reach of all the counties, and educational inequalities are thereby further reduced.

For precisely the same reasons, supervisors should be placed on the same basis as superintendents. That is, the state should pay a like proportion of the salary of at least one supervisor for each county having fifty or more teachers, and of one supervisor for each two adjoining counties having respectively less than fifty teachers. Thus, to bring within reach of all the counties at least one strong supervisor would do more than any other single step to quicken and inspire the teaching body to improve classroom work.

The present uses of the state public school fund are thus eminently sound. However, fully to equalize school tax burdens, school opportunities, and school efficiency is the work of years. In the meantime, provision should be made for the next step. The state public school fund should be so increased as to make possible the establishment of county summer schools and teacher training departments wherever needed, to provide more effectively for a uniform system of high schools, to provide all counties with capable, trained superintendents and with at least one supervisor, and to provide for equalizing the length of the school term up to six and a half months. These increases are in addition to those that will be required to meet the necessary increase in teachers' salaries, to enlarge and improve present teacher training nstitutions, to establish at least one new normal school, and to equip properly the state department of education.
Finally, there should be a state school budget. At present it is almost impossible to tell what the state appropriates from its general treasury and what it raises by state taxation for public education. The various financial provisions and appropriations are scattered in a score or more of laws and in as many places. If a single educational budget is not feasible, there should at least be a budget for the state board of education and for all activities and institutions under its control.

The foregoing pages have, it is hoped, placed before the people of North Carolina a just account of the educational facilities and needs of the state. Progress depends in the last analysis upon two factors: (1) the willingness of the people to look at the problem in a large way, considering it not from the selfish standpoint of a single district, or even a county, but rather from the point of
view of the state taken as a whole; (2) the willingness of the people to pay, up to the measure of their actual ability, for the improvements that have been recommended. With a few words on each of these topics this volume will be brought to a close.
The State of North Carolina is a unit. In the long run what is best for the whole state will prove to have been best for its component parts. For many years, general state-wide improvement could hardly have been effected; separate steps had therefore to be taken-a step in advance here, another there. There has been so much special legislation that the state is, educationally, broken up in ways that practically prevent harmonious or uniform state-wide progress. In consequence, our present conditions are irregular and at times unfair. The time has come when, without unduly disturbing what has been anywhere accomplished, conditions should be established which will make it possible not only for progressive communities to advance still further, but for backward communities to join them at the front. Are the people of North Carolina so in earnest that a combined moveent of this kind is practicable?
If so, after securing appropriate legislation, what can be accomplished becomes largely a question of money. Education is not cheap. It is expensive and it is every day becoming more expensive. But let it not be forgotten that education is the most profitable investment that a state can make. Wealth flows into the states where the tax rate for education is relatively high, not into the states where it is relatively low. "Too poor to maintain schools?" cries out one of the greatest of North Carolina's sons, "The man who says it is the perpetuator of poverty. It is the doctrine that keeps us poor. It has driven more men and more wealth from the state and kept more away than any other doctrine ever cost us."

Our suggestions involve large expenditures; but the state can afford them. As our educational facilities develop, our wealth will increase; we shall be able to spend more still in training the children of the state. Breaking the vicious circle of poverty and ignorance, we shall have started a beneficent circle of intelligence and efficiency.



[^0]:    ${ }^{1}$ In 1890 there were in 72 counties of the state-the others not reporting-a total of 526 private and preparatory schools, having a white enrollment of 24,301 , and a colored enrollment of 4,413. Superintendent's Report, 1889-1890, page 89.

[^1]:    ${ }^{1}$ These cities were: Goldsboro, Charlotte, Durham, New Bern, Greensboro, Wilson, Salisbury, and Winston. Superintendent's Report, 1885-1886, page 92.
    ${ }^{2}$ Thirteen of the city and town high schools in 1907, and 37 in 1918, received state aid and were also classed as county high schools, as they were open without tuition to the children of the county.

[^2]:    ${ }^{1}$ In the corresponding period the enrollment of the white school population rose from 54 to 78 per cent and the enrollment of the colored school population from 47 to 69 per cent.

[^3]:    ${ }^{1}$ While not considered here, it should be noted that the State College of Agriculture and Engineering, at West Raleigh, was established in 1889, and the Agricultural and Mechanical College for Negroes, at Greensboro, in 1891.

[^4]:    ${ }^{1}$ There are in the state 136 specially chartered districts, or city school systems.
    ${ }^{2}$ Our description of rural schoolhouses is based on data taken from the annual reports of the State Superintendent of Public Instruction and on personal observation. We spent during the course of our study four and a half months in the rural schools, visiting thirty-one counties in all sections of the state.

[^5]:    ${ }^{1}$ There is probably a small error in the number of one, two, and three room schoolhouses given above, as the estimate is based on the number of schools reported as having one, two, three, or more teachers.

[^6]:    ${ }^{1}$ Between 1913 and 1918 there were erected 1,414 new rural school buildings for white children and 494 for colored children.
    ${ }^{2} \mathrm{Mr}$. Julius Rosenwald, of Chicago, co-operates with local school authorities in providing rural schoolhouses for colored children, contributing, as a rule, $\$ 300$ when the authorities and the community contribute an equal amount, or larger sums in approximately the same ratio. Up to March, 1919, 111 colored rural schools have thus been built in North Carolina.

[^7]:    ${ }^{1}$ Our observations on city schools are based on a personal study of practically all the schoolhouses of all the cities of the state having a population of 2,500 or more according to the census of 1910 .

[^8]:    In 1917, there were 4,681 schools with one teacher, and 2,147 schools with two teachers, together constituting 88 per cent of all the rural schools of the state.
    ${ }^{2}$ This presupposed an a verage daily attendance of 90 per cent and a school year of 160 days.

[^9]:    ${ }^{1}$ The average instruction time, in minutes, for the several grades in 52 of the 136 specially chartered districts was, in 1919-1920, as follows: lst grade, 213; 2d grade, 240; 3d grade, 265; 4th grade, 283; 5th grade, 287; 6th grade, 291; 7th grade, 298.

[^10]:    ${ }^{1}$ The r ural school enrollment by grades for the state is not available. We have this for four counties. For the age-grade distribution of Guilford County, see page 30.

[^11]:    ${ }^{1}$ See table on following page.

[^12]:    ${ }^{1}$ The high school inspector estimated the number in 1908-1909 at 800, and doubtless the number is quite as large now.

[^13]:    ${ }^{1}$ A country life curriculum and a farm life curriculum were subsequently provided, to be used in farm life schools and in high schools that have agricultural and home economics departments.

[^14]:    'The law permitting the establishment of such high schools was enacted in 1911.
    ${ }^{2}$ The Guilford County Farm Life School Law, making possible the establishment of such departments, was passed in 1911, and made applicable to all the counties of the state in 1913.

[^15]:    ${ }^{1}$ The Jeanes teachers or colored supervisors are included in this number.

[^16]:    ${ }^{1}$ Six reported graduation from the Agricultural and Technical College; 13 from Biddle; 73 from Shaw; 2 from Fiske; 15 from Hampton; 2 from Howard; and 3 from Tuskegee.
    ${ }^{2}$ This is on the assumption that teachers reporting attendance at schools other than public elementary schools have done work of high school grade.
    ${ }^{3}$ This is on the assumption that all the schools reported, except those enumerated in note 1, are of high school grade.

[^17]:    'Of these 755 received their major training at the North Carolina College for Women; 389, at the East Carolina Teachers Training School; 43, at the Appalachian Training School; and 75, at the Cullowhee Normal and Industrial School.

[^18]:    ${ }^{1}$ The state also maintains the Cherokee Normal School for Indians at Pembroke. While this school gives Indian teachers about all the school training they ever receive, the school itself is merely a graded school, for rarely do pupils advance beyond the seventh grade.

[^19]:    ${ }^{1}$ In the giving of the tests, we enjoyed the co-operationof the state departinent of education, of the faculties of the University of North Carolina, North Carolina College for Women, and East Carolina Teachers Training School, and of county and city superintendents, supervisors, and others.

[^20]:    The Achievement Test in Reading, Sigma I. By Haggerty and Noonan. (The World Book Company, Yonkers, New York).

[^21]:    ${ }^{1}$ Thorndike Reading Scale, Alpha II.

[^22]:    ${ }^{1}$ In interpreting grade scores, it should be kept in mind that North Carolina has a seven grade system.

[^23]:    ${ }^{1}$ These tests, as arranged for the North Carolina survey, were new, and in order to procure comparable data, we had them given in certain other cities, notably Kansas City, Missouri, Boulder, Colorado, and St. Paul, Minnesota.

[^24]:    ${ }^{1}$ These words were selected from Column $R$ of the Buckingham Extension of the Ayres Spelling Scale.
    ${ }_{2}$ These words were selected from Column $X$ of the Buckingham Extension of the Ayres Spelling Scale.

[^25]:    *For the first half of year or students entering at mid-year.
    ${ }^{1}$ A method-Percentage based on total number of questions in test.
    ${ }^{2} \mathrm{~B}$ method-Percentage based on number of questions attempted

[^26]:    ${ }^{1}$ Woody Scales, Series B (Bureau of Publications, Teachers College, Columbia University, New York.)

[^27]:    ${ }^{1}$ Questions were selected from the Van Wagenen Series of Standard Scales in American History.

[^28]:    ${ }^{1}$ Hotz's Algebra Tests, published by the Bureau of Publications, Teachers College, Columbia University, New York, were employed.

[^29]:    ${ }^{1}$ The fact that within recent years the same officials have been repeatedly returned to office has prevented the state from appreciating this danger; the danger nevertheless exists.

[^30]:    ${ }^{1}$ Prior to 1918 , four months

[^31]:    ${ }^{1}$ The county board of education in 1901 assumed responsibility for sites or school grounds.
    ${ }^{2}$ Happily, the special session of the general assembly in 1920 removed this limitation.
    ${ }^{3}$ There was, however, a long standing law permitting townships to vote a nominal local tax, but few townships acted favorably.

[^32]:    ${ }^{1}$ The Public School Law of 1919 contains 972 references to these special acts, and the list is incomplete.

[^33]:    ${ }^{1}$ After 1901, these centers could have taken advantage of the law permitting the formation of special tax districts.

[^34]:    ${ }^{1}$ At such elections, nominations are by petition, the names of the nominees are entered alphabetically on non-partisan tickets, and the terms are of such length and expire at such different times as to guarantee stability and continuity of policy.

[^35]:    ${ }^{1}$ The general assembly in August, 1920, wisely appropriated $\$ 10,000$ for the establishment of a division of schoolhouse planning in the office of the state superintendent.

[^36]:    ${ }^{1}$ The State University only recently opened its doors to women, in limited numbers.

[^37]:    ${ }^{1}$ There were, in 1917-1918, 225 public high schools attempting four year courses, but only 104 of these at most could be called standard high schools.

[^38]:    ${ }^{1}$ These departments have been especially developed in Minnesota. A study of their work has been recently made by Dr. Lotus D. Coffman, entitied "Teacher Training Departments in Minnesota High Schools." A copy of this study can be obtained gratis on application to the General Education Board, 61 Broadway, New York City.

[^39]:    ${ }^{1}$ The country-wide average current expenditure per pupil enrolled was, in 19171918, $\$ 30.91$; for North Carolina, $\$ 8.49$. The country-wide average outlay for new buildings, grounds, etc., was $\$ 5.71$; in North Carolina, \$1.83. (Bulletin No. 11, 1920, Bureau of Education, page 67) [128]

