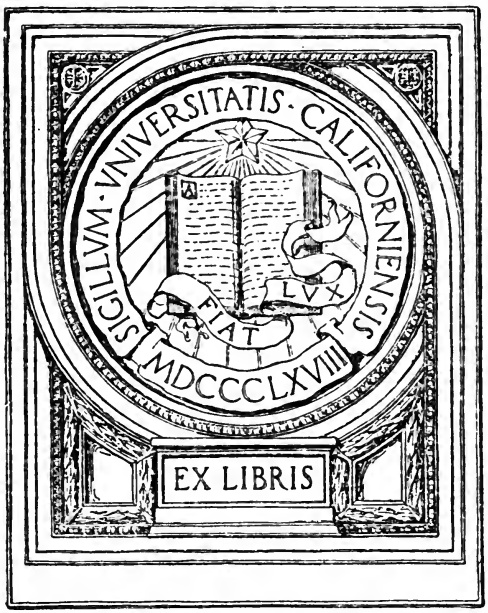
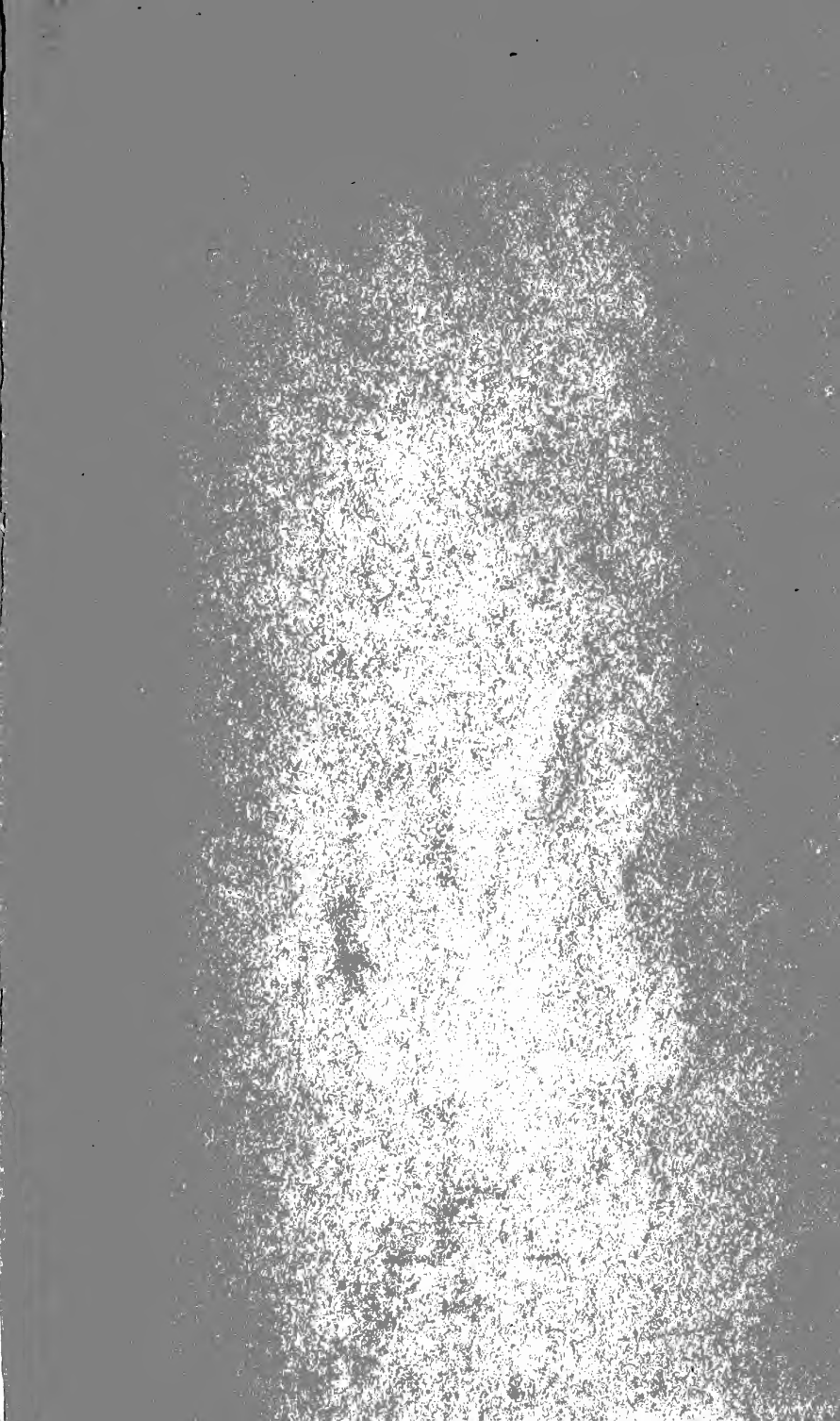
EXCHANGE



EDUC.
LIBRARY



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/comparativestudy00fellrich

EXCHANGE
DEC 9 1913

LIBRARY OF THE UNIVERSITY OF CALIFORNIA

STUDIES IN EDUCATION

FROM THE

DEPARTMENT OF EDUCATION

OF

THE STATE UNIVERSITY OF IOWA

: V. 1-2, 1911

VOLUME I NO. 1

DEC 9 1913

BULLETIN OF THE STATE UNIVERSITY OF IOWA

NEW SERIES NO. 40. APRIL 13, 1912

IN THE SERIES OF RESEARCH BULLETINS OF THE UNIVERSITY

STUDIES IN EDUCATION

FROM THE

DEPARTMENT OF EDUCATION

OF

THE STATE UNIVERSITY OF IOWA

PROFESSOR FREDERICK ELMER BOLTON, PH.D., Editor

VOLUME I NUMBER 2

CONTENTS

A comparative study of city school and rural school attendance

ERNEST WILDER FELLOWS, M. A.

