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A SURVEY OF TIME ALLOTMENT PRACTICES IN THE ELEMENTARY
SCHOOL AS REPORTED BY CLASSROOM TEACHERS IN
THIRTY PUBLIC SCHOOL SYSTEMS IN OKLAHOMA

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BY
JAMES OSCAR GATES, JR.

Norman, Oklahoma

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A SURVEY OF TIME ALLOTMENT PRACTICES IN THE ELEMENTARY
SCHOOL AS REPORTED BY CLASSROOM TEACHERS IN
THIRTY PUBLIC SCHOOL SYSTEMS IN OKLAHOMA

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DISSERTATION COMMITTEE

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A SURVEY OF TIME ALLOTMENT PRACTICES IN THE ELEMENTARY
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PUBLIC SCHOOL SYSTEMS IN OKLAHOMA

CHAPTER I

INTRODUCTION

By general agreement the curriculum of the elementary school has evolved into a pattern of eight broad subject fields: language arts, arithmetic, science, social studies, art, music, health, and physical education. Administrators and instructional staff have long wrestled with problems of how best to maintain proper perspective among these curricular obligations and responsibilities. The range of practice in this regard has been great and, increasingly, expressions of interest and concern have grown with reference to balanced educational programs in the elementary school. According to Mann,¹ the standard curriculum in 1826 consisted of the Three R's plus spelling and grammar; some schools also devoted time to geography

¹Carleton Hunter Mann, How Schools Use Their Time (New York: Bureau of Publications, Teachers College, Columbia College, 1928), pp. 14-15.

and sewing. The typical school day was six hours long with a fifteen-minute recess in the morning and in the afternoon. Mann figured that in a total week of 1800 minutes, 1650 minutes, or approximately 92 per cent of the time, were devoted to writing and arithmetic; and 150 minutes, approximately 8 per cent, to recess.

In the past few years, the public elementary schools have been under pressure to give more time to teaching science, or handwriting, or a modern foreign language. For the most part, educational decisions concerning time allotments have not been based on scientific inquiry, but rather on existing practices in leading schools, opinions of leading educators, criticisms of self-appointed critics, societal pressures, attitudes and values of classroom teachers, or administrative expediency.

In 1962 Jarvis² made a survey of sixty-four metropolitan school systems in an effort to determine existing time allotment policies and practices for the intermediate grades--namely Grades 4, 5, and 6. Jarvis discovered that the time allocations of these sixty-four districts based on the average number of minutes per week were as follows: reading, 300; arithmetic, 225; social

²Oscar T. Jarvis, "Time Allotment in Elementary Schools...Policies and Practices," The National Elementary Principal, XLII, No. 1 (September, 1963), 64-65.

studies, 225; language, 200; science, 150; physical education, 150; music, 150; spelling, 100; art, 60; handwriting, 60; health, 60; foreign language, 60; and opening exercises, 50. Jarvis states that:

While investigations of practice are only an indication of what is, and not necessarily of what should be, this study should provide interesting data for those principals who wish to compare the use of time in their schools with policies and practices in other districts.³

The importance of this educational problem as one which needs further study was also indicated by Otto when he stated:

The amount and proportion of school time to be allocated to each subject or activity is difficult to determine. Little is known about what is practiced, but even less is known about what is advisable. Society's changing demands upon elementary schools, changing conceptions of satisfactory levels of pupil achievement, and improved methods and materials help⁴ to keep time allotment practices in a state of flux.

In view of the two statements above, this study is concerned with an attempt to determine existing practices concerning the amount and proportion of school time allotted to each subject or activity in the elementary school. A specific statement of the problem is made following justification of the study.

³Ibid., p. 65.

⁴Henry J. Otto and David C. Sanders, Elementary School Organization and Administration (New York: Appleton-Century-Crofts, 1964), pp. 72-73.

Need for the Study

The problem of apportioning the school day to the various subjects and activities is ever present in the elementary schools. Principals and teachers have long been interested in providing an equitable distribution of the pupil's time in school to the various subjects or areas of experience. No one knows just how much time should be devoted to this or that subject. There probably can be no absolute rule to follow.

Smith, Stanley, and Shores have posed two very interesting questions concerning time allotments by asking, "How often should a class meet--five times a week, three times, only once? And how long should the class period be? Should it be thirty minutes, forty minutes, ninety minutes?"⁵

They answer these questions themselves by stating, "There is very little research evidence to help answer these questions."⁶

The significance of these two questions was revealed by the New England School Development Council when it stated, "Few issues have been so disputed in educational

⁵B. Othanel Smith, William O. Stanley, and J. Harlan Shores, Fundamentals of Curriculum Development (New York: World Book Co., 1957), p. 197.

⁶Ibid.

theory and practice as the distribution and use of instructional time within the elementary school."⁷

Bell and Green⁸ suggested that a re-evaluation of official policies regarding the time budget is needed because of a shift in educational values since World War II. Science, social studies, mathematics, and modern foreign languages have received emphasis to the extent of having a larger portion of the elementary school day than they traditionally possessed. Science and mathematics, for example, have been the target of excessive criticism because of the apparent success of Soviet military and scientific undertakings and the alleged, although dubious, superiority of Russian, or even European, schools over the American approach to education.

It is not surprising that there are many conflicting demands upon school time and many complications in the effort of school personnel to utilize time most effectively. Time is one of the most important dimensions of all human activity and its application has long been the focus of public and educator concern.

⁷New England School Development Council, Time Allotment in the Elementary School (Cambridge, Mass.: The Council, April, 1959), p. 1.

⁸John W. Bell and Arthur S. Green, "Time Schedules in the Grades," The American School Board Journal, CXXXVIII (June, 1959), 21-23.

Justification

Traditionally, emphasis in the elementary school has been placed on reading, language arts, arithmetic, and social studies. However, in recent years, through the influence of the National Defense Education Act of 1958 and other national curriculum projects, emphasis is being placed on science, mathematics, and modern foreign languages, as well as the development of a comprehensive curriculum, which would include planned instruction in the areas of art, music, health education, and physical education. Therefore, it becomes imperative to discover whether or not an imbalance exists in the time allotment for each of these subjects in relation to identifiable subject matter area priorities.

As a result of this enigma, a primary concern of this study is to determine what recent trends in education have done to force a realignment of subject matter area time allotments in the elementary school.

Statement of the Problem

This study will attempt to determine the amount of time classroom teachers allot to the various subject matter areas and/or activities in the elementary school.

Specifically, answers to the following questions were sought: Does a wide variability of time allotment to the various subject matter areas and/or activities exist among classrooms, grades, and/or elementary schools? Is

there wide diversity of practice in different classrooms, grades, and/or elementary schools as to when a subject should begin and how long it should continue? Have recent events such as emphasis on science, mathematics, and foreign languages; stress on international education; increased knowledge in child growth and development; advanced communication media; and the implications of societal change caused teachers to modify the amount of time allocated to given subject matter areas?

These problems imply subproblems which are pertinent. Specifically, answers to the following questions concerning pertinent subproblems will be sought: How has current practice evolved? What time allocation priorities are evident in current practice? Have changes in time allotments occurred as a result of societal pressures? What are some of the factors that influence scheduling in the utilization of time in the elementary school? Is there a relationship between the interpretation of identifiable societal pressures and current practice? Does individual classroom teacher, elementary school, and/or school system interpretation of those factors which seem pertinent to their particular situation determine time allocation priorities in the elementary school? Are there factors that make it impossible to tell how much time should be given to any given subject matter area in order to insure the quality and quantity of educational experiences

necessary to develop the maximum potential of each child?

Basic Hypothesis

This study will attempt to establish a basis for the testing of the following hypothesis: The distribution of the total time allocated to the various subject matter areas and/or activities in the elementary school is widely varied.

Operational Definitions

There are a few technical terms used repeatedly throughout this research project which are related to the data presented in this study. They have therefore been defined in order to provide clarity and continuity in the presentation and understanding of the data. These terms are:

Average. This term is used in this study to refer to the sum of the scores in a distribution divided by their number.

Content subjects. This term includes formal instruction in the following subjects: history, civics, geography, social studies, and science.

Curriculum. For purposes of this study this term is used to include all subjects taught in the elementary school, or course of study.

Range or variation. These terms are used to contrast the highest score or amount in a distribution

with the lowest score or amount in the same distribution.

Societal pressures. For purposes of this study this term is used to indicate influences and controls that individual groups, formal and informal, and institutions bring to bear on school administrators, school boards, and faculties in an attempt to bring about educational change.

Special subjects. This term includes formal instruction in the following subjects or activities: physical education, recess, hygiene, art, music, drawing, manual training, industrial arts, foreign language, opening exercises, health education, and miscellaneous.

Time allotment. This term is used to indicate the apportionment of time to a given subject matter area or activity in the school day or week.

Three R's. This term includes formal instruction in the following subjects: reading, language, English, spelling, penmanship, writing, and arithmetic.

Major Assumptions

For purposes of this study the following assumptions will apply:

1. That teachers continue to employ teaching methods based on subject matter classification in spite of organizational patterns reported.

2. That teachers tend to concentrate their instruction on subject matter areas in which they feel competent.

3. That teachers tend to avoid subject matter areas in which they feel incompetent.

4. That preparation, experience, and background influence the amount of time teachers spend on various subject offerings.

5. That amount, accessibility, and procurement of instructional media and supplies influence the amount of time teachers allot to various subject matter areas.

6. That learning requires time.

7. That teachers' values, attitudes, beliefs, and commitments influence the amount of time allocated to the various subject offerings.

8. That extrinsic needs and goals influence the amount of time allotted to various subject matter areas.

9. That the nature of student populations influences the amount of time given to various subject offerings.

10. That the length of the school day has not changed.

11. That societal demands influence changes in the curriculum and the amount of time allocated to various subject matter areas.

12. That no teacher has devised an absolute or panacean time allotment instruction schedule that will guarantee optimum development of each child's cognitive, affective, and psychomotor powers.

13. That the length of the school day which would

guarantee the maximum development of each child's potential, is not known.

14. That the optimum class size which would guarantee the maximum development of each child's potential is not known.

Delimitations of the Study

For the purposes of this study the following delimitations will apply:

1. The public school systems involved in this study were selected according to the total enrollment figures of the 1964-1965 school years.⁹

2. This study involved classroom teachers of Grades 1-6 selected from thirty public school systems in the state of Oklahoma.

3. The instructional staff, with the exception of kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers of each elementary school investigated in this study were asked to indicate their individual time allotment practices.

4. No classroom teacher's time allotment practices investigated in this study were rejected because of the amount of teaching experience.

⁹Enrollment figures for 1964-1965 school year available from Research Department, State Department of Education, Oklahoma City, Oklahoma.

5. The amount of time devoted to lunch was excluded from the results of this study.

6. The implications, recommendations, and conclusions which were drawn from the results of this study were limited to specific statements concerning the differences of time allotment practices as shown by the data of this particular study, reported under the conditions operating at the time the study was made. No attempt was made to draw conclusions as to the underlying causal factors contributing to the results that were reported in this study.

Selection of Subjects

Because of the immensity of the problem, this study was limited to fifty elementary schools selected from thirty public school systems in the state of Oklahoma. In order to assure representativeness in the selection of the sample, the following procedures were used:

1. Every public school system in the state of Oklahoma was ranked in numerical sequence according to total school enrollment figures.

2. Following the initial ranking, each system was screened to determine those which possessed at least one elementary school with a classroom teacher for instruction in each grade level in Grades 1-6.

3. In order to investigate time allotment practices of classroom teachers in school systems of various

sizes, the thirty school systems were divided into three groups of ten. One group was comprised of the systems which ranked as the ten largest, from which three elementary schools were randomly selected from each system, or a total of thirty elementary schools. One elementary school was randomly selected from each system of the second group, which included the ten systems located near the fiftieth percentile of the numerically ranked systems, a total of ten elementary schools. The remaining group consisted of one elementary school from each of the systems which ranked as the ten lowest, yet possessed a classroom teacher in each grade level in Grades 1-6.

4. It was anticipated that the three groups of school systems selected for the study would serve as a cross-section of the state and at the same time provide representative numbers for varying amounts of time allotment practices.

Procedures of the Study

The purpose of this study was to examine time allotment practices as reported by classroom teachers in the elementary school. This was accomplished through a questionnaire which was sent to each classroom teacher selected to participate in this study.

In earlier time allotment studies, administrators were asked to report time allocation practices in

questionnaire form. The fallacy of this method was evident since many administrators are far removed from actual classroom instruction. Therefore, it was believed that the teacher-questionnaire method employed in this study would provide unique results. Also, it was believed that the design of this study would serve to report more realistic time allotment practices as revealed by classroom teachers, as opposed to time allotment practices that previously have been reported by administrators.

The general plan employed in conducting this study may be outlined as follows:

1. The formulation of the curriculum of the elementary school in which the integral aspects of each subject matter area and activity were defined.
2. The construction of a time allotment questionnaire which provided for the reporting and enumeration of time allocation practices as revealed by individual classroom teachers.
3. The selection and notification of the elementary schools and teachers selected to participate in this study.
4. The mailing of the time allotment questionnaire packet to each participating teacher.

Formulation of the Curriculum. It was apparent that in order to examine time allotment practices as revealed by the teachers, the prerequisite of the formulation of the curriculum was a fundamental priority.

In order to guarantee uniformity and accuracy, it was necessary to formulate definitions of each subject matter area and activity. Primarily, the definitions stressed formal instruction and secondly, included all aspects that entail learning in any given subject or activity. Social studies, for example, included formal instruction in citizenship, geography, history, civics, and international and intercultural relations.

Construction of a Time Allotment Questionnaire. In order to report time allotment practices, it was necessary to construct a questionnaire on which teachers could indicate the amount of time devoted to the various course offerings. Caution was exercised to frame a comprehensive, yet simplified, instrument that would adequately fulfill one of the purposes of this study.

Basically, space was provided with fifteen-minute segments for each day of the school week in which the teachers could indicate the number of minutes devoted to each of the following subject matter areas and activities: opening exercises, reading, English language, spelling, handwriting, arithmetic, social studies, science, art, modern foreign language, physical education, health education, recess, unassigned or free time, and miscellaneous.

The organization of the questionnaire based on fifteen-minute intervals for each day of the school week was constructed in an effort to validate each teacher's

reported time allotment practices.

After receipt of each teacher's completed questionnaire, the results were transferred to a tally sheet which indicated the total number of minutes per week devoted to the above subject matter areas and activities. Henceforth, this figure was transposed to a percentage to reveal the per cent of the school week allotted by each teacher to any given subject matter area or activity.

Selection and Notification of Schools and Teachers.

After selection of the school systems eligible to participate in this study, the administration was asked to authorize the involvement of the teachers in the randomly selected elementary schools.

After this writer received permission from the administration, the building principal of each appropriate elementary school was notified, and he initially designated the teachers who were given the opportunity to participate in this study.

The Time Allotment Questionnaire Packet. Each teacher participating in the study received a time allotment questionnaire packet which contained a letter explaining the study and directions for completing the questionnaire; a curriculum sheet; a completed sample questionnaire; a blank questionnaire; and a stamped, self-addressed envelope.

In the letter the teachers were assured that no names would be included in the time allotment sheet nor in

the final draft of the study. The teachers were identified by numbers which were known only by this writer. The teachers were assured that the results of the time allotment practices reported would not be available to anyone other than the dissertation committee without the teacher's written consent.

The teachers were informed that their reported time allotment practices would not be used in any evaluative form. One of the basic purposes of this letter was to make certain that the teachers be convinced and satisfied that any threatening situation would be minimized.

The teachers were advised to familiarize themselves with the list of definitions of the various subjects and activities before attempting to complete the time allotment questionnaire. It was suggested that as teachers fill in the time for each subject and activity, reference should be made to the list of definitions and the completed sample questionnaire. Also, it was explained that they should honestly attempt to refrain from reporting unrealistic data because actual time allotment practices, not opinions, were desired in this study. Therefore, the teachers were cautioned to use extreme discretion in reporting the amount of time allocated to the various course offerings.

Each packet included a stamped, self-addressed envelope so that the teachers could return the completed questionnaire directly to this writer.

Analysis of Data

For the purposes of this study the following statements in reference to the analysis of the data applied:

Organization of the Data. The statistical analysis of the data encompassed a comparison of the time allotment practices as reported by classroom teachers.

Basically, the average amounts of time in minutes per week and the percentage of time in each grade allotted to the various subject matter areas and activities were computed for the practices reported by classroom teachers in the large, median, and small school districts.

The statistical instrument used was the mean for computation of the reported time allotment practices of each grade level in each group of systems.¹⁰ The following formula for the mean (M) was used:

$$M = \frac{\sum X}{N}$$

Where M = arithmetic mean
 \sum = "the sum of"
 X = each of the measurements
 N = number of measurements

In order to secure an overall mean for the combined groups, each mean of each subject matter area and/or activity in each grade level was weighted according to the number of cases in the group from which it was derived.¹¹

¹⁰J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Co., Inc., 1965), p. 44.

¹¹Ibid., p. 63.

The formula for computing the weighted mean (\bar{M}_w) was as follows:

$$\bar{M}_w = \frac{\sum WX}{\sum W}$$

Where \bar{M}_w = weighted mean

W = weight

$\sum WX$ = sum of the values being averaged, each multiplied by its appropriate weight

$\sum W$ = sum of the weights

After computing the weighted mean of each subject matter area and activity in each grade level for all groups, this writer plotted the results on a table which indicated the average amount of time in minutes per week and percentages of time in each grade level allotted to the various subject offerings and activities by the combined groups.

Format for Succeeding Chapters

The succeeding chapters of this study contain a review of the related literature, an examination of some factors of scheduling, statistical analysis and interpretation of data, and conclusions drawn from the study.

Chapter II presents research related to this study. Chapter III is concerned with some factors of scheduling and determining the amount of time allotted to each subject and activity in the elementary curriculum. Chapter IV presents a report of the data collected and its treatment. Chapter V contains the summary, findings of the study, conclusions drawn, and recommendations for further study.

CHAPTER II

REVIEW OF RELATED LITERATURE: HISTORICAL PERSPECTIVE

For many years scientific investigations and experiments have been conducted in an attempt to determine optimum time allotments necessary for instruction in the several subjects of the elementary curriculum. In order to arrive at some conception of how the time allotments were formulated for the various course offerings of the elementary school, a review of the literature was necessary for this study. This review will delve into the area of the history and evolution of the elementary curriculum and time allotments for the various subject matter areas and activities.

Historical Background of Elementary School Time Allotments

Religious freedom was a motivating force which led the early New England settlers to make their journey to the New World. The strong emphasis upon religion was exemplified by the Puritans, who believed that the individual should be equipped to read and understand the Bible in order to assure his salvation and the perpetuation of the faith. Therefore, these early colonists felt a distinct obligation to teach

their children to read, so that they might know the Bible and take the first step toward saving their souls.

Another motivating force in the development of education in New England was that many of the early settlers were highly educated. Richey stated that approximately 3 per cent of the adult men were university graduates.¹ Without a doubt they were highly influential in promoting interest in education.

Evidence of this interest is the fact that by 1635, the Pilgrims had established the Boston Latin School, which provided the framework for secondary schools in America.

The responsibility for the elementary schooling of children was sustained solely by each family. However, many families, not feeling equal to this responsibility, sent their children to Dame schools. Here, under the leadership of a housewife, children were provided opportunities to learn the ABC's, the catechism, and at times a little simple arithmetic.

It soon became apparent that the Dame schools did not guarantee that all children would attain the basic requirements of literacy which the Puritan society demanded. This condition prompted the Massachusetts Bay Colony to enact the Massachusetts School Law of 1642, which did not provide for the establishment of schools but, through

¹Robert W. Richey, Planning for Teaching (New York: McGraw-Hill Book Co., Inc., 1963), p. 307.

finances, attempted to enforce upon parents their responsibilities for having their children learn to read.

In time it became evident that the law was not being strictly enforced. It was felt that the government must do more than merely insist upon education. It must make provisions for education, if children were to be properly educated. Thus, in 1647, Massachusetts passed a new law which became known as the "Old Deluder Satan Law."

This law required that each town of fifty families provide a teacher to instruct the children sent to him. The law also stipulated that every town of one hundred families should provide a grammar school to prepare boys for college. This law, therefore, established a common school to teach the rudiments of learning and a preparatory school to qualify young boys for college.

The New England plan of common schools was destined to set the pattern for the future development of public education in America. The early Massachusetts school laws set the precedent for state control and a high degree of local autonomy in educational affairs.²

As a result of the early colonists' demands that their children acquire reading skills for the purpose of comprehending and interpreting the Bible, reading was

²Harold W. Massey and Edwin E. Vineyard, The Profession of Teaching (New York: The Odyssey Press, Inc., 1961), pp. 22-23.

established as the first and dominant subject of the curriculum in the early public schools. Therefore, reading schools came into existence with the primary responsibility of instructing children in this specific area.

Also, writing, which was closely associated with reading from the beginning, received emphasis to the extent that writing schools were created which had the express purpose of providing children experience in handwriting skills.

Thus reading schools and writing schools, which originated separately, were combined to form the common schools that spread through the New England area.

Gradually arithmetic was included among the subjects taught until by 1775 the curriculum of the Three R's had been widely accepted and was firmly established as the curriculum of the elementary schools. Spelling was also included in many schools at this date but was considered of minor importance. By 1800 grammar had been included in the curriculum in some cities. Here again, as with spelling, only limited attention was given to this specific area.

Trends in Time Allotment Practices, 1826-1936

It was not until approximately 1826 that spelling and grammar received attention to the extent of being accepted as an integral aspect of the curriculum of the

Three R's. Mann³ stated that 91.7 per cent of the time was dedicated to instruction in the Three R's, while only 8.3 per cent was devoted to "special subjects and activities."

In 1856 the Three R's continued to dominate the curriculum. Evidence of this continuance was revealed by Mann⁴ in the Cleveland Report of 1856, which was illustrated by the fact that reading and spelling (reported in combination) consumed almost 55 per cent of the time in Grades 1-6. Emphasis in Grades 1 and 2 revealed that almost three-fourths of a six-hour school day was devoted to these two subjects. While writing, drawing, and music received no time in Grades 1-4, evidence of their inclusion in the curriculum was shown in Grades 5 and 6. Also, as a result of their acceptance into the curriculum, geography and oral instruction, the content subjects, received almost 16 per cent of the school time.

A comparison of the percentage of time allotted to the various subject matter areas in 1826 and 1856 revealed that the Three R's were given 91.7 per cent in the former and 70.1 per cent in the latter, a loss of 21.6 per cent. In 1826, 8.3 per cent was given to the special subjects and activities as opposed to 14.2 per cent in 1856.

³Mann, loc. cit.

⁴Ibid., pp. 16-17.

Mann⁵ gave the results of time allotment schedules found in the 1866 reports of the following cities: Baltimore, Chicago, Cincinnati, Cleveland, Newport, and Columbus.

A comparison of time allotments in 1866 with those of earlier dates revealed a number of striking facts. Reading, which had been the primary reason of concern by the Puritans, continued to rank as the most important subject, yet received less than one-fifth of the total time in Grades 1-6. Reading and spelling combined, which in 1856 were allocated almost 55 per cent of the total time, were given but 30.8 per cent in 1866.

From 1856 to 1866, writing, drawing, and music showed individual gains of 6 per cent, 2.5 per cent, and 3.6 per cent.

As evidence of the addition of new subjects in the curriculum of Grades 1-6, time allocations were reported for phonics, history, nature study and science, object lessons, and physical training. Combined, these new subjects received only 11.1 per cent of the total time in Grades 1-6; however, their inclusion in the curriculum at this early date was noteworthy and important.

An analysis of the 1866 time allotment schedules of these six typical cities revealed important changes when compared to earlier studies of amounts of time

⁵Ibid., pp. 18-20.

allocated to the three major domains of the elementary school curriculum. The Three R's received 62.0 per cent in 1866, 70.1 per cent in 1856, and 91.7 per cent in 1826. The content subjects were given 12.5 per cent in 1866 and 15.7 per cent in 1856. The special subjects were allocated 25.5 per cent in 1866, 14.2 per cent in 1856, and 8.3 per cent in 1826.

In 1904 Payne⁶ made a study of the time allotments given to the various subjects in the curriculum in the elementary schools of ten American cities: New York; Boston; Chicago; Cleveland; San Francisco; Jersey City; New Orleans; Louisville; Kansas City, Kansas; and Columbus, Georgia.

Because of differences of statistical treatment detected in Payne's study, four cities--Boston, Jersey City, New York City, and San Francisco--will not be included in reporting and analyzing the results of Payne's study. Therefore, all information, comments, and statistics reported will be concerned only with six of these ten cities.

In summarizing Payne's research, a number of subjects warrant comment. A comparison of the studies of 1866 and 1904 revealed little or no change in the amount of time allocated to reading, arithmetic, penmanship, music, physical training, and recess. However, advances were noted in language and grammar, 6.3 per cent; geography, 2.9 per cent;

⁶Bruce Ryburn Payne, Public Elementary School Curricula (New York: Silver, Burdett and Co., 1905).

science, 2.5 per cent; and drawing, 1.4 per cent. Spelling showed a decline of 5.8 per cent.

An analysis of the amount of time devoted to the Three R's, the content subjects, and special subjects revealed no basic changes between 1866 and 1904.

Payne's study was exceptional in that it possessed a unique feature: in addition to reporting time allotment policies and practices which existed in 1904, Payne proposed a guide for future time allotment schedules in the elementary school.⁷ His suggested guide allocated 11.8 per cent to arithmetic, 11.7 per cent to reading, 10.0 per cent to handwork, 10.0 per cent to opening exercises, and 7.6 per cent to science. All remaining subject matter areas received less than 7.0 per cent of the total time of the school day in Grades 1-6.

The time allotment to the various subject matter areas thus was 41.4 per cent for the Three R's, 21.2 per cent for the content subjects, and 37.4 per cent for the special subjects.

Payne gave the following explanations of the point of view taken with reference to the content and distribution of certain subjects of instruction in order to facilitate a clear understanding of his suggested time allotment schedule for Grades 1-6:

⁷Ibid., p. 198.

1. Reading should be taught by the use of literary readers in the second, third, and fourth grades, and if taught in the grammar grades, geographical and historical readers might be used with profit.
2. Writing should cease per se by the completion of the fourth grade.
3. Spelling is always to be taken from the oral, written, and printed work, and should not receive a special assignment after grade five, but should be taught in connection with other subjects.
4. Grammar should be inductively developed from the beginning of the third grade. A text might be introduced at the beginning of the sixth grade.
5. Literature should be taught in connection with reading through the fourth grade. It should be a separate subject from the beginning of the fourth grade.
6. Composition work should begin as early as possible, and increase with each advancing grade in time allotment.
7. Arithmetic should deal with the quantitative aspect of social activities as early as the child can do concrete work, i.e., from the first.
8. Home geography should be studied in connection with nature study, school excursions, school garden, weather observations, etc., in the first and second grades. A text on home geography should be given during the third year. The regular elementary and advanced courses in geography should be taken.
9. In history, historical and biographical stories should be given in the first and second grades. Local history should be used in the third grade, and in the upper grades the usual historical works.
10. Civics is a development connected with history and should increase in importance in the upper grades.
11. Physical culture does not include recess periods, which should be several in number. Organized games are presupposed in these recess periods.

12.. Handwork for boys and that for girls need not contain the same subject matter, and their recitation periods in this subject need not occur at the same time.⁸

Payne's suggested time allotment schedule for the elementary school revealed educational thinking indicative of that period in the history of the common school. Handwork, which was exceeded only by reading and arithmetic, was an example of societal demands and influences on education to produce individuals that possessed manual skills in order that the educational end-product be a contributing member of society.

In 1904 Payne revealed parental interest and educator concern in the quality and quantity of the curriculum in the elementary school when he remarked:

Perhaps the most vital and pressing question regarding the elementary curriculum of city schools in America is the cry arising from teachers and parents that the curriculum is overcrowded. The complaint indicates that too much is being attempted to insure successful work on the part of teachers or pupils. Confusion of mind, divided attention, and⁹ nervous strain are results following overcrowding.

In 1904 there was a period of marked shifts in time allotments for the elementary school course offerings. This period of transition was from 1904 to 1926. Concerning this transition Smith, Stanley, and Shores have stated:

This was the period of two great developments in education: first, the rise of educational science and the resulting crusade against educational inefficiency; second, the rise of the activity movement with

⁸Ibid., pp. 198-200.

⁹Ibid., p. 187.

its emphasis on developing the entire personality, which called for more than academic content and skills. The first development stressed the importance of accomplishing in less time, by more efficient methods and materials of instruction, desirable results in spelling, reading, arithmetic, and other fields. The second emphasized the importance of the arts and other activities related to the development of wholesome habits and tastes beyond the usual academic arts.¹⁰

In 1909 Elson and Bachman¹¹ made a study of the percentage of the total time of the elementary school given in the 1907-1908 curriculum of the following eleven cities: Boston; New York; Chicago; Rochester; Cincinnati; Indianapolis; St. Louis; Milwaukee; Cleveland; San Francisco; and Kansas City, Kansas.

The study by Elson and Bachman revealed a considerable variation in the percentage of time allocated to the same subjects in different cities. Reading received 23.7 per cent on the average in Grades 1-6, which was more time than was allotted to any other subject, yet there existed a variation from 14.1 per cent in Cincinnati to 32.5 per cent in New York City. This was a range of 18.4 per cent. Also, reading received 8.5 per cent more of the total time of the elementary school day than was given to arithmetic, almost twice as much as was allocated to geography and

¹⁰Smith, Stanley, and Shores, op. cit., pp. 200-201.

¹¹William H. Elson and Frank P. Bachman, "Studies and Study-Values in Elementary Schools in Large Cities," The Elementary School Teacher, X, No. 7 (March, 1910), 309-315.

history combined, and almost as much time was given to it as was devoted to music, drawing, manual training and physical training taken together. In a word, almost one-fourth of the total time of the elementary school in these eleven cities was devoted to the teaching of reading.

An analysis of the average amounts of time allotted to the three major domains of the curriculum in the elementary school of these eleven cities between 1866 and 1909 disclosed no important changes.

In 1914 Holmes¹² studied the distribution of time by subjects and grades in the elementary schools of fifty American cities, representing all sections of the country and a wide variety of conditions.

In analyzing the results of Holmes's study, reading, which received almost one-fifth of the total time, continued its chronometrical dominance of the subjects. However, a comparison with Payne's study revealed a loss of 4.0 per cent. Though this amount may seem small, an even smaller percentage of the total time was allocated to history, science, industrial arts, physical training, opening exercises, and miscellaneous--almost one-half of the total of the subject matter areas.

¹²Henry W. Holmes, "Time Distribution by Subjects and Grades in Representative Cities," Minimum Essentials in Elementary-School Subjects--Standards and Current Practices, Fourteenth Yearbook of the National Society for the Study of Education, Part I (Chicago: The University of Chicago Press, 1915), 21-27.

Reading and arithmetic combined, which were given almost one-third of the total time, were gradually forced to share more time with other subject offerings.

Evidence of this renumeration was revealed in a comparison of the percentage of time allocated to the various subject matter areas in 1904 and 1914, in which the Three R's received 55.3 per cent in 1914, as opposed to 61.8 per cent in 1904. The special subjects were given 31.8 per cent in 1914 and 25.9 per cent in 1904, and the content subjects had no basic change during the ten-year period. A closer examination revealed that the Three R's relinquished approximately 6.0 per cent to the special subjects, while the percentage of time allotted to the content subjects remained about the same.

Wide differences continued to exist among time allotment practices as revealed in the 1914 study of fifty American cities. Holmes indicated a need for further study of the formulation of time allotment standards when he wrote:

The outstanding fact of this study is the great divergence in the allotments--there is still marked disagreement as to the distribution of time among the elementary school subjects.¹³

In 1924 Ayer¹⁴ made a study of time allotments in

¹³Ibid., p. 21.

¹⁴Fred C. Ayer, "Facts on Time Allotment of Subjects," The Department of Superintendence, Second Yearbook (Washington, D.C.: The Department of Superintendence, National Education Association, 1924), pp. 139-172.

elementary schools. As director of research in the Seattle Public Schools, he secured facts on time allotments in forty-nine cities of over 100,000 in population in order to compare the Seattle situation with that in other cities.

The results of Ayer's study of forty-nine cities in 1924 and Holmes's study of fifty cities ten years earlier revealed a strikingly close agreement of time allotments in the average number of minutes per week in each subject in Grades 1-6. Also, as was the case in Holmes's study, Ayer's study revealed a wide variation in the amounts of time devoted to the same subject in different cities. For example, reading received 12.9 per cent in one city, while more than twice as much, 29.0 per cent, was allocated to it in another. Also, arithmetic, varied from 7.3 per cent to 20.6 per cent. Although on the average these two studies revealed parallel results, a comprehensive investigation disclosed a tremendous amount of variation in different cities, which raised the question as to why there should be variation in time allotments. Ayer answers the question by stating, "The lack of uniformity is doubtless the result of the expression of individual opinion, often unsupported by sound educational philosophy, scientific data, or knowledge of common practice."¹⁵ These results revealed how little agreement there was as to what constituted the

¹⁵Ibid., p. 140.

amount of time essential for instruction in a given subject.

In 1926 Mann¹⁶ made a monumental study of 444 American cities. Because of its population size, this study yielded results far more representative than earlier studies. Mann¹⁷ reported that the core of the elementary school curriculum as determined by an arbitrary standard of time allotments by at least 88 per cent of the 444 cities in 1926 consisted of the following subjects and activities: arithmetic, language, penmanship, reading, spelling, geography, music, art and drawing, history, opening exercises, recess, and health education.

Arithmetic, penmanship, and language and grammar were offered in all of the 444 cities, while reading and spelling received emphasis to the extent of being included in the curriculum of more than 99.0 per cent of the cities. However, one city did not report any time allocation to reading, and three cities did not schedule formal instruction in spelling. Geography was reported in 98.0 per cent of the cities; music, in 96.6 per cent; art and drawing, in 96.4 per cent; history, in 94.1 per cent; physical training, in 90.8 per cent; opening exercises, in 92.1 per cent; recess, in 91.7 per cent; and health education, in 88.7 per cent.

¹⁶Mann, op. cit., pp. 51-152.

¹⁷Ibid., p. 51.

Among the remaining subjects included in the time allotment schedules of the 444 cities, none were accepted by more than 75.0 per cent.

Reading, which was given 17.1 per cent on the average, continued to receive the largest portion of time allocated to the various subjects in Grades 1-6 by the 444 American cities in 1926. Also, arithmetic, which received 11.6 per cent, continued to rank second, while language and grammar, allotted 9.1 per cent, remained third.

These three subject matter areas were allocated a total of 37.8 per cent of the total time, while the remaining twenty-one shared 62.3 per cent, which on the average, yielded less than 3.0 per cent for each subject.

A comparison of Holmes's study of fifty cities in 1914 and Mann's study of 444 cities in 1926 revealed some noteworthy changes in the amount of time allocated to the three major domains of the curriculum. In the brief span of twelve years, the Three R's continued to surrender time to the special subjects, while the content subjects remained about the same. In 1914 the Three R's received 55.3 per cent of the time, as compared to 51.7 per cent in 1926. The special subjects were given 31.8 per cent in 1914, while 1926 found them receiving 36.5 per cent.

Covert's¹⁸ study of eighty consolidated schools in

¹⁸Timon Covert, Time Allotments in Selected Schools, U.S. Department of the Interior, Office of

1930 possessed a unique characteristic: it was the first study of time allocation practices and policies concerned entirely with consolidated rural schools. The population of this study included thirty-three states representing all sections of this country.

Reading, which on the average received 11.4 per cent of the total time in the school day, held the dominant position in the curriculum of Grades 1-6. Arithmetic and recess received an identical amount of time, 8.3 per cent. The fact that recess was surpassed only by reading was extraordinary when compared with the results of earlier studies. Language, which included Latin and modern foreign languages, was allotted 7.5 per cent of the school day. Among the remaining subjects, the amounts of time allocated revealed a variation of from 4.2 per cent to 6.7 per cent with the exception of civics, which received 3.0 per cent.

More than 50 per cent of the eighty consolidated schools placed greatest amount of emphasis in the primary grades on language, arithmetic, supervised play, and recess, and the least emphasis on spelling, drawing, penmanship, physical training, and music, while less than 50 per cent gave major emphasis to history and industrial arts or

Education, Rural School Leaflet No. 46 (Washington, D.C.: Superintendent of Documents, Government Printing Office, 1930), pp. 1-10.

devoted even a limited amount of time to civics, geography, science, and hygiene. Subjects which were allotted the greatest time in the intermediate grades by a majority of the schools were language, reading, arithmetic, history, geography, and hygiene.

A comparison of the amounts of time allocated to the three major subject matter areas of Mann's study of 444 cities in 1926 and Covert's study of 80 consolidated rural schools in 1930 revealed unusual results. In 1926 the Three R's received 51.7 per cent, the content subjects were allotted 11.8 per cent, and the special subjects were given 36.5 per cent. Yet in 1930, the Three R's were allocated 37.3 per cent, the content subjects were granted 20.4 per cent, and the special subjects were consigned 42.3 per cent. In a word, the Three R's relinquished 8.6 per cent to the content subjects and 5.8 per cent to the special subjects between 1926 and 1930.

In 1936 Kyte and Lewis¹⁹ studied the amounts of time allocated to each subject in Grades 1-6 in sixty-three school systems. Results revealed that reading, which on the average received 21.1 per cent, was allotted more time than any other subject. From 34.3 per cent in Grade 1, the average amount of time decreased grade by grade until it

¹⁹George C. Kyte and Robert H. Lewis, "Time Tables," The Nation's Schools, XVII, No. 1 (January, 1936), 23-25.

reached 11.9 per cent in Grade 6. Arithmetic, which on the average was given 10.9 per cent, showed a complete reversal when it increased from 4.2 per cent in Grade 1 to 13.0 per cent in Grade 6. A similar pattern was followed in social studies, which was allocated 11.4 per cent on the average, and increased from 5.4 per cent in Grade 1 to 17.7 per cent in Grade 6. Language clearly ranked as the fourth subject in terms of the total amount of time allocated to it when it received an average of 9.8 per cent.

Kyte and Lewis's investigation also had a unique feature. In earlier studies history, geography, and civics had been reported separately, but this study reported these subjects under a new term--social studies, which undoubtedly was due to the work of the Commission on the Social Studies in a comprehensive examination of the social studies curriculum in the early 1930's.

For a total period of six school years, the percentages of time devoted to the three major domains of the curriculum were 51.4 per cent to the Three R's, 14.3 per cent to the content subjects, and 34.3 per cent to the special subjects. These figures were extremely compatible with the results reported in Mann's study of 444 cities in 1926, although they differ markedly from amounts revealed in Covert's study of eighty consolidated schools in 1930.

Kyte and Lewis indicated possible future difficulty

in the conducting of time allotment studies when they reported:

The integration of subject matter and the development of activity programs are educational movements minimizing the guidance to teachers with respect to the distribution of school time.²⁰

Recent Trends in Time Allotment Practices

In 1944 evidence of combining related subjects into one course of study revealed by Reinoehl, who stated:

Many schools reported groupings such as the following: language arts, number and science, social studies, practical arts, fine arts, and recreative arts.²¹

Reinoehl also called attention to a trend in time allotment practices and policies when he stated:

The general trend has been to decrease the amount of time devoted to the fundamental subjects of reading, language, writing, spelling, and arithmetic from three-fifths to less than one-half of the total school time; to increase the time given to the special subjects, such as art, music, industrial arts, and physical education from one-fourth to fully one-third of the total time; and to leave the social studies and other "content" subjects with only a slight change from one-eighth to one-sixth of the school time.²²

In 1956 the Indiana State Department of Public Instruction reported a study of time allotment in the

²⁰Ibid., p. 23.

²¹C. M. Reinoehl, "Time Allotment of School Subjects and Length of School Days," The National Elementary Principal, XXIII, No. 6 (June, 1944), p. 15.

²²Ibid.

elementary grades of the Goshen Public Schools.²³

The results of the Goshen study revealed that language arts, on the average, received 52.3 per cent of the total time in Grades 1-6. In Grades 1 and 2 nearly two-thirds of the total time was devoted to these skill subjects. Reading was given the major portion of the amount with 30.3 per cent on the average, which was more time than was allotted to any other subject or activity. Arithmetic was allocated 15.1 per cent on the average, while the fine arts were given 10.1 per cent. Social studies received the fourth largest portion of the total school day, that of 9.1 per cent on the average in Grades 1-6.

It was noted that science received the least amount of time, 1.9 per cent on the average, while apparently in Grades 5 and 6, no time was allocated to science instruction. Obviously, these figures revealed educational opinions and practices prior to "sputnik."

Also, conspicuously absent from the results of the Goshen study was evidence of time allocation for recess and physical education.

In 1958 the San Diego Public Schools²⁴ conducted a

²³Beatrice Crump Lee, Instructional Time Allotment in Elementary Schools, National Education Association Research Memo 1961-29 (Washington, D.C.: Research Division of the National Education Association, July, 1961), p. 4.

²⁴San Diego Public Schools, Time Allotments in Elementary Schools by Subject and Grade Level in the

survey of the time allotments by subject and grade in the elementary schools of the seventeen largest metropolitan districts in California. The following fifteen districts responded to the survey: Fresno, Glendale, Long Beach, Los Angeles, Oakland, Pasadena, Richmond, Sacramento, San Bernadino, San Diego, San Francisco, San Jose, Santa Monica, Stockton, and Torrance.

The results of the San Diego study revealed results typical of earlier studies. Specifically, the same subject was allocated various amounts of time in different cities. Reading, which received 21.8 per cent on the average in Grades 1-6, continued its chronographical dominance of the various subject offerings. However, in Grade 1, Fresno allotted 44.6 per cent to reading, while Santa Monica assigned 21.6 per cent, resulting in a range of 25.0 per cent.

Social studies received emphasis to the extent of placing second in the average amounts of time given to the subject matter areas when it was allocated 18.4 per cent of the total time in Grades 1-6. But, as was the case with reading, wide differences were found in the amounts of time delegated to it. For example, in Grade 1, Los Angeles allocated 25.0 per cent of the total time to social studies as opposed to 9.8 per cent in Glendale. This is a

Seventeen Largest California Metropolitan School Districts
(San Diego: Board of Education, November 18, 1958), pp. 1-21.

range of 15.2 per cent.

Also, arithmetic, which received 12.5 per cent on the average, followed a similar pattern of variation in different cities. San Francisco, in Grade 1, assigned 16.6 per cent to arithmetic instruction, while Long Beach devoted but 2.2 per cent.

As was the case in earlier studies, wide differences revealed how little agreement there was as to what constituted the amount of time essential for instruction in a given subject.

Noticeably missing in this study was evidence of formal instruction in two subjects--science and health. With the exception of Fresno, which allocated 100 minutes per week in Grades 4-6, science was not included in the curriculum of these seventeen metropolitan districts. Also, health was omitted from the curriculum of these districts except for San Bernadino, which included health instruction as a part of physical education.

A note of importance was that California state law requires that a total of at least 100 minutes a week (20 minutes a day) be devoted to physical education,²⁵ and at least 50 per cent of the school week must be devoted to the basic or skill subjects.²⁶ The State Board of Education also requires that there be at least 20 minutes of recess

²⁵Ibid., p. 4.

²⁶Ibid., p. 2.

time each day.²⁷

In analyzing the percentage of time allocated to the three major subject matter domains, an interesting pattern was evident. In 1958, the Three R's received 53.6 per cent, the content subjects were given 18.4 per cent, and the special subjects were allotted 28.0 per cent. In the past forty-five years, the average amount of time devoted to the Three R's has undergone no basic change, except as indicated in Covert's study of eighty consolidated schools in 1930. However, with the exception of Covert's study, the content subjects and the special subjects have followed a different pattern. In 1914 the content subjects received 12.5 per cent and increased gradually through the years to 18.4 per cent in 1958, while the special subjects received 31.8 per cent in 1914, rose to 36.5 per cent in 1926, fell to 34.3 per cent in 1936, and decreased again to 28.0 per cent in 1958.

Current Status of Time Allotment Practices

It appears from a review of the literature, therefore, that the existing time allotments of the elementary school are based largely on opinion and not on research. Moreover, research that is available, for the most part, is a collection of opinions of leading educators and existing practices of leading schools. The review of the

²⁷Ibid., p. 5.

literature points out clearly that time allotments which have emerged have done so as a result of administrative expediency in submission to societal pressures. This point has been expressed by Bathurst:

School systems are permitting individual schools greater freedom in the use of school time. In the 100 cities visited by a team from the U.S. Office of Education in 1947-48, only 35 school systems were requiring schools to adhere rigidly to time allotments recommended by the central office.²⁸

In 1960 the U.S. Office of Education completed a research study to determine the current instructional time allocations in the public elementary schools for Grades 1-6 of urban places with more than 2,500 inhabitants.

Results revealed that the most common policy was that of "suggested time per subjects," with slightly fewer than half the urban places employing that procedure. The designated policies of "no recommended time," "prescribed time," and "block time" were about evenly distributed, each approximately 10 per cent of national practice. Dean has summarized the practices thus:

The most prevalent practice, then, takes the form of a suggested time allotment guideline for

²⁸Effie Bathurst, Organization and Supervision of Elementary Education in 100 Cities, U.S. Department of Health, Education, and Welfare, Office of Education, Bulletin 1949, No. 11 (Washington, D.C.: Superintendent of Documents, Government Printing Office, 1949), p. 31.

teachers which, presumably, is permissive and non-restrictive.²⁹

Lee³⁰ reported that in 1961 the Tulsa Public Schools issued a booklet to inform parents of the amount of time allocated to the various course offerings in the elementary school.

This booklet showed that reading and social studies were combined and received on the average 24.7 per cent of the total school week. Library and physical education were given 12.0 per cent each. It was explained that most of the library period was devoted to reading. Arithmetic was allotted 9.2 per cent, while science and geography combined were allocated 7.1 per cent. All remaining subjects and activities were allotted 5.9 per cent or less.

In 1962 Jarvis³¹ studied the time allotment policies and practices of Grades 4, 5, and 6 in sixty-four

²⁹Stuart E. Dean, Elementary School Administration and Organization: A National Survey of Practices and Policies, U.S. Department of Health, Education, and Welfare, Office of Education, Bulletin 1960, No. 11 (Washington, D.C.: Superintendent of Documents, Government Printing Office, 1960), p. 52.

³⁰Lee, op. cit., p. 5.

³¹Oscar T. Jarvis, A Statistical Analysis of the Relationship of Varying Time Allotments to Pupil Achievement in Reading, Arithmetic, and Language of the Elementary School Grades in the Texas Gulf Coast Area, Research Study No. 7, unpublished doctoral dissertation, University of Houston, Houston, Texas, 1962, pp. 60-84.

public school systems in Texas. Since his research was concerned only with the intermediate grades, the results reported would not be compatible with that of earlier studies of time allotment practices in Grades 1-6. More emphasis in some subjects in the intermediate grades than in the primary grades would tend to distort and skew the apportionment of time allotted to the various subject matter areas and activities in the elementary school.

As has been the case in earlier studies, however, Jarvis's findings revealed a wide variation in the amounts of time devoted to the same subject in different cities. For example, reading, which received 13.1 per cent on the average, was given 100 minutes a week in one city, while more than four times as much, 440 minutes, was allocated to it in another. Also, recess showed similar results, a variation of less than 40 minutes a week in one city to more than 360 minutes a week in another. These are but two examples of the seemingly wide range of practices revealed by this study concerning the amount of time essential for instruction in a given subject.

A noteworthy finding of this study was that, although the investigation was concerned with time allotment policies and practices in the intermediate grades in sixty-four public school systems in the Gulf Coast area of Texas, only six schools reported time allotted to a foreign language, namely, Spanish.

An analysis of the average percentage of time allocated to the three major subject domains in the intermediate grades revealed 45.6 per cent devoted to the Three R's, 34.2 per cent given to the special subjects, and 19.0 per cent allotted to the content subjects.

Summary

In summarization of a review of the literature concerning time allotments in the elementary school, it may be said with authority that there is little evidence that existing time allocations were based on research findings. It is evident that for the most part, educational decisions concerning time allotments have not been based on scientific inquiry, but rather on existing practices in leading schools, opinions of leading educators, criticisms of self-appointed critics, societal pressures, attitudes and values of classroom teachers, or administrative expediency.

CHAPTER III

REVIEW OF RELATED LITERATURE: SOME FACTORS THAT INFLUENCE SCHEDULING IN THE ELEMENTARY SCHOOL

The basic purpose of this study is to determine the amount of time teachers allot to the various subject matter areas and/or activities in the elementary school. This will be accomplished by securing information concerning the time allotment practices of classroom teachers.

In an attempt to arrive at some conception of how teachers determine the distribution of time to the various subject matter areas, it is necessary to examine several factors which seem pertinent to the determination of time allocation priorities in the elementary school. Therefore, it is the purpose of this chapter to discuss this time phenomenon from a number of angles, with the intent to develop a wide range of awareness concerning it, and to point out some of the factors that influence scheduling in the utilization of time in the elementary school.

Time is, without a doubt, one of the most precious aspects of elementary school education. There are so many things to be done, and a limited time in which to do them.

A most compelling question is, "How do we get it all in?" Considerable energy and ingenuity have been applied to this question, and planning at the school and classroom level has moved toward greater efficiency over the years.

The implications of this question are broad and infer other pertinent questions such as the following: Does society influence the selection of subjects to be taught in the elementary school? Why is more time given to the acquisition of reading skills than to any other subject? Is it more efficient to teach skills such as the fundamental processes of arithmetic in thirty- or sixty-minute periods, other things being equal? What is the optimum length of class period for subjects such as social studies and science? In other words, what factors must be considered in distributing the school day among the various subject offerings?

An examination of the time allotment practices of numerous school systems as reported in the previous chapter revealed how little agreement there has been as to what constituted the amount of time essential for instruction in a given subject.

This wide variation indicates that educational decisions concerning time allocation practices have been formulated and determined by factors such as the following: legal requirements, pupil interests and needs, class organization, public pressure, and administrative requirements.

Evidently, some factors carry more weight than others because time allocation practices vary immensely from community to community.

The multiplicity of these factors has had a direct impact on and has resulted in a scarcity of research concerning time allotments. Daugherty revealed some of these factors when he stated:

So many obstacles stand in the way of scientific investigations of time allotments such as pupil variations in needs and abilities; context of the course; differences in methods of teaching; size of the classes; overcrowding of classrooms; shortages of teachers; and constantly changing theories of what is good education.¹

In the past many school systems have had official time schedules which allocated a certain block of time to each subject matter area. In 1960 Dean² found that the prevalent practice was that of "suggested time per subject." However, a single time schedule to be applied to all pupils enrolled in the elementary school does not seem to be the answer.

Mann questioned the possibility of an optimum time allotment schedule when he stated:

It is impossible to tell how much time should be given to geography, for example, until we know just

¹James L. Daugherty, A Study of Achievement in Sixth Grade Arithmetic in Des Moines Public Schools, Research Study No. 1, unpublished doctoral dissertation, Colorado State College, Greeley, Colorado, 1955, p. 13.

²Dean, op. cit., p. 56.

how much geography is to be taught and the standard of achievement which is to be taught. The same is true of arithmetic, history, language, music, or any other subject of the elementary curriculum. This is not a matter to be determined by guess, opinion, or tradition but by scientific investigation and experiment.³

Optimum time allotments can be established only after educational research has resulted in:

1. The determination on the part of curriculum makers of a definite list of specific objectives and desirable outcomes for each subject which should be attained by pupils of the elementary school.
2. The determination of the quantity, quality, and kind of educational experiences necessary to insure achievement of the specific objectives.
3. The determination of the most effective methods of instruction to be employed in presenting these educational experiences in order to secure expected knowledge, skills, attitudes, and ideals. This factor also involves proper grade placement of materials.⁴

Until the time that Mann's suggested criteria for determining optimum time schedules can be accomplished, which seems somewhat remote according to the results of the previous chapter, educators in any given school system are going to have to evaluate, organize, and distribute the school day on the basis of factors which seem pertinent and applicable to their particular learning environment.

In an attempt to arrive at some conception of the importance each factor plays in the apportionment of the

³Mann, op. cit., p. 150.

⁴Ibid.

school day to the various subjects and activities in the elementary school, this writer felt it necessary to examine and present a comprehensive view of the following factors: pupil interests, legal requirements, subject organization, public pressure, administrative requirements, class organizations, non-instructional uses of time, and length of school day.

Interests

Is it possible that one may be penalized throughout life because of failure, for lack of stimulus or opportunity, to acquire certain interests as a child? Is it likely that the interests a person cultivates and enjoys as an adult are those influenced by what he learned as a child? Can one infer from these two questions that a person will probably never learn certain skills if he doesn't learn them as a youngster?

Time has long since passed when interests were believed to have been inherent--that one just has, or does not have, interest in certain things. Such was the traditional position. The modern position holds that interests develop from knowledge, experiences, success, and the exercise of talents--which infers that interests cannot be given: they must be created. The latter position places considerable importance on the teacher's ability to provide an educational climate that will enhance and facilitate the development and

acquisition of children's interests. Therefore, as a result of this situation, teachers are confronted with the task of allocating time to interest development. Furthermore, this creates the problem of how much time to devote to certain subject matter areas and activities in which children display an interest. This last statement--the problem of how much time to allot to the various subject offerings and activities in which children indicate an interest--entails the situation in which teachers frequently find themselves in the course of apportioning the school day to the subject matter areas and activities. In other words, can teachers justify giving a little more time to an activity that has captured children's interest? Does "Strike while the iron is hot" still have meaning for classroom teachers?

Evidently, Dyer thought so when he suggested carrying through with an activity as long as it held the children's interest, even at the expense of disregarding time allotment schedules.⁵

Interest may be defined as the focusing of the sense organs on or giving attention to some person, activity, situation, or object. It may be a temporary or permanent feeling in which a preference is present.

⁵L. E. Dyer, "Improving the Organization for Learning Within the Classroom," The National Elementary Principal, XXVI, No. 4 (February, 1947), 8.

Strong suggested that interests have five characteristics:

First, they are acquired in the sense that feeling becomes associated with the activity. We are not referring to the learning of an activity itself, such as writing one's name, which usually requires many repetitions. We are referring to the associating of feeling with an activity.

Second, interests are persistent. Sometimes disliking is replaced by liking and vice versa; many start out disliking olives and acquire a taste, a pleasant feeling for them. But, all in all, interests are surprisingly permanent.

A third characteristic of interests is intensity. One can not only immediately indicate whether he likes or dislikes an activity, but one can also immediately indicate his relative preferences for different activities.

The fourth and fifth characteristics are acceptance-rejection and readiness to act . . . The associated value, or feeling quality, determines whether the activity will be accepted or rejected, whether the organism will go toward or away from, whether it will continue the status quo or discontinue it. It must also be noted that many activities develop in time so as to bring sufficient pleasure to be employed for their own sake. So we smoke, chew gum, play bridge, or golf for the fun of it.⁶

What a child likes to do is influenced by what he has had the opportunity to learn to do, provided, of course, that he not only has had the opportunity but also has the ability to make use of it. Jersild and Tasch discussed the importance of opportunities in interest

⁶E. K. Strong, Jr., "Satisfactions and Interests," American Psychologist, XIII, No. 11 (November, 1958), 452-453.

development when they stated:

The child who lives in an environment which provides an opportunity for the learning of many varied interests will probably be better situated than a youngster in an environment that makes provision for only a limited range. The reason is not that many interests are necessarily better than a few, but, that the person will find a way of acquiring interests which are best suited to his particular gifts and which will be most serviceable to him.⁷

Too many teachers look only for the presence or absence of interest and condemn the student whose interest is low or lacking. When teachers recognize that interest stems from personally challenging tasks and some degree of success in their pursuit, they will assume some responsibility for its creation and development.

Bernard suggests the following ways in which teachers can help pupils develop and maintain interests that contribute to effective study:

1. Relate the new to what is already known. When new topics are introduced, show how they are related to previous readings and discussions. Pupils can be asked to point out the relationships of the new to the old. School subjects should be related to one another.
2. Make knowledge as personal as possible. Try to show how pursuit of a subject can serve the pupil's needs--how science contributes to health, living conveniences, transportation, manufacturing automobiles, etc., or how social studies are concerned

⁷Arthur T. Jersild and Ruth J. Tasch, Children's Interests and What They Suggest for Education (New York: Bureau of Publications, Teachers College, Columbia University, 1949), p. 85.

with the things that are related to what parents read in the newspaper and discuss at the table--or better yet, what the youngsters are seeing on television.

3. See that information is acquired. Because interests are developed rather than inherent, the student must take the first step by acquiring the habit of paying attention and doing assignments. Once this is accomplished, attention and interest on subsequent occasions comes easily.
4. Arrange for success. Tasks scaled to the ability of pupils and to their past performances make the distribution of the experience of success equitable. Expectation that all pupils in a class will perform at one level has long been a valid criticism of classroom teaching.
5. Use instructional materials and resources. Motion pictures, slides, transparencies, models, murals, displays, dramatic productions, relics, and realia can provide a sense of reality and a here-and-now flavor to subjects. These interest-evoking approaches should, however, be means to the ends of getting the pupil to become personally responsible for his further pursuit of the subject.
6. Encourage use of what is learned. One often hears the complaint "We didn't even discuss the reading assignment," or "The exam didn't cover outside readings." A pupil's apparent short attention span is actually a manifestation of his disinterest in learning things for which he can see no use, and it is relative to adult-imposed activities.⁸

Teachers must also recognize that regardless of opportunity, children's interests will naturally differ as they become older and abler physically and intellectually

⁸ Harold W. Bernard, Psychology of Learning and Teaching (New York: McGraw-Hill Book Co., Inc., 1965), pp. 109-110.

and as they become socially and emotionally more mature. At any maturity level, the interests of a particular child will also be influenced by any special talents, abilities, or limitations which he happens to have.

The specific interests that a child develops depend directly on how clearly he has been able to identify the types of activity that satisfy his motives. His desires for security, self-esteem, the esteem of others, and new experiences, and the success or failure that he meets in attempting to satisfy these desires play a major part in determining what his interests will be. In other words, psychological motives, as well as physiological motives, are important.

Jersild and Tasch⁹ in a survey of 2,248 children revealed some noteworthy data concerning the interests of children. An interest finder was used on which children were asked to respond to the following statements: What I like best in school, what I like least in school, what I don't care to study about, and what I'd like to learn more about at school.

When students were asked to indicate what they liked best in school, results revealed that the academic subject matter areas were mentioned most frequently, by 70 per cent of the students in Grades 1-3 and 75 per cent

⁹Jersild and Tasch, op. cit., p. 5.

of the students in Grades 4-6.

In response to the statement, What I like least in school, 25 per cent of the students in Grades 1-3 and 50 per cent of the students in Grades 4-6 indicated the academic subject matter areas. Certain subjects were mentioned more frequently than others. Specifically, arithmetic, English, writing, and reading were named by 10 per cent of the students as least desirable. One subject, social studies, was named by only 3 per cent of the students in Grades 1-3, yet 14 per cent of the students in Grades 4-6 chose these same subjects.

The lack of interest in certain subject matter areas was revealed when children were asked to indicate what they didn't care to study about. Specifically, arithmetic, English, writing, and reading were named by 14 per cent of the students in Grades 1-6. Another important area revealed a wide range of interests when approximately 2 per cent of the students in Grades 1-3 and 25 per cent of the students in Grades 4-6 named social studies as the subject they didn't care to study about.

When asked what they would like to learn more about at school, 25 per cent of the students in Grades 1-3 mentioned arithmetic, English, writing, and reading; while 10 per cent of the students in Grades 4-6 selected arithmetic and social studies and 10 per cent of the students chose spelling, English, writing, reading, science, and art.

In summation of Jersild's and Tasch's study, results revealed favorable interests in all subject matter areas except that of social studies. The unfavorable view of the social studies as one which needs careful analysis was pointed out by Jersild and Tasch when they remarked:

The unfavorable attitude which children show toward the social studies as they are taught in the schools becomes more significant when considered in relation to certain other findings. In view of the findings regarding the personal flavor of children's wishes and interests, it is likely that their reactions to the social studies might be different if these were approached more by way of issues that touch upon children's own feelings and that have a bearing on emotional currents in their own lives.¹⁰

Another study in the area of children's interests was conducted by Dean¹¹ in which he examined the relation of children's preference of school subjects to their achievement. Results revealed that high achievers in reading, arithmetic, spelling, and language in Grade 5 tended to express preference for these subjects to a greater degree than did the low achievers.

The implications of the findings are clear for classroom teachers. Methods of teaching that appeal to the interests of the learner are much more likely to be

¹⁰Ibid., p. 28.

¹¹S. E. Dean, "Relation of Children's Preference to Their Achievement," Elementary School Journal, LI (October, 1950), 89-92.

effective than methods that do not. Every school child has some interests. If the teacher can determine these interests and find some means of relating the materials of the school program to them, his task will be easier and pleasanter, for himself and the learner.

Caswell and Campbell suggest two ways in which interests may be used as a basis for grade placement:

First, the interests of a particular group of children may be permitted to determine the placement of subject matter. That is, what a given group of children are interested in at a given time and the duration of their interest may determine what books they read, what references they use, what facts they employ, what they write about, and so on. Time allotments may be determined in the same way. The children may be permitted to spend as much time on a particular phase of subject matter as they care to spend. This procedure places the entire burden of determining desirable grade placement and time allotment on the teacher.

Second, interests that tend to be common to the respective grades may be made the basis for placing subject matter on grade levels. For example, if it is found that pupils generally in the fourth grade are interested in airplanes then material about airplanes is considered appropriate for the fourth grade.¹²

Although Caswell and Campbell do not state verbatim that certain interests have an absolute relationship to any given grade level, they strongly infer it. It would seem, however, in the highly complex society in which we currently reside, teachers should attempt to encourage children to

¹²Hollis L. Caswell and Doak S. Campbell, Curriculum Development (New York: American Book Co., 1935), p. 321.

acquire a broad range of interests rather than attempt to limit them to only a few standardized interests. The practical approach would make the teacher cognizant of interests common to pupils on several grade levels. This approach--an awareness of a wide range of interests in any given classroom--would necessitate the provision of multi-grade materials that could adequately challenge and satisfy the interests of all children in each particular classroom.

Educators need to learn more specifically what it is that captures children's interest and what does not. We need to look for leads to the proper dosage and the proper length of planning periods, discussion periods, and study units. We need to keep an eye open for the kinds of problems and issues that are best suited to different levels of intellectual and social maturity. We need to look for information on how issues that are important in the life of the world may be dealt with in terms that a child can appreciate and understand in the light of his own background of knowledge and experience.

We may never find an absolute answer to these proposed objectives but at least they make us aware that children's interests are a factor in determining the daily schedule and, as a result, will have to be reckoned with by teachers as they allocate time to the various subject matter areas and activities.

By way of summation it seems that a child's interest

is a valuable key to learning. Capture his interest and he will work with persistence and imagination which usually will result in phenomenal precision and detail. In school or out of school, a child mobilizes his imagination, knowledge, and skill for any task that is interesting to him. In a situation he finds uninteresting, he will make no such effort.

Legal Aspects

The second factor affecting scheduling in the elementary school is the set of legal requirements specifying the subjects and activities to be included in the elementary school and fixing the amount of time to be devoted to a subject matter area or activity.

Cummings and Macintosh revealed each state's responsibility for required subjects when they stated:

The State department of education has a clear responsibility to maintain an elementary school program which will provide instruction in language arts, (reading, literature, spelling, handwriting, and oral and written expression), arithmetic, American history, geography, science, health, physical education, art, and music which are mentioned almost uniformly. Such subjects are usually mandated by law, but are frequently required by rulings of the State board of or State department of education and, with a few exceptions, have long been a part of the elementary school curriculum.¹³

¹³Howard H. Cummings and Helen K. Macintosh, Curriculum Responsibilities of State Departments of Education, U.S. Department of Health, Education, and Welfare, Office of Education, Misc. No. 30 (Washington, D.C.: Superintendent of Documents, Government Printing Office, 1958), p. 8.

The state board or state department of education, according to statutory provision, also adopts time standards. A few statements from one such list of standards points to minimum time allotments in the scheduling process:

- D. There shall be approximately the following time allocation to the teaching of the various subject areas in the elementary school:
1. One-third of the school day devoted to the language arts and mathematics.
 2. One-third of the school day devoted to unit experiences in such subjects as geography, history, civics, science and health.
 3. One-fourth of the school day to art, music and directed recreation.
 4. The balance of the day should be devoted to problems in daily living and individual help.¹⁴

Flanders, in an early study of standards legally required by various states, reports the following statements concerning the amount of time devoted to some of the subjects and activities in the elementary school:

In 1919 Oregon required physical education which shall average at least twenty minutes in each school, exclusive of recess periods.¹⁵

In 1923 thirteen states had specific time requirements ranging from one hour per week to two and one-half hour per week to be devoted to physical education.¹⁶

¹⁴Elementary School Standards (Columbus, Ohio: The Ohio State Board of Education, 1965), p. 6.

¹⁵Jesse Knowlton Flanders, Legislative Control of the Elementary Curriculum (New York: Bureau of Publications, Teachers College, Columbia University, 1925), p. 85.

¹⁶Ibid., p. 86.

In 1923 thrift was required to be taught at least thirty minutes a week in each grade of the elementary and high school of the state of Ohio, while Kentucky required at least one fifteen-minute period each week.¹⁷

Fire prevention instruction in New Jersey and Rhode Island "not less than one hour in each month shall be devoted to this subject"; in New York and Ohio, at least fifteen minutes in each week. Virginia provided that a teacher may devote not less than one hour each month and Wisconsin required not less than one-half hour in each month.¹⁸

Teaching of humaneness--Washington requires not less than ten minutes each week be devoted to systematic teaching of humane treatment of animals. Colorado, Montana, North Dakota, and Wyoming require not less than two lessons of ten minutes each per week.¹⁹

Flanders reports that the only instance of specific time requirements applying exclusively to any of the fundamental subjects was found in California when he quoted from the California state law:

In the first six grades of the elementary school, at least two-thirds of the pupil's time during each week shall be devoted to study and recitation of the following subjects: reading, writing, spelling, arithmetic, geography, language and grammar, with special reference to composition, history of the State of California, history of the United States, with special reference to the history of the constitution of the United States; and the history of the reason for the adoption of each of its provisions, the duties of citizenship, together with instruction in local civic government; elements of physiology and hygiene, with special reference to the injurious effects of tobacco, alcohol and narcotics on the human system; morals and manners.²⁰

¹⁷Ibid., p. 107.

¹⁸Ibid., p. 106.

¹⁹Ibid., p. 110.

²⁰Ibid., pp. 145-146.

Later, in a similar study, Shaner grouped the various subjects and activities under broad headings. One such group was the practical and cultural subjects which consisted of agriculture, music, drawing, household arts, industrial arts, exhibitions, bookkeeping, art, cotton grading, and home and farm economy. So far as time allocations concerning the practical and cultural subjects Shaner reports the following:

Not a single prescription in this general classification was found with a time-specification in any on the three years, 1924, 1932, and 1940. Evidently the legislators were not concerned to any great degree with the effectiveness of the instruction in the subjects and activities in this category. If they had deemed these subjects of major importance in the education of the child, it is quite probable that time specifications would have been added to the curricular prescriptions.²¹

The fundamental subjects, as defined by Shaner consisted of: arithmetic, English, geography, penmanship, reading, and spelling. He points to the legality of these subjects when he stated:

Not one of these six items grouped together as "Fundamental Subjects" was required to be taught in the public elementary school of any state by a provision in the constitution of the state. In every instance instruction was required in the six subjects by laws enacted by the legislatures of the various states.²²

²¹James D. Shaner, Legislative Control of the Elementary Curriculum from 1924 to 1940, unpublished doctoral dissertation, University of Pittsburgh, Pittsburgh, Pennsylvania, 1941, p. 55.

²²Ibid., p. 67.

Shaner discussed the few states requiring minimum time allotments in the "fundamental subjects" when he stated:

Except in two instances, all subjects, except "Geography", in the California law, and "Writing" in the North Dakota law, time-specifications were not resorted to by the legislatures to insure the realization of their will. In each of the three years of this study, 1924, 1932, and 1940, "Arithmetic", "English", "Reading", and "Spelling" had one time-specification each. "Penmanship" had two minimum time allotments for each of the three years.²³

In an attempt to synthesize the problem of legally imposed time allotments and scheduling, Shaner made a noteworthy observation when he stated:

A noticeable trend in curricular legislation is the addition of time-specifications to subject-matter requirements. This trend is one of the most significant findings of this study. Such legislative provision restricts the educational program of the public elementary school and places a serious limitation on the teacher. She must make her program of studies conform to the law regardless of whether the prescribed subject-matter meets the needs and interests of the child and of the community. If this trend continues, and there is no evidence otherwise, the initiative of the teacher will be destroyed, the complete control of the elementary school curriculum will rest in the state, the local community will lose its last stronghold in our American democratic institutions, and our children will suffer from a rigid, inflexible, state-controlled curriculum.²⁴

Shaner places the responsibility directly on the state. However, few would argue that any conception of the State as an educational agent, interested in seeing

²³Ibid., p. 70.

²⁴Ibid., p. 156.

that schools are provided to preserve itself and to advance its welfare, naturally involves the right of the State to fix the minimum standards below which it will not allow any public or private school to fall. While either too much liberty or too much state oversight may result in weakness in the local school systems maintained, some state oversight and control must be exercised if strength is to be developed. In all such matters as types of schools and classes must be maintained; the language in which the instruction is given; length of term to be provided; the care of children which must be exercised; the hygienic conditions; and the minimum rate of tax for schools, which must be raised locally, it is essentially the business of the State to fix the minimum types, lengths, and amounts which will be permitted, and through the exercise of state inspection and state penalties to enforce these minimum demands. However, does this responsibility of the State include placing time allotment restrictions on the classroom teacher? If time specifications and penalties for the failure or refusal of the teacher to comply with the statutes making mandatory the devoting a certain amount of time to certain subject matter areas are added to curricular prescriptions, will not the curriculum become so inflexible that it will be difficult, if not impossible, to meet the ever-changing needs of society?

Do we want an educational program so fixed by law

that the professional educators will have no opportunity for experimentation and for adjustment of the curriculum to the needs, interests, and abilities of the children?

The amount of time available for a given activity is determined either directly or indirectly by legislators, who, for the most part, fail to realize the full importance of proper administration of the time schedule. It is only after a careful consideration of the relative importance of the various objectives of elementary education and the relationship of the different school activities to these objectives that one can approach scientifically the topic of time distribution.

Pressure Groups

Wherever there are teachers, there are societal pressures. Education and teaching are always related to the various forces or pressures within a social system. From the earliest days of recorded history, whenever teaching has been done outside the family group, pressures within the community have been imposed upon the teachers and the teaching. The time is long since that day in Athens when certain forces caused Socrates to drink poison. Yet there is little doubt that certain forces operate within our own national community. The methods of pressure exerted by these various forces may be through public propaganda campaigns aimed at influencing public opinions

and attitudes, through lobbying activities aimed at influencing legislative and executive processes, or by specific pressure upon teachers themselves.

The purpose of this discussion is to examine the role that pressure groups play in an attempt to add, lessen, or delete topics and/or subjects to the curriculum in the elementary school.

Robert Skaife, in the 1953 Yearbook of the Association for Supervision and Curriculum Development, devoted an entire chapter to groups that affect education in which he revealed the nature of groups when he stated:

Some groups and individuals appear to claim to be motivated by politico-economic purposes and others appear or claim to be motivated by patriotic purposes. However, placing an organization in a particular category is difficult because the decision rests upon a consideration of its literature, its membership, aims and purposes are generally phrased in idealistic terms, its classification becomes even more difficult, for closer inspection may reveal that its practices and its professed aims are far apart.²⁵

The program advocated by these various groups imply philosophic judgments. Each group, with the express purpose of "bettering education," pushes for changes which involve decisions that all too frequently are relative and cannot be measured objectively.

Whenever we refer to anything as better, we move

²⁵Robert Skaife, Forces Affecting American Education, 1953 Yearbook of the Association for Supervision and Curriculum Development, (Washington, D.C.: The National Education Association, 1953), pp. 49-50.

into the area of making judgment about "values." What is "better" education? Some may say that it is education by which children learn more and learn it so that it sticks. Learn more about what? Learn to do what?

Should all people learn the same things? How shall we select what should be learned? How much of the total job of education should the schools assume? No matter how one defines "better" elementary education, several questions arise. To the extent that decisions involving such questions affect the apportioning of the school day to the various subjects and activities in the elementary school which result in changed behavior of children; they are the concern of all of us--educators and noneducators alike.

The values of a culture provide tone and spirit for the educational process. Yet there should be differences between general cultural values and educational values. Educational values should reflect general cultural values, bolster them at weak points, and help maintain balance in their interplay. They provide a standard for present practices and a guide for future ones. Far from being esoteric ideals suitable only for the classroom, educational values are at the heart of the matter. It is essential, therefore, that all educational issues be weighed carefully in terms of values.

To a considerable extent criticism of American

education is criticism of American society. By and large, the values accepted and many of the practices found in schools are imitations of the larger society. Havighurst and Neugarten elaborated on this point when they stated:

Whatever the changes or fluctuations in school policy in a given period of time, they occur always as a reflection of changing attitudes toward education and changing images of the school held by at least some members of the community. In this respect, either directly or indirectly, the school reflects the value systems and the prevailing image of the school that is current at a given time in a given place.²⁶

What hierarchy of priorities should be recognized in scheduling students' time for the various subjects and school experiences? H. B. Wilson, who was chairman of the Committee on Economy of Time of the Department of Superintendence of the National Education Association, posed these questions when he discussed the minimum essentials in the elementary school subjects:

1. What subjects are essential constituents of the elementary curriculum?
2. What is absolutely essential content in each subject?²⁷

²⁶Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, Inc., 1957), pp. 218-219.

²⁷H. B. Wilson, "Minimum Essentials in Elementary-School Subjects," Minimum Essentials in Elementary-School Subjects--Standards and Current Practices, Fourteenth Year-book of the National Society for the Study of Education, Part I (Chicago: The University of Chicago Press, 1915), p. 14.

There is no set of specifications for a balanced curriculum which can be applied to every school in the United States. Yet, in the United States today powerful special-interest groups which include patriotic, political, social, religious, economic, educational, humane, welfare, and professional, seek to dominate what is taught in public schools. Individuals within these groups are sincere in their beliefs. Often they strongly assert that the very existence of our society depends upon children's acceptance of their values. Many businessmen believe the schools should more actively teach the virtues of free enterprise, competition, and limited government. Doctors insist that children be taught that society would not benefit from socialized medicine. Labor leaders solicit the schools' support of labor's point of view. Persons who belong to organizations promoting civil rights urge schools to teach children the justice of their stand. Opponents of civil rights object. Internationalists expect teachers to present the United Nations, foreign aid, and internationalism in a favorable light. Isolationists may accuse teachers who do so of being communists. Obviously the teacher is most likely to be victim of attacks from these groups. Raup added clarification to this point when he stated:

Both indirectly and directly, the teacher feels the pressure of organized interests. Such pressure is brought to the classroom in the background of the

young people whom he teaches; it is present in his own personality; it is operating in the atmosphere which they all breathe, through advertising, publicity, and all kinds of propaganda; and finally, it often breaks out in the public attack, perhaps in legislation, upon what he teaches and the way he teaches.²⁸

Serious controversies have been caused by representatives of extreme rightist patriotic or socioeconomic groups. The rightist groups demand that textbooks be purged, books be banned, "collectivism" and "progressive education" be eliminated, and teachers who present materials differing from rightist interpretations of socioeconomic and political issues be discharged.

In the early 1960's the John Birch Society was the most discussed rightist group, probably because its membership was secret, its organization authoritarian, and its leader was said to have called ex-President Eisenhower a communist.

Tactics as displayed by the John Birch Society are not representative of most pressure groups. Some organizations use methods of persuasion rather than coercion. Nevertheless, when a group does not succeed in selling its program to schools, the most ardent advocates of the association's point of view are likely to become hostile.

Under the leadership of Arthur Bestor, Mortimer

²⁸ Bruce Raup, Education and Organized Interests (New York: G. P. Putnam's Sons, 1936), p. 2.

Smith, and others, advocates of a traditional course of study organized the Council of Basic Education. The council publishes attacks on schools and applies pressures to get its program adopted. The council holds that basic education should include only certain subjects which would endow one with the ability to perform successfully as a learner and citizen. The program espoused by the council is a highly academic curriculum in which they expound to great lengths the virtues of liberal education. They often pose questionable dichotomies such as "life adjustment" vs. "traditional education," "education" vs. "training," "subject matter" vs. "methods," and "solids" vs. "frills."

The American Legion furnishes another example of the pressure of a minority group. The organization has an abundance of material which is frankly printed and boldly distributed to attain its purposes. Of marked significance is The American Legion Magazine, a regular publication of the Legion. Seldom does the magazine fail to have in each issue one or more suggested programs for activities of the local post for youth and the community, programs outlined primarily by the National Americanism Commission of the Legion. The magazine continually calls attention to the varied types of "assistance programs" begun and carried out in the schools. The wide extent to which the Legion's activities are planned for the schools may be shown by an

examination of the many state and local Legion magazines published over the country.

The above are only a few of the many "non-educator" pressure groups placing demands on the public schools. Since the purpose of this dissertation is not to evaluate each pressure group that exists in this society, the examples given are made to point out the nature of pressure groups.

Among the "educator" pressure groups, there are many individuals²⁹ and groups³⁰ which also place demands on the public schools.

²⁹ Benjamin S. Bloom, Taxonomy of Educational Objectives: The Classification of Educational Goals (New York: David McKay Co., Inc., 1956).

Jerome S. Bruner, The Process of Education (New York: Alfred A. Knopf, Inc., 1960).

Noland Kearney, Elementary School Objectives (New York: Russell Sage Foundation, 1953).

James E. Russell, Change and Challenge in American Education (Boston: Houghton Mifflin Co., 1965).

Paul Woodring and John Scanlon, American Education Today (New York: McGraw-Hill Book Co., Inc., 1963).

³⁰ Educational Policies Commission, The Central Purpose of American Education (Washington, D.C.: The National Education Association, 1962).

National Education Association Project on Instruction, Schools for the Sixties (New York: McGraw-Hill Book Co., Inc., 1963).

President's Commission on National Goals, Goals for Americans (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960).

Probably the first group to make suggestions concerning time allotments in the elementary school which was composed of educators was the Committee of Fifteen on Elementary Education. William T. Harris, chairman of the sub-committee on the correlation of studies in elementary education, and also United States Commissioner of Education made the following recommendations concerning time allotment in the elementary school:

The following schedule will show the number of lessons per week for each quarter of each year:

Reading. Eight years, with daily lessons.

Penmanship. Six years, ten lessons per week for first two years, five for third and fourth, and three for fifth and sixth.

Spelling Lists. Fourth, fifth, and sixth years, four lessons per week.

Grammar. Oral, with composition or dictation, first year to middle of fifth year, text-book from middle of fifth year to close of seventh year, five lessons per week.

Latin or French or German. Eighth year, five lessons per week.

Arithmetic. Oral, sixty minutes a week for first and second year, text-book third to sixth year, five lessons per week.

Algebra. Seventh and eighth year, five lessons per week.

Geography. Oral, sixty minutes a week for first to middle of third year, text-book from middle of third year, five lessons weekly to seventh year, and three lessons to close of eighth.

Natural Science and Hygiene. Sixty minutes per week, eight years.

Constitution of United States. Third quarter in the eighth year.

General History and Biography. Oral lessons, sixty minutes a week, eight years.

Physical Culture. Sixty minutes a week, eight years.

Vocal Music. Sixty minutes a week, eight years.

Drawing. Sixty minutes a week, eight years.

Manual Training, Sewing and Cooking. One-half day each week in seventh and eighth years.³¹

Later, Sears suggested that the relative value of subjects should be used when determining the amount of time allocated to the various subject matter areas of the curriculum. Sears gives the following principles that should be kept in mind when formulating the curriculum:

1. There is so much subject matter in each course to be covered in a given time, from which one can estimate the approximate amount to be covered each week and each day.
2. There is the number of classes or recitations to be heard each day, from which, with the amount of available time, one may compute the average time which can be devoted to each class.
3. There is the relative value of each recitation or study, to be decided upon as a basis for determining which studies shall have more and which less than the average time allotment.
4. There is the order in which each lesson shall be studied and recited, to be determined by the relative difficulty of the studies, as shown by the tendency of each to fatigue the child.

³¹William T. Harris, The Report of the Committee of Fifteen on Elementary Education (New York: American Book Co., 1895), pp. 93-94.

5. There is the general problem of the distribution of the child's energy throughout the day.
6. Then, there is the division of the day into work and recitation periods, to be determined by the influence of recreation upon keeping the child's energy at a high state of efficiency.³²

In 1957 the New England School Development Council conducted a survey of sixty-eight communities in the six New England states. One specific question in the questionnaire sent to each community was concerned with the pressures for additional time allocations. The results were reported as follows:

<u>Number of Responses</u>	<u>Item</u>
35	More science
20	More concern for mental health
19	More training in reading
17	Hot lunch at school
15	More phonics
13	More spelling
11	More music
11	More health and physical education
11	French or another modern language
11	More handwriting
11	More arithmetic
10	More art
9	Released time for religious instruction
6	Training in library usage and research
5	More health services (dental and medical clinics)
4	More geography, history, civics, world understanding
3	Moral and spiritual education. ³³

³²J. B. Sears, Classroom Organization and Control (New York: Houghton Mifflin Co., 1917), pp. 159-160.

³³New England School Development Council, op. cit., pp. 6-7.

The council revealed the relationship of pressures and size of community when it stated:

That the larger school systems are reporting far fewer pressures on time than the less populated school districts, the committee suspects, is a reflection of the fact that small communities are more intimate. Pressures expressed by various people in the small communities reach the ears of the school committee, the school administrators, and the teachers more quickly and perhaps in a more poignant way than they do in the large city systems. Large systems are protected by their size, by a more "bureaucratic" kind of organization, and by the strength of their history and established policies.³⁴

A recent study by the National Education Association points out a pertinent implication of the influence bureaucracies have on the education of children when it stated:

Parental pressure on the schools to emphasize social adjustment will increase. Parents expect schools to stress what they have found important, and "organization parents" tend to feel that success depends upon a combination of technical or managerial skill and proficiency in interpersonal relations. As employment in large organization increases, so will this kind of pressure.³⁵

In another recent study by the National Education Association, the following recommendations were made concerning the selection of content:

Each curriculum area should be under continuous study and evaluation and should be reviewed periodically. One purpose of such reviews is to determine whether recent findings in the academic disciplines are or should be reflected in the instructional

³⁴Ibid., p. 8.

³⁵National Education Association Project on Instruction, Education in a Changing Society (Washington, D.C.: The National Education Association, 1963), p. 47.

program. These reviews should utilize the knowledge and skills of the teacher, the school administrator, the scholar in the academic disciplines, the scholar in the profession of teaching, and the lay citizen each contributing his special competence to the total task.³⁶

Not all persons who make demands upon schools are organized into groups. Many individuals exert pressure upon superintendents, teachers, and school boards. In a study conducted by Neal Gross, results revealed that 92 per cent of the superintendents and 74 per cent of the school boards had been exposed to pressures from parents and the PTA. Interestingly enough, Gross reported that the PTA made demands of a larger percentage of school officials than did any other individuals or groups. Gross reported the following specific pressures to which superintendents and school-board members were exposed when he stated:

Pressure	Superintendents (N=105)	School Board Members(N=508)
1. Demands that the schools should place more emphasis on the Three R's	59	53
2. Demands that the schools should teach more courses and subjects	64	447
3. Protests against the introduction of new services (in addition to academic instruction) for pupils	39	35

³⁶ National Education Association Project on Instruction, Deciding What To Teach (Washington, D.C.: The National Education Association, 1963), p. 48.

Pressure	Superintendents (N=105)	School Board Members (N=508)
4. Demands for the introduction of new services (in addition to academic instruction) for pupils	63	49
5. Demands for the introduction of new teaching methods	29	35
6. Protests against the introduction of new teaching methods	43	28
7. Demands that greater emphasis be placed on the athletic program	58	52
8. Demands that less emphasis be placed on the athletic program ³⁷	40	38

Americans assume that the local community, national values and concerns, theories of educated men, expert knowledge, and the heritage of the past should determine what is taught in schools. Proposals for curriculum change should not be based on community whims or national hysteria even if the suggested change might be subsumed under a broad educational objectives such as "individual self-realization." There are indeed learnings of high priority. Demands for change must be evaluated in terms of whether the critics represent pressure groups at odds with the school's objectives and the mainstream of American life.

This is not to say that pressure groups cannot make

³⁷ Neal Gross, Who Runs Our Schools (New York: John Wiley and Sons, Inc., 1958), p. 49.

worthwhile suggestions for education, because pressure groups' criticisms and demands can have good effects--good if the criticisms and demands produce better curriculum and methods, more earnest students, more extensive and thorough experimentation and research, and greater concern for the problems of schools. However, bad can result if the criticisms and demands bring about curriculum changes that violate the spirit of free inquiry, that make inadequate provision for the educational needs of all children, or that create an imbalance in the classroom teacher's time allotment schedule. In recent years some of the criticisms and demands of pressure groups have been intemperate, couched in insulting language, and filled with untruthful statements. Some of the replies by defenders of schools have also been biased, emotional, and immature. These reactions seldom lead to constructive action. It should be a concern to all those who have a sincere interest in improving schools to find ways that the good and not the ill effects of criticisms and demands will prevail.

In the allotment of time to the various subject matter learnings in the elementary school, the individual, or group, must come to an agreement upon the purposes of their educational program. Since the amount of time allocated to any aspect of the program depends upon what is conceived to be important, it follows that agreement upon educational objectives is essential to agreement upon

time allotment practices. Moreover, agreement upon purposes must be reached at the level of operational meanings as well as the level of discussion, for it is not unusual to find persons who agree upon purposes so long as no decisions involving choices among purposes have to be made. However, it is not the intent of this discussion to suggest that differences of opinion about purposes must be settled before other aspects of the problem of time allotment are considered. The point is that such differences must be resolved as the group moves toward a decision about time allotment.

Non-Instructional Uses of Time

The non-instructional use of time is a situation that classroom teachers have long faced as they go about the process of scheduling the elementary school day. In many situations teachers must allocate a certain period or amount of time in the school day for the purpose of collecting lunch money, taking a milk break, supervising the cafeteria, and so on. The performance of these trivial duties and tasks reflects on the instructional program to the extent that teachers sacrifice valuable time that might better be spent on giving a few more minutes to some intellectual area.

An example of the classroom teacher being relieved of many non-instructional duties was reported in the

Amphitheater Public Schools in Tucson, Arizona, when it was stated:

The use of nonteaching lay persons has freed teachers from a great deal of time-consuming clerical work. For example, the twelve teachers in Amphitheater's Walker School receive each day a total of forty-eight hours of varied, nonprofessional assistance related to the instructional program.³⁸

Many are the tasks for which teachers are responsible yet which could be handled by clerical aides, volunteers from PTA's, faculty secretaries, teacher aides, and other subprofessionals.

Some of the clerical tasks which prevent the classroom teacher from devoting his full effort to professional work are collecting fees; mimeographing tests and class exercises; ordering supplies; keeping grade books, class records, and health records; scoring tests; soliciting subscriptions to magazines; distributing, collecting, and alphabetizing various forms; recording test data; or arranging bus transportation for field trips.

In addition to clerical tasks the teacher also performs supervisory duties such as hall duty, cafeteria supervision, study hall supervision, bus supervision, or supervision of detention halls.

Walter Foster reports that in a survey of approximately two hundred experienced elementary teachers

³⁸Malcom M. Provus, "NEA Time to Teach Project," NEA Journal, LIV, No. 4 (April, 1965), 10.

questions were asked concerning changes in conditions of teaching. Results revealed that 13 per cent advocated release from playground supervision, 12 per cent suggested use of teacher aides to help with supervision, films, supplies, bulletin boards, and grading of papers, 11 per cent recommended use of aides for playground and lunchroom supervision, and 10 per cent suggested more secretarial help.³⁹

The Research Division of the National Education Association conducted a poll of the lunch period situations of 1,500 teachers. Of the 1,443 responding, 8.6 per cent had a full duty-free period daily and 32.4 per cent had a duty-free period on scheduled days.⁴⁰

In 1959 the New England School Development Council submitted a questionnaire concerning time allotment in the elementary school to sixty-nine school systems in which one question was specifically asked about non-instructional uses of time:

"What things are handled through the schools at the expense of time for the curriculum?" The responses were as follows: 24 reported charity drives, 20 reported collections at various times, 40 reported milk programs, 39 reported banking programs, 10 reported questionnaires, 38 mentioned lunch money, 31

³⁹Walter S. Foster, "Teachers' Opinions: Their Implications for In-Service Education," The National Elementary Principal, XLV, No. 5 (April, 1966), 48-51.

⁴⁰"Teacher-Opinion Poll," NEA Journal, LII, No. 8 (November, 1963), 41.

mentioned the Junior Red Cross; and then there were others such as: stamp collecting, picture money, Blue Cross, accident policy, notices, P.T.A. activity, school fund drives, insurance, attendance records, student patrols, elaborate dramatizations, and so on.⁴¹

A recent study concerning the use of teacher aides in non-instructional duties revealed:

The use of teacher aides can slash the percentage of time teachers devote to routine tasks, a five-year study of 25 Michigan public schools showed. During the two years aides were employed, the time teachers spent correcting papers was cut by 89 per cent; enforcing discipline, 36 per cent; taking attendance, 76 per cent; preparing reports, 25 per cent; supervising children moving between classes, 61 per cent; and monitoring written lessons, 83 per cent. With the increased time, teachers spent 105 per cent more time on lesson preparation; 57 per cent more class time on recitation; 20 per cent more on preparation on homework assignments; and 27 per cent more on individual coaching.⁴²

The above results causes one to wonder how teachers find time to teach. It seems clear that non-professionals can and should be used more widely in the schools than they have been. The use of non-professionals is not a panacea to the problem of non-instructional use of time, but it certainly seems to be a step in the right direction.

The New England School Development Council offered a tenable solution when it stated:

⁴¹New England School Development Council, op. cit., p. 10.

⁴²"News and Trends," NEA Journal, LVII, No. 1 (January, 1968), 4.

Teachers and administrators alike must examine the interruption problem in their own schools, and create logical and defensible solutions for them. A proper professional stance would be to support the provision of labor-saving equipment; to ask the School Committees to adopt policies excluding adult fund-raisers and other promotional agencies from invading the schools, to insist that the schools be protected from non-educational intrusions, and to argue that instruction is the chief, if not exclusive, business of the classroom.⁴³

Length of the School Day

There is lack of evidence as to the optimum length of the elementary school day. As a rule, the length of the elementary school day is standardized only for the different schools within a school system. The Encyclopedia of Educational Research sums it up this way:

No one has been able to determine scientifically how long a school day or year is necessary for achieving the objectives of the public-school program. Neither has anyone determined scientifically the scope of a curriculum which can be attained under existing lengths of the school day or year. Likewise there are no scientific answers to the questions as to how many hours a day a pupil can profitably spend in study or how many hours a day a teacher can do efficient teaching.⁴⁴

As classroom teachers go about apportioning the school day, they must make their schedules fit the existing framework. That is, each community has rigorous standards

⁴³New England School Development Council, op. cit., p. 11.

⁴⁴Henry J. Otto, "Elementary Education--III. Organization and Administration," The Encyclopedia of Educational Research, ed. Walter S. Monroe, (2d ed. rev.; New York: The Macmillan Co., 1950), p. 369.

so far as when school daily begins and ends throughout the school year. Furthermore, these standards vary from community to community. In short, a tremendous amount of relativity exists throughout the nation so far as length of school day is concerned.

Kyte discussed the controls placed on the length of the elementary school day when he stated:

The length of the school day is fixed by law-- either by state legislation or by local school board regulation. Children attend kindergarten about three hours a day. Primary-grade pupils generally attend school four to five hours each day. The upper grades are in session five to six hours a day. Severely overcrowded schools are organized on the less effective double-session program, in which each class is in session the legal minimum number of hours.⁴⁵

By and large, the approved length of the elementary school day comes within the limits provided by law or by boards of education. It would appear from the viewpoint of the growing child in a democratic society that the deciding factor would be the number of school hours which is best for his normal, or perhaps slightly accelerated, growth. But there are other factors that may prevent the full realization of any ideal set-up. The objectives of education, scope and types of curriculum experiences, size of school and the way it is organized, school facilities and the physical environment, efficiency of teachers, customs, and convenience for parents are a few of the variable

⁴⁵George C. Kyte, The Elementary School Teacher at Work (New York: The Dryden Press, 1957), p. 433.

factors that make it difficult, if not impossible, to solve the problem scientifically.

In view of this situation what can classroom teachers do? It appears to be a twofold problem that must be considered as they attempt to cope with these factors. On the one hand they must plan experiences that will challenge adequately each child on his own level, while on the other, they must satisfy society's demands--a fortitudinous task. But in spite of all these difficulties a solution may be possible. All factors considered in proper perspective, the problem may be solved in part by making all possible readjustments of local conditions in furtherance of child growth at each level of maturity. In other words, the problem may be solved through a process in which each individual community or school system evaluates the various factors in light of their own unique situations. Stratemeyer and others suggested that the length of the school day should vary in different schools when they stated:

Some of the characteristics of the community in which learners live may influence decisions regarding the appropriate length of the school day. The fact that almost all children in a rural school must travel by bus may determine the length of the day. In another community where mothers work until late afternoon, the school may well be extended to six o'clock for those who wish it. In still another community where little provision is made in the home or neighborhood for after-school recreation, the day may be lengthened to include this type of activity. Such factors as the following should also be taken into account in determining the length of day: the distance learners travel to and from school, the means of transportation, the age of the learners,

the needs of older boys and girls for work experiences, the staff available, the nature of educational opportunities afforded by the homes and community agencies, and the particular role of the school in that community. The school that provides for balanced growth is responsive to factors such as these and varies the length of its program to adjust to them.⁴⁶

The Historical Development of the Length
of the Elementary School Day

In an attempt to provide a comprehensive evaluation of this factor of scheduling, this writer felt it necessary to examine the historical development of the length of the elementary school day.

After reviewing the historical development of research related to the length of school day from 1823 through 1926, Mann⁴⁷ reported that during both the 1823 and 1827 school years, each grade spent the same amount of time in school (6 hours, 15 minutes), whereas during both the 1845 and 1856 school years, each grade received only 6 hours of instruction each school day.

From 1856 to 1904 the trend was toward shorter daily sessions. After 1904, except in Grades 1 and 2, the trend changed again toward longer sessions, and by 1926 the length of daily sessions had returned to approximately

⁴⁶Florence B. Stratemeyer et al., Developing a Curriculum for Modern Living (New York: Bureau of Publications, Teachers College, Columbia University, 1957), p. 465.

⁴⁷Mann, op. cit., p. 34.

what they were in 1866.

In 1949, Bathurst reported the following data concerning length of school day in one hundred cities:

For Grades 1-3, the median length of day reported by 80 cities is 5 hours. The longest day is 6 hours, 30 minutes; