THESIS

A STUDY OF SCHOOL PROGRAMS

Submitted by

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For the Degree of Master of Science
Colorado Agricultural College
Fort Collins, Colorado
March 5, 1929

STATE AGRICULT'L COLLEGE FORT COLLINS, COLO.

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President C. A. Lory, Chairman Graduate Committee on Education Campus

My dear President Lory:

I hand you herewith the thesis prepared by Mr. Henry J. Igo.

Mr. Igo majored in rural education and minored in agricultural education and economics and sociology. Although his major was in rural education, still because he was taking courses under Professor Schmidt we made arrangements for Professor Schmidt to act as his advisor on the preparation of his thesis.

After the thesis was completed, Professor Schmidt read it carefully, gave me his approval in writing recommending that Mr. Igo be allowed 5 credits with a grade of "A". I likewise read the thesis carefully and submitted it to Miss Wattles, acting head of the English Department for her opinion on the thesis from a literary standpoint.

I recommend its approval for 5 credits with a grade of "A".

Very truly yours,

C. G. Sargent

Professor of Rural and Vocational Education

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Part I.

INTRODUCTION

PREFACE

This is a study of the programs of the first six grades of ten rural schools located in Larimer and Weld counties in Northern Colorado.

Stated more specifically, the major problem in this thesis is to find out what the actual conditions are in a specified number of rural schools with regard to the subjects and extra-subject activities given in the programs of these schools and the amount of time allotted to them, and to suggest any changes that might be made, as a result of this study, that would make a better balanced program which could be used in these schools.

The ten rural schools selected are of approximately the same size and are operating under approximately the same conditions. Nine of these schools are consolidated and the tenth school, although not consolidated, is comparable to the others in regard to size and operating conditions.

It is not the purpose of this study to state the objectives of these subjects or the objectives of the extra-subject
activities or for what purpose the various subjects and
extra-subject activities are included in these programs.
Nor is it the purpose of this study to discuss the different
methods of teaching employed in these schools.

IMPORTANCE OF THE SCHOOL PROGRAM

It is during this elementary school period of the child's life that his basic educational foundation is laid. Much of his later success in school depends upon how well he has mastered these basic fundamentals in the common school subjects. For this reason the elementary school program is important, as it contains those subjects and extra-subject activities which, if properly presented and mastered, equip the pupil with the desired basic fundamental school training.

THE OBJECTIVES OF THIS STUDY

The major problem of this study resolves itself into a discussion of the following objectives:

- (1) To find out to what extent the programs used in these schools are alike or unlike with regard to the subjects and extra-subject activities given in each grade and in the amount of time allotted to them.
- (2) To find out the conditions as they actually exist in these schools with regard to their programs.
- (3) To compare the time allotted to the different subjects and to the different extra-subject activities in the programs of these schools with a recognized standard, to determine to what extent they measure up to or fall below the standard.

(4) To construct a program that will measure up to the standard, which could be adapted to these schools and which would contain the best features of the programs of the schools studied.

REASONS FOR MAKING THIS STUDY

The writer has been preparing himself to enter the field of rural school supervision and administration work, and he believed, because of the importance of the elementary program in a school system, that he needed a more thorough acquaintance with this problem than he could obtain in the pursuit of college subjects devoted to Rural School Administration.

Furthermore, he hopes, in making this study, that the results obtained will be helpful to those engaged in administrative work or who intend to take up this work in the future.

METHOD OF PROCEDURE

Ten schools were selected to make this study. These schools were typical rural schools such as are found in the rural towns of Northern Colorado. The towns in which these schools were located varied in population from 250 to 1,000 inhabitants. Nine of these schools were consolidated and furnished transportation for their pupils, and the tenth school, although not consolidated, was of approximately the same size as the others and was operating under approximately

the same conditions.

The data was obtained by the writer in personal visits to each school. This method of securing data for the study was used instead of the questionnaire method because the writer felt that he would be better able to obtain the data desired in this way.

The data obtained, pertaining to the program of each of the six grades of each school studied, consisted of the names of school subjects offered and extra-subject activities, the hour in which each occurred, the length of each subject and extra-subject activity period, and the length of the noon recess, together with other essential facts.

A standard of comparison was made use of in this study. This standard was taken from Research Bulletins No. 5, Vol. I, and No. 4 and 5, Vol. III, of the National Educational Association. The data upon which the standard was constructed consisted of the time allotted to various subjects and extra-subject activities given in the first six grades of the schools in 49 large cities of the United States.

The factors set up in the standard were obtained from a careful study made, under the supervision of the National Educational Association. of the subjects and extra-subject activities given in the first six grades of 49 large city school systems of the United States.

This study furnishes a reliable record of the amount of time that these city school systems devote to the seventeen subjects and extra-subject activities found in the elementary school program.

The purpose of using a standard was to have a basis of comparison with which an evaluation of the following points could be made:

- (1) Whether these schools studied were devoting more or less time to the various subjects and extra-subject activities in each grade than was allotted in the standard.
- (2) How the programs of these schools compared with the standard in regard to the number of subjects and extrasubject activities given in each grade.
- (3) How the time allotted for the noon recess in the programs of these schools compared with the time allotted for the noon recess in the standard.

It is generally believed that the objectives of elementary education are the same for both city schools and rural
schools, so, for this reason, the time allotments given in
the standard can well be used as a basis of comparison with
the time allotments used in the rural schools upon which
this study is based. Another reason why this standard was
used is because the city schools have set the pace in the
development of new and better methods in elementary education in the past, thus making the highest standard that
could be obtained with which to make a comparison.

^{1.} Cubberley, E. P., Public School Administration, p. 61.

PART II

THE EXTENT OF VARIATION IN THE PROGRAMS OF THE TEN SCHOOLS

The problem in Part II of this thesis is to discover and show the extent of variation in the programs of the ten schools studied.

This problem is covered by the first objective of this thesis, as mentioned on page 6 in the Introduction.

In the study made of the programs of these ten schools it was found that there was quite a variation in:

- (a) The number of subjects and extra-subject activities given by each school in each of the six grades.
- (b) The time allotted by each of these ten schools in their programs to these subjects and extra-subject activities, in minutes per week, in each grade.

These variations in the programs with regard to the number of subjects and extra-subject activities given in each grade are shown by Tables I to VI, pages 14 to 19.

These tables were constructed in the following way:

- (a) By listing the total number of subjects and extrasubject activities given in the programs of each grade of these ten schools.
- (b) By listing the number of schools that give each subject or extra-subject activity in each grade.

In the First Grade, Table I, page 14, the following subjects were given by all of the schools studied:

Reading, Arithmetic, and Music, while all of the schools provided for Recesses in their programs. Out of the total number of 14 elementary school subjects and extra-subject activities included in the First Grade programs of these 10 schools, only 4 subjects and extra-subject activities were given by all of the schools in their programs.

In the Second Grade, Table II, page 15, the following subjects were given by all of the schools studied:

Reading, Spelling, Language,

Penmanship, Arithmetic, and Music, while all of the schools provided for Opening Exercises, Unassigned Study, and Recesses in their programs. Only 8 subjects and extra-subject activities were given by all of the schools out of the 15 elementary school subjects and extra-subject activities included in the Second Grade programs of the 10 schools.

In the Third Grade, Table III, page 16, the following subjects were given by all of the schools studied:

Reading, Language Spelling,

Penmanship, Arithmetic, and Music, while all of the schools provided for Opening Exercises, Unassigned Study, and Recesses in their programs. Only 8 subjects and extra-subject activities were given by all of the schools out of the 15 elementary school subjects and

extra-subject sctivities included in the Third Grade programs of the 10 schools.

In the Fourth Grade, Table IV, page 17, the following subjects were given by all of the schools studied:

Reading. Language. Spelling.

Penmanahip. Arithmetic, and Music, while all of the schools provided for Opening Exercises and Unassigned Study. Only 7 subjects and extra-subject activities were given by all of the schools, out of the 17 elementary school subjects included in the Fourth Grade programs of the 10 schools.

In the Fifth Grade, Table V, page 18, the following subjects were given by all of the schools studied:

Reading,

Penmanship.

Arithmetic, and

Music.

while all of the schools provided for Opening Exercises and Unassigned Study in their programs. Only 5 subjects and extra-subject activities were given by all of the schools, out of the 17 elementary school subjects and extra-subject activities included in the Fifth Grade programs of the 10 schools.

In the Sixth Grade, Table VI, page 19, the following subjects were given by all of the schools studied:

Reading.

Language,

Spelling,

Penmanship,

Arithmetic, Geography, end

Music.

while all of the schools provided for Opening Exercises and Unassigned Study in their programs. Only 8 subjects and extra-subject activities were given by all of the schools, out of the 17 elementary school subjects and extra-subject activities included in the Sixth Grade programs of the 10 schools.

In this study Opening Exercises and Unassigned Study are taken as one group under the heading of Miscellaneous.

Further variations in the subjects and extra-subject activities in the elementary school programs of the 10 schools, along with the variations mentioned above, are shown by Tables I to VI, which follow.

It will be observed from the data shown in Tables I to VI that: (a) There is a great variation in the number of subjects and extra-subject activities given by each school, in their programs, for each grade; (b) no one school gives all of the subjects and extra-subject activities found in all of the programs of these 10 schools.

NOTE: In all of the tables containing a list of subjects and extra-subject activities:

READING - includes phonics, literature and stories, SUPERVISED PLAY - includes games,

MISCELLANEOUS - includes opening exercises and unassigned study.

SCIENCE - denotes nature study or natural science.

The time indicated for recesses does not include the noon recess.

Table I

The Total Number of Subjects and Extra-Subject Activities
Given in the First Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity.

Grade I	
Subject or Extra-Subject Activity	Number of Schools in Which Given
Reading	10
Arithmetic	10
Music	10
Recesses	10
Art	9
Miscellaneous	9
Penmanship	7
Language	7
Hygiene	5
Physical Training	4
Spelling	3
Science	3
Supervised Play	3
Civics	2

Table II

The Total Number of Subjects and Extra-Subject Activities

Given in the Second Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity.

Grade II	
Subject or Extra-Subject Activity	Number of Schools In Which Given
Reading	10
Spelling	10
Language	10
Penmanship	10
Arithmetic	10
Music	10
Miscellaneous	10
Recesses	10
Art	9
Hygiene	7
Science	5
Physical Training	4
Supervised Play	3
Geography	1
Civics	1

Table III

The Total Number of Subjects and Extra-Subject Activities

Given in the Third Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity

Grade III	
Subject or Extra-Subject Activity	Number of Schools in Which Given
Reading	10
Language	10
Spelling	10
Penmanship	10
Arithmetic	10
Music	10
Miscellaneous	10
Recesses	10
Art	9
Geography	9
Hygiene	8
Science	4
History	2
Civics	2
Physical Training	1

Table IV

The Total Number of Subjects and Extra-Subject Activities
Given in the Fourth Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity

Grade IV	· · · · · · · · · · · · · · · · · · ·
Subject or Extra-Subject Activity	Number of Schools in Which Given
Reading	10
Language	10
Spelling	10
Penmanship	10
Arithmetic	10
Music	10
Miscellaneous	10
Geography	9
Hygiene	9
Art	9
Recesses	9
History	4
Science	3
Physical Training	3
Civics	1
Industrial Arts	1
Supervised Play	1

Table V

The Total Number of Subjects and Extra-Subject Activities

Given in the Fifth Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity

Grade V	
Subject or Extra-Subject Activity	Number of Schools in Which Given
Reading	10
Penmanship	10
Arithmetic	10
Music	10
Miscellaneous	10
Spelling	9
History	9
Geography	9
Recess	9
Language	8
Hygiene	8
Art	7
Science	4
Physical Training	2
Industrial Arts	1
Civics	1
Supervised Play	1

Table VI

The Total Number of Subjects and Extra-Subject Activities

Given in the Sixth Grades of These Ten Schools and the Number of Schools Giving Each Subject or Extra-Subject Activity

Grade VI	
Subjects or Extra-Subject Activity	Number of Schools in Which Given
Reading	10
Language	10
Spelling	10
Penmanship	10
Arithmetic	- 10
Geography	10
Music	10
Miscellaneous	10
History	9
Recesses	9
Hy gien e	8
Art	7
Science	4
Physical Training	3
Civics	2
Industrial Arts	1
Supervised Play	1

The variation in these programs with regard to the amount of time, in minutes per week, allotted to the various subjects and extra-subject activities for each of the six grades in these schools is shown in Tables VII to XII on pages 21 to 27.

These six tables were made up by listing the amount of time, in minutes per week, that was devoted to each subject in each grade in all of the schools studied.

Take for example the time allotted to various subjects and extra-subject activities in the First Grade by these ten schools, Table VII, page 21. The time devoted to Language in this grade varied from 25 minutes per week in one school to 150 minutes per week in another, while three schools did not devote any time to the subject at all. In the case of Reading, the time allotted varied from 463 minutes per week in one school to 975 minutes per week in another school. Only three schools devoted any time to Spelling in this grade and the time allotment for these schools varied from 25 minutes per week.

The same thing is true of each grade, to a greater or less degree, for all subjects and extra-subject activities found in the programs of these ten schools.

Table VII

The Time Allotted, in Minutes Per Week, by These Schools to the Subjects and Extra-Subject Activities in Their First

		Grad	ie I					Grade I									
Subjects			Scl	nool	8												
(In minutes	1	2	3	4	5	6	7	8	9	10							
per week) Language	0	0	0	100	25	6 7	50	7 5	4 5	150							
Reading	750	875	5 50	975	5 7 5	350	77 5	463	625	550							
Spelling	38	0	0	0	0	0	0	25	0	7 5							
Penmanship	150	100	100	0	0	0	50	60	100	7 5							
Arithmetic	7 5	100	150	150	100	100	7 5	162	100	150							
History	0	0	0	0	0	0	0	0	0	0							
Civics	0	0	0	0	0	6 6	0	0	0	50							
Geography	0	0	0	0	0	0	0	0	0	0							
Science	7 5	0	20	0	0	0	0	0	30	0							
Hygiene	38	0	0	0	0	66	7 5	0	100	50							
Physical Training	. 0	50	25	0	50	0	0	0	7 5	0							
Music	7 5	7 5	80	100	7 5	100	50	100	50	50							
Art	38	0	225	100	150	200	50	165	150	7 5							
Industrial Arts	0	0	0	0	0	0	0	0	0	0							
Recesses	150	150	150	200	200	100	200	200	150	150							
Supervised Play	0	0	50	0	0	250	0	0	0	105							
Miscellaneous	7 5	150	150	0	50	50	125	250	200	75							

Table VIII

The Time Allotted, in Minutes Per Week, by These Schools to

the Subjects and Extra-Subject Activities in Their Second
Grade Programs.

Grade II										
Subjects					S	choo!	ls			
(In minutes	1	2	3	4	5	6	7	8	9	10
per week) Language	50	100	7 5	100	100	59	7 5	7 5	200	150
Reading	47 5	605	4 50	625	290	550	350	600	5 80	600
Spelling	17 5	150	50	100	7 5	100	100	125	185	100
Penmanship	125	7 5	50	100	100	100	100	60	7 5	100
Arithmetic	250	150	225	22 5	150	150	125	200	350	200
History	0	0	0	0	0	0	0	0	0	0
Civics	0	0	0	0	0	58	0	0	0	0
Geography	0	0	0	0	0	0	0	0	125	0
Science	62	0	20	0	80	0	38	0	0	50
Hygiene	0	0	25	50	7 5	58	37	0	7 5	50
Physical Training	0	25	0	0	7 5	25	25	0	0	0
Music	7 5	7 5	100	100	100	100	100	100	0	90
Art	63	0	150	100	165	125	88	90	30	60
Industrial Arts	0	0	0	0	0	0	0	0	0	0
Recesses	175	150	150	225	200	150	200	200	150	150
Supervised Play	0	25	50	0	0	0	0	0	0	100
Miscellaneous	50	95	150	7 5	100	25	212	50	25	150

Table IX

The Time Allotted, in Minutes Per Week, by These Schools to the Subjects and Extra-Subject Activities in Their Third

Grade Programs.

Grade Hograms.											
Grade III											
Subjects	Schools										
(In minutes per week)	1	2	3	4	5	6	7	8	9	10	
Language	100	7 5	150	100	175	100	100	125	100	150	
Reading	300	625	425	5 7 5	37 5	350	500	400	225	520	
Spelling	150	125	150	175	125	100	0	225	150	145	
Penmanship	50	7 5	7 5	100	100	50	150	100	40	100	
Arithmetic	150	100	300	300	150	200	300	200	225	150	
History	0	0	0	0	0	0	0	0	0	80	
Civics	0	0	0	0	0	50	0	0	0	50	
Geography	250	0	175	50	225	100	125	250	200	7 5	
Science	0	Ó	0	50	0	50	0	0	124	7 5	
Hygiene	50	0	60	50	50	100	62	0	126	50	
Physical Training	0	0	0	0	25	0	0	0	0	0	
Music	7 5	7 5	6 5	100	7 5	100	100	7 5	40	40	
Art	100	60	7 5	50	50	100	63	0	60	60	
Industrial Arts	0	0	0	0	0	0	0	0	0	0	
Recesses	1 7 5	150	150	200	200	200	200	300	150	150	
Supervised Play	0	0	0	0	0	0	0	0	0	0	
Miscellaneous	250	140	175	50	150	50	150	7 5	300	85	

Table X

The Time Allotted, in Minutes Per Week, by These Schools to the Subjects and Extra-Subject Activities in Their Fourth

Grade Programs

	G	rade	IV		·-·					
Subjects							Sch	ools		
(In minutes per week)	1	2	3	4	5	6	7	8	9	10
Language	200	150	200	17 5	100	100	150	225	200	200
Reading	300	37 5	225	460	175	225	300	100	250	250
Spelling	100	125	7 5	100	125	100	225	225	17 5	100
Penmanship	50	100	100	7 5	100	100	7 5	100	40	100
Arithmetic	300	250	300	300	275	150	200	37 5	260	300
History	0	0	85	50	0	175	0	0	0	50
Civics	0	0	0	0	0	0	0	0	0	2 5
Geography	200	125	225	200	125	50	150	0	200	50
Science	0	0	0	0	0	0	100	0	63	100
Hygiene	50	0	125	7 5	175	100	150	200	62	25
Physical Training	. 0	50	0	0	25	0	0	0	0	120
Music	7 5	7 5	80	100	7 5	100	100	7 5	40	100
Art	100	60	90	40	50	150	150	0	60	100
Industrial Arts	0	0	0	0	0	0	0	0	0	60
Recesses	175	150	150	150	200	150	200	200	150	0
Supervised Play	0	0	0	0	0	0	0	0	0	120
Miscellaneous	100	140	125	7 5	17 5	50	50	150	300	50

Table XI

The Time Allotted, in Minutes Per Week, by These Schools to the Subjects and Extra-Subject Activities in Their Fifth

Grade Programs.

	Go	rade	٧							
Subjects	Schools									
(In minutes per week)	1	2	3	4	5	6	7	8	9	10
Language	0	0	150	100	100	150	175	275	100	200
Reading	80	275	175	225	150	375	200	300	225	200
Spelling	150	175	125	100	100	100	88	0	150	100
Penmanship	7 5	7 5	7 5	100	100	100	87	100	40	100
Arithmetic	200	200	365	350	225	100	27 5	275	225	300
History	70	90	125	37	60	175	150	0	200	100
Civics	Ó	0	0	0	0	0	0	0	0	50
Geography	105	225	175	125	200	200	150	0	200	100
Science	125	0	60	0	0	0	0	0	125	100
Hygiene	0	0	150	125	100	100	112	150	125	50
Physical Training	8 7	0	0	0	0	0	0	0	0	120
Music	150	150	40	100	150	100	125	7 5	40	100
Art	0	60	90	38	40	0	113	0	60	100
Industrial Arts	0	0	0	0	0	0	0	0	0	60
Recesses	150	150	150	150	200	200	200	200	150	0
Supervised Play	0	0	0	0	0	0	0	0	0	120
Miscellaneous	287	50	150	3 50	3 25	100	7 5	150	160	50

Table XII

The Time Allotted, in Minutes Per Week, by These Schools to the Subjects and Extra-Subject Activities in Their Sixth Grade Programs.

Grade VI										
Subjects							Scho	ools		
(In minutes per week)	1	2	3	4	5	6	7	8	9	10
Language	120	150	50	200	150	175	100	200	200	200
Reading	80	100	225	200	159	2 25	125	100	2 50	200
S pelling	150	125	60	125	100	125	100	150	135	100
Penmanship	7 5	7 5	60	7 5	150	100	7 5	7 5	40	100
Arithmetic	200	37 5	170	300	250	200	200	3 7 5	200	300
History	70	150	150	225	200	225	175	0	200	100
Civics	0	0	0	0	0	0	25	0	0	50
Geography	105	275	225	200	200	250	200	150	200	100
Science	175	0	0	0	0	0	25	0	63	100
Hygiene	0	60	7 5	150	90	50	120	0	62	50
Physical Training	8 7	0	150	0	0	0	0	0	0	120
Music	150	150	50	100	100	100	150	50	40	100
Art	0	60	30	0	60	7 5	30	0	60	100
Industrial Arts	0	0	0	0	0	0	0	0	0	60
Recesses	150	150	150	150	200	200	200	150	150	0
Supervised Play	0	0	0	0	0	0	0	0	0	120
Miscellaneous	287	50	130	7 5	150	7 5	7 5	550	200	50

CONCLUSIONS

The following conclusions are deducted from the study of the extent of variation in the programs of these schools:

- (1) There was very little uniformity in the programs used in the same grades by these ten different schools.
- (2) That there was a variation in the amount of time allotted to the same subjects in the same grades by these ten schools.
- (3) That there was a variation in the number of subjects and extra-subject activity periods in the programs of these ten schools for each grade.
- (4) That there was a variation in the number of schools giving the same subject or the same extra-subject activity in the same grade in the programs of the ten schools.
- (5) That the superintendents of these ten schools did not consider the various subjects and extra-subject activities of equal importance in each grade because:
 - (a) The kind and number of subjects and extra-subject activities varied in each grade of these ten schools;
 - (b) Some of the subjects and extra-subject activities found in some programs were left out entirely in other programs;
 - (c) The time allotment for the same subject or extrasubject activity varied in the different grades.

Part III

AN ANALYSIS OF THE PROGRAMS USED IN THESE TEN SCHOOLS

It is the object of Part III of this thesis to make an analysis of the programs used in these ten schools in order to find out what the actual conditions are with regard to:

- (1) The average amount of time allotted to each subject and extra-subject activity in each grade by these ten schools, in minutes per day.
- (2) The importance of each subject and extra-subject activity in each grade, based upon the average amount of time allotted to them in each grade, in minutes per week, by the ten schools.
- (3) The importance of each subject and extra-subject activity given in the entire program of these ten schools, based upon the average amount of time devoted to them, in minutes per week.
- (4) The average number of periods per day in each grade.
- (5) The time of opening and closing the school day for each grade.
- (6) The length and number of recess periods for each grade.
- (7) The length of the noon recess for each grade.
- (8) Time devoted to Supervised Play and Physical Training.

Part III covers the second objective of this thesis as found on page 6 in the Introduction.

RESULT OF THE ANALYSIS

VARIATION IN THE AMOUNT OF TIME DEVOTED TO THE VARIOUS SUBJECTS AND EXTRA-SUBJECT ACTIVITIES BY THESE TEN SCHOOLS IN THEIR PROGRAMS.

Table XIII shows the average amount of time allotted, in minutes per day, to each subject and extra-subject activity that was given in each grade, by these ten schools.

This table was constructed by dividing the total number of minutes allotted by the ten schools, in minutes per day, to each subject and extra-subject activity for each grade, by the number of schools giving the subject or extra-subject activity.

It can be seen from this table that there is a great variation in the number of minutes per day devoted to the same subject or extra-subject activity in each grade by each school.

THE IMPORTANCE OF THE VARIOUS SUBJECTS GIVEN IN EACH GRADE BY THESE SCHOOLS

The importance of a subject in the elementary school program is indicated by the amount of time devoted to it.

In Table XIV, page 32, the importance of the different subjects in each grade is shown. The order of importance is based upon the total number of minutes per week that was devoted to the subject by the ten schools.

Table XIII

Average Amount of Time Allotted by the Ten Schools, in Minutes Per Day, to the Subjects and Extra-Subject Activities Given by These Schools in Each Grade.

Given by These Schools in Each Grade.						
	Tin	e in	minut Grade	es pe	r day	
Subject or Extra-Subject Activity	1	2	3	4	5	6
Reading	130	103	86	53	44	33
Language	15	20	23	34	31	31
S pelling	9	23	27	27	24	25
Arithmetic	23	40	41	54	50	51
Penmanship	18	18	17	17	15	16
History	0	0	8	18	38	33
Civics	12	12	10	5	10	7
Geography	0	25	32	29	33	38
Science	8	10	15	18	23	18
Hygiene	13	11	14	21	23	16
Music	15	17	15	16	21	20
Art	25	19	14	18	14	12
Industrial Arts	0	0	0	12	12	12
Physical Training	10	8	5	13	21	24
Recesses	33	3 5	37	34	34	33
Supervised Play	27	12	0	24	24	24
Miscellaneous	27	19	28	24	40	32

Table XIV

The Importance of Each Subject Given in Each Grade of These Schools, Based Upon the Average Amount of Time Allotted to

Them in Minutes Per Week.

			Grade			
*	I	II	III	IV	٧	VI
1	Reading	Reading	Reading	Arith.	Arith.	Arith.
2	Arith.	Arith.	Arith.	Read.	Read.	Geo.
3	Art	Spell.	Geo.	Lang.	Misc.	Read.
4	Misc.	Lang.	Misc.	Spell.	Geo.	Misc.
5	Music	Misc.	Spell.	Geo.	Lang.	Lang.
6	Pen.	Pen.	Lang.	Misc.	Spell.	Hist.
7	Lang.	Art	Pen.	Hygiene	Music	Spell.
8.	Hygiene	Music	Music	Pen.	Hist.	Music
9	Spell.	Hygiene	Art	Music	Hygiene	Pen.
10	Science	Science	Hygiene	Art	Pen.	Hygiene
11	Civics	Geo.	Science	Hist.	Art.	Art.
12		Civics	Civics	Sci.	Sci.	Sci.
-13			Hist.	Ind.Art	Ind.Art	Civics
14				Civics	Civics	Ind.Art

^{*} Importance

It will be observed from Table XIV that the subjects vary in importance as they appear in each grade.

- (a) Reading and Arithmetic maintain their position as the most important subjects in all of the six elementary grades.
- (b) Art and Penmanship decrease in importance from the first grade to the sixth.
- (c) Spelling is stressed the most in the second grade and it decreases in importance from that grade to the sixth.
- (d) Language increases in importance from the first grade on.
- (e) Geography was first given in the second grade and increased in importance, while History was first given in the third grade and also increased in importance to the sixth grade.
- (f) The time spent upon Science and Civics remained about the same through the six elementary grades and they were rated from tenth to fourteenth in importance in the school programs.
- (g) Music and Hygiene remained at about the same level of importance throughout the six grades, Music being rated a little higher than Hygiene.
- (h) Industrial Art was rated the lowest. In fact, only one school out of the ten devoted any time to it at all.

IMPORTANCE OF THE VARIOUS SUBJECTS IN THE ENTIRE ELEMENTARY PROGRAM OF THESE TEN SCHOOLS

In listing the subjects found in the programs of these ten schools in the order of their importance, based upon the total time allotted to them by all of the schools, in minutes per week, they arranged themselves in the following order:

Importance	Subject
lst	Reading
2d	Arithmetic
3 d	Geography
4th	Language
5th	Spelling
6th	Music
7th	Penmanship
8th	Art
9th	Hygiene
lOth	History
llth	Science
12th	Civics
13th	Industrial Arts

NUMBER OF PERIODS IN THE SCHOOL DAY

The number of periods in the school day for each grade of these ten schools showed a great variation.

Grade	Variation in Periods Per Day	Average Number of Periods Per Day
I	11-22	17
II	14-22	18
III	14-22	18
IV	14-22	18
٧	12-19	15
VI -	12-16	14

In all of the schools there were more periods in the day for the first four grades than for the last two grades.

TIME OF OPENING AND CLOSING THE SCHOOL DAY

There was not so much of a variation in the time of opening and closing the school day in these schools.

Number of schools	Time of Opening	Time of Closing
7	9:00 a. m.	4:00 p. m.
1	9:00 a. m.	3:30 p. m.
1	8:45 a. m.	3:50 p. m.
1	8:45 a. m.	3:35 p. m.

The school day varied in length for the first two grades from 380 minutes per day to 405 minutes per day.

In the first grade, seven out of the ten schools had a 390 minute day.

In the second grade, six out of the ten schools had a 390 minute day.

In the third, fourth, fifth, and sixth grades, the school day varied between 390 minutes per day and 425 minutes per day.

In the third grade, three schools had a 390 minute day and three had a 420 minute day.

In the fourth grade, four had a 420 minute day, while two had a 405 minute day and two had a 390 minute day.

In the fifth grade, three had a 420 minute day, two had a 405 minute day, and two a 390 minute day.

In the sixth grade, six out of the ten schools had a 420 minute day.

In summarizing, it is found that the majority of the schools (a) had a 390 minute day for the first two grades, (b) the third grade was about equally divided between the 390 minute day and the 420 minute day, and (c) the 420 minute day was used in an increased number of cases from the third grade to the sixth grade.

RECESS AND NOON HOUR

The total number of minutes per day for recesses and the number of minutes per day allotted to the noon hour were as follows:

Grade	Recesses			Noc	on
I	30 to 40 minutes	7 5	to	105	minutes
II	35 to 45 minutes	6 5	to	105	minutes
III	30 to 40 minutes	4 5	to	105	minutes
IV	O to 40 minutes	4 5	to	7 5	minutes
v	O to 40 minutes	45	to	7 5	minutes
VI	O to 40 minutes	4 5	to	7 5	minutes

The majority of the schools gave two fifteen minute recesses and a ninety minute noon for the first two grades, and two fifteen minute recesses and a sixty minute noon for the third, fourth, fifth, and sixth grades.

One school did not have recesses in the fourth, fifth, and sixth grades, but substituted a period devoted to physical exercise each day.

SUPERVISED PLAY AND PHYSICAL TRAINING

With regard to the comparison of the amount of time devoted to supervised play and physical training in the six grades of these ten schools, it was found that:

- (a) In the first two grades more time was devoted to supervised play than to physical training;
- (b) In the third, fourth, fifth, and sixth grades the positions of the two were just reversed, more time being devoted to physical training than to supervised play.

CONCLUSIONS

Conclusions drawn from the analysis of the programs of these ten schools are as follows:

- 1. That certain subjects in the programs of these schools are stressed more than others;
- 2. That some subjects are stressed more as the child progresses from the first to the sixth grade; some subjects decrease in importance, and some subjects keep their same relative importance in the program from the first to the sixth grade;
- 3. In importance of the subject groups, based upon the time allotted to them, the "Three Rs" ranked first (reading, penmanship, language, spelling, and arithmetic); the Social Subjects ranked second (history, geography, and civics); music and art ranked third; and the remaining subjects ranked fourth (science, hygiene, and industrial arts);
- 4. That the number of periods in the school day for the first four grades was approximately the same, while the number of periods per day decreased for the fifth and sixth grades;

- 5. The length of the school day was the same in most cases for the first two grades, but increased in length for each grade from the third to the sixth;
- 6. The total time allotted for recesses in all grades was approximately the same, the first two grades having shorter recesses, but more in number. The noon recess was longer for the first three grades than it was for the last three grades;
- 7. In the first two grades more time was allotted to supervised play than to physical training, while in the third, fourth, fifth, and sixth grades more time was given to physical training than to supervised play;
- 8. That 80 per cent of the total time allotted in the programs was devoted to the subjects; 12 per cent to extra-subject activities; and 8 per cent to miscellaneous time (opening exercises and unassigned study).

Part IV

A COMPARISON OF THE PROGRAMS USED IN THE TEN SCHOOLS WITH THE STANDARD

It is the purpose of this part of the thesis to show how the programs of these ten schools compare, in time allotted to each subject and extra-subject activity, with the Standard.

This problem covers the third objective of this thesis as mentioned in the Introduction on page 6.

The time allotments used, for each subject and each extra-subject activity for each grade in the elementary school program in the Standard, was found by dividing the total number of minutes per week devoted by the 69 city schools to each subject and each extra-subject activity by the number of schools studied, or 69.

The time allotments for each subject and each extrasubject activity for each grade in the elementary school program of these ten schools were found by the writer in the same way. The total number of minutes devoted by the ten schools to each subject and extra-subject activity in each grade of the elementary school program was divided by the number of schools, or ten.

The resulting data obtained for both the Standard and the ten schools is shown in Tables XV and XVI, pp. 41 and 42. Table XV shows the subjects and Table XVI shows the extrasubject activities.

Table XV

A Comparison of the Average Time Devoted, in Minutes Per Week, to Subjects in the First Six grades of the Ten Schools with the First Six Grades of the Standard.

* S - Standard C - Ten Schools

5 - Stanuar		<u> </u>	3011001				
			Grad	es			
Subjects	*	I	II	III	IV	٧	VI.
Reading	S	421 649	404 512.5	332 429.5	245 266	182 220.5	141 165.5
Language	S	130 5 1	141 98	167 117.5	176 170	18 7 125	194 154.5
Spelling	S	39 14	82 116	87 134.5	85 1 3 5	82 109	78 117
Arithmetic	S	6 4 116	143 202.5	193 207.5	206 271	211 251.5	211 257
Penmanship	S	6 7 6 3. 5	72 88.5	77 84	78 84	77 85	7 5 82.5
History	S	17 0	19 0	30 8	5 4 36	84 101	97 149.5
Civics	S	9 12	12 6	11 10	12 2.5	1 4 5	15 7. 5
Geography	S	11	14 125	59 14 5	137 132.5	156 148	162 190.5
Science	S	22 12.5	23 2 5	23 30	23 26	21 46	21 36
Hygiene	S	16 33	16 37	18 55	22 96	27 91	2 7 66
Music	SC	71 75.5	74 8 4	74 74.5	77 82	7 6 103	74 99
Art	S	8 7 115	88 8 7	87 62	86 80	8 2 50	7 5 41.5
Industrial Arts	s	22 0	22 0	2 5 0	30 6	50 6	65 6

Table XVI

A Comparison of the Average Time Allotment, in Minutes Per Week, Devoted to Extra-Subject Periods in the First Six Grades of the Ten Schools with the First Six Grades of the Standard

Extra-Subject		Grades					
Periods	*	I	II	III	IV	٧	VΙ
Physical Training	ac	90 20	97 15	89 2. 5	90 19. 5	90 2 1	89 36
Recesses	SC	105 165	106 175	106 187.5	96 152.5	91 155	90 150
Supervised Play	SC	22 40.5	19 17.5	18	14 12	16 12	16 12
Miscellaneous	SC	97 112.5	93 93	99 1 42. 5	97 121.5	99 170	98 164

^{*} S - Standard

C - Ten Schools

In order to show more clearly the comparison of the time allotments of the Standard with the time allotments given by the ten schools to the subjects of the elementary school program, Graphs I to XIII are presented.

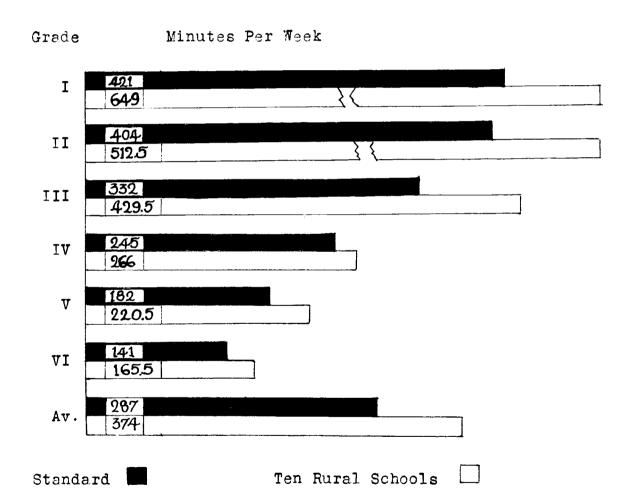
These graphs show the comparison of the time allotments in the Standard with those in the ten schools studied, for each subject in the six grades, and the average
time allotment made to the subject for all six grades by
the Standard and by the ten schools.

In Graphs XIV to XVII the same comparison is shown for the extra-subject activities found in the elementary school program of the Standard and of the ten schools.

Graph I

READING

A Comparison of the Amount of Time Being Devoted to Reading in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

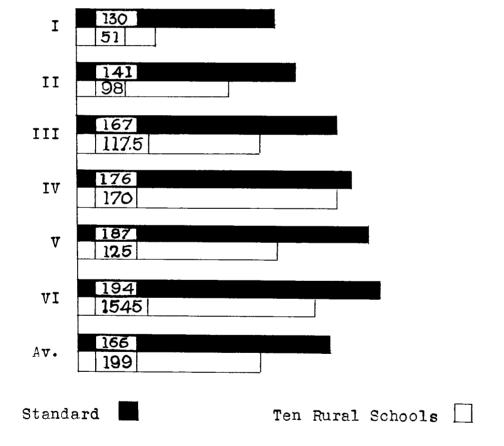


Graph II LANGUAGE

A Comparison of the Amount of Time Being Devoted to

Language in the First Six Grades of Ten Rural Schools

With the Standard, in Minutes Per Week.



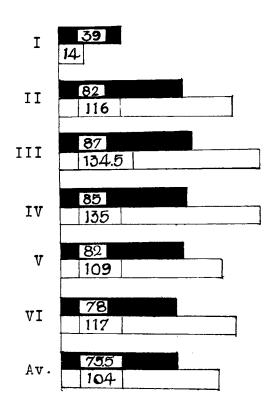
Minutes Per Week

Grade

Graph III SPELLING

A Comparison of the Amount of Time Being Devoted to Spelling in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

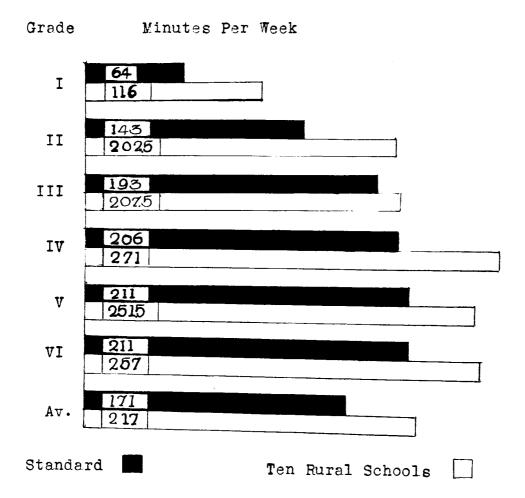
Grade Minutes Per Week



Graph IV

ARITHMETIC

A Comparison of the Amount of Time Being Devoted to
Arithmetic in the First Six Grades of Ten Rural Schools
With the Standard, in Minutes Per Week.



Graph V

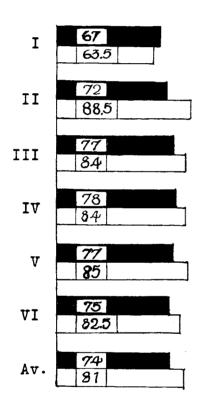
PENMANSHIP

A Comparison of the Amount of Time Being Devoted to

Penmanship in the First Six Grades of Ten Rural Schools

With the Standard, in Minutes Per Week.

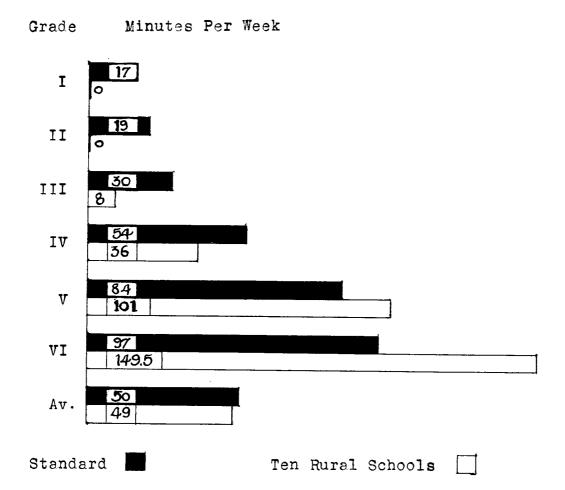
Grade Minutes Per Week



Graph VI

HISTORY

A Comparison of the Amount of Time Being Devoted to
History in the First Six Grades of Ten Rural Schools
With the Standard, in Minutes Per Week.



Graph VII

CIVICS

A Comparison of the Amount of Time Being Devoted to Civics in the First Six Grades of Ten Rural Schools
With the Standard, in Minutes Per Week.

Grade Minutes Per Week

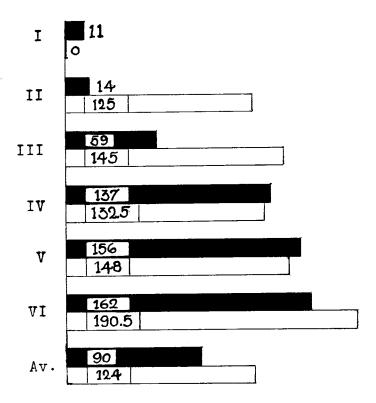
I	12
II	12
III	10
IV	1 <u>2</u> 2.5
٧	14 5
VI	15 7.5
Av.	12

Graph VIII

GEOGRAPHY

A Comparison of the Amount of Time Being Devoted to Geography in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

Grade Minutes Per Week

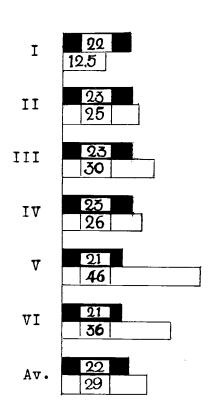


Graph IX

SCIENCE

A Comparison of the Amount of Time Being Devoted to Science in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

Grade Minutes Per Week



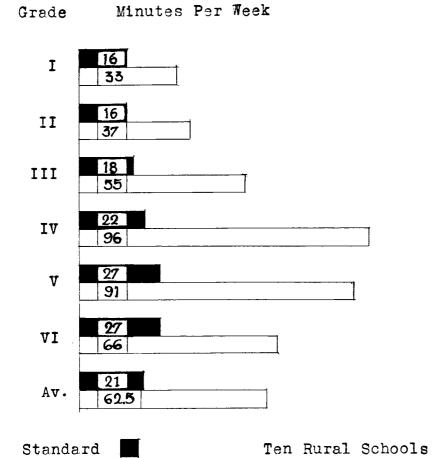
Graph X

HYGIENE

A Comparison of the Amount of Time Being Devoted to

Hygiene in the First Six Grades of Ten Rural Schools

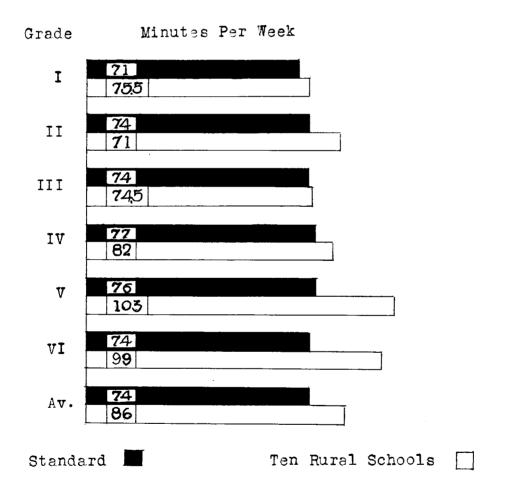
With the Standard, in Minutes Per Week.



Graph XI

MUSIC

A Comparison of the Amount of Time Being Devoted to Music in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.



Graph XII

ART

A Comparison of the Amount of Time Being Devoted to
Art in the First Six Grades of Ten Rural Schools
With the Standard, in Minutes Per Week.

Minutes Per Week Grade 87 Ι 115 88 ΙI 87 87 III 62 86 IV 80 82 V 50 75 VI 41.5 Av. 73

Ten Rural Schools

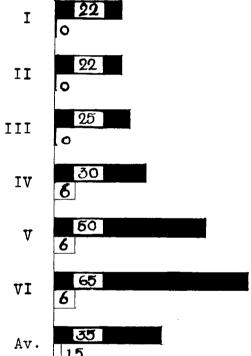
Standard

Graph XIII

INDUSTRIAL ARTS

A Comparison of the Amount of Time Being Devoted to Industrial Arts in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

Grade Minutes Per Week



SUMMARY OF GRAPHS I TO XIII

In summarizing Graphs I to XIII, which show the comparison of the time allotted by the Standard with that allotted by the ten schools to the elementary school subjects, the following points are noted:

- (1) That more time was allotted by the ten schools to:

 Reading Spelling Civics

 Geography Science Hygiene

 Music
- (2) That more time was allotted by the Standard to:

 Language History Art

 Industrial Arts
- (3) That approximately the same amount of time was spent upon Penmanship and Arithmetic in the ten schools and in the Standard.
- (4) Those subjects which increased or decreased in importance alike in the programs of the ten schools and in the Standard were:
 - (a) Reading and Art. Both subjects were stressed more in the first grade and decreased in importance up to the sixth grade.
 - (b) Arithmetic, Geography, History, and Hygiene increased in importance from the first grade up to the sixth grade, although History and Geography were given in all of the six

grades in the Standard, while in the ten schools Geography was not given in the first grade and History was not given in the first two grades.

- (c) Spelling, in both the Standard and the ten schools, was stressed most in the third grade.
- (5) Those subjects which were not stressed equally by the Standard and the ten schools were:

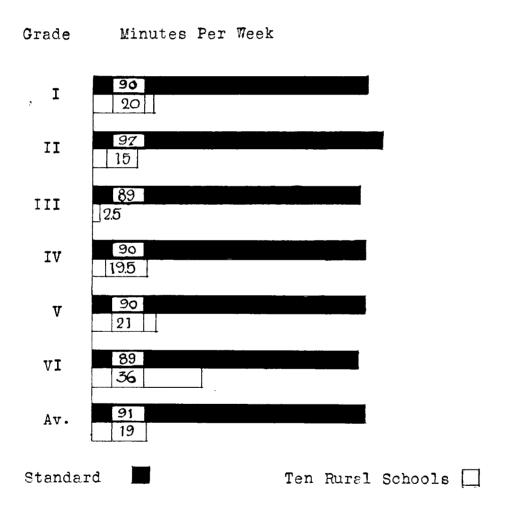
Subject	Highest point in the Standard	Highest point in the ten schools
Language	Grade VI	Grade IV
Penmanship	Grade IV	Grade II
Civics	Grade VI	Grades I and II
Science	Grades III and IV	Grade V
Music	Grade IV	Grade V
Industrial Arts	Grade VI	Grades IV, V, VI

Graph XIV

A Comparison of the Amount of Time Being Devoted to

Physical Training in the First Six Grades of Ten Rural

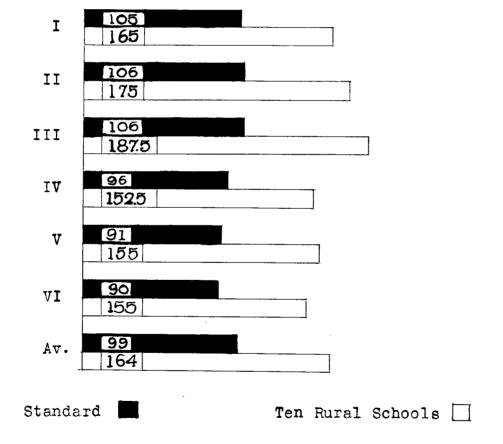
Schools With the Standard, in Minutes Per Week.



Graph XV

RECESSES

A Comparison of the Amount of Time Being Devoted to
Recesses in the First Six Grades of Ten Rural Schools
With the Standard, in Minutes Per Week.



Minutes Per Week

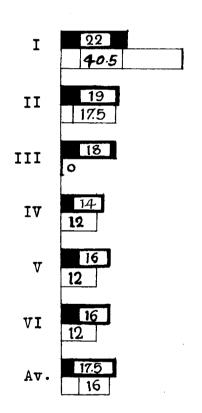
Grade

Graph XVI

SUPERVISED PLAY

A Comparison of the Amount of Time Being Devoted to Supervised Play in the First Six Grades of Ten Rural Schools With the Standard, in Minutes Per Week.

Grade Minutes Per Week



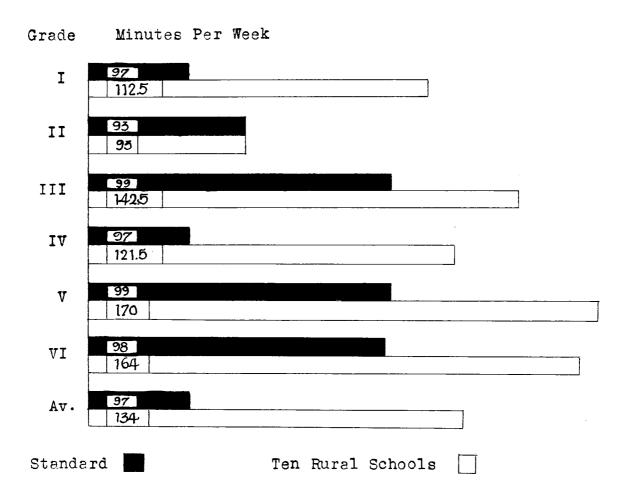
Standard ____

Ten Rural Schools

Graph XVII

MISCELLANEOUS

A Comparison of the Amount of Time Being Devoted to Miscellaneous Activities in the First Six Grades of Ten Rural Schools with the Standard, in Minutes Per Week.



SUMMARY OF GRAPHS XIV TO XVII

In summarizing Graphs XIV to XVII, which show the amount of time allotted by the Standard and the ten schools to the extra-subject activities found in the elementary school program, the following points are noted:

- (1) More time was devoted to Recesses in the ten schools than was devoted to this activity in the Standard.
- (2) More time was devoted to Opening Exercises and Unassigned Study (Miscellaneous) by the ten schools in their programs than was allotted in the Standard.
- (3) More time was allotted to Physical Training by the Standard than was devoted by the ten schools.
- (4) Approximately the same amount of time was allotted to Supervised Play in both programs.

COMPARISON OF THE TIME DEVOTED TO SUBJECTS AND EXTRA-SUBJECT ACTIVITIES IN THE STANDARD WITH THAT OF THE TEN SCHOOLS

Table XVII, page 64, shows a comparison of the total average time devoted, in minutes per week, to the subjects and extra-subject activities in the first six grades of the Standard and in the ten schools.

The total average time devoted to each subject and extrasubject activity by the six grades in the Standard and by the ten schools was found by adding the average time devoted, in minutes per week, to the subject and extra-subject activity for each grade in the standard and in the ten schools, from Table XV, page 41, and Table XVI, page 42.

Table XVII

A Comparison of the Total Average Time Devoted, in Minutes

Per Week, to Subjects and Extra-Subject Activity Periods

In the First Six Grades of These Ten Schools with the First

Six Grades of the Standard.

Subjects and Extra- Subject Periods	Total Time Per Week (S	
	Standard	Ten Schools
Reading	1725	2243.5
Language	995	716
Spelling	453	625
Penmanship	446	487.5
Arithmetic	1028	1305.5
History	301	294.5
Civics	73	43
Geography	539	741
Science	133	175.5
Hygiene	126	3 7 8
Physical Training	5 3 5	114
Music	446	5 18
Art	505	435.5
Industrial Arts	214	18
Recesses	594	985
Supervised Play	99	94
Miscellaneous	583	803.5
Total Number of Minutes	8795	9978

SUMMARY OF TABLE XVII

In summarizing Table XVII, which shows a comparison of the total average time allotted to the subjects and extrasubject activities in the Standard and in the ten schools, the following points are noted:

- 1. More minutes per week are devoted to the total number of subjects and extra-subject activity periods in the programs of the ten schools than in the Standard.
- 2. The importance of these subjects and extra-subject activity periods, based upon the time devoted to them by the Standard and in the ten schools, is as follows:
 - (a) Those subjects and extra subject activity periods which hold the same position of importance
 in both the programs of the ten schools and the
 Standard are:

Subject	Importance in Standard	Importance in the ten schools
Reading	lst	lst
Arithmetic	2d	2d
History	12th	12th

(b) Those subjects and extra-subject activity periods in which there is a slight difference in importance:

Subject	Importance in Standard	Importance in the ten schools
Recesses Miscellaneous Geography Music Penmanship Science Supervised Play Civics	4th 5th 6th 9th 10th 14th 7	3d 4th 5th 10th 9th 13th 15th

(c) Those subjects and extra-subject periods where the difference in importance is more marked:

Subject	Importance in Standard	Importance in the ten schools
Art Language Spelling Hygiene Industrial Arts Physical Training	8th 3d 11th 15th 13th 7th	10th 6th 7th 11th 17th 14th

COMPARISON OF THE TIME ALLOTTED TO THE "THREE Rs", THE FUNDAMENTAL SUBJECTS, AND THE SPECIAL SUBJECTS IN THE STANDARD WITH THAT IN THIS TEN SCHOOLS

Table XVIII shows a comparison of the time spent on the "Three Rs", the Fundamental Subjects, and the Special Subjects in the ten schools with the time allotted to these subject groups in the Standard.

This table brings out some interesting points in the comparison:

- 1. Although the programs of the ten schools devote a greater amount of time to all of the subjects and extra-subject activity periods than is spent in the Standard, the percent of the total time devoted to these subject groups in the ten schools and in the Standard is very uniform.
- 2. The ten schools spent more time upon the "Three R" subjects than the Standard, but the increase is due to the fact that the ten schools devoted more time to arithmetic, while the schools in the Standard devoted more time to the English subjects.

- 3. The ten schools spent a greater percent of their total time on the total Fundamental Subjects than did the Standard.
- 4. The Standard devoted a greater percentage of time to the Special Subjects and the E_X tra-Subject periods than did the ten schools.

Table XVIII

A Comparison of the Time Devoted, in Minutes Per Week, to the "Three Rs", the Fundamental Subjects, and the Special Subjects in the First Six Grades of These Ten Schools with That in the First Six Grades in the Standard.

Subjects	Min. per week (Standard)	Minutes per week (Schools)		Percent total time (Schools)
The "Three Rs": Language, Reading, Spelling, Writing, Arithmetic	3619 1028	4072.5 1305.5	41.15 11.69	40.82
Total "Three Rs"	4647	5378.0	52.84	53.90
The Fundamentals: The "Three Rs" History and Civics	4647 347	5378.0 337.5	52.84 4.26	53.90 3.39
Geography and Science	672	916.5	7.60	9.18
Total Fundamentals	5693	6632.0	64.70	66.47
The Special Subjects Hygiene, Physical Training, Play, and Recess	1354	1571	15.40	15.73
Industrial Arts and		453.5	8.18	4.55
Music	446	518.0	5.08	5.20
Miscellaneous (Open- ing Exercises and Unassigned Study	583	803.5	6.64	8.05
Total Special Sub- jects and Extra- Subject Periods	3102	3346.0	35.30	33.53
Grand Total	8795	9978.0	100.00	100.00

CONCLUSIONS

1. There was quite a variation in the amount of time spent upon the various subjects by the ten schools and by the Standard.

Percent of subjects to which the ten schools devoted more time than did the Standard - 55.

Percent of subjects to which the Standard devoted more time than did the ten schools - 30.

Percent of subjects upon which the ten schools and the Standard spent the same amount of time - 15.

- 2. The same subjects and extra-subject activity periods in the same grades were not stressed with equal importance in the programs of the ten schools and in the Standard.
- 3. The ten schools devoted more time to the entire program of the first six grades than did the Standard.
- 4. There was a variation in the importance given to the same subjects and extra-subject activity periods in the programs of the ten schools and in that of the Standard.

Percent of cases where equal importance was given - 18.

Percent of cases where there was a slight difference
in importance - 41.

Percent of cases where there was a marked difference in importance - 35.

5. The ten schools devoted a greater percentage of their total school time to the "Three R" subjects and the Fundamental Subjects, while the Standard devoted more time to the Special Subjects and the Extra-Subject activity periods.

Part V

THE CONSTRUCTION OF A PROGRAM FOR THE SIX GRADES FROM THE DATA OBTAINED.

It is the purpose of Part V of this thesis to construct a program for each of the six elementary school grades, which will measure up to the Standard and contain the best features of the programs of the ten schools studied. It is also the aim of this part of the thesis to so construct these programs that they will be adapted to the type of rural schools studied.

This problem constitutes the fourth objective of this study as mentioned in the Introduction on page 6.

In constructing these programs for the first six grades, the number of minutes per week devoted to each subject and extra-subject activity in each grade is based upon the minutes per week that are allotted to each subject and extrasubject activity in the Standard for that grade.

The length of the periods and the order in which they occur in each program are based upon the best and the most common practices observed in these ten schools and in the study of their programs.

The programs herein constructed include all of the subjects and extra-subject periods that should be given in the first six grades of the elementary school, and they are so arranged that they fit into the school day.

It has been noted thus far that there is a wide difference between the ten schools in their programs with regard to the number of subjects that are given in the same grades of these schools, and a wide difference in regard to each subject's importance in their programs.

There is a tendency among these schools to stress the "Three R" subjects and slight the other subjects and extrasubject activities. These programs attempt to overcome this and make a well-rounded program for each grade.

- 73 Table XIX

CONSTRUCTED PROGRAM FOR THE FIRST GRADE

Period	Mon.	Tue.	Wed.	Thur.	Fri.
9:00 - 9:10	Op.Ex.	Op.Ex.	Op. Ex.	Op.Ex.	Op. Ex.
9:10 - 10:10	Read I Read II		Read I Read II		Read I Read II
10:10 - 10:30	Arith.	Hygiene	Arith	Science	Arith
10:30 - 10:50	Recess	Recess	Recess	Recess	Recess
10:50 - 11:05	Pen.	Pen.	Pen.	Pen.	Pen.
11:05 - 11:15	Spell.	Spell.	Spell.	Spell.	Study
11:15 - 11:35	Phonics	Phonics	Phonics	Phonics	Phonics
11:35 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:10	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.
1:10 - 1:40	Read I Read II		Read I Read II	Read I Read II	Read I Read II
1:40 - 1:50	Geo.	Hist.	Civics	Hist.	Study
1:50 - 1:55	Games	Games	Games	Games	Games
1:55 - 2:10	Music	Music	Music	Music	Music
2:10 - 2:30	Phonics	Phonics	Phonics	Phonics	Phonics
2:30 - 2:50	Phy. Ed.	Phy. Ed.	Phy.Ed.	Phy. Ed.	Phy. Ed.
2:50 - 3:15	Lang.	Lang.	Lang.	Lang.	Lang.
3:15 - 3:35	Art	Art	Art	Art	Ind.Art

COMMENTS ON THE FIRST GRADE PROGRAM CONSTRUCTED

In the first grade program, page 73, more time is devoted to reading and phonics than to any other subject. For this reason, reading and phonics are given both in the morning and in the afternoon. The reading class is divided into Group I and Group II and during the 60 minute period in the morning one group recites while the other studies. minutes are allotted to each group in which to recite, but in case one group is slower than the other, the slow group can be given more time than the brighter one. The 30 minute period in the afternoon is conducted in the same way. In case the reading class is not divided into two groups, the morning period would be 30 minutes in length and the afternoon period 15 minutes in length. However, in the majority of the schools studied, the class was divided, as it gave more time for study and made a smaller group to work with during the recitation.

In phonics, the whole class recites for 20 minutes in the morning and for 20 minutes in the afternoon. If the same division in phonics is wanted as in reading, Group I could recite during the morning period and Group II during the afternoon period.

This arrangement gives a total of 425 minutes per week devoted to reading and phonics, compared to 421 minutes per week as set up in the Standard.

Many of the schools studied devoted more time to reading and phonics than 425 minutes per week, but in doing so they were obliged to leave some other subject out of their programs. Judging from the Standard, reading and phonics can be satisfactorily taught in this length of time.

Language is given a 25 minute period daily to conform to the Standard. This is more time than the average school studied devoted to this subject.

Such subjects as geography, history, hygiene, and civics, to which a small amount of time is devoted per week in this grade, but which should be given, are taught on alternate days of the week, in ten, fifteen, and twenty minute periods. In this respect this program differs from most of the programs used in these schools studied, as a majority of them did not include these subjects in their programs at all.

A short period is included for Industrial Arts, which consists of simple construction with paper. Although none of the schools studied included this subject in their programs, the same type of work is included in their Art periods! A very good description of how this Industrial Art work is carried on from the first to the sixth grade is found in the December, 1928, issue of the Industrial Arts Magazine, Vol. XXX, No. 6, Page 201.

^{1.} Work observed in the first grade at Gill, Colorado.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

The constructed first grade program checks with the Standard for this grade as follows:

Reading 421 425 Language 130 125 Spelling 39 40 Penmanship 67 75 Arithmetic 64 60 History 17 20 Civics 9 10 Geography 11 10	S ubjects	Minutes per week Standard	Minutes per week in program constructed
Science 22 20 Hygiene 16 20 Physical Training 90 100 Music 71 75 Art 87 80 Industrial Arts 22 20 Recesses 105 100 Supervised Play 22 25 Miscellaneous 97 295	Language Spelling Penmanship Arithmetic History Civics Geography Science Hygiene Physical Training Music Art Industrial Arts Recesses Supervised Play	130 39 67 64 17 9 11 22 16 90 71 87 22 105 22	125 40 75 60 20 10 10 20 20 20 100 75 80 20 100 25

The amount of time devoted to unassigned study is much greater in this program than in the Standard, due to the fact that the Reading class is divided into two sections. However, in the city schools the children can go home after the day is over, but in the case of the schools studied the children cannot go home until the bus leaves, so the added length of the school day in this case is an advantage.

- 77 Table XX
CONSTRUCTED PROGRAM FOR THE SECOND GRADE

Period	Mon.	Tues.	₩ed.	Thur.	Fri.
9:00 - 9:15	Op. Ex.				
9:15 - 9:30	Pen.	Pen.	Pen.	Pen.	Pen.
9:30 - 10:30	Read. I Read.II				
10:30 - 10:50	Recess	Recess	Recess	Recess	Recess
10:50 - 11:20	Arith.	Arith.	Arith.	Arith.	Arith.
11:20 - 11:35	Phonics	Phonics	Phonics	Phonics	Phonics
11:35 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:20	Read.	Read.	Read.	Read.	Read.
1:20 - 1:40	Spell.	Spell.	Spell.	Spell.	History
1:40 - 1:55	Civics	Science	Geo.	Science	Hygiene
1:55 - 2:00	Games	Games	Games	Games	Games
2:00 - 2:15	Music	Music	Music	Music	Music
2:15 - 2:30	Phonics	Phonics	Phonics	Phonics	Phonics
2:30 - 2:50	Phy. Ed.	Phy. Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.
2:50 - 3:20	Lang.	Lang.	Lang.	Lang.	Lang.
3:20 - 3:40	Art	Art	Art	Art	Ind.Arts

COMMENTS ON SECOND GRADE PROGRAM CONSTRUCTED

In the second grade program, Table XX, page 77, as in the first grade, Reading and Phonics are allotted the greatest amount of time. The class arrangement is a little different in this grade for Reading. The sixty minute period in the morning is conducted in the same way as in the first grade, but the twenty minute period in the afternoon is used as a recitation period for both groups. This is done in order that the school day is not made too long.

Although less time is devoted to Reading and Phonics in this grade than in the first grade, 400 minutes per week as compared to 425 minutes per week in the first grade, less time is devoted to Phonics, thus increasing the time spent upon Reading 25 minutes per week.

The amount of time spent upon Language is increased in this grade and more time is given to Spelling, Penmanship, History, Civics, and Geography.

There is a big increase in the time allotted to arithmetic in this grade, an increase from 60 minutes per week in the first grade to 150 minutes per week in the second grade.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

The program constructed checks with the Standard as follows:

Subject	Minutes per week Standard	Minutes per week in Program Constructed
Reading Language Spelling Penmanship Arithmetic History Civics Geography Science Hygiene Physical Training Music Art Industrial Arts Recesses	404 141 82 72 143 19 12 14 23 16 97 74 88 22 106	400 150 80 75 150 20 15 15 15 100 75 80 20 100
Supervised Play Miscellaneous	19 93	25 225

Miscellaneous is much higher in this program than in the Standard, due to the time allotted for study during the Reading period.

Table XXI

CONSTRUCTED PROGRAM FOR THE THIRD GRADE

Period	Mon.	Tues.	₩ed.	Thur.	Fri.
9:00 - 9:15	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.
9:15 - 9:55	Arith.	Arith.	Arith.	Arith.	Arith.
9:55 - 10:30	Read. (Study)		Read. (Study)		Read. (Study)
10:30 - 10:50	Recess	Recess	Recess	Recess	Recess
10:50 - 11:10	Lang.	Lang.	Lang.	Lang.	Lang.
11:10 - 11:30	Spell.	Spell.	Spell.	Spell.	Hygien e
11:30 - 11:45	Pen.	Pen.	Pen.	Pen.	Pen.
11:45 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:15	Music	Music	Music	Music	Music
1:15 - 2:15	Read. I Read. II	Read. I Read.II	Read. I Read.II	Read. I Read.II	Read. I Read.II
2:15 - 2:30	Hist.	Science	Hist.	Science	Civics
2:30 - 2:50	Phy. Ed.	Phy. Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.
2:50 - 3:05	Lang.	Lang.	Lang.	Lang.	Lang.
3:05 - 3:20	Geo.	Geo.	Geo.	Geo.	Study
3:20 - 3:25	Games	Games	Games	Games	Games
3:25 - 3:45	Art	Art	Art	Art	Ind.Arts

COMMENTS ON THE THIRD GRADE PROGRAM CONSTRUCTED

In this third grade program, Table XXI, page 80, the arrangement for Reading is a little different, in that both divisions study their Reading for 35 minutes in the morning, but the recitation period of 60 minutes in the afternoon is conducted the same as in Grades I and II. Less time is devoted to Reading in this grade and no Phonics is given. The time allotted to Language has been increased, which is also true in the case of Arithmetic.

History and Geography begin to play a more important part in this grade, especially is this true of Geography.

If the 40 minute period in Arithmetic is considered too long, the period could be divided into two 20 minute sections, and by taking out the period for Games, extend the school day to 4 o'clock.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

The Third Grade program constructed compares with the Standard as follows:

Subjects	Minutes per week Standard	Minutes per week in Program Constructed
Reading Language	332 16 7	325
Spelling	8 7	1 7 5 80
Penmanship	77	7 5
Arithmetic	193	200
Histor y	30	30
Civics	11	15

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Subjects	Minutes per week Standard	Minutes per week in program constructed
Geography Science Hygiene Physical Training Music Art Industrial Arts Recesses	59 23 18 89 74 87 25 106 18	60 30 20 100 75 80 20 100 25
Supervised Play Miscellaneous	99	240

- 83 Table XXII

CONSTRUCTED PROGRAM FOR THE FOURTH GRADE

Period	Mon.	Thes.	Wed.	Thur.	Fri.
9:00 - 9:10	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.
9:10 - 9:30	Arith. (study)	Arith. (study)	Arith. (study)	Arith. (study)	Arith (study)
9:30 - 9:45	Pen.	Pen.	Pen.	Pen.	Pen.
9:45 - 10:15	Read. (study)	Read. (study)	Read. (study)	Read. (study)	Read. (study)
10:15 - 10:30	Spell.	Spell.	Spell.	Spell.	Spell.
10:30 - 10:50	Phy. Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.
10:50 - 11:30	Read. I Read.II	Read. Í Read.II		Read. I Read.II	Read. I Read.II
11:30 - 11:50	Arith.	Arith.	Arith.	Arith.	Arith.
11:50 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:15	Music	Music	Music	Music	Music
1:15 - 1:50	Lang.	Lang.	Lang.	Lang.	Lang.
1:50 - 2:20	Geo.	Geo.	Geo.	Geo.	Geo. 15 Civics 15.
2:20 - 2:30	Study	Study	Study	Study	Study
2:30 - 2:50	Recess	Recess	Recess	Recess	Recess
2:50 - 3:10	Hist.	Science	History	Hygiene	History
3:10 - 3:40	Art	Art	Art	Ind.Art	Play

COMMENTS ON THE FOURTH GRADE PROGRAM CONSTRUCTED

In the fourth grade program, Table XXII, page 83, Reading and Arithmetic are given approximately the same amount of time. Much more time is being devoted to History and Geography in this grade.

The noon recess is shortened to 70 minutes.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

This program compares with the Standard as follows:

Subject	Minutes per week Standard	Minutes per week in program constructed
Reading Language Spelling Penmanship Arithmetic History Civics Geography Science Hygiene Physical Training Music Art Industrial Arts Recesses Supervised Play	245 176 85 78 206 54 12 137 23 22 90 77 86 30 96 14	250 175 75 75 200 60 15 135 20 20 100 75 90 30 100
Miscellaneous	97	100

Table XXIII

CONSTRUCTED PROGRAM FOR THE FIFTH GRADE

Period	Mon.	Tues.	Wed.	Thur.	Fri.
9:00 - 9:10	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.
9:10 - 9:50	Arith.	Arith.	Arith.	Arith.	Arith.
9:50 - 10:30	Lang.	Lang.	Lang.	Lang.	Lang.
10:30 - 10:50	Phy. Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.	Phy.Ed.
10:50 - 11:25	Read.	Read.	Read.	Read.	Read.
11:25 - 11:40	Pen.	Pen.	Pen.	Pen.	Pen.
11:40 - 12:00	Spell.	Spell.	Spell.	Spell.	Study
12:00 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:15	Music	Music	Music	Music	Music
1:15 - 1:35	History	History	History	History	Science
1:35 - 2:05	Geo.	Geo.	Geo.	Geo.	Geo.
2:05 - 2:30	Study	Study	Study	Study	Study
2:30 - 2:50	Recess	Recess	Recess	Recess	Recess
2:50 - 3:05	Hygiene	Civics	Hygiene	Games	
3:05 - 3:25	Art	Art	Art	Art	Ind.Art
3:25 - 3:40					

COMMENTS ON FIFTH GRADE PROGRAM CONSTRUCTED

In the fifth grade program, Table XXIII, page 85, there are two outstanding changes: First, the greatly increased amount of time allotted to History and Geography; and second, the increased amount of time allotted to Industrial Arts.

The work in Industrial Arts for the boys consists of beginning wood work, and for the girls, sewing. Only one school out of the ten studied conducted an Industrial Arts class in wood work and sewing.

These classes are carried on in the regular shop and in the regular sewing room under the instruction of the teachers in charge of that work.

The last period in the day, except on Friday, can be used as an activity period for club work, student government meetings, or athletics.

In this grade the amount of Language taught is increased, the amount of Spelling is slightly decreased, and the amount of Art is also decreased.

It will be noted that in this grade Reading is not the most important subject, but that it has given way to Arithmetic as far as the amount of time spent upon the subject is concerned.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

This constructed program compares with the Standard as follows:

Subject	Minutes per week Standard	Minutes per week in program constructed
Reading	182	175
Language	187	200
Spelling	82	80
Penmanship	77	7 5
Arithmetic	211	200
History	84	80
Civics	14	15
Geography	156	150
Science	21	20
Hygiene	27	20
Physical Training	90	100
Music	76	7 5
Art	82	80
Industrial Arts	50	50
Recesses	91	100
Supervised Play	16	15
Miscellaneous	99	195

Table XXIV

CONSTRUCTED PROGRAM FOR THE SIXTH GRADE

Period	Mon.	Tues.	Wed.	Thur.	Fri.
9:00 - 9:10	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.	Op. Ex.
9:10 - 9:50	Arith.	Arith.	Arith.	Arith.	Arith.
9:50 - 10:30	Lang.	Lang.	Lang.	Lang.	Lang.
10:30 - 10:50	Phy.Ed.	Phy.Ed.	Phy.Ed.	Phy. Ed.	Phy.Ed.
10:50 - 11:20	Read.	Read.	Read.	Read.	Read.
11:20 - 11:35	Pen.	Pen.	Pen.	Pen.	Pen.
11:35 - 11:50	Spell.	Spell.	Spell.	Spell.	Spell.
11:50 - 1:00	Noon	Noon	Noon	Noon	Noon
1:00 - 1:15	Music	Music	Music	Music	Music
1:15 - 1:35	Hist.	Hist.	Hist.	Hist.	Hist.
1:35 - 2:15	Geo.	Geo.	Geo.	Geo.	Civics Hygiene
2:15 - 2:30	Study	Science	Games	Science	Study
2:30 - 2:50	Recess	Recess	Recess	Recess	Recess
2:50 - 3:10	Art	Art	Art	Art	Ind.
3:10 - 3:50					Art.

COMMENTS ON SIXTH GRADE PROGRAM CONSTRUCTED

In the sixth grade program, Table XXIV, page 88, there is a still greater proportion of time devoted to Geography, History, Science, Language, and Industrial Arts, and a decreased amount of time devoted to Reading and Spelling, while the time devoted to Arithmetic remains the same.

A CHECK OF THE TIME IN CONSTRUCTED PROGRAM AGAINST THE STANDARD

This constructed program compares with the Standard as follows:

Standard	
Reading 141 Language 194 Spelling 78 Penmanship 75 Arithmetic 211 History 97 Civics 15 Geography 162 Science 21 Hygiene 27 Physical Training 89 Music 74 Art 75 Industrial Arts 65 Recesses 90 Supervised Play 16 Miscellaneous 98	150 200 75 75 200 100 15 160 30 25 100 75 80 60 100 15 65

SUMMARY OF PART V

Summary of programs constructed:

In the programs of these ten schools more time was given to recesses than was allotted in the Standard and less time devoted to Physical Training. This can be overcome, as was done in the construction of the programs, by allowing a 20 minute recess in the morning for the first three grades, and a 20 minute Physical Education period in the afternoon when organized play and games are conducted under supervision. In the fourth, fifth, and sixth grade programs, the order is reversed, so the same instructor can take charge of the Physical Training during the day.

Opening exercises are conducted during the first ten or fifteen minutes of the morning in each grade. At this time some schools had a short flag drill and group singing, while other schools used this period for story reading by the teacher.

In the fourth, fifth, and sixth grades, the last period of the day, excepting on the day when Industrial Arts work was carried on, was devoted to extra-curricular activities such as club work, school government meetings, and athletics.

The amount of time devoted to music is practically the same for all grades.

It will be noted that in the programs of both the schools studied and the Standard, the English subjects received the greatest proportion of time in the lower grades and gradually

decreased in each succeeding grade, with the exception of Language, which increased as the pupil progressed.

The time devoted to Arithmetic was also increased in each succeeding grade.

The Social Subjects, such as History, Geography, and Hygiene, were stressed much more in the fourth, fifth, and sixth grades.

In these constructed programs much more time is allotted to Industrial Arts than was allotted in the programs of these ten schools.

In order to have a well-rounded program, no subject or extra-subject activity should be given less time than is indicated in the Standard, although more time could be devoted to any subject, provided there is enough time in the school day and provided no other subject or extra-subject activity is slighted.

Part VI

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 1. There was a great variation in the programs of these ten schools studied, which indicates that among the administrators of these schools there is a difference of opinion as to the value of the various subjects and extrasubject periods found in the elementary program.
- 2. Certain subjects are stressed more during the first three years of the elementary program than during the last three years; while some subjects are stressed more during the last three years; and some subjects maintain relatively the same degree of importance during all six years.
- 3. The "Three R" group of subjects is considered the most important, the Social Subjects second in importance, while Music and Art are third.
- 4. The time allotted for recesses and for the noon recess for each grade in these schools did not vary materially. The same is true of the number of periods per day and the length of the school day for each grade.
- 5. There was quite a variation between the time allotted to the various subjects and extra-subject periods in the programs of these ten schools and that of the Standard.

6. The ten schools devoted more time to the "Three R" subjects and the Fundamental Subjects, while the Standard devoted more time to the Special Subjects and the Extra-Period Subjects.

Recommendations: -

- 1. That the time spent upon the "Three R" subjects and the Fundamental subjects be reduced to conform to the Standard, and more time be put upon the Special Subjects in order to make a better rounded program for the elementary grades, as is brought out in the programs constructed;
- 2. That the time spent upon Reading and Arithmetic be reduced in the first, second, and third grades, and that History and Industrial Arts be introduced into the programs of the first grade and continued through the elementary program in each grade. Also, that Geography be given in the first grade and continue through the program in accordance with the Standard, and as set up in the constructed programs;
- 3. That more time be devoted to organized and supervised Physical Training in the elementary grades and less time given to Recesses;
- 4. That the administrators of the rural school set up a program to be followed in the elementary grades, based upon some recognized standard, such as was used in Part V of this thesis, in order:

- (a) That the programs used in these schools may be more uniform;
- (b) That the programs may be better belanced and rounded out;
- (c) That all of the subjects and extra-subject activities in the dementary program will be allotted their correct proportion of time;
- (d) That all of the extra-subject activities can be included in the program;
- (e) That the program used in the rural elementary school will be comparable to the elementary program used in the city school systems, thereby giving the rural child the same advantages and training obtained by the city child.

Part VII

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