PUBLISHED BY THE UNIVERSITY

IOWA CITY

ISSUED TWENTY-ONE TIMES DURING THE ACADEMIC YEAR; MONTHLY FROM OCTOBER TO JANUARY, WEEKLY FROM FEBRUARY TO JUNE. ENTERED AT THE THE POST OFFICE AS SECOND CLASS MAIL MATTER

IN THE SERIES OF RESEARCH BULLETINS OF THE UNIVERSITY

STUDIES IN EDUCATION

FROM THE

DEPARTMENT OF EDUCATION

OF

THE STATE UNIVERSITY OF IOWA

PROFESSOR FREDERICK ELMER BOLTON, PH.D., Editor

VOLUME I NUMBER 2

CONTENTS

A comparative study of city school and rural school attendance

ERNEST WILDER FELLOWS, M. A.

CONTENTS

1 Introduction

2. Method and scope of the study

3. Comparative numbers in attendance in city and in rural schools

4. Comparative number of days' attendance in city and in rural schools

5. Correlation between the number attending and the number of days' attendance

6. The relation of attendance to classification

7. The relation between attendance and cost

A COMPARATIVE STUDY OF CITY SCHOOL AND RURAL SCHOOL ATTENDANCE

I.

INTRODUCTION

Since the appointment of the Country Life Commission by Roosevelt our rural schools have been the subject of much discussion both on the platform and in the press. The ideal country life has been pictured with the boys and girls attending ideal schools in their own neighborhoods. The content of education in these schools is so closely related to the life and activities of the people that the boys and girls at once see its real value. There is no longer the great gulf between school and life that Dr. Dewey so deplores. The desire to leave the farm and move to the city with its congested population and artificially stimulated life is replaced by a love for and appreciation of the beauty and peace of rural life, free from the noise, dust and intense nervous strain of the city. In short, equipment, curriculum, teachers and pupils in these schools are all adapted to developing the highest type of rural life. On the other hand this vision of the ideal school is repeatedly interrupted by some blunt, untactful and brutally frank speaker or writer who harshly asserts that the Iowa farmer does not send his children to school. We are told that the wages of his children, often at the age when they have an inalienable right to nurture and education, constitute the savings of the average Iowa farmer.

It is hoped that this somewhat detailed study of the school attendance in one Iowa County, (Crawford) may help at least by way of suggestion, in a small way to answer some of the questions suggested by the above mentioned discussion. Do parents in the rural districts appreciate and use their schools less than or more than parents in the towns of the same general locality? How many boys and girls of each age in the country do not attend school at all, compared with the number in town of the same age who do not attend? What is the average number

of days attended by rural children of each age compared with the average number of days attended by town children of the same age? What is the cause of absence in country and town? How does the amount expended for the education of the boys and girls in the country compare with the amount paid for the education of the same number of boys and girls in town for the same number of days of attendance? This study was not begun as a quest for evidence to maintain a position already assumed nor to find argument or proof for any opinion already formulated. The study is one of investigation rather than of demonstration.

II.

METHOD AND SCOPE OF THE STUDY

An attempt was made to get the name and age of every person between five and twenty-one years of age in the county, together with the record of his actual school attendance for the year. In order to do this report blanks were printed and sent to every rural school teacher in this county. This report blank was accompanied by a letter explaining the purpose of the investigation and asking her co-operation. This blank had columns ruled for the name, age, number of days attended, number of days absent, and cause of absence of each pupil. A separate report blank was sent to each teacher at the beginning of each term. The names of those who did not attend at all were to be learned from the school census list which was asked for from the secretary of each township.

When the first set of reports was returned the blank was found to be inadequate in that it omitted some necessary items. At the close of the year, after using a second and more elaborate report blank, the number of schools from which complete reports had been received was so small that it was decided to begin the study again the next year. This decision was arrived at the more easily as it was found that still other data were needed that had not been asked for in the report blank. Also the futility of trying to get the names of all persons of school age from the school census lists had been demonstrated. So a third report blank was prepared and the work was begun again. This final blank called for the name, age, grade and sex, of each pupil, with the total number of days attended by each and the total number of days each was absent. It also called for the number of days taught in the term. In addition to this, columns were ruled with the following headings: "Sickness," "Work,"

"Weather," "Distance or Bad Roads," "Visiting or Indifference," and "No reason Given." Teachers were asked to divide the number of days absent among these six columns. One of the most important changes in the blank was one that provided for the record of all three terms of school on one sheet so that any pupil's record for the three terms would appear in one place. In this way the almost endless task of tracing each pupil's name through three separate reports was avoided. In order to make clear how this was to be done a sample record for a single term and the same sample record completed for the year, were printed at the top of the report blank. The following instructions also were printed on the report blank.

Record the names of all persons between the ages of five and twenty-one living in your district, also the names of any others who may be attending your school.

Add names of any who may be missed at first. If any move to the district, state from what township and district.

If not attending school, please state this fact. State reason for non-attendance or give present occupation, also if any have graduated from rural school or high school.

If attending another school, state what school.

If you have pupils who live in another district, state what district.

If any have moved away, record their attendance up to the time they moved away.

Under "absent" include days not enrolled so that "days present" plus "days absent" will equal the total number of days taught.

Please make the record for each term as complete as possible and return at the end of each term.

The first line shows a sample record for the fall term and the second line shows the same sample record completed for the year.

It will be seen that if all these reports were made and if all were accurate and complete, they would include the name of every person of school age in the county, exclusive of the independent districts, together with the age, grade in school, sex, number of days attended, number of days absent, and the causes for absence. In looking over the reports one is struck by the number of pupils who moved during the school year and whose attendance is therefore partly in one school and partly in another. As far as possible the records of these have been traced and their attendance for the whole year has been credited to

them in the district *to which* they moved and their name has been taken off the list in the district *from which* they moved. In this way all duplication of names has been removed as far as possible. The school districts are not large and each teacher, with a little help from one of the older children, the family where she boards, or someone else to whom the names of the families in the neighborhood are familiar, can make a fairly accurate list of the names and ages of persons of school age in her district. There are some pupils reported by the different parochial schools whose names do not appear on the list from their home district. There are also a few who are recorded by one teacher as attending her school but living in another district who are not reported at all from the other district. Again, the names of some who are reported by the teacher as attending another district or another school cannot be found in the report from that school. However, none of those who are reported by a teacher as attending another school are counted as not attending, even though no record of their attendance can be found. Names of all such persons have been stricken from the list. On the whole, however, this list is probably as accurate as the average school census list of the independent district taken by the secretary. If there is any disadvantage to the rural schools in the omission of names of those who attend some school other than the public school it is probably more than offset by the omission of names of those who do not attend at all. From a total of 156 rural schools reports are available and are used from 145.

To get the corresponding data for the independent districts report blanks were sent to the superintendents or principals with the request that they be distributed aong the teachers. Each teacher here was asked to report for her own room only. The names of those not attending were obtained from the school census list furnished by the secretary of the district. Out of the ten independent districts reports are available and are used from nine. Three of these are omitted from consideration in such parts of the reports as require the use of the school census list, as these were received from six independent districts only.

III.

COMPARATIVE NUMBERS IN ATTENDANCE IN CITY AND IN RURAL SCHOOLS

After making the eliminations indicated above, the names of those not attending at all are arranged by ages, boys and girls

in separate columns, and counted. The results, together with the per cent of the total number of each age who attend, are tabulated for the boys in Table I. and Table II. and for the girls in Table III. and Table IV. The facts presented in these tables are illustrated by the curves in Plates I, 1.

The curves all show the same general characteristics. The per cent of those who attend rises quite rapidly from five to seven years of age. From seven to thirteen the per cent of those who attend is fairly constant. Then at thirteen years of age with the boys of both town and rural schools and at thirteen with the rural girls and at fourteen with the town girls the per cent of those who attend drops very rapidly. While these curves are all very much alike in form there are two points of great difference between those representing rural attendance and those representing town attendance. They show (1) a difference in the age at which the rapid decrease in the per cent of those who attend begins and (2) a difference in the rate at which the decrease takes place. Plate I, 1 shows that the great drop begins with the rural girls about two years earlier than with the town girls not till fourteen years of age. The horizontal distance between the two curves shows that as the per cent of those who attend drops from about 90 to about 60 it reaches each successive lower stage with the rural girls about a year earlier than with the town girls. As the per cent of those who attend drops from about 60 to about 15 each successive lower stage is reached with the rural girls about two years earlier than with the town girls.

Again, if we look at the vertical distance between the two curves we see that from thirteen to seventeen years of age the descent is much more rapid with the rural than with the town girls. At thirteen the per cent of rural girls who attend is higher than the per cent of town girls who attend. At fourteen the curves have crossed and there is a greater distance between them, now in favor of the town girls, than there was at thirteen in favor of the rural girls. At fifteen years of age the distance is about 50 per cent greater than it is at fourteen. At sixteen the distance is about double what it is at fifteen and remains about the same for seventeen years of age. At eighteen the curves approach each other again, crossing between eighteen and nineteen years with the per cent of those who attend somewhere between 10 and 15. The curves do not have great significance after they pass the point representing seventeen years of age because the number who attend, either in country or in town, is so small.

Plate I, 1 shows the same general relation between the per cent of rural boys who attend at any given age and the per cent of town boys who attend at the same age. The horizontal distance between the curves is not so great as in those of plate 6, but from the point where the per cent of those who attend is 90 to where it has fallen to 25 each successive lower stage is reached with the rural boys about a year earlier than with the town boys. Looking again at the vertical distance between the curves we find that this is almost nothing at thirteen years of age. At fourteen there is a distance representing a difference in the number of those who attend of more than 10 per cent. At fifteen this distance has increased about one-half. At sixteen it is almost double what it is at fifteen and continues about the same at seventeen.

The figures in these tables lead us to the following conclusions:

1. There is a great drop in the number of those who attend, with both boys and girls, in both country and town, as soon as they reach fourteen years of age, the lowest age at which our compulsory education law permits non-attendance.

2. On the whole, the boys and girls in the country drop out of school entirely, more than a year earlier than they do in town.

3. At any given age from fourteen to seventeen, with either boys or girls, the number of those who attend is from 10 per cent to 40 per cent higher in town than in the country. Reports of the number of rural school graduates and of the number of high school graduates suggest that if all those who have completed the work of the eighth grade could be eliminated, a similar study would show a greater difference than is shown here.

IV.

COMPARATIVE NUMBER OF DAYS' ATTENDANCE IN CITY AND IN RURAL SCHOOLS

Having compared the number of boys and of girls who attend school in the rural districts with the number who attend in the independent districts, it is interesting to compare in the same way the average number of days attended by rural pupils with the average number of days attended by town pupils. For this comparison none of those who have moved from the country during the school year or who have moved to the country during the school year have been counted. Neither have any been counted who moved from one district to another unless their record could be traced through the different schools they attended and the total attendance for the year could be found.

Tables V and VI show the results of this investigation for the boys of the country and the boys of the town respectively. Tables VII and VIII show the results for the girls of the country and the girls of the town respectively.

The number of days attended for each age, as indicated in tables V and VI is illustrated very strikingly by the curves in Plate I, 2. While these curves correspond in general direction, two points of difference stand out prominently. First, there is a relatively low average number of days attended for every age in the rural schools as compared with the average number of days attended for the same age in the town schools. Second, the rapidity with which the average number of days attended decreases as the age increases is much greater in the rural schools than in the town schools. Take, for instance, rural boys eight years of age, the age at which their average number of days attended reaches its highest point. At this age the average number of days attended is 125.6 days. The average number of days attended by the boys of the same age in the town schools is almost 158.5 days.

This difference of about 33 days is more than one-fifth of the highest average number of days attended for the whole school year. This difference of 33 days means that the country boy eight years old attended, on an average, only about three-fourths as many days as the eight year old boy in town. It means that if the eight year old boy in the country is to have the same opportunity in school attendance as the boy of the same age in town when he has attended his average of 125.5 days his parents must consider that he has completed only three-fourths of his school year and must continue to send him to school for one-third as many additional days as he has already attended. As the age increases, the average number of days attended by rural and by town boys decreases, but the difference in attendance decreases much more rapidly than the age increases.

At fourteen, the age of the lowest average attendance for town boys, the average number of days attended by the country boy is only three more than one-half the number attended by the town boy. The lowest average number of days attended by rural boys is reached at sixteen years of age. Here the average number of days attended is only a little over 36 1-2 per cent of the average number of days attended by town boys of the same age. Expressed differently, the rural boy at sixteen years of age attends school on an average, only four and a half days more than one third as long as the boy of the same age in town. Expressed in terms of the school year, the rural school boy thirteen years of age attends, on an average, less than half an

average school year of 160 days. By the time he has reached sixteen years of age the average number of days he attends has dropped to less than a third of an average year of 160 days.

A further examination of Plate I, 2 shows the same general facts concerning the relation of the average number of days attended by girls in the rural schools to the average number of days attended by girls in the town schools. The difference between the two is, on the whole, not so great as in the case of the boys and the average number of days attended does not fall nearly so low nor so rapidly for town girls as for town boys nor for rural girls as for rural boys. After sixteen years of age there is a general rise in the average number of days attended by rural girls. But from thirteen to seventeen the average number of days attended by the girls in the rural schools is less than 54 per cent of the average number of days attended by the girls in the town schools. At fourteen years and at fifteen years the average number of days attended by rural girls is less than one-half an average school year of 160 days.

Of course, the average number of days attended by most of the boys or girls of any age, either in the rural or in the independent districts, may be higher than the average given here. That is, the average may be made low by the very low attendance of a few. Tables V and VI throw some light on this point also. They show the number of boys and girls of each age who attended less than sixty days. In the case of both town and rural schools the number of both boys and girls five years of age who attend less than sixty days is very large. This is easily accounted for by the fact that many, because they have not yet reached five years of age, are not allowed to start to school in the fall but begin at some other time during the school year. Excepting this first school year, the highest relative number of pupils who attend for less than sixty days is found in the town schools at fifteen years of age. Here about one seventh of the boys and one thirteenth of the girls attend less than sixty days. The next highest relative number of those who do attend less than sixty days is at thirteen years of age, where one fiifteenth of the boys attend for less than sixty days. At no other place is the number greater than two for either girls or boys. In the rural schools the number of boys from six to twelve who attend less than sixty days is one eighth of the whole number who attend. From thirteen to seventeen years of age it is more than 45 per cent, or nearly one-half. At sixteen and seventeen years of age more than three fifths of those registered attend less than sixty days. More than one-eighth of the rural school girls between six and eleven years of age attend for less than

sixty days and more than one fourth of those from twelve to seventeen years of age attend for less than sixty days.

Summarizing these facts we have the following:

1. The average number of days attended by pupils of any given age is much lower in the rural than in the town schools for both boys and girls.
2. The difference is greater between rural boys and town boys than between rural girls and town girls.
3. Like the drop in the per cent of those who attend, the drop in the average number of days attended, comes earlier with rural than with town boys and girls.
4. The drop in the average number of days attended is much greater in the rural than in the town schools.
5. The average number of days attended by either boys or girls in the rural districts falls below the minimum requirements of the compulsory education law at about eleven or twelve years of age.

V.

CORRELATION BETWEEN THE NUMBER ATTENDING AND THE NUMBER OF DAYS' ATTENDANCE

The per cent of attendance, as kept in the school records, does not reveal the whole situation regarding attendance of boys and girls of school age. When a pupil has been absent three successive days he is dropped from the roll and his continued absence has no effect on the record. The record of a pupil who attends two or three weeks and then drops out of school and does not attend again does not affect the per cent of attendance to a greater degree than does the record of a pupil who attends the whole year with the exception of three scattered absences of one day each. The figures showing the average number of days attended give a better idea of the actual conditions with reference to attendance, but these figures, if taken alone, are insufficient. To get the full meaning of the comparisons we have been making we must combine in some way the facts concerning the relative number of boys and of girls who attend school in the country and in town with the facts concerning the average number of days they attend in each case. Either set of facts, taken without the other, is likely to be misleading. For instance, Table VII and Plate I, 2 show an increasing number of days attended for rural girls from fifteen to nineteen years of age. From eighteen to nineteen years of age the average number of days attended increases from 101 to 175. These facts are

very misleading unless we remember at the same time that from fifteen to nineteen the number of girls who attend at all decreases from 56.5 per cent to 12 per cent. While the average number of days attended by those who attend at all is increasing from 101 to 175 the number who attend decreases from 60 to 8. At nineteen years of age where the average number of days attended rises to 175, there are only eight girls attending while there are 57 who do not attend at all. To obviate errors of this kind the average number of days attended for each age is computed again, counting as zero those who did not attend at all. For these figures only six of the independent districts are considered, the required data for the others not being at hand.

The results of correlating these two sets of facts are given in Table IX and Table X and are illustrated by the curves in Plate I, 3-5. After studying Tables I, II, III and IV and Plate I, 1 showing the per cent of those who attend for each age, and Tables V, VI, VII and VIII and Plate I, 1, 2, showing the average number of days attended at each age, we are prepared for the results found here. In fact, we could almost have anticipated them. Plate I, 3 shows clearly that with the boys below thirteen years of age, in both the rural and the independent districts, it makes very little difference in the average number of days attended whether or not we include those who did not attend at all. The curves part at the point representing thirteen years of age and the number of those who do not attend causes a rapid drop in the curves.

In Plate I, 3, representing the attendance of the boys in the independent districts, this separation of the curves does not occur until we reach the point representing fourteen years of age. Here is another illustration of the fact, already noted, that the boys in the country drop out of school at least a year younger than do those in town. Plate I, 4 shows the same general relations between the attendance of the girls in the country and of the girls in town. Just as with the rural boys the curves representing the attendance of the rural girls separates at the point indicating thirteen while with the town girls the curves separate at the point indicating fourteen years of age.

Plate I, 5 shows the average number of days attended by the rural boys and town boys. The difference is considerably greater here than in Plate I, 2 where those not attending at all are not considered. The highest average number of days attended by the rural boys is 123 when they are eight years old and again when they are ten years old. We find almost the same average number of days attended (121) by the town boys

when they are fifteen years of age. From this point down, if we take any number of days for the average attendance and follow the line horizontally across the page we find that the difference in age is about four years until we get down to where the average number of days attended is only fifty. Here the difference in age is about three years and grows gradually less to the point where the average number of days attended is only ten, where the difference in age is only one year.

Looking at the vertical distances between the curves, we find that with the rural boys the number of days attended decreases after ten years of age more rapidly than it does with the town boys after fifteen years of age. This suggests that, on the whole, the boys in town remain in school nearly four years longer than the boys in the country. Looking further at the vertical distances between the curves, we find that from ten years of age, where the difference is 35 days the distance becomes greater and greater until seventeen years of age. The exact figures from Table IX show that from the time they are eleven years of age to the time when they are seventeen years of age the boys in town attend school, on an average, 58.5 days more in a year than the boys in the country. These figures also show that at twelve years of age the boy in the country goes to school about one third as many days as the boy in town, at thirteen years a little more than half as many, at fourteen years of age a little less than half as many, at fifteen years of age about one third as many, at sixteen years of age about one fifth as many, and at seventeen years of age less than one sixth as many. Plate I, 5 also shows the same relations between the attendance of the rural girls and the attendance of the town girls. The highest average number of days attended by the rural girls is 124 at ten years of age. From this point the curve descends steadily, the rapid descent beginning at twelve. The big drop in the average number of days attended by the town girls does not begin until fourteen years of age, two years later than with the country girls. Taking the point on the curve that marks the highest average number of days attended for the rural girls, the point representing ten years of age, and following the horizontal line across the page, we find that the town girls have about the same average number of days when they are five years older, or fifteen years of age. From this point in the curve down to where the attendance has dropped to 20 days we find the town girls maintaining a given average from three to four years later than the country girls. From twelve to seventeen years of age the town girls attend school, on an average 65 days more than the rural girls. At twelve years of age the

rural girls attend school, on an average, a little more than two-thirds as many days as the town girls, at thirteen years a little less than two-thirds as many, at fourteen less than one-half as many, at fifteen less than one-third as many, at sixteen less than one-fifth as many, and at seventeen less than one-sixth as many. It must be remembered that this is counting all those who do not attend at all.

Summarizing, we have the following generalization:

The difference in the average number of days attended for both boys and girls is much greater when those who do not attend at all are considered than when they are not.

Concerning both the relatively small number who attend school after reaching twelve years of age and the low average number of days attended, both boys and girls in town maintain a given average number of days attended from three to five years later than the boys and girls in the country do.

Between twelve and seventeen years of age the average number of days attended by rural boys and girls, including those who do not attend at all, is only about half what it is for town boys and girls.

VI.
THE RELATION OF ATTENDANCE TO CLASSIFICATION

To what extent does the relatively small number of days attended affect the classification of pupils in the rural schools? In studying this question we shall expect the results to correspond with those obtained in studying the facts of attendance when excluding those who did not attend at all. The fact that some do not attend at all will not affect the classification of those who do.. Table X shows the average age for each grade for boys in rural and in town schools. Table XI shows the average age for each grade for girls in rural and in town schools. Table X shows that the rural boys in each grade are, on an average, about a year older than the town boys in the same grade. Table XI shows a difference of something less than a year between the average age of rural girls and town girls of each grade.

Perhaps a truer idea of the effects of low attendance can be obtained by studying its effects on individuals rather than on the average age of a grade. Table XII shows the distribution by grades of the boys in the rural schools and in the town schools, beginning with ten years of age. This is about the age

at which, as we have already seen, the difference in attendance begins to be marked. For this table all the boys in the town school were counted. All the boys from ten to twelve were counted in about half of the rural schools, and from thirteen to nineteen in about three-fourths of them. In every case, when any were counted in a school all of the given age were counted, and the schools were selected at random. If we examine the grades in which we find the largest number of boys of each age, —from ten to fourteen years—we find that the largest number in the town schools is just about one grade ahead of the largest number in the rural schools. After we pass fourteen years of age the difference in grade becomes greater, as we should expect from our study of attendance. After fifteen years of age most of the town school boys are in the high school while the rural school boys are more and more scattered in their classification with each succeeding year. This also is no surprise after what we have seen concerning the constantly decreasing number of days attended. Table XIII is worked out for the girls in the same way that Table XII is for the boys and shows the same general relations between the classification of the girls by ages as is shown concerning the boys.

The same general relations exist between the grades reached by pupils (both boys and girls) in the rural schools and pupils in the town schools of the same age, as exist between the average number of days attended. Both boys and girls above twelve years of age reach a given grade in the town schools, on an average, about a year younger than they do in the rural schools.

A much smaller relative number of rural school boys and girls than of town boys and girls complete the work of the eighth grade.

A relatively very small number of rural boys and girls attend school in any grade higher than the eighth. The relative number is much smaller than it is with town boys.

VII.

THE RELATION BETWEEN ATTENDANCE AND COST

For determining the cost of tuition in the rural schools in relation to the cost of tuition in the town schools only fourteen townships are considered because complete reports of attendance are at hand from these fourteen only. The average cost of tuition per pupil per month for the fourteen townships considered, based on the report of the county superintendent to the

state superintendent of public instruction for 1910, is $3.72. The average cost of tuition per pupil per month for the nine independent districts, based on the figures from the same report, is $3.39. This shows the cost of tuition to be 33 cents per pupil, or 9.73 per cent higher in the rural than in the town schools.

These figures, however, do not express the whole truth for two reasons. In the first place, to add the cost of tuition for the several towns and divide this amount by the number of towns does not give a fair result because it overlooks the fact that the largest town school enrolls more than twenty times as many pupils as the smallest town school. In the largest town school the average cost of tuition is less than half what it is in one of the smaller towns with only a two-room school. A second reason why these figures are not adequate is that all pupils are counted whether they attended the whole time or only a few days. If two schools enrolled the same number of pupils and paid the same amount for the teacher's salaries for the year, the average cost of tuition would be the same in the two schools even if half of the pupils in one school came for only a few days. The average cost of tuition per pupil per day, or per one hundred days, seems to be a fairer basis for comparison and gives a more adequate view of the real situation. In determining the cost in this discussion the total amount of money turned over to the different school treasurers by the county treasurer is used as the reports of the different school treasurers were not available until several weeks after the completion of this paper.

The total number of days attended in the fourteen townships considered, according to the reports received, was 184,176. The whole amount received by the different school treasurers for teachers' salaries was $31,663.39. These figures give as the cost for one hundred days of attendance $17.19. The total number of days attended in the nine independent districts was, according to their reports, 257,799. The total amount received by the school treasurers for teachers' salaries was $34,312.13. These figures give as the cost of one hundred days of attendance $13.31. Every one hundred days of attendance in the rural schools, then, costs $3.88 or 29.15 per cent more than in the town schools. That is, the cost for teachers for a given number of days of attendance is, on an average, more than a fourth more in the rural schools than in the town schools including the high schools. The cost in the town schools includes the salaries of the superintendents and principals, one special teacher of manual training, one special teacher of domestic science, and two special teachers of music. The cost for the rural schools

includes the salaries of the rural teachers only. If we should leave out of consideration the high schools with their relatively high salaries the difference between the cost of tuition in the town and in the country would be considerably greater. This is true in spite of the fact that the towns pay higher salaries to teachers than the rural districts do and are continually filling their vacancies from the best among the rural teachers.

The total amount received for school purposes by the treasurers of the fourteen townships was $44,233.84. This gives a total cost of $24.01 per hundred days of attendance. The total amount received for school purposes by the treasurers of the nine independent districts was $55,491.21. This gives a total cost of $21.13 per one hundred days of attendance. Taking the total cost, then, school house fund and all, every one hundred days of attendance costs, $2.88 or 15.35 per cent more in the rural than in the town schools.

The school house fund varies greatly in different years. A district that happens to be building a school house, or to be paying for one, may have a large school house fund while the one that has just finished paying for its school house may have a much larger sum invested in school property but have no school house fund. It may be more accurate then, to exclude the school house fund from the comparison but to include interest on the total amount invested in school property. The estimated value of the school houses, grounds and equipment for the fourteen rural districts, as given in the report of the county superintendent for 1910, is $81,770. Interest on this amount at 4 1-2 per cent, the rate most districts pay on their bonds, is $3,679.65. Adding this to the total cost, exclusive of the school house fund, gives us the total cost of running the schools for the year $47,495.97. These figures give as the total cost for one hundred days of attendance $25.70. The total estimated value of the school houses, grounds and equipment in the nine independent districts is $119,100. Interest on this amount at 4 1-2 per cent is $5,359.50. Adding this to the total expense for the year, exclusive of the school house fund, gives $55,231.07. These figures give as the total cost of one hundred days of attendance in the town schools $21.42. On this basis every one hundred days of attendance in the rural schools cost, on an average, $4.37 or 20.4 per cent more than in the town schools. We find, then, that for actual days attended the rural schools cost 18.35 per cent more than the town schools if we consider the total amount collected for school purposes, including the school house fund. If we leave out of consideration school house fund but include interest on the total amount invested in school prop-

erty, then the rural schools cost 20.4 per cent more for actual days attended than the town schools do. If we consider only the amount paid for teachers' salaries as is the case in determining the cost of tuition per pupil per month, then for actual days attended the rural schools cost 29.15 per cent more than the town schools and high schools.

VIII.

GENERAL SUMMARY

1. In both the rural and the town districts there is a marked falling off in the number of those who attend school at about fourteen years of age. On the whole, the boys and girls in the country drop out of school entirely about a year younger than the boys and girls in town.

2. After fourteen years of age the relative number who attend school grows steadily less in both rural and town districts, but the decrease is much greater and much more rapid in the rural than in the town districts.

3. At any given age above fourteen the relative number of either girls or boys who attend school is much smaller in the country than in town.

4. The average number of days attended by boys or girls of any given age is much lower in the rural than in the town schools.

5. There is a great drop in the average number of days attended that corresponds closely in time to the big drop in the number of those who attend. This diminution in the number of those who attend comes earlier and is much more rapid with rural pupils than with town pupils.

6. After thirteen nearly half of the rural boys who attend school do so for less than sixty days per year. After twelve years of age about one-fourth of the rural girls who go to school attend for less than sixty days. Here is clearly a failure to live up to the requirements of the compulsory education law.

7. If all of school age be counted, town boys and girls maintain a given average number of days attended until they are from two to five years older than the rural pupils maintaining the same average.

8. If we count the whole number of boys and girls from twelve to seventeen years of age, those in the rural districts

attend school, on an average, only about half as many days per year as those in the town districts.

9. The effect of this very low attendance is seen when we compare the classification of rural pupils with the classification of town pupils of the same age. Both boys and girls above ten years of age reach a given grade in the town schools about a year younger than the rural pupils reach that grade. After fourteen years of age the difference in classification becomes much greater. The relative number of either boys or girls who complete the eighth grade course of study is much smaller in the country than in town. A still greater difference exists between the relative number in the country and in town who attend school after completing the work in the eighth grade.

10. In spite of the fact that teachers for the town schools are chosen almost entirely from among the best of the rural teachers, and in spite of the fact that town teachers are paid higher wages, on an average, than rural teachers, the average cost for teachers for a given number of children for a given number of days is more than one-fourth higher in the rural than in the town schools, even including the high school.

11. Although the town schools have better equipment and better buildings, in most cases, than the rural schools, the total cost of maintaining schools for a given number of pupils for a given number of days is more than 18 per cent higher in the rural schools than in the town schools.

TABLE I.

Boys—Rural

Age.	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Number who attended	118	160	119	162	151	137	142	133	134	115	79	53	25	14	2	2
Number who did not attend	17	11	3	3	1	0	1	3	7	22	29	59	70	72	84	70
Per cent who attended	87.40	93.57	97.54	98.79	99.34	100	99.30	97.79	95.04	83.94	73.15	47.32	27.37	16.28	2.33	2.78

TABLE II.

Boys—Town

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Number who attended	47	49	62	58	56	59	54	53	31	43	42	38	25	7	2	5
Number who did not attend	24	12	2	1	0	0	1	0	1	3	5	12	24	24	39	31
Per cent who attended	76.37	80.33	96.88	98.30	100	100	98.18	100	96.88	93.48	89.36	76.00	51.02	22.58	4.88	13.89

Tables I. and II. indicate the school attendance of boys from 5 to 20 years from 145 rural school districts and from all the urban districts in the county.

TABLE III.

Girls—Rural

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Number who attended	108	140	157	127	136	136	112	134	124	91	60	30	11	14	8	2
Number who did not attend	18	9	0	2	0	0	1	2	2	23	44	79	63	89	57	30
Per cent who attended	85.71	93.96	100	98.45	100	100	99.12	98.53	98.41	79.82	57.69	27.52	14.86	13.59	12.31	6.25

TABLE IV.

Girls—Town

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Number who attended	42	42	40	58	48	46	57	44	48	66	38	27	14	7	3	1
Number who did not attend	13	7	4	2	1	3	5	1	5	6	10	14	12	32	29	36
Per cent who attended	76.36	85.71	90.90	96.97	97.96	93.88	91.94	97.78	90.57	91.66	79.17	65.87	53.85	17.95	9.38	2.70

Tables III. and IV. indicate the school attendance of girls from 5 to 20 years of age from 145 rural school districts and from all the urban districts in the county.

TABLE V.

Average number of days attended, excluding those who did not attend at all

Boys—Rural

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of boys	102	135	120	145	123	119	122	101	103	76	52	44	16	10	2	1
No. who attended fewer than 60 days	53	31	17	13	14	7	8	13	24	36	31	29	11	8	2	1
Av. No. of days attended	71.55	98.27	117.86	125.51	119.60	122.50	111.60	105.08	81.63	73.04	64.57	50.77	64.88	47.15	26.50	44.00

TABLE VI.

Average number of days attended, excluding those who did not attend at all

Boys—Town

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of boys	53	61	68	53	58	78	52	67	74	44	48	44	31	8	2	5
No. who attended fewer than 60 days	17	2	2	0	1	0	0	0	5	2	7	0	2	0	1	1
Av. No. of days attended	110.05	146.39	152.60	158.44	156.87	158.46	159.45	154.01	144.29	140.17	132.25	138.75	147.52	128.56	98.25	92.20

TABLE VII.

Average number of days attended, excluding those who did not attend at all

Girls—Rural

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of girls	96	119	134	99	120	120	87	107	88	67	45	23	8	12	2	0
No. who attended fewer than 60 days	54	27	18	11	13	10	15	18	25	25	17	6	0	3	0	0
Av. No. of days attended	64.50	106.36	115.34	123.21	122.76	124.33	112.03	109.14	91.08	80.20	79.72	85.80	126.88	101.21	175	0

TABLE VIII.

Average number of days attended, excluding those who did not attend at all

Girls—Town

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of girls	63	57	39	67	53	59	67	55	62	80	46	39	19	11	4	0
No. who attended fewer than 60 days	31	2	2	0	1	1	1	2	2	0	3	0	0	0	0	0
Av. No. of days attended	93.25	137.52	146.91	156.43	152.00	153.30	152.42	153.06	154.81	160.65	151.89	158.78	160.87	165.73	144.50	0

TABLE IX.

Average number of days attended, including those who did not attend at all

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Boys—Rural	61.33	90.87	114.26	122.97	118.65	122.50	110.70	102.05	76.43	56.65	41.45	21.72	12.07	5.75	0.62	
Boys—Town	71.75	115.11	146.48	152.62	159.58	157.89	156.02	152.02	143.73	135.63	120.81	104.27	78.22	34.26	4.79	
Girls—Rural	54.31	98.88	115.34	120.77	122.76	124.33	110.76	107.14	89.05	59.71	40.31	20.35	14.01	12.02	2.23	
Girls—Town	79.20	115.12	127.82	159.60	147.67	144.86	139.24	154.07	142.35	147.73	123.73	110.70	89.93	32.90	12.92	

TABLE X.

Average age by grades

Boys

Grade	1	2	3	4	5	6	7	8
Age--Rural	6.5	8.5	9.4	10.9	12	13.1	13.5	14.7
Age--Town	6	7.4	9	10	11	11.9	13.1	13.3

TABLE XI.

Average age by grades

Girls

Grade	1	2	3	4	5	6	7	8
Age--Rural	6.3	7.8	9	10.4	10.9	12.1	13.2	14.3
Age--Town	6	7.5	8.6	9.7	10.6	11.8	12.8	13.6

TABLE XII.

Showing relation of age to grade

Boys

Age	Grade	1	2	3	4	5	6	7	8	9	10	11	12
10	Rural		1	8	9	5	2	2					
	Town		4	14	21	12	15	1					
11	Rural		2	7	10	8	7	1					
	Town			4	17	19	17	1					
12	Rural		1	3	10	11	8	7					
	Town			4	11	11	18	17	5				
13	Rural		1	1	11	10	15	10	2				
	Town		1	3	2	7	15	22	17	3			
14	Rural				8	7	4	16	6	1			
	Town				1	4	5	7	14	9	5		
15	Rural				1	4	5	5	11	1			
	Town				1	0	3	6	5	19	11	3	
16	Rural				1	5	4	4	8	4			
	Town						1	1	0	15	10	15	3
17	Rural				1	1	3	2	5	0	0	1	
	Town							2	0	5	10	8	4
18	Rural			1	0	1	1	0	2	0	2	0	1
	Town							1	0	1	1	4	1
19	Rural												
	Town										1	1	

TABLE XIII.

Showing relation of age to grade

Girls

Age	Grade	1	2	3	4	5	6	7	8	9	10	11	12
10	Rural	2	2	4	13	10	2	1					
	Town			2	21	25	8	1					
11	Rural			4	6	13	2	3					
	Town		2	1	13	22	25	2	2				
12	Rural			1	6	11	6	6	1				
	Town			3	1	13	16	24	6	1			
13	Rural			2	4	2	15	13	8	9			
	Town			2	0	5	16	12	19	10			
14	Rural			3	0	4	3	17	14	6			
	Town					1	4	14	23	28	7	2	
15	Rural				1	2	3	8	8	4			
	Town							1	10	25	13		
16	Rural							3	6	9	1	0	1
	Town							3	1	8	9	8	8
17	Rural							1	1	1	1	1	0
	Town									2	2	6	10
18	Rural				1						1	1	3
	Town										1	1	9
19	Rural							1					
	Town											1	3

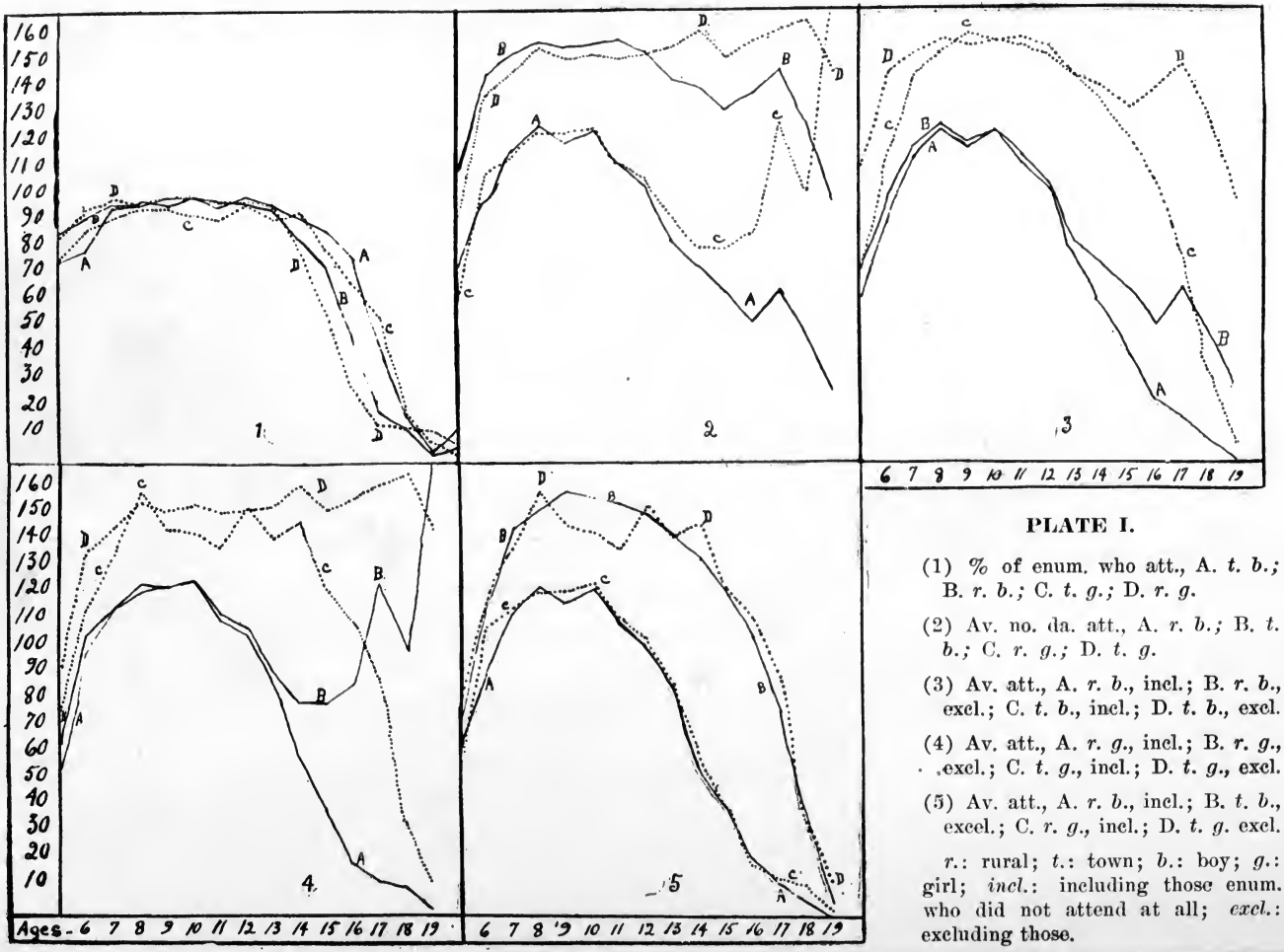


PLATE I.

(1) % of enum. who att., A. *t. b.*; B. *r. b.*; C. *t. g.*; D. *r. g.*

(2) Av. no. da. att., A. *r. b.*; B. *t. b.*; C. *r. g.*; D. *t. g.*

(3) Av. att., A. *r. b.*, incl.; B. *r. b.*, excl.; C. *t. b.*, incl.; D. *t. b.*, excl.

(4) Av. att., A. *r. g.*, incl.; B. *r. g.*, excl.; C. *t. g.*, incl.; D. *t. g.*, excl.

(5) Av. att., A. *r. b.*, incl.; B. *t. b.*, excel.; C. *r. g.*, incl.; D. *t. g.* excl.

r.: rural; *t.*: town; *b.*: boy; *g.*: girl; *incl.*: including those enum. who did not attend at all; *excl.*: excluding those.

Obtainable from the University
Editor Price, $0.75

RETURN TO the circulation desk of any
University of California Library

or to the

NORTHERN REGIONAL LIBRARY FACILITY
Bldg. 400, Richmond Field Station
University of California
Richmond, CA 94804-4698

ALL BOOKS MAY BE RECALLED AFTER 7 DAYS

- 2-month loans may be renewed by calling (510) 642-6753
- 1-year loans may be recharged by bringing books to NRLF
- Renewals and recharges may be made 4 days prior to due date

DUE AS STAMPED BELOW

SEP 0 5 2003

SEP 2 4 2003

OCT 1 7 2003

DD20 15M 4-02

U.C. BERKELEY LIBRARIES
C029341655

640514

UNIVERSITY OF CALIFORNIA LIBRARY
EDUC.
LIBRARY