



A STUDY OF TIME ALLOTMENTS  
IN 133 SCHOOLS OF KANSAS

by

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A STUDY OF TIME ALLOTMENTS IN ONE-TEACHER SCHOOLS IN  
DOUGLAS, FRANKLIN, LEAVENWORTH, SHAWNEE, AND  
WYANDOTTE COUNTIES, 1928-'29

CHAPTER I

INTRODUCTION

One of the most perplexing problems and one becoming of increasing importance which confronts the rural school teacher and supervisor, and which is difficult of adequate solution, is the time allotment for each subject and out-side activity in such a way that it will secure maximum efficiency in all school work. It is, indeed, a difficult proposition to arrange a program of studies that will include eight grades and yet allow a reasonable length of time for each class. With the broad expansion of the curriculum of the American public schools during the past century, the three R's as commonly considered have increased to six, then eight, and finally twelve branches which are required at the present.<sup>1</sup>

The complexity in program making for 17 subjects and 8 grades with time allotments for out-side activities become quite pronounced. The maximum number of recitations provided on a daily schedule of classes would be seventy. Such a schedule is unthinkable in a one-teacher school.

Alfred D. Mueller, professor of psychology and education,

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<sup>1</sup>Report of the State School Code Commission of Kansas, Vol. I, p. 9

Massachusetts State Normal School, Worcester, writing on one of the difficult problems of one-teacher school expresses in part<sup>1</sup>

"The common practice of hearing from thirty-five to forty classes a day, with class periods of only five and ten minutes has resulted from the attempt to 'grade' the rural schools and from the increased number of subjects that have come into the elementary school curriculum. In the majority of states this number is now seventeen. This is quite an increase over the traditional three R's. To be sure, no one grade will have all seventeen subjects at the same time, but in some grades the number runs as high as twelve. This is too big a load for any pupil to carry daily."

The outstanding fact this study attempts to find is the great divergence in the time allotments among the elementary-school subjects. Any marked disagreement is doubtless not wholly remediable would total uniformity be desirable since legitimate differences due to the length of the school courses or of the school year, or differences in rural demands, or fundamental differences of opinions on points on which there are no conclusive data, would still exert a marked influence in fixing the time allotted to any subject. This is, for example, no uniform expert judgment nor do writers agree as to the subjects to be commonly taught, their relative social values, their essential content, reasonable standards of accomplishment, the amount of time needed to reach such standards, and the most effective methods.

To remedy this difficulty of time budgeting, Fred C. Ayer, Director, Department of Research, Seattle Public School, points out:

" to have definite standards of achievement---- the ultimate goal. The scientific time allotments cannot be made for a particular subject in any grade until it is agreed officially as to what knowledge

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<sup>1</sup>Studies in Administrative Research, Bulletin No. I, Department of Research, Seattle Public Schools, June 1924.

and skill in that subject we may rightfully expect of a child in a given grade. For the present, the administrator who contemplates a readjustment of the time element in his elementary school program must derive his justification from proposed changes out of the practical experience of our better school system."

Considering the problem from the teacher's position, we find that her teaching problems are concerned with an excessive number of classes due to the large number of subjects or out-side activities resulting into many, varied, and short class periods. Studies and surveys of various types are being made by experts on the rural school with the effort to remedy this problem for the interest of both teacher and pupils. The findings show always a marked tendency toward much retardation, low efficiency of work on the part of the teacher, low standard of pupils' achievement, high cost of education, and particularly the wide divergence of time allotment for each subject taught. The conclusions point out that the relative causes responsible for failures are the large numbers of classes resulting often in very short time allotments for each subject or activity.

## CHAPTER II

### RELATED STUDIES

A careful survey of the literature in the one-teacher schools reveals many studies in this field as a whole. The writer of this thesis found two studies that were limited to Kansas one-teacher schools and both of these were made for particular counties not included in this study. Moreover, the above mentioned studies were not specially made to show time allotment for each subject taught in the one-teacher schools but partially mentioned it to show retardation of pupils and low pupils' achievement. The reason is due, in part, to rapid consolidation of the one-teacher schools. This is actually taking place in Shawnee county which now has only ten one-teacher schools. The one teacher school is being discouraged due to high cost of maintenance. The parents and school authorities are in favor of consolidation of these schools for little less cost of education yet possible high standard in pupils' achievement.

A Study of Educational Facilities and Pupils achievement in Some One-Teacher Schools of Kansas<sup>1</sup>, is one of the most important studies in this field. This study deals especially with the situation as it exists in six one-teacher districts surrounding a graded school district in Johnson county.

This survey found out that the one-teacher schools are greatly handicapped because of the many grades and large number of classes that must be handled daily; it also found that the teacher has at the most only five and one-half hours of teaching time in

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<sup>1</sup>Bulletin of the University of Kansas, Vol.22, Dec. 1,1921, No. 18

her school day so one may indeed feel puzzled as to how she can be expected to accomplish such a program in an effective manner. As a measure of the result of instruction in some of the essential elementary school subjects, standard tests were given. The result disclosed an inferiority in the performance of pupils from the one-teacher schools in all the school subjects. This situation would seem to indicate quite clearly that the pupils in the one-teacher schools are inferior in mental ability or that the school instruction is of lower quality.

It is also pointed out that there is a great diversity of time allotment for each subject and instruction in each grade. The following table shows the divergence in daily time allowance:

Districts	Ave. No. of Min. Daily Given to Instruction in Each Grade
1	47
32	37
38	110
44	47
49	37
61	37

In February, 1917 with the cooperation of the State Superintendent and the County Superintendents concerned, a study<sup>1</sup> was made by F. J. Kelly and A. K. Loomis on retardation in one-room rural schools in Kansas. In 1918, Kansas still had 147,889 children enrolled in one-room rural schools out of a total of 405,317 children enrolled in all public schools. Of those in one-room schools about 72 per cent were enrolled in schools having terms of seven months and almost all of the remaining 28 per cent in schools having term

<sup>1</sup>Journal of Educational Research, Vol. I, 1920, Pp. 271-'84.

of eight months.

Pupil's cards and teacher's cards containing questions for information were sent to each teacher and pupils in each school of fourteen typical counties in Kansas. Of the fourteen counties, eleven sent in returns in time to be tabulated for the study. Of all the teachers of one-room rural schools in these eleven counties 54 per cent sent in reports of all their children. The range of schools responding was from 30 per cent in one county to 81 per cent in another. The total number of pupil's cards received was 10,298, of which 5,267 were boy's cards and 5,031 were girl's cards.

It was found that while 31 per cent of all children in eight month schools are retarded, 42 per cent of all children in seventh month schools are retarded, a difference of 11 per cent. This means that of the present enrollment in one-room rural schools in Kansas, practically one thousand are retarded in seven month schools who would not be retarded if they were eight-month schools.

Furthermore, it was pointed out that inasmuch as only 37 per cent of boys of normal age for the grade of twelve years of age or above do not intend to go to high school, whereas 46 per cent of those retarded for one year, and 61 per cent of those retarded more than one year do not intend to go to high school. The relationship between retardation and ambition to go to high school is therefore direct.

A similar study<sup>1</sup> was made by Charles M. Reinohl, Professor of School Administration, University of Arkansas, on State Courses of Study for Rural Elementary Schools.

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<sup>1</sup>Department of the Interior, Bureau of Education, Bulletin, 1922, No. 42.

The study used twenty-six model programs, taken from as many state courses of study. It shows that the range of daily recitation periods for the one-teacher schools is from 21 to 38, with 85 per cent of the programs limiting the number of such periods to twenty-five. The Illinois course contains a program of 32 recitations, and 225 minutes weekly are allowed for this program for the ninth and tenth grades. The Kansas Rural Course of Study, 1914, gives 38 daily recitations, 9 of which are in Arithmetic and 4 are in the ninth grade.

The distribution of recitation time for each subject shows a great variation in all model programs due mainly to situations in the schools. By investigation it was found out that a two-fifth reduction in average time was necessary to bring the total time within the compass of a 6-hour day or a 1,800-minute week.

One of the most striking facts revealed in the study is the excessive amount of time allotment to upper-grade children. It is unfair to the first-grade child to receive but 140 minutes a week of the teacher's time when the seventh-grade child with all his ability to be self-helpful gets 275 minutes of her time.

It is recommended that one method of securing efficiency in the one-teacher school is through reduction of daily recitations by plans of alternation and combination of grades and classes. The plan provides for the combination of grades 3 and 4, 5 and 6, and 7 and 8 into C, B, and A, respectively.

Another method of securing efficiency through reduction of recitation is by alternation and combination of subjects. The 26 model programs contain as many as 47 different combinations of two or more subjects.

On the average daily program, provision is made for children of each of the first five grades to recite five or six times each day; for the fifth and sixth to recite six or seven times daily; and for the seventh and eighth to recite seven or eight times each day. The more helpless and immature children have one to two fewer recitations a day than upper-grade children.

Anna D. Cardts, Professor of Elementary Education, Iowa State Teachers College, Cedar Fall, made a study<sup>1</sup> of the course of study for one room rural schools in Iowa. Of the problems she discovered in her study, the short recitation periods, the long study periods and the small classes received the greatest emphasis and substantial recommendation. She pointed out that the course of study must recommend a daily program; a general suggestion of what constitutes a good daily program, but definite recommendations with a copy of a model program for the teacher's use. The daily program must present a workable scheme of combination and alternation of classes if such a scheme is desirable. Studies show that teachers have little use of the suggestions of combining and alternating classes, perhaps because they have not study, occupation, and primary seatwork as well as for the recitation periods.

U. J. Hoffman, State Supervisor of Rural Schools, Illinois, after a careful study and observation of the daily activities of the one-teacher schools gave valuable suggestions<sup>2</sup> in dividing a daily program for each subject or activity. He says the following:

"First: It should provide ample and uninterrupted

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<sup>1</sup>National Education Association, 1928, Pp. 463-466.

<sup>2</sup>National Education Association, 1928, Pp. 492-493.



time for the pupils to study each subject and do the necessary exercises.

Second: It should provide ample time for the teacher to start every pupil in his work at the beginning of each session.

Third: It should provide time for class instruction, class cooperative study, class conference and testing.

Fourth: It should provide time for the teacher to give individual instruction to those who were not able to profit by class instruction to the end that the gifted pupil may work to his full capacity and the slow pupil does at least the minimum essentials to enable him to progress in his studies.

Fifth: It should provide time for "general exercises" participated in by all the pupils such as singing, story telling as reading, current events, morals, and manners, etc.

Sixth: It should provide time for recreation and play."

A quotation<sup>1</sup> in *School and Society* portraying the good side of one-teacher school from a study made by a committee of ten points out:

"The rural school is not all bad. It may not be idealistic to teach from ten to forty pupils ranging in age from six to twenty-one, varying in grades from the first to the eighth, all housed in one room for five and one-half hours, while the teacher conducts from thirty to forty recitations per day, with recitation periods of from three to ten minutes, and at the same time disciplines the whole school. But even so it gives results."

In 1920, the Department of Rural Education of the National education Association appointed a committee to study the question of the effectiveness of instruction in one-teacher and consolidated schools. <sup>2</sup>The committee, under the leadership of John M. Foote, gave

<sup>1</sup>*School and Society*, Vol. 228, No. 710, Aug. 4, 1928

<sup>2</sup>Foote, John M., "Comparative Instruction in Consolidated and One-Teacher Schools", *Journal of Rural Education*, Vol. II, Pp. 337-351

certain achievement tests in reading, arithmetic, language, spelling, and handwriting to 10,999 pupils in consolidated schools and 4,653 pupils in one-teacher schools. Grades three to eight were located in 135 consolidated and 373 one-teacher schools of nineteen states.

An analysis of what seemed to be the more important administrative conditions in these two types of schools showed that there was no significant difference in the length of the school term and in the number of years in the elementary course. Slight differences were shown to exist as to length of experience of the teachers, number of pupils enrolled per teacher, and average tenure of teacher's service. In the matter of experience and per-teacher enrollment the advantage lay with the one-teacher schools, in the length of teacher service, with the consolidated schools. A very real difference in conditions was shown to exist in the length of training of the elementary teachers. In the consolidated schools fifty-six per cent had two years or more of training above the high school, while in the one-teacher schools the percentage was only twenty-eight.

The committee reported the following important findings:

1. There was no significant difference in the two types of schools as to age of pupils, rate of progress from grade to grade, and holding power.
2. In 41 of the 42 comparisons made by means of the achievement tests the consolidated schools had the advantage. The median amount of the superiority is valued at thirty-three per cent of a year's work.
3. The difference in achievement between the two types of schools increased as the grade advanced.

Maud C. Newbury made a report<sup>1</sup> on one-teacher schools. In her

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<sup>1</sup>Department of Interior, Bureau of Education, Bulletin, No. 9, 1923.

discussion of the problems of organization of the one-teacher school, she says:

"The tendency at present in too many rural schools is to follow the eight-group plan of organization, a system developed in urban centers and wholly unsuited to one-teacher school condition."

She recommended the discontinuance of the eight-group plan for it represents overlapping and it results in 30 or more class recitations each day, with periods of 10 minutes or less in length. Periods so short mean too often that children memorize something from a book and recite it poll-parrot fashion to a teacher.

She recommended also the adoption of the four-group plan. Such an organization as is suggested makes possible teaching periods varying from 15 to 35 minutes in length.

V. J. Hoffman, in discussing the one-teacher schools, its special features, organization, and procedure<sup>1</sup> says, that in the one-teacher school there are no real classes. One or even five pupils do not constitute a class except in name. There are so many individuals whose needs may be met either as individuals or in groups, as seems best. The school is a big family composed of children of all ages living with a teacher of mature mind and character. This is a decided advantage over a room of the same age.

As the school is now conducted, copying the graded school, the teacher has only a few minutes with the group; the rest of the time she serves only as a policeman. The situation is favorable. She can so organize and conduct her school that she will have ample time to serve the needs of every one of his pupils. A correct program

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<sup>1</sup>National Education Association of the United States, 1926, Vol. 64, Department of Rural Education.

will not teach the school, but it will make conditions favorable for good teaching.

Fannie W. Dunn made an address<sup>1</sup> at the First Conference of Supervisors of the Southern States held at Nashville, Tennessee. She pointed out that the great diversity of time allotment in one-teacher school is causing low standards of school work. She recommended that the newer types of activity must provide (a) a definite time for each activity on the program; (b) a plan of grouping grades and subjects, and of combining classes and alternating the work by years; (c) a definite time for noisy activity for all, and for quiet activities for all.

W. K. Wilson and E. J. Ashbough made a study<sup>1</sup> for the purpose of comparing the reading and arithmetic ability of pupils in consolidated and in one-room rural schools. The Illinois Examination was used for obtaining intelligence scores, reading scores, and arithmetic scores; these were obtained from the pupils in Grades III to VIII inclusive in four consolidated and fifty one-teacher rural schools in nine counties of Ohio. The testing was done in spring of 1929; the tests were given by the Bureau of Educational Research.

Comparison of the achievement in arithmetic and reading was made between the pupils of corresponding grades in the two types of schools. Comparisons were also arranged between the scores of the boys enrolled in each type of schools and those of the girls. All comparisons were made by separate grades as was the case with the mixed groups---boys and girls. The pairing method was used. It was done first with the boys and girls separate, then with the boys and girls together.

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<sup>1</sup>Department of the Interior, Bureau of Education, Bulletin, 1926, No. 12.

<sup>2</sup>Educational Research Bulletin, Vol. VIII, Nov. 6, 1929, No. 16,

Superiority of achievement was determined by comparing the mean of one group with that of its corresponding group; the difference between these means was used as the criterion of judgment.

Summing up the findings of the thirty-six groups ranging in size from 18 to 76 pairs, thirty-three or all but three of them show mean achievement scores favoring the consolidated school. The differences are slight, it is admitted. The final conclusion is that the Illinois Examination indicates a superiority of achievement in reading and arithmetic in the consolidated school as against the one-teacher school. This is based not on the size of the difference in mean achievement scores, but that these differences favor the consolidated school. It is further concluded that the factor responsible for the lower achievement scores of the one-teacher school pupils is the presence of too many subjects taught with very short time allotted for each subject, varying from 3 to 15 minutes.

## CHAPTER III

## FACTS ABOUT THE ONE-TEACHER SCHOOL

"The one-teacher school has suffered most from the graded procedure. The school is divided into eight grades. Each grade constitutes a class and is taught as a class though there be but one pupil in the grade. The absurdity of delivering a lecture to an audience of one is not greater than treating one or four pupils if they were a room full. Each grade has at least four study periods. That gives the teacher thirty-two or more class periods. This drives her to the cafeteria method of service. The teacher's desk is the center of activity. Each class comes up and is served each the same portion. This occupies all the teacher's time and one fourth of the pupil's time. Three fourth of his time he must shift unaided for himself."

U. J. Hoffman

Reading the above quotation, one forms a vivid picture of the one-teacher school and its daily activity.

The unit of local school administration in Kansas is the district system which was legally established in 1841. It is called common school or one-teacher school, usually found in the open country and commonly it offers instruction only in the elementary school subjects. The common-school district board of education has the authority over this school system for its support and maintenance. The board consists of three electors, no two of whom are chosen from any one municipal township.

The growth and development of the one-teacher school has been rather slow, but none the less marked. From the common tools of learning, the number of studies has increased to twelve branches at present. The length of the school term too has gradually gained.

Originally it was placed at three months; later in 1903, at five; then six; then seven; and finally, in 1923, at eight, as the minimum term. a rule of the State Board of Education now requires nine months' terms for all schools.<sup>1</sup>

Various kinds of literature such as the Rural course of Study, County Superintendent term reports, State Superintendent annual reports, reports of the School Commission and etc. were consulted and information was asked of the County Superintendents visited in the effort to obtain reliable informations concerning the growth and development of the one-teacher schools but to no avail. The lack of this information is due to rapid decrease of their number because of consolidation of these schools into large school system.

However, in order to have some valuable knowledge of the one-teacher schools, information coming into the Bureau of Education from a number of different sources enable us to estimate that the average number of children in one-teacher school in the United States is not less than twenty-five. There are approximately 186,000 such schools in the United States, the total enrollment is about 4 1/2 million children. Comparing the enrollment in one-teacher schools with the total enrolment for the States and assuming that this percentage, namely, 18 per cent of all children enrolled in the States reporting, hold good for the United States as a whole, there were a little over 4,750,000 children in one-teacher schools in that year, a larger number than is estimated. The number of one-teacher schools is greatest in Minnesota, Iowa, Nebraska, Missouri, Illinois, Kansas, Wisconsin, Michigan, Ohio, Kentucky, West Virginia,

<sup>1</sup>Educational Provision of the State Constitutions, Article VI, p. 5, Revised School Laws of Kansas, 1923.

Pennsylvania, and New York. In 1920, it was estimated that there were 45 per cent of the rural teaching corps working in 187,951 one-teacher schools in the United States.

#### OPINIONS ON SUBJECT TIME ALLOTMENT

A comparison of time allotment of the various subject courses in different one-teacher schools reveals great variation. In many instances this is doubtless due to necessary provision for individual and community needs or variations in length of school course or of the school year. George A Boyce in an article, *Applying to Mathematics the Modern Ideas of Educational Science*,<sup>1</sup> commenting on the length of time devoted to mathematics, says in part:

"Since the abilities that we would include in the course of study are of fundamental value to child's nature and adult's life and since this leaves but a small residue of what it traditionally taught, we would spend much more time on these items than is usually spent, and accept perfection, with only an occasional slip as the standard of mystery."

H. W. Homes points out on his study<sup>2</sup> of time allotment how most teachers do not follow their time schedule. He says:

"Official tables of time allotments do not, of course, represent actual distribution of time. Teachers depart from the schedule for various reasons, good or bad, and there are many interruptions in the work of the school year. No child gets just the number of hours of class work in Arithmetic, or any other subjects, which published school schedule promises him."

Fred C. Ayer, made a study<sup>3</sup> of scientific time allotment in

<sup>1</sup>The National Schools, p. 60, Vol. IV, No. 3, Sept. 1929

<sup>2</sup>Time Distribution by Subjects and Grades in Representative One-Teacher Schools, Pp. 21-22, Fourteenth Yearbook, Part I, 1915.

<sup>3</sup>Bulletin No. 1, Department of Research, Seattle Public Schools, June, 1924.



Seattle Public Schools. After a careful investigation and consideration of the causes of the varied time allotments for each subject throughout the city schools, he recommends the following:

"Scientific time allotments cannot be made for a particular subject in any grade until it is agreed officially as to what knowledge and skill in that subject we may rightfully expect of a child in a given grade. For the present the administrator who contemplates a readjustment of time element his justification from proposed changes out of the practical experiences of our better school system."

The Research Division made a report<sup>1</sup> on Subject Time Allotment from a study of three hundred school systems. Commenting on the practice as to subject time allotment in large schools systems of the country it pointed out in part:

"The opinion and experience of a considerable number of persons is generally more reliable than of a few. On the other hand, the prevailing practice is not necessary the best practice. An average of the practices resulting from discordant ideals may worthless. If for some good reason a city wished to lift the ability of its children considerably above the average standard in a particular subject such as handwriting, an allotment of time to handwriting above that of common practice might be defended. Such an allotment might also be defended as a part of a scientific experiment. On the other hand, it would be indefensible to deviate significantly from general practice on no other basis than the vigorously expressed opinion of a few individuals."

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<sup>1</sup>The National Education Association, Research Bulletin, Vol. III, Nos. 4 and 5, Sept. and Nov., 1925.

## CHAPTER IV

## TIME ALLOTMENT RECOMMENDED BY STATE AUTHORITIES

1. What are the difficulties that the rural teacher encounters in organizing her program of study?

2. Does the state department of education recommend or prescribe time allotment schedules? If so, how does the current time distribution of time compare with that recommended by the state authorities?

To answer the above mentioned questions, a careful search was made through all the recently issued state courses of study and other educational bulletins available.

The state department of education recommends or prescribes allotment schedules. State courses of study and teacher's manuals are the chief means by which the state department of education can hope to exert a direct day-by-day influence upon the organization of classroom instruction as carried on by individual teacher.

Each year hundreds of new teachers enter the one-teacher school room for the first time with little or no knowledge of how to budget either their own or their pupils' time. Their first problem is that of time allotment and program making. How much time should be given to this or that subject in order to serve a well-balanced program in the particular grade or grades in which she is to teach is a perplexing question confronting every inexperienced teacher. To meet this problem, the educational authorities recommend time allotment schedules which would serve as a guide to the teacher in time budgeting for her school.

## GENERAL SUGGESTIONS

Methods of Solution.--- There are four possible ways suggested to new teachers to reduce the number of classes and at the same time increase the number of minutes spent in recitation. They are grade grouping, alternation by grades, alternation by subjects, and correlation. These methods are recommended by the National Education Association as very effective in creating an interest in school work. They are at present being practiced in most of the one-teacher schools throughout the United States.

1. Grade Grouping,<sup>1</sup>--- This plan is only recommended to those schools who have at least fourteen pupils. It materially decreases the number of classes daily. For those less than fourteen, it does not work as satisfactory as the alternation by groups. The grade groupings are as follows:

READING--- Fourth and fifth grades recite together, following outline for fourth grade, beginning in the autumn of odd years.

Fourth and fifth grades recite together, following outline for fifth grade, beginning in the autumn of even years.

Sixth and seventh grades write together, following outline for sixth grade, beginning in the autumn of odd years.

Sixth and seventh grades recite together, following outline for seventh grade, beginning in the autumn of even years.

SPELLING--- Fifth and sixth grades recite together following outline for fifth grade, beginning in the autumn of odd years.

Fifth and sixth grades recite together, following

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<sup>1</sup>Course of Study for the Rural Schools Of Kansas, 1914, Pp. 7-9.

outline for sixth grade, beginning in the autumn of even years.

GEOGRAPHY--- It is suggested that sixth grade and seventh grades, alternate, doing sixth grade work, beginning in the autumn of odd years.

HISTORY--- It is suggested that the eighth and ninth grades alternate, the same as in geography, doing eighth grade work beginning in the autumn of odd years.

### THE MODEL PROGRAM RECOMMENDED<sup>1</sup>---

TABLE I

Distribution of Combinations of Twenty-six Model Programs

Subjects	Number of Programs						
	1-2	2-3	3-4	4-5	5-6	6-7	7-8
Grade Combination	1-2	2-3	3-4	4-5	5-6	6-7	7-8
Reading.....	13	5	24	6	19	5	19
Language.....	15	5	16	6	16	6	11
Spelling.....	3	2	18	10	26	12	21
Arithmetic.....	10	1	16	5	22	6	20
History.....	4	4	4	4	11	5	18
Geography.....	1	2	10	8	15	8	13
Hygiene.....	4	4	3	4	12	4	10
Nature study and Agriculture.....	11	5	8	3	6	5	6
Average.....	8.1	3.1	10.9	5.1	13.1	5.6	14
Percentage.....	14.0	5.0	18.0	9.0	22.0	9.0	22

2. Alternation by Grades.<sup>2</sup>--- By alternation by grade is meant the combination of two grades on the work of two consecutive years. While the work of one grade is being done, the work of the other is omitted. The next year the omitted work is taken up. Alternation by grades and grade grouping go hand in hand. The advantages of alternation by grades greatly outweigh its disadvantages. Twice as much time for teaching is available for each grade where two grades are

<sup>1</sup>United States Bureau of Education, Bulletin No. 42.

<sup>2</sup>Mueller, A. D. "Progressive Trend in Rural Education," Chapter III, Organization of the One-Teacher School.

combined. Much better work can be accomplished with the larger classes afforded by combination, for more interest, competition, and group spirit can be stimulated.

3. Alternation by Subjects,--- By alternation by subject is meant that a class will recite in one subject a certain number of days a week and in another the remaining days.

The following are the combinations of most frequently made in the twenty-six model programs studied by Reinoehl:<sup>1</sup>

TABLE II

## COMBINATION MOST FREQUENTLY MADE

Subjects Combined or Alternated	No. of Program	Grades
History and Civics.....	15	7-8
Writing and Drawing.....	12	All classes
Reading and Spelling.....	8	1-4
Reading and History.....	7	3-5
History and Geography.....	7	5-6
Geography and Hygiene.....	6	5-6
Language and Spelling.....	6	1-3
Reading and Language.....	5	1-3
Hygiene and Agriculture.....	5	7-8

4. Correlation of Subject Matter,--- By the correlation of subject matter is meant the teaching of one subject in conjunction with another. The Wisconsin Course of study suggests that in the first four grades spelling and history be taught in connection with reading and language; and that in the fourth grade home geography be correlated with language. Civics, hygiene and sanitation, moral, nature study, etc., in the lower grades, and music for all, can be taught during the general exercises period. Correlation in subject matter offers great possibilities in relieving the over-crowded rural school teacher.

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<sup>1</sup>United States Bureau of Education, No. 42.

The schedule presented in Table III has been carefully worked out with the chief principle of organization. It contemplates twenty-four well balanced class periods for a one-teacher school of eight grades. It may serve as a guide for any teacher to make out a program adapted to her school:

TABLE III

## Proposed Balance Schedule of Class Periods for One-Teacher

Schools with Eight Grades Represented.<sup>1</sup>

No. of Periods Weekly	No. of Minutes per Day	Classes and Subjects
55	85	Class D
15	36	Reading and Spelling (Class E)
10	25	Reading and Spelling (Class D)
		Reading includes Phonics, Spelling, Word Study.
5	12	Language, Correlate Hygiene, Ci- vics, and History.
5	12	Numbers
		Note: Nature Study and Industrial Arts with Class C. Change of seat work between periods.
25	75	Class C
5	15	Reading
5	10	Spelling
5	15	Language, Correlate Hygiene, Ci- vics, and History.
5	20	Nature Study and Industrial Arts. Correlate Home Geography.
5	15	Arithmetic
		Note: Grade 4 Geography with Class B.
20	75	Class B
3	25	Reading (Grades 5-8)
2	8	Spelling (Grades 5-8)
4	15	Language, Correlate Hygiene.
4	15	Arithmetic.
4	16	History and Civics
3	20	Note: Grade 6 Geography with Class A. Agriculture and Industrial Arts with Class A.

<sup>1</sup>United States Bulletin of Education, No. 42.

20	70	Class A
4	15	Language
3	15	Arithmetic
4	20	Arithmetic (Grades 5-8). Correlate Industrial Arts.

#### SUGGESTIONS FOR MAKING SCIENTIFIC CLASS PROGRAM

That there is a great waste in the daily work of the one-teacher school is apparent to any one who has investigated this subject. One needs but to visit the rural schools and observe the number of minutes spent by pupils doing nothing. This actual situation needs immediate attention. Some model daily program calculated to the best interest of both teacher and pupils should be furnished by the administrator in charge. Such a program must give the time to begin; number of minutes for recitation periods of class recitating; subject (or Subjects) for recitation; and study programs for each class (Or grade). This program explains the organized work of the schools and in practice appears to be the best.

The importance which state departments attach to a definite time allotment schedule and to the daily program which is based upon it are expressed by the following quotations:

"The allotment of time<sup>1</sup> is based upon the six-hour school day designated in the school law. The time assigned to the different subjects includes that used for both recitation and study. On the whole, it is best to assign definitely all the available time. Some teachers, however, prefer to have a period of unassigned time which may be used in a variety of ways where it will serve to the best advantage. The best time for this period is not the very end of the school day.

A flexible time schedule is useful in school-room practice. It provides a means for checking up the time pupils give to the several subjects and thereby keeps the work of the school day fairly well balanced. In arranging a daily program of recitation and

<sup>1</sup>Pennsylvania Course of Study, 1927

study, teacher should generally follow this time schedule."

For the program work<sup>1</sup> it further points out:

"In the arrangement of the program it is necessary to see that pupils have definite study assignments as well as assignment for recitation purposes.

The program that is arranged should be generally. There is no single thing that will upset the classroom work so much as omitting classes for a day, or getting behind with the schedule and having to make shifts to the following day when the pupils have had their work prepared for a regular period."

W. D. Ross, State Superintendent of Public Instruction, Kansas, after a careful study<sup>2</sup> of the problems of the organization of the one-teacher schools, made the following suggestion for time allotment:

"The organization of the rural school requires the grouping of the pupils into classes where each can do his best work, the planning of a daily program that will provide the maximum of time for recitation and the preparation of lessons, the assignment of duties so that pupils and teachers may work to the best advantage, and permeating all, a spirit of interest in the work that will reduce problems of discipline to the minimum. The daily program ought, even if all grades are represented, to contain no more than twenty-five recitation periods, and more than thirty should not be permitted. This will be possible only through a careful plan of alternation, as suggested in the course of study."

As the above suggested plan for making daily time schedule did not meet satisfactorily the general rural situation as was expected by the State Superintendent, The "alternation of work" was modified to fit better the one-room schools as mentioned in the Supplementary course of Study for Rural School.<sup>3</sup> George A. Allen, Jr., the present

<sup>1</sup>Pennsylvania Course Of Study, 1927.

<sup>2</sup>Course of Study for Rural Schools, 1927, Pp. 47-48.

<sup>3</sup>Course of Study for Rural and Graded Schools, 1922.



State Superintendent of Public Instruction for Kansas, made the following suggestion:

"Make your program to fit the needs of your school.

Give a place for every one of the required subjects.

Place the more important subjects in the morning or early in the afternoon.

Adjust the length of the recitation periods to the age of the pupils and value of the subject.

Provide more time for study than for recitation periods.

Provide when possible for a study period of a subject immediately following the recitation in the subject.

The study period should be indicated on the program for the guidance of the pupils.

Always give opportunity for individual help of pupils.

Provide for variety of occupation, especially for the beginning pupils.

Have a definite time for the use of the library.

Place the program on the wall near the clock.

Follow the Program conscientiously.

The Law requires that the flag salute be given at the opening of each day of school.

Normal Frost, in discussing the seven factors that must be considered in making a course of study and teacher's manual, he commented on time allotments<sup>1</sup>

"The fourth thing that must be considered in a making a course of study is the time available for instruction. It seems obvious that the comparatively

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<sup>1</sup>A Differentiated Curriculum for Rural Schools, Pp. 344-345, Peabody Journal of Education, Vol. V, May 1923, No. 26.

short term of the country schools and the short recitation period of the small school call for fundamental differences in the amount and character of the work which should be undertaken..... The difficulties in regard to time may be practically met and somewhat abviated by the careful selection of materials to be taught, the alternation and correlation of subjects, and similar devices."

The above quoted opinions, as expressed by the experts in one-teacher school organization suggest the fact that the one-room school programs depart from the time allotted for each subject recommended in the rural and graded course of study furnished by the state authorities. Furthermore, they give clear evidence that each one-teacher school allots its time for each subject independently to fit the local needs, manifesting a wide variation of time allotment for the same subject in different schools.

## CHAPTER V

## THE PROBLEM AND METHOD OF PROCEDURE

As much of the present lack of uniformity in time allotment is the result of desirable and carefully thought out experimentation in the direction of adapting a course of study to differences in community make-up, capacity of children, length of school term, type of school organization, etc, the specific problem of this investigation is--- A STUDY OF SUBJECT TIME ALLOTMENTS IN THE ONE-TEACHER SCHOOLS IN DOUGLAS, FRANKLIN, LEAVENWORTH, SHAWNEE, AND WYANDOTTE COUNTIES, KANSAS, FOR THE SCHOOL YEAR 1928-'29.

The purposes of this study, which has been undertaken in order to discover how the one-teacher schools use their time, are as follows:

1. To determine present practice relative to the amount of time allotted to subjects and activities.
2. To compare present practice with recommended optimum time allotments for any subjects.
3. To know the position of the Three R's in relation to the length of school days.
4. To study time budget for each subject in relation to the number of pupils enrolled in school.
5. To know grade placement of subjects.

SOURCES OF DATA.---- The writer of this thesis investigated all available literature in the field of rural schools with the purpose to find means of obtaining reliable information and facts about the

actual practice in time budgeting in each one-teacher school with the result that no patent data were found. Among the blanks on which information is sent to the office of the State Superintendent of Public Instruction of Kansas, the following are found: teacher's report, supervisor's report, county superintendent's report, state superintendent's report, etc., and also report that are monthly, semi-annually, and annually in character. More than 100 blanks are used by the state superintendent's office to gather the information of various kinds. The writer found a term report of the one-teacher school and decided to use it for gathering the required data. Much information were furnished by the county superintendent visited.

The time allotment facts which have been used in this study were gathered from the following sources:

1. Term reports of one-teacher school, Form 13-A,\* received and filed in the office of the county superintendent.
2. Printed time allotment schedules for each one-teacher school filed in the county superintendent's office.
3. Pamphlet which contained the assignment of work by months for Rural and Elementary Schools, 1928-'29.

SOURCES OF STATE TIME ALLOTMENT DATA--- Facts as to time allotments recommended by the Kansas state educational authorities were secured from the Full Course of Study for Elementary Schools of Kansas and other state bulletins for the latest recommendations or to time schedules.

NATURE AND EXTENT OF THE SAMPLINGS FOR 1928-'29--- Time allotment blanks were used in gathering the data for this study. Its formulation will be explained later in this chapter.

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\* See sample form on the last page.

Personal visits were made to each of the County Superintendent of Douglas, Franklin, Leavenworth, Shawnee, and Wyandotte counties respectively. The county superintendents of these counties gave the writer their hearty cooperation and in every case were they very willing to make available for him Form 13-A and other monthly and annual reports available in their offices. In some cases the superintendent was so eager to assist in this study that he took the writer to some nearby one-teacher schools during the rest of the day. He showed the actual activities of these schools. It was very interesting to observe the real working of the daily program of studies. Disregarding the many shortcomings of the one-teacher schools visited, each school as a whole was a bee hive. Every body--teacher and pupils were busy with their work. No time is wasted if possible. But of course, everything could not be done in such a conglomeration of activities. The teacher could not abide strictly with her time schedule. There, the writer found his problem-- too many subjects or activities and a very short time allotted for each, varying from two to fifteen minutes. The County Superintendent stated that such a condition needs a substantial administrative reform calculated for the best interest of both teacher and pupils.

In selecting fairly good representative counties for this study, the writer referred to the pamphlet--- Better Rural Schools for Kansas, 1928, prepared by Geo. A. Allen, Jr., the present State Superintendent for Kansas. The counties selected are among those that have at present the most superior and standard schools<sup>1</sup> in Kansas.

In selecting the school reports for obtaining data, the writer

<sup>1</sup>Kansas Rural and Graded Schools Requirements for Standardization, 1928.

used the so called random sampling method. The first difficulty he met was a great many of the daily programs of studies submitted by the teachers in charge of these schools contained more recitation periods and outside activities than those required and only permitted in the course of study. Moreover, the small number of usable cases proved a difficulty since more daily class program or in checking it was found that the sum of the time allotment by subjects and activities for several grades failed to balance with the length of the school day or school week reported for the grades in question. To illustrate this difficulty, some daily programs show that when the minutes allotted for the subjects or activities are added, they give a total of over 2,000 minutes which is more than 1,800 minutes or 30 hours of school work per week allowed in the course of study.

Of the 390 one-teacher school term reports found on file in the county superintendent offices, 133 were used either in the study of time allotment or in a supplementary study of the length of school year and length of school day, or in both. This sampling of 133 one-teacher schools includes 35 per cent of all the schools in the five counties included in this study. The list of the counties is as follows:

TABLE IV

## NAMES OF COUNTIES AND NUMBER OF SCHOOLS SELECTED IN THIS STUDY

County	No. of School	No. of School Districts Included in This Study
Douglas	83	22
Franklin	100	37
Leavenworth	82	36
Shawnee	103	30
Wyandotte	12	8

TABLE V

NAME, YEARLY ENROLLMENT AND LENGTH OF SCHOOL TERM OF SCHOOLS  
INCLUDED IN THIS STUDY

Name of School	Enrollment for Year	Length of Term in Days
<u>Douglas County</u>		
Lake View	30	160
Stony Point	21	156
Oakdale	19	160
Walnut Grove	16	160
Pleasant Valley	45	158 1/2
Star	12	160
Fairview	12	160
Clinton	38	158 1/2
Apple Pie	12	157
Twin mound	16	156
Union	27	160
Yarnold	14	158 1/2
Colyer	19	163
Brubaker	25	158
Deer Creek	33	160
Willow Springs	14	157
Harmony	21	156
Oakridge	27	156
Central	21	158
Columbia	17	157
Big Springs	34	160
Model	31	160
<u>Franklin</u>		
Pleasant Valley	24	160
Oakland	10	160
Emery Green	25	159
Peoria	23	158
Silver Valley	16	160
West Valley	21	156
Chestnut Grove	40	158
Hot Springs	20	160
Wycoff	21	154
Latimer	20	156
Fouts	15	156
Cole	20	157
Boyd	17	160
Star	15	157
Baxter	21	160
Sand Creek	22	172 1/2
Liberty	26	160
North Illinois	22	160
Coal Creek	23	157
Dovy	13	157
Tapley	20	157

Continued---

Name of School	Enrollment for Year	Length of Term in Days
South Illinois	25	160
Acorn	30	158
Silver Lake	19	160
Central	10	160
Diamond Ridge	24	160
Elm Grove	12	157
Mt. Hope	23	159
Runsonville	20	151
Martin	20	158
North Pomona	26	160
Pleasant Valley	17	151 1/2
Mt. Everest	9	160
Chippewa	20	160
<u>Leavenworth</u>		
Glen Valley	19	160
Skaggs	16	158
High Prairie	24	155 1/2
Central	25	156
Oak Hill	15	160
Spring Hill	17	160
Mt. Olivet	15	159
Stony Point	16	160
Williams	21	180
Delaware	22	160
Nine Miles	24	160
Bell	23	151
Timber Ridge	24	160
Springdale	25	156
Elmwood	22	160
Smith	18	160
Faulkner	23	160
Kerr	12	155
Ravena	23	160
Rock	29	160
Reno	25	160
Mound	29	157
Friendship Valley	17	160
Pleasant Prairie	21	158
Hazel Ridge	23	160
Fall leaf	25	160
Mockey	20	160
Honey Valley	12	150
Surcoxie	11	160
Standwood	34	155
Star	16	155
Hawk Hollow	12	158 1/2
Eagle	27	160



Continued---

Name of School	Enrollment for Year	Length of Term in Days
Centennial	18	160
Hazel Dale	26	160
Grandview	9	160
<u>Shawnee County</u>		
Pleasant Valley	17	159
Read	18	160
Twinville	18	156
Deer Creek	26	160
Pleasant Hill	20	160
Indian Creek	27	160
Pleasant Hill	15	157
Berry Creek	23	159
Disney	21	160
Matnez	27	155
Mission Center	20	160
Menoken	22	159
Lone Tree	22	155
County Lane	16	154
Fairview	20	156
Union	27	154
Elevation	16	160
Berryton	25	160
High Land	18	160
Priddy	19	156 1/2
Valencia	34	160
Goldenrod	17	155 1/2
Pauline	25	160
Lipp	16	155
Capitol View	16	160
Balz	12	155
Walnut Hill	15	160
Liberty	28	160
Clover Hill	20	155
Kiene	17	156
<u>Wyandotte County</u>		
Wallula	26	146 1/2
Piper	35	169
Pleasant Ridge	22	153
Braner	11	148
Twist	8	160
Central Point	4	150
Maywood	12	153
Nearman	17	163

The Allotment Blanks Used.--- The time allotment blanks which were used in this study are so formulated as to provide for the allot-

cation of the pupil's time in each grade to any nineteen subjects or activities including a miscellaneous item. Moreover, in order to secure uniformity, speed, and accuracy in copying time allotted for each subject, the writer used the compulsory subjects and programs of studies provided in the Course of Study for Rural Schools of Kansas, as items. Copy of this form may be found in the Appendix.

## CHAPTER VI

## PRESENTATION AND INTERPRETATION OF DATA

When the data for this study were collected and carefully selected to insure their usefulness there were found 133 separate time allotment blank forms filled with the necessary information facts. It became obvious that so large a number of forms would be difficult for analytical study. For this reason it necessitated some kind of a classification. Several possible ways of classifying time allotment facts were investigated but no standard procedure for classifying this type of material was suggested. Upon the basis of an individual judgment, the allotment blank forms were carefully examined with the view to making a few general headings under which to group the school systems.

As stated in Chapter V, one of the purposes in making this study was to determine "time budget for each subject in relation to number of pupils enrolled in school." With this end in view, the writer finally decided to divide the one-teacher schools into three main divisions or groups of enrollment in which the administrative problems are relatively similar. With these enrollment groups the writer would be able to discover the time allotment facts for each group of school systems.

The enrollment groups chosen are as follows:

Group I. All schools included in this study.

Group II. Schools having a yearly enrollment of 20 to 39 or more.

Group III. Schools having a yearly enrollment of 0 to 19.

In this study the current practice in time allotments was determined for all subjects and activities offered in grades 1-8 by finding the average time allotment and percentage of time allotted to each subject in each grade. All schools in each enrollment group are considered regardless of whether or not all or only part of the group allotted time to the given subject. This method makes available information needed to determine the relative weights given to the various subjects and by all enrollment groups combined.

The statistical measures, which were determined for each of the nineteen subjects and activities, in three enrollment groups, are as follows:

1. Average (mean) time allotments for each subject, by grades, considering all schools.
2. Percentage of time allotted to each subject, by grades.
3. Median time allotments by grades, considering only schools reporting time allotted to the specified subjects.
4. Maximum-minimum range of time for each subject, by grades.
5. Range of the middle 50 per cent ( $\frac{Q_3 - Q_1}{2}$ ) as shown by the first and third quartiles of the time distribution for each subject, by enrollment groups.

#### Analysis of Time Allotment Data for Each Subject or Activity.--

Before proceeding to analyze the time allotment data for each subject or activity, the writer thought it best to present first the subjects and activities provided in the Kansas Course of Study for Rural Schools. It was found in all programs of studies of the 133 one-teacher schools included in this study that the subjects and activities are orthography, reading, classics, writing, arith-

metic, geography, language and grammar, U. S. History, Kansas history, physiology, civil government, agriculture, music, drawing, opening exercises, supervised study, recess, and phonics. These subjects and activities of the elementary curriculum are often classified as belonging to one of the three major groups which has been designated as (1) the Three R's, (2) the content subjects, and (3) the special subjects or activities. The Three R's are now considered to include the five tool subjects: reading, writing, arithmetic, language and grammar, and orthography. To the group of content subjects belong geography, history, civil government, U. S. history, and Kansas history. These two general groups combined have been referred to at times as the fundamental subjects.<sup>1</sup> The third general group, known as special subjects and activities, and often condemned as so-called "fads and frills" included classics, drawing, music, physiology, agriculture, recess, opening exercises, supervised study, and miscellaneous subjects.

In order to have a definite guide in analyzing the data, the writer used the question and answer method supplemented by the use of tables or diagrams for further explanation.

The first set of questions to answer are the following:

1. What are the subjects and activities which are accepted by the one-teacher schools included in this study?
2. Are these subjects the same for all enrollment groups or are there differences which appear in some way to be dependent upon the size of the school?

To answer these questions the number of one-teacher schools

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<sup>1</sup>Kansas Course of Study for Rural and Graded Schools

alloting time to each subject in some one or more grades has been determined in the three main enrollment groups. From these data the percentage of schools in each group offering the several subjects has been computed. Both the number and percentage of schools in each enrollment group which allot time to the various subjects are given in Table VI.

As one looks at Table VI, the Three R's are evidently still solidly entrenched as part of the curriculum of the one-teacher schools. Orthography, reading, arithmetic, and language and grammar are offered in all 133 school systems. Writing is offered in 87 per cent of the schools; geography, in 99 per cent; U. S. history in 97 per cent; physiology in 93 per cent; and agriculture and civil government in 75 per cent. Opening exercises and recess receive time allotments in approximately 80 per cent of the schools.

Among the other subjects and activities included in the time allotment schedules of 133 one-teacher school systems none is accepted by as large a proportion as 75 per cent. Classics, music, drawing, supervised study, receive definite time allotment in less than 5 per cent of the schools. Phonics receives a definite allotment of time and is taught at a time separate from the reading period in 20 per cent of the schools. The miscellaneous subjects or activities such as nature study, Bible study, sewing, hiking, literary clubs, etc. are only mentioned in three or four schools.

Comparing the three enrollment groups as to the greatest agreement concerning what subjects are commonly accepted for study program, the first and third enrollment groups are similar in every respects in both content and special subjects. The three groups have

TABLE VI

NUMBER AND PERCENTAGE OF ONE-TEACHER SCHOOLS ALLOTING TIME TO EACH  
SUBJECT IN ONE OR MORE ELEMENTARY GRADES IN 1928

Subjects	Enrollment Group					
	133 Schools		0-19 Pupils		20-40 Pupils	
	No.	%	No.	%	No.	%
Orthography	133	100	59	100	74	100.00
Reading	133	100	59	100	74	100.00
Classics	4	3	1	1.70	3	4.00
Writing	116	87.20	51	86.60	65	87.80
Arithmetic	133	100	59	100	74	100.00
Geography	132	99.17	59	100	73	98.65
Language and Grammar	133	100	59	100	73	100.00
U. S. History	131	97.74	57	96.61	72	97.29
Kansas History	49	36.84	26	44.06	23	31.08
Physiology	124	93.23	57	96.61	67	90.59
Civils Government	101	75.93	43	72.88	58	78.37
Agriculture	100	75.18	39	66.10	61	82.43
Music	6	4.51	4	6.78	2	2.70
Drawing	9	6.76	5	8.47	4	5.40
Opening Exercises	100	82.70	50	84.74	60	81.08
Supervised Study	5	3.75	5	8.47	0	0.00
Recess	109	78.19	48	77.96	58	78.51
Phonics	27	20.30	7	11.86	20	28.37
Miscellaneous	3	2.28	1	1.69	2	2.70

100 per cent agreement in the Three R's.

What subject is commonly taught in each grade or throughout the grades in the one-teacher schools? In order to determine the practice of each school of the enrollment groups with reference to grade placement of the subjects or activities the percentage of schools of each group which offer the several subjects has been computed. Table VII shows the following:

Orthography.--- Looking at the percentage of one-teacher schools allotting time to orthography it is apparent that at least 50 per cent of the schools allot time for this subject. It is interesting to note that the percentage of schools that allot time gradually increases from 50 per cent in the first grade to 91 per cent in the fifth grade and then gradually decreases to 59 per cent in the eighth grade. The greatest emphasis in teaching orthography is in the fifth grade.

Reading.--- If 80 per cent should be considered to include the majority of the school systems allotting time to reading, formal instruction in reading is carried extensively in the first five grades of the one-teacher schools. Only 43 per cent of the schools allot time to reading in the eighth grade.

Classics.---Out of the 133 one-teacher schools included in this study, only four schools taught classics. The rest of the schools have not mentioned this subject in any of their daily time schedule.

Writing.--- The most widely accepted practice is to require writing in all grades; consequently it is evenly placed throughout the eight grades. One hundred per cent of the schools allot time for this subject.

Arithmetic.--- Instruction in arithmetic is accepted by 133



TABLE VII

PERCENTAGE OF 133 ONE-TEACHER SCHOOLS ALLOTING TIME TO THE VARIOUS  
SUBJECTS BY GRADES IN 1928-'29

SUBJECTS	G R A D E S							
	1	2	3	4	5	6	7	8
Orthography	50.37	79.69	78.27	71.43	90.97	67.62	80.45	59.39
Reading	85.71	87.97	84.21	21.20	78.94	57.14	80.45	43.61
Classics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50
Writing	100	100	100	100	100	100	100	100
Arithmetic	71.28	85.48	100	100	100	100	100	100
Geography	0.00	0.00	.75	100	100	75.94	100	8.27
Language and Grammar	81.20	97.74	99.25	100	100	100	100	100
U. S. History	0.00	0.00	.76	0.00	0.00	0.00	71.43	100
Kansas History	.76	.76	.76	0.00	.76	3.00	11.28	25.64
Physiology	.76	.76	.76	0.00	97.74	9.02	100	3.75
Civil Government	0.00	0.00	0.00	0.00	0.00	0.00	4.51	93.98
Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	4.51	89.47
Music	4.51	3.76	3.00	4.51	3.00	4.51	3.00	6.01
Drawing	5.26	5.26	3.00	5.26	3.00	4.51	3.76	1.50
Opening Exercises	100	100	100	100	100	100	100	100
Supervised Study	3.00	3.00	2.25	1.50	2.25	.75	.75	1.50
Recess	100	100	100	100	100	100	100	100
Phonics	16.54	7.52	5.26	1.50	1.50	.75	1.50	.75
Miscellaneous	3.00	3.00	.75	1.50	1.50	1.50	0.00	1.50

schools as belonging in grades 3 to 8. One hundred per cent agreement is found in grades three to eight. As seen from the data in Table VII, there is a decided tendency to postpone formal instruction in this subject until the second year of school. Only 71.28 per cent of the 133 one-teacher schools offer arithmetic in the first grade. From the third grade on, 100 per cent of all schools allot time to this subject.

Geography.--- Geography is widely accepted as belonging to grades four to seven, in which grades it is offered by 100 per cent of the schools except in grade six, which is 75 per cent. No school allot time for geography in both first and second grades; 75 per cent in the third grade; and .8 per cent in the eighth grade.

Language and grammar.--- Language and grammar receive time allotments in the first grade in 81.20 per cent of the school systems. This percentage increases rather abruptly to 99.74 per cent in grades two and three. From fourth grade to eighth grade, all the schools allot a definite time for this subject.

U. S. History.--- The practice in all one-teacher schools is that U. S. History is not offered in any grade under the seventh. Only 71.43 per cent of the schools offer this subject in the seventh grade and every school included in this study offer this subject in the eighth grade.

Kansas History.--- It is very surprising to notice that less than one per cent of the one-teacher schools allot time for Kansas History in grades 1 to 5; 3 per cent in the sixth grade; 11.23 per cent in the seventh grade and 25.69 per cent in the eighth grade.

Physiology.--- Practically all one-teacher schools do not allot

time for physiology in grades one, two, three, four six, and eight. However, there is a complete agreement in all schools that this subject belongs to the fifth and seventh grades.

Civil Government.--- No school allots time for civil government from first grade to sixth grade. Only 4.51 per cent of the schools allot time for this subject in the seventh grade. The agreement is that this subject belongs particularly to eighth grade.

Agriculture.--- Agriculture is offered only in 89.47 per cent of the schools in grade eight and 4.51 per cent in the seventh grade. No allotted time for this subject is found in all schools below the seventh grade.

Music.--- Music is offered in 3 to 6 per cent of the one-teacher schools throughout the elementary curriculum.

Drawing.--- Drawing is given less often in the higher elementary grades. The percentage of schools allotting time for this subject varies from 5.26 per cent in the first grade to 1.5 per cent in the seventh grade.

Opening Exercises.--- The practice is that all schools allot a definite time to opening exercises in all grades.

Supervised Study.--- Supervised study is offered in .75 per cent of all schools from the first grade to eighth grade.

Phonics.--- Only 16.54 per cent of the school systems allot time for phonics in the first grade and gradually decreases to .75 per cent of the schools in the eighth grade.

Miscellaneous.--- All subjects or activities that are found in the daily school programs of the one-teacher schools and which are not mentioned in the course of study are called the miscella-

neous subjects or activities. These are nature study, physical education, sewing, gardening, literary clubs, hiking, and games. The percentage of schools allotting time to these subjects or activities is practically insignificant in all one-teacher schools, varying from 3.00 per cent in the first grade and gradually decreases to 0 per cent in the seventh grade.

For more details Table VIII shows vividly the grade placement of each subject and activity by disregarding the percentage of schools allotting time.

There are two outstanding facts shown by the preceding table.

1. That orthography, reading, writing, arithmetic, language and grammar, music, and drawing are offered throughout the elementary grades. Opening exercises and recess are practiced by almost schools.

2. That classics, U. S. History, Kansas history, physiology, civil government, and agriculture are only given to the seventh and eighth grades. Phonics belongs to the lowest three grades.

Analysis of time allotment data in this study up to this point has been confined to percentage of school systems allotting time and grade placement. Next, the writer is to analyze the time allotment facts concerning the several subjects and activities, analyzed from two standpoints, and summarized in a series of two tables for each subject and activity as follows:

Table A: In the first table the total time allotted to a given subject in grades 1-8 is considered, and the facts needed to answer the following questions are presented: What is the average amount of time given to this subject during the eight years of

## DIAGRAM I

GRADE PLACEMENT OF SUBJECTS AND ACTIVITIES IN 133 ONE-TEACHER  
SCHOOLS OF KANSAS

S U B J E C T S	G R A D E S							
	1	2	3	4	5	6	7	8
Orthography								
Reading								
Classics								
Writing								
Arithmetic								
Geography								
Language and Grammar								
U. S. History								
Kansas History								
Physiology								
Civil Government								
Agriculture								
Music								
Drawing								
Opening Exercises								
Supervised Study								
Recess								
Phonics								
Miscellaneous								

schools? What percentage of the total time available for elementary education is devoted to this subject? Among those schools which offer the subject, what is the central tendency as shown by the median time allotment, and what is the degree of variability as indicated by the range of the middle 50 per cent of the cases? How great is the variation between the maximum and the minimum time devoted to the subject? How do all these measures compare for three enrollment groups?

Table B: The second table deals with the average amount of time devoted to each subject in each grade, considering all schools in each enrollment group. The following questions are answered: What is the average present practice for this subject in each grade, and what per cent of the time available for instruction in this subject is given over to this subject in question? How does this practice vary from grade to grade and from enrollment to enrollment?

#### ORTHOGRAPHY

Of the 133 one-teacher schools included in this investigation, all of them allot time specifically to orthography. There are significant tendencies which are brought out by a study of the facts given in these tables on orthography.

1. The number of minutes allotted to orthography per week is in inverse proportion to the size of the enrollment group.
2. More time is given to this subject in grades 2 and 3, and gradually decreases in the higher grades.
3. There is wide variation in the time allotted to orthography among the schools of each enrollment group. A great many of the school allot ten times greater than the others. In the enrollment

TABLE VIII-A

ORTHOGRAPHY

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO ORTHOGRAPHY IN GRADES 1-8 IN 133 SCHOOL SYSTEMS OF KANSAS BY ENROLLMENT GROUPS, 1928-1929

Enrollment Group	Number of Schools	Ave. Min. per Week	Per Cent of Total Time	For Schools Which Report Time Allotted to Orthography						
				No. of Schools	Range	Median	Range of Middle 50 per cent	Q <sub>1</sub>	Q <sub>3</sub>	
All Schools.....	133	137	7.87	133	25 : 400	145.11	79.54 : 184.89			
20 - 39 Or over.....	74	132	7.49	74	25 : 300	153.75	95.97 : 201.25			
0 - 19.....	59	142	8.36	59	25 : 400	141.66	98.12 : 172.32			

TABLE VIII-B

ORTHOGRAPHY

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO ORTHOGRAPHY IN 133 ONE-TEACHER

SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.
All Schools.....	133	27	10.12	40	20.00	25	12.66	21	10.66	22	10.92	18	10.94	19	9.71	22	11.28
20 - 39 or over.....	74	28	13.18	38	17.91	28	13.24	25	11.69	22	10.66	22	10.37	25	11.82	27	12.99
0- 19.....	59	27	15.79	42	24.59	21	12.46	17	9.96	22	13.05	13	7.65	12	7.07	16	9.37



group the variation is not so wide as among the individual schools.

4. The range of minutes allotted for this subject is similar in amount in the first and third enrollment groups. The third enrollment group is below 100 minutes.

Earlier investigations by Rice and Corman, Ernest Horn, and various surveys, especially those of Oakland, California have shown uniformly that schools with large time allotments have not secured proportionately superior results and in many cases have not secured results which were superior in any degree. The amount of time required depends somewhat the method of teaching employed by the teacher. It is further pointed out that time allotment should provide for both study and practice.

A search through other literatures on orthography fails to show an optimum amount of time necessary to get the best result in teaching this subject.

#### READING

Reading has always held and continues to hold first in the time schedule of the one-teacher schools. This is especially true in the first and second grades where in schools of the largest enrollment group it receives about one-fifth of the time

Among the schools which allot time to reading, the median total allotment for grades 1-8 is 304.84 minutes per week. The middle 50 per cent of the schools allot between 262.5 and 355.21 minutes per week. The maximum amount of time, which is 155 minutes per week is in the largest enrollment group and the minimum amount of time, which is 50 minutes is in the second largest enrollment group. The minutes per week allotted to this subject is greatest in amount in

TABLE IX-A

READING

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO READING IN GRADES 1-8 IN 133 ONE-

TEACHER SCHOOLS OF KANSAS BY ENROLLMENT GROUP, 1928-'29

Enrollment Group	For Schools Which Report Time Allotted to Reading									
	Number of Schools	Ave. Min. per Week for all Schools	Per Cent of Total Time	No. of Schools Which Report	Range of Min. to Max. Subject	Median No. of Minutes per Week	Range of Middle 50 per cent			
							Q <sub>1</sub>		Q <sub>3</sub>	
All Schools.....	133	295	:16.95:	132	: 50 : 555:	304.84	: 262.50		: 355.21	
20 - 39 or over.....	74	296	:16.70:	73	: 50 : 430:	310.29	: 267.93		: 390.97	
0 - 19.....	59	294	:17.31:	59	:125 : 550:	254.85	: 255.15		: 351.25	

TABLE IX-B

READING

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO READING IN 133 ONE-TEACHER  
SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of	G R A D E S															
		1		2		3		4		5		6		7		8	
		Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per
		Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent
All Schools.....	133	57	18.90	44	14.41	40	13.18	37	12.21	39	12.93	27	8.77	37	12.77	21	6.88
20 - 39 or over....	74	48	17.23	45	15.43	43	10.09	40	14.10	36	12.80	28	10.18	39	14.01	17	6.08
0 - 19.....	59	53	16.55	44	14.21	36	17.51	34	10.89	42	13.88	24	7.81	38	11.68	26	6.88

the first grade of the three enrollment groups and gradually decreases toward the eighth grade.

The National Committee on Reading in its reports published in 1925 makes the following statements regarding time allotments for reading.<sup>1</sup>

"Current practice with regard to time allotment developed when reading activities were limited almost exclusively to the reading period. According to the program which has been recommended reading is intimately related practically to every class activity. It follows that less rather than more time should be used for daily reading practice..... In general, 80 minutes per day is a reasonable time allotment in schools."

Applying this practice of time allotment for reading in one-teacher schools a recommendation of from 250 to 300 minutes per week in the first and second grades is justifiable.

#### WRITING

All one-teacher school systems include writing in their daily school program. It is offered from first grade to eighth grade. It receives an average of 59.72 minutes per week or 3.44 per cent of the total time devoted to all subjects per week. The fact that the writing period is given to all grades at the same time, yet there is a wide variation in time allotments for this subject in all grades. For instance, the average minutes per week in the first grade and second grades are 48 and 52 minutes respectively, whereas in the fourth grade the average allotted, is thirth-seven. The least amount of variation is found among schools of 0 - 19 yearly enrollment.

In all enrollment groups there is a wide range of amount of time

<sup>1</sup>Gray, Williams S. and others---"Report of the National Committee on Reading", National Society for the Study of Education, Twenty-fourth Yearbook, Part I, 1925, Pp. 42F.

TABLE X-A

WRITING

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO WRITING IN GRADES 1-8 IN 133 ONE-TEACHER SCHOOLS OF KANSAS BY ENROLLMENT GROUP, 1928-1929.

Enrollment Group	For Schools Which Report Time Allotted to Writing									
	Number of Schools	Ave. per Week	Min. per Week	Per Cent of Total	No. of Schools	Range	Median per Week	Range of Middle 50 per cent		
								Q <sub>1</sub>	Q <sub>3</sub>	
All schools.....	133	59.73	3.44	115	25 : 300	75.03	61.67	92.41		
20 - 39 or over.....	74	54.05	3.05	64	25 : 200	71.32	59.56	86.96		
0 - 19 .....	59	68.66	3.94	51	25 : 500	82.24	40.46	99.01		

TABLE X-B

WRITING

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO WRITING IN 133 ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent
All Schools.....	133	48	12.33	52	13.25	52	13.41	37	9.48	55	13.97	51	12.96	51	12.85	46	11.88
20 - 39 or over....	74	49	13.12	54	14.37	52	13.48	28	7.32	51	13.57	50	13.21	53	13.93	40	10.68
0 - 19 .....	59	46	11.40	48	11.76	53	12.92	49	12.05	59	14.43	51	12.57	47	11.61	54	13.23

per week allotted for writing. The range is from 25 to 300 minutes per week.

It is, however, recommended that, as a result of scientific investigation, practice period in writing should be not more than 15 minutes a day. Freeman<sup>1</sup> found that there was no close correspondence between amount of time spent and efficiency in handwriting. He pointed out that "of the two cities which spend on the average of 45 minutes per week, one has eleventh rank and the other twenty-sixth; while two cities which spend an average of 95 minutes have the rank of forty-three and forty-four, very nearly at the bottom of the list." His findings show that "the 23 cities of the upper half spend 73.4 minutes per week, and the 33 cities of the lower half, 73.4 minutes." Finally, as a result of statistical and experimental evidence, Freeman reached the conclusion, as pointed in the Eighteenth Yearbook,<sup>2</sup> that "ten to fifteen minutes a day is probably the best length of practice period."

#### ARITHMETIC

Of the total time given to elementary education in grades 1-8 by one-teacher schools in the school year 1928-'29, 18.02 per cent was devoted to arithmetic. The average per week in all grades is 313 minutes; 321 minutes in the second enrollment group; and 303 minutes in the smallest enrollment group. The range for all schools is 125 to 430 minutes. The median is 325.32 minutes for all schools. The smallest size enrollment group shows a range of 125 to 400 minutes and a median of 326.59 minutes per week. All these figures suggest

<sup>1</sup>Freeman, Frank N. "handwriting" National Society for the Study of Education, Fourteenth Yearbook, Part I, 1925, Chapter V.

<sup>2</sup>Freeman, F. N. "Handwriting," National Society for the Study of Education, Sixteenth Yearbook, Part I, Chapter IV.

TABLE XI-A

ARITHMETIC

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO ARITHMETIC IN GRADES 1-8 IN 133 ONE-TEACHER SCHOOLS OF KANSAS, BY ENROLLMENT GROUP, 1928-1929.

Enrollment Group	Number of Schools	Ave. Min. per Week for all Schools in Group	Per Cent of Total Time Report	For Schools Which Report Time Allotted to Arithmetic						
				No. of Schools	Range Min.:Max.	Median No. of Minutes per week	Range of Middle 50 per cent	Q <sub>1</sub>	Q <sub>3</sub>	
All Schools.....	133	313	18.02	133	125: 430	325.32	295.62	365.11		
20 - 39 or over.....	74	321	18.13	74	175: 430	341.07	301.25	351.68		
0 - 19 .....	59	303	17.88	59	125: 400	326.39	286.25	357.92		



TABLE XI-B

ARITHMETIC

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO ARITHMETIC IN 133 ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.
All Schools .....	133	38	12.08	37	11.72	39	12.35	40	12.35	39	12.37	40	12.64	40	12.70	42	13.42
20 - 39 or over ...	74	36	11.36	34	10.77	42	13.12	39	11.81	35	11.08	43	13.14	44	13.83	44	13.83
0 - 19 .....	59	41	12.98	39	12.45	35	11.36	43	13.63	44	14.00	37	11.42	35	11.26	41	12.96

that the size of enrollment group seems to have but little influence upon the amount of minutes allotted to this subject. A school of ten pupils allotted about four times as much time as a school of 33 pupils. The degree of variability as indicated by the interquartile range is greatest in the smallest enrollment group, while the closest agreement is in the largest enrollment group. This wide range of time given to arithmetic indicates that time allotments in many schools are much higher than is necessary.

Table XI-B gives the average number of minutes per week given to arithmetic, together with the percentage of time devoted to this subject. It is apparently noted that arithmetic is becoming more important as a subject in the higher elementary grades. The highest percentage given to this subject is in the fifth grade in the smallest enrollment group, which is 14 per cent.

Studies or surveys on arithmetic were to find evidence relative to optimum time allotments for this subject but to no avail. However, the committee of the Department of Superintendence on the revision of the curriculum in arithmetic includes among its "General Statements Offered as Guides in Revision of Arithmetic Curriculum" made the following statement:

"On the basis of research investigation to date, the committee feels warranted in urging less time to arithmetic than that devoted to the subject in practically all schools throughout the country."

#### GEOGRAPHY

Time allotments for geography were reported by almost schools. Apparently the percentage of total time devoted to this subject is almost the same for all groups. The median time allotment per week in

TABLE XII-A

GEOGRAPHY

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO ARITHMETIC IN GRADES 1-8 IN 133 ONE-TEACHER SCHOOLS OF KANSAS BY ENROLLMENT GROUP, 1928-29.

Enrollment Group	FOR Schools Which Report Time Allotted to Geography									
	Number of Schools	Ave. Min. per Week for all Schools in Group	Per Cent of Total Time Report	No. of Schools Which Report	Range of Min. to Max. Subjects	Median No. of Minutes per Week	Range of middle 50 per cent	Q <sub>1</sub>	Q <sub>3</sub>	
All Schools .....	133	162	9.31	132	50 : 300	180.55	151.61 : 213.57			
20 - 39 or over .....	74	172	9.72	73	50 : 275	194.79	160.31 : 217.85			
0 - 19 .....	59	159	9.36	59	50 : 300	169.53	135.94 : 230.09			

TABLE XII-B

GEOGRAPHY

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO GEOGRAPHY IN 133 ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent
All Schools .....	133	---	---	---	---	.67	.42	33	21.32	38	24.28	33	24.28	41	25.45	5	9.31
20 - 39 or over ...	74	---	---	---	---	.34	.20	33	20.42	39	23.76	41	34.97	46	28.01	4	2.46
0 - 19 .....	59	---	---	---	---	1.34	.84	34	22.53	34	24.97	35	23.33	36	24.67	6	4.24

grades 1-8 for 132 schools is 180.55 minutes. The average minutes per week for all schools in all groups is 162 minutes showing that there is no wide variation of time allotted for this subject if it is compared to the median.

Practically all cities agree that geography belongs to grades four, five, six, and seven as clearly shown in Table XII-B. It becomes an increasingly importance in the seventh grade in which the average minutes per week for this subject is 46 in the second largest enrollment group while in the fourth grade is but 33 minutes for the largest enrollment group.

For optimum time for this subject, there is no study available at present.

#### LANGUAGE AND GRAMMAR

All cities included in this study allot time for language and grammar and are offered from first grade to eighth grade of all schools. However, there is a wide range among the schools in allotting their time for this subject. A great many of them in the middle group allot time about four times as much as is being allotted in some schools in the smallest size enrollment group.

The average minutes per week allotted to language and grammar is 293, with a median of 304.22 minutes per week. It receives 16.87 per cent of the time devoted for all subjects and activities. The range of the middle 50 per cent is not very wide in all enrollment groups. The average number of minutes allotted for this subject for each grade in all school is practically equal. The median practice among all school groups is to allot approximately 15 minutes a day to language and grammar.

TABLE XIII -A

LANGUAGE AND GRAMMAR

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO LANGUAGE AND GRAMMAR IN GRADES 1-8 IN 133  
 ONE-TEACHER SCHOOLS OF KANSAS BY ENROLLMENT GROUP, 1928-'29.

Enrollment Group	For Schools Which Report Time Allotted to Language and Grammar									
	: Number : of : Schools	: Ave. Min. : per Week : for all : Schools : in Group	: Per Cent : of : Schools : Total : Time	: No. of : Schools : Which : Report : Subject	: Range : Min. : Max.	: Median : No. of : Minutes : per Week	: Range of middle : 50 per cent	: Q <sub>1</sub>	: Q <sub>3</sub>	
All Schools .....	133	293	:16.87:	133	100: 425:	403.22	: 257.81:	350.92		
20 - 39 or over .....	74	269	:16.64:	74	175: 425:	304.80	: 258.75:	351.50		
0 - 19 .....	59	289	:17.06:	59	100: 400:	303.82	: 256.87:	350.28		

TABLE XIII-B

LANGUAGE AND GRAMMAR

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO LANGUAGE AND GRAMMAR IN 133

ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.
All Schools .....	133	31	10.88	34	11.59	35	11.68	34	11.61	40	13.79	39	13.27	39	13.50	40	13.66
20 - 39 or over ...	74	31	10.41	32	10.78	35	11.81	34	11.81	37	12.54	40	14.77	43	14.76	42	14.33
0 - 19 .....	59	33	11.45	36	12.49	33	11.42	34	11.74	44	15.39	37	12.62	35	11.30	37	12.76

## U. S. HISTORY

U. S. History receives only about one-fifth of the time given to elementary grades. In other words the time each child devotes to this subject is 6.34 per cent throughout his elementary education. Of the 133 one-teacher schools included in this study, 128 schools reported time allotment for this subject. The average minutes for the smallest enrollment group, the second largest enrollment group, and the largest enrollment group are 103, 116, and 110 minutes respectively. It is very interesting to note that there prevails a very wide range of time allotments for this subject in all schools ranging from 45 minutes to 225 minutes per week for all schools with a median of 122.29 minutes.

Table XIV Shows that U. S. History actually belongs to the upper elementary grades. The average number of minutes per week by grades shows that the sixth grade receives 25 minutes per week; seventh grade, 37; and eighth grade, 41. The percentage of time increases as it approaches the eighth grade. This subject is exceedingly important in the eighth grade.

## KANSAS HISTORY

Of the 133 one-teacher schools included in this study only 37 schools allot a definite time for Kansas history and it receives .89 per cent of the total time. The average minutes per week for all schools is 15, with a median of 63.59 minutes per week. The range is very wide for all schools, as for example, a certain school of an enrollment of ten allotted about seven times as much as a school of 37 pupils.

Table XV-B shows that no schools allot time for Kansas history below sixth grade. Moreover, the average minutes per week allotted



for this subject is very insignificant---2 minutes in grade six; 4 minutes in the seventh grade; and 11 minutes in the eighth grade. The conclusive evidence is that this subject is not adapted as one of those compulsory subjects provided in the curriculum of the rural schools in Kansas.

#### PHYSIOLOGY

Physiology includes health education in the one-teacher schools and one which is becoming of greater importance every year. Out of the 133 one-teacher schools, 124 school systems allot a definite time for this subject. It receives 4.53 per cent of the time spent in the one-teacher school. The minimum amount of minutes allotted to this subject is 25 minutes per week and the maximum is 325 minutes. The median is 63.41 minutes per week. The range of the middle 50 per cent is 63.41 minutes to 116.22 minutes.

Table XVI-B shows that physiology is offered only in three grades---fifth, sixth, and seventh. The average time allotted for this subject in the fifth and seventh grade are the same in amount --- 46 minutes per week while in the sixth grade, six minutes.

#### CIVIL GOVERNMENT

Only 4.30 per cent of the total time is appropriated to civil government. Disregarding the small amount of time allotted for this subject in the seventh grade, civil government belongs to the eighth grade. Of the 133 one-teacher schools only 98 schools report time allotted specifically for this purpose and the rest of the schools do not include this subject as a part of their curriculum.

Among the schools which allot time to civil government, the range is very wide.

TABLE XIV-A

U. S. History

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO U. S. HISTORY IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	For Schools Which Report Time Alloted to U. S. History									
	:Number : of : Schools	:Ave. Min. :per Week :for all : Schools	: Per : Cent : of : Schools	:No. of : Schools	: Range : of : Schools	: Median : No. of : Minutes	: Range of middle : 50 per cent : Minutes	: Q <sub>1</sub>	: Q <sub>3</sub>	
All Schools .....	133	110	6.34	128	45 : 225	123.29	100.67	157.03		
20 - 39 or over .....	74	116	6.56	72	50 : 225	130.77	106.25	159.09		
0 - 19 .....	59	103	6.04	56	45 : 200	114.70	85.71	152.50		

TABLE XIV-B

U. S. HISTORY

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO U. S. HISTORY IN 133 ONE-TEACHER

SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of	G R A D E S															
		1		2		3		4		5		6		7		8	
		Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per
		Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent
All Schools .....	133	---	---	---	---	---	---	---	---	---	---	25	31.55	37	41.35	41	26.25
20 - 39 or over ...	74	---	---	---	---	---	---	---	---	---	---	29	25.55	43	37.99	42	36.45
0- 19 .....	59	---	---	---	---	---	---	---	---	---	---	26	27.62	29	31.11	38	41.17

TABLE XV-A

KANSAS HISTORY

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO KANSAS HISTORY IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS KANSAS, 1928-1929.

Enrollment Group	FOR Schools Which Report Time Allotted to Kansas History									
	:Number : of : Schools	:Ave. Min. : per Week : for all : Schools : in Group	: Per : Cent : of : Total : Time : Report : Subject	:NO. of : Schools : Which : Min. : Max. : Subject	: Range : Min. : Max.	: Median : No. of : Minutes : per Week	: Range of middle : 50 per cent : Minutes	: Q <sub>1</sub>	: Q <sub>3</sub>	
All School .....	133	15	.89	37	25 : 150	63.59	53.97	69.29		
20 - 39 or over .....	74	10	.62	13	25 : 75	63.33	53.33	73.33		
0 - 19 .....	59	22	1.28	24	25 : 150	64.06	53.91	74.22		

TABLE XV-B

KANSAS HISTORY

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO KANSAS HISTORY IN 133 ONE-TEACHER

SCHOOLS OF KANSAS; p928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent
All Schools .....	133	--	--	--	--	--	--	--	--	--	--	2	9.58	4	25.14	11	64.84
20 - 39 or over ...	74	--	--	--	--	--	--	--	--	--	--	2	12.24	5	31.36	10	57.52
0 - 19 .....	59	--	--	--	--	--	--	--	--	--	--	1	7.14	3	19.04	12	73.81

TABLE XVI-A

PHYSIOLOGY

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO PHYSIOLOGY IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929

Enrollment Group	Number of Schools	Ave. Min. per Week for all Schools in Group	Per Cent of Total Time	For Schools Which Report Time Allotted to Physiology						
				No. of Schools Which Report Subject	Range Min.:Max.	Median No. of Minutes per Week	Range of Middle 50 per cent Q <sub>1</sub> : Q <sub>3</sub>			
All Schools .....	133	80	4.85	124	25 : 325	92.39	63.41	116.22		
20 - 39 or over .....	74	80	4.56	67	35 : 200	95.50	68.75	118.75		
0 - 19 .....	59	78	4.61	57	25 : 325	87.50	25.00	113.54		

TABLE XVI-B

PHYSIOLOGY

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO PHYSIOLOGY IN 133 ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7			
		Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent		
All Schools .....	133	---	---	---	---	---	---	---	---	36	46.33	6	8.64	35	45.02	---	---
20 - 39 or over ...	74	---	---	---	---	---	---	---	---	35	44.37	5	6.77	38	48.98	---	---
0 - 19 .....	59	---	---	---	---	---	---	---	---	37	48.82	8	11.00	31	40.15	---	---

TABLE XVII-A  
CIVIL GOVERNMENT

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO CIVIL GOVERNMENT IN GRADES 1-8 IN 133  
ONE-TEACHER SCHOOLS OF KANSAS, 1928-1928.

Enrollment Group	For Schools Which Report Time Allotted to Civil Government									
	Number Of Schools	Ave. per Week for all Schools in Group	Min. Cent: of Total Time Report Subject	Per Cent: of Schools Which Report Subject	No. Of Schools	Range Min.:Max.	Median No. of Minutes per Week	Range of 50 per cent Q <sub>1</sub> : Q <sub>3</sub>	Middle	
All Schools .....	133	42	4.30	98	25 : 150	56.72	52.89	70.75		
20 - 39 or over .....	74	45	2.54	75	25 : 150	56.82	25.50	72.29		
0 - 19 .....	59	39	2.30	41	50 : 100	50.00	50.00	50.00		



TABLE XVII-B

CIVIL GOVERNMENT

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO CIVIL GOVERNMENT IN 133 ONE\*

TEACHER SCHOOLS OF KANSAS, 1928- 1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent
All Schools .....	133	--	--	--	--	--	--	--	--	--	--	--	--	2	4.37	39	95.62
20 - 39 or over ...	74	--	--	--	--	--	--	--	--	--	--	--	--	1	5.95	39	94.05
0 - 19 .....	59	--	--	--	--	--	--	--	--	--	--	--	--	1	2.21	37	97.78

The maximum total time in grades 7-8 is more than seven times as great as the minimum total time. The median time allotment for the 98 schools is 56.72 minutes per week in both grades, and the range of the middle 50 per cent is from 52.89 to 70.75 minutes. Within the middle 50 per cent of the group some schools allot three times as much time for instruction in civil government than the rest do. A greater percentage of small than of large schools report time allotments. In fact the percentage of schools which allot time for this subject decreases regularly as the size of school increases.

#### AGRICULTURE

Apparently agriculture belongs to the eighth grades. This is contrary to the best opinion since this subject is specially introduced into the curriculum for the rural schools. As an evidence, of the 133 one-teacher schools only 99 allot definite time for this subject with an average of 42 minutes per week. It receives 2.31 per cent of the total time.

Time allotments for agriculture as reported by the schools show extreme variations. One teacher of the smallest enrollment group reported 40 minutes per week in contrast with one which reported 125 minutes per week in grades 1-8. The tendency is to allot more time in the lower grades than in the upper grades for this subject.

#### DRAWING

Drawing as a subject in one teacher school curriculum is very insignificant for only 9 schools out of 133, allot a certain amount of time for this subject. The average minutes per week for all school group is 5.82. It is practically the same for all enrollment groups.

TABLE XVII-A

AGRICULTURE

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO AGRICULTURE IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS IN KANSAS, 1928-1929.

Enrollment Group	For Schools Which Report Time Allotted to Agriculture									
	: Number	: Ave. Min.	: Per	: Cent.	: No. of	: Range	: Median	: Range of Middle		
	: of	: per Week	: :	: of	: Schools	: Min.	: No. of	: 50 per cent		
	: Schools	: Schools	: Total	: Which	: -----	: Minutes	: -----			
	: Schools	: in Group	: Time	: Report	: Min.	: Max.	: per Week	: Q <sub>1</sub>	: Q <sub>3</sub>	
	:	:	:	: Subject:	:	:	:	:	:	
All Schools .....	133	42	2.31	99	40	125	55.99	51.09	59.47	
20 - 39 or over .....	74	43	2.42	58	40	100	55.81	52.44	59.18	
0 - 19 .....	59	40	2.66	41	40	125	56.25	52.59	59.91	

TABLE XVIII-B

AGRICULTURE

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO AGRICULTURE IN 133 ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of	G R A D E S															
		1		2		3		4		5		6		7		8	
		Schools	Per Ave.	Schools	Per Cent	Schools	Per Ave.	Schools	Per Cent	Schools	Per Ave.	Schools	Per Cent	Schools	Per Ave.	Schools	Per Cent
All Schools .....	133	---	---	---	---	---	---	---	---	---	---	---	---	2	5.41	42	94.57
20 - 39 or over ...	74	---	---	---	---	---	---	---	---	---	---	---	---	3	7.76	40	92.23
0 - 19 .....	59	---	---	---	---	---	---	---	---	---	---	---	---	1	2.15	38	97.79

TABLE XIX-A

DRAWING

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO DRAWING IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS IN KANSAS, 1928-1929

Enrollment Group	Number of Schools	Ave. Min. per Week for all Schools in Group	Per Cent of Total Time Report Subject	For Schools Which Report Time Allotted to Drawing.					
				No. of Schools	Range Min. Max.	Median No. of Minutes per Week	Range of Middle 50 per cent Q <sub>1</sub> Q <sub>3</sub>		
All Schools .....	133	5.82	.34	9	25 : 200	87.50	53.12	121.87	
20 - 39 or over .....	74	6.42	.36	4	25 : 100	86.75	53.12	93.75	
0 - 19 .....	59	5.08	.29	5	25 : 200	125.00	50.00	175.00	

TABLE XIX-B

DRAWING

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO DRAWING IN 133 ONE-TEACHER

SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.	Ave.	Cent.
All Schools .....	133	4	15.85	3	13.54	4	15.16	2	8.05	4	14.58	3	12.41	4	10.39	2	6.89
20 - 39 or over ...	74	4	14.46	2	9.33	4	17.33	2	8.55	4	16.00	4	16.00	2	13.33	1	6.33
0 - 19 .....	59	5	17.14	4	12.85	5	17.14	3	10.00	4	12.85	3	8.57	4	12.85	3	8.57

It receives .39 per cent of the total time. However, there prevails a wide variation of time allotment for this subject among the schools reporting. The time assigned by the schools to this subject ranges from 25 to 200 minutes per week. The median is 87.50 minutes per week.

Table XIX-B shows that drawing is taught in all grades of the schools which assigned a definite time to this subject, but of very small amount.

#### OPENING EXERCISES

One hundred and thirteen schools out of one hundred and thirty-three, include opening exercises as a part of their daily program. All enrollment groups except the smallest size one, allot approximately the same amount of time to this activity. The average minute per week for all schools is 48, with a median of 65.28 minutes per week. With the exception of the third enrollment group which is slightly higher in amount, the per cent of total time for this activity is 2.77 per cent.

There is a wide range of variability among the schools. A certain school in the smallest group enrollment with an attendance of 14, assigned 150 minutes per week for this activity which is 6 times as great in amount as the time assigned for the same activity in a school of 32 pupils in the largest enrollment group.

Table XX-B shows that the average minutes per week spent for this activity is from the first grade to eighth grade is practically the same.

#### RECESS

Recess is reported by 115 one-teacher schools. The usual time

TABLE XX-A  
OPENING EXERCISES

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO OPENING EXERCISE IN GRADES 1-8 IN 133  
ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929

Enrollment Group	For Schools Which Report Time Allotted to Opening Exercises									
	Number of Schools	Ave. Min. per Week for all Schools in Group	Cent. of Time Report	No. of Schools Which Report	Range of Min. Max.	Median No. of Minutes per Week	Range of Middle 50 per cent	Q <sub>1</sub>	Q <sub>3</sub>	
All Schools .....	133	48	2.77	133	20 : 150	65.28	56.56	77.99		
20 - 39 or over .....	74	46	2.58	63	20 : 100	63.79	55.59	72.01		
0 - 19 .....	59	52	3.04	50	25 : 150	67.42	57.95	76.89		



TABLE XX-B

OPENING EXERCISES

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO OPENING EXERCISES IN 133 ONE-  
TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of	G R A D E S															
		1		2		3		4		5		6		7		8	
		Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per
	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	
All Schools .....	133	43	:12.51:	42	:12.45:	43	:12.75:	40	:11.79:	45	:13.22:	42	:12.51:	43	:12.61:	42	:12.34:
20 - 39 or over ...	74	43	:13.14:	41	:12.28:	42	:12.69:	37	:11.98:	41	:12.49:	41	:12.23:	42	:12.69:	42	:12.59:
0 - 19 .....	59	42	:11.92:	44	:12.51:	45	:12.81:	41	:11.56:	49	:14.09:	43	:12.40:	44	:12.42:	42	:12.04:

TABLE XXI-A

RECESS

TOTAL NUMBER OF MINUTES PER WEEK ALLOTTED TO RECESS IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	For Schools Which Report Time Allotted To Recess									
	: Number : of : Schools	: Ave. Min. : per Week : for all : Schools : in Group	: Per : Cent : of : Schools : Total : Time : Report : Subject	: No. of : Schools : Which : Report	: Range : Min. : Max.	: Median : No. of : Minutes : per Week	: Range of Middle : 50 per cent : Q <sub>1</sub>	: Q <sub>3</sub>		
All Schools .....	133	125	7.22	115	50 : 200	160.69	152.34	166.55		
20 - 39 or over .....	74	129	7.15	64	75 : 150	160.17	155.08	170.34		
0 - 19 .....	59	124	7.31	51	50 : 200	161.35	154.31	167.92		

TABLE XXI-B

RECESS

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO RECESS IN 133 ONE-TEACHER

SCHOOLS OF KANSAS, 1928-1929

Enrollment Group	Number of Schools	G R A D E S															
		1		2		3		4		5		6		7		8	
		Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent	Ave.	Per Cent
All Schools .....	133	112:12.98	114:13.46	111:13.00	104:12.23	120: 9.06	109:12.70	112:13.11	114:13.40								
20 - 39 or over ...	74	119:12.52	119:12.55	116:12.20	113:11.74	127:13.09	117:12.31	119:12.56	137:12.87								
0 - 19 .....	59	102:12.07	111:13.13	106:12.57	95:11.27	121:14.14	98:11.71	104:12.33	105:12.53								

given to this activity is 15 minutes in the morning and 15 minutes in the afternoon making a total of 30 minutes a day. This activity receives 7.22 per cent of the total time and has an average minute per week for all school systems of 125. Among the three enrollment groups the range of minutes assigned by each school is very wide, varying from 50 to 200 minutes per week. The median number of minutes per week for all schools is 152.34 to 166 minutes.

Table XXI-B shows that in usual practice throughout the grades in all enrollment groups, recess receives about the same amount of time.

#### PHONICS

There is no doubt that phonics is included with the teaching of reading in the higher grades of the one-teacher schools. This is evidenced by the fact that very small number of schools appropriate a certain amount of time for this subject. Out of the 133 school systems, only 25 reported. Moreover, this subject as indicated by Table XXII-B, belongs to first and second grades. The rest of the grades is impractical to mention their time allotments for this subject, because of their insignificant value.

For all schools phonics receives an average of 16 minutes per week and 24 minutes for the smallest enrollment group. Of the total time spent for all subjects taught in the elementary school, this subject receives .91 per cent. However, there is a wide range of time allotments among the schools offering this subject. The median number of minutes per week for all schools is 79.17. The range of the middle 50 per cent for all schools is 59.14 to 146.87 minutes per week.

## CLASSICS, MUSIC, SUPERVISED STUDY, AND MISCELLANEOUS

Classics, music, supervised study, and miscellaneous activities as included in the one-teacher school curriculum are given little attention as to time budgeting. The investigation reveals that but few schools allot time for these subjects in their program of studies, so that to make tables for analysis of their time allotment facts is impossible. Turning back to Table VI, the number of schools which appropriate a certain amount of time for classics is only four, out of 133 one-teacher schools; 6 for music; 5 for supervised study; and 3 for miscellaneous activities.

However, by carefully examining the time allotment blanks for these subjects, a wide variation in time budgeting practice among the schools reported, prevails. For instance, one school which assigned a fixed time for classics appropriated 25 minutes per week while two others assigned 75 minutes; 3 schools gave 15 minutes per week for music, while one, 50 minutes; one school assigned 150 minutes per week for supervised study whereas 2 others, 20 minutes; one school assigned 25 minutes per week for miscellaneous activities while the other two gave 45 minutes.

TABLE XXII-A

PHONICS

TOTAL NUMBERS OF MINUTES PER WEEK ALLOTTED TO PHONICS IN GRADES 1-8 IN 133

ONE-TEACHER SCHOOLS OF KANSAS, 1928-'29.

Enrollment Group	For Schools Which Report Time Allotted to Phonics									
	Number of Schools	Ave. Min. per Week for all Schools in Group	Per Cent of Total Time	No. of Schools Which Report Subject	Range of Min.	Range of Max.	Median No. of Minutes per Week	Range of Middle 50 per cent	Q <sub>1</sub>	Q <sub>3</sub>
All Schools .....	133	16	.91	25	25	150	79.17	59.14	146.87	
20 - 39 or over.....	74	9	.51	9	25	150	87.50	62.50	125.00	
0 - 19 .....	59	24	1.43	16	25	150	70.83	52.08	118.75	

TABLE XXII-B

PHONICS

AVERAGE NUMBER OF MINUTES PER WEEK BY GRADES AND PERCENTAGE OF TIME IN EACH GRADE TO PHONICS IN 133 ONE-TEACHER

SCHOOLS OF KANSAS, 1928-1929.

Enrollment Group	Number of	G R A D E S															
		1		2		3		4		5		6		7		8	
		Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per	Schools	Per
	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	Ave.	Cent	
All Schools .....	133	10	46.30	4	19.82	2	11.69	1	3.60	1	3.60	1	3.60	1	3.60	1	3.60
20 - 39 or over .....	74	12	40.00	8	24.17	4	14.74	1	4.39	1	4.39	1	4.39	1	4.39	1	4.39
0 -19 .....	59	6	62.50	2	16.00	--	--	--	--	--	--	--	--	--	--	--	--

## CHAPTER VII

## CONCLUSION

It is the main purpose of this study to disclose the diversity of time budgeting for each subject of activity in one-teacher schools in the counties included in this investigation. As a result of the findings, there is clear evidence that standardization in subject time allotment among these schools is totally lacking. One of the most striking facts revealed by the analysis of the current practice of time allotments, is the extreme variation in the total amount of time given to any subject or activity, which is the resultant of lack of agreement relative to what constitutes the amount of time considered essential for instruction in any given subject in the rural elementary grades.

The Three R's which are considered as the oldest subjects in the elementary curriculum and of which we might expect a high degree of standardization in time allotments among the schools, reveal extreme differences. Moreover, by considering this unconceivable situation from the size of the enrollment groups, the actual practice shows the same tendency. This current practice occurs in all subjects and activities whether it be in individual schools, group of schools, or indigrades.

However, the greatest degree of agreement in time allotments for any subject is found in arithmetic but even then several schools allot about one-half as much time as the others. Geography ranks second and language and grammar ranks the third in agreement among the rest of the school subjects.



The enrollment per one-teacher school included in this study ranges from 4 to 45 pupils. As a matter of fact, we expect that the larger the size of the school enrollment, the greater the amount of time spent, but on the contrary the situation is the reverse. One school having four pupils allotted 1,859 minutes per week which is 59 minutes more than is prescribed in the course of study, while another school of 45 pupils appropriated 1,800 minutes per week. These figures disclose another significant fact. The smaller the school enrollment is, the more number of subjects or activities that appear in the daily school program, thus resulting in wide variation of practice in time allotments.

Regardless of the school law which provides that the length of school term in all rural schools in Kansas is nine months, the school term in days varies from school to school. One school in Franklin county had 151 school days for the school year 1923-'29, while in a certain school in Wyandotte county had 169 school days in that school year. The interesting fact connected with the length of school term is---- The schools whose school terms fall below 160 days allow more amount of time per week for each subject than those schools whose school terms fall above 160.

In this study of subject allotments, an attempt has been to answer the following questions:

1. What is the present practice relative to time allotments for subjects and activities of the one-teacher schools?
2. How does the actual time allotment practice compare with recommendations of some scientific investigation for each subject?
3. What position have the Three R's in relation to the length of the school days?

4. Are there differences in time allotment practice which are apparently related to differences in school enrollment?

5. What subject or activity is assigned to each grade or grades?

The major part of this study has been devoted to answering the first and the fourth questions stated above. The practice in most schools is-- a county superintendent in a certain county may say with assurance that the amount of time given to a certain subject in a certain grade equal to his own estimation of time allotment for that subject in so many minutes. The result is that every school is independent from the other schools in time allotment. The detailed analysis of current practice for each subject in each enrollment group has been presented carefully in Chapter VI.

The attempt to answer question 2 involves a thorough search among the recent educational literature to disclose what scientific investigation and experiments had been conducted which would indicate a substantial amount of time necessary for instruction in the several subjects offered. Apparently the evidence has been conclusive enough to warrant the definite statement of optimum time allotments by specialists in two subjects-- spelling and penmanship.

To answer question 3, the evidence is that the Three R's receive the greatest portion of the total time devoted to all subjects, regardless of the length of the school term. They hold their position as the core of the elementary curriculum from first to eighth grades.

The answer of question 5, is clearly discussed and illustrated in Tables VII and VIII. They show that there are certain subjects which belong to certain grade or grades.

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# REPORT OF CLASSIFICATION

This report should be made in full to both the County Superintendent and the School District Clerk.

SCHEDULE OF CLASSES	BEGAN		THIS TERM (Pupils in Class by Number. See page 1)	FINISHED		NEXT TERM (Pupils in Class by Number. See page 1)	TO ENTER	
	Year	Mo.		Year	Mo.		Year	Mo.
Spelling.....	2							
	3							
	4							
	5							
	6							
	7							
	8							
Primer.....	1							
Reading.....	1							
	2							
	3							
	4							
	5							
	6							
	7							
Classics (Reading).....	8							
Arithmetic.....	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
Geography.....	4							
	5							
	6							
	7							
Language and Grammar, 1, 2, 3	1, 2, 3							
	4							
	5							
	6							
	7							
	8							





What work, if any, has been done in—

- Cooking: .....
- Sewing: .....
- Woodwork: .....
- Parent-Teacher Associations: .....
- Names and addresses of pupils perfect in attendance: .....

REMARKS (report any special work in agriculture, boys' and girls' club work, and any social gatherings or other matters of interest in connection with school work): .....

DAILY PROGRAM

FORENOON			AFTERNOON		
Time	Grade	Subjects	Time	Grade	Subjects

I HEREBY CERTIFY That the foregoing report is correct and that I have completed my daily and classification register and have filed the same with the District Clerk. I also give above a copy of my daily program.

(Signed) \_\_\_\_\_ Teacher.

Teacher's Term Report

District Clerk and the County Superintendent

School District No. ...., County, Kansas,

Term ending ..... 19.....

Received and filed ..... 19.....

District Clerk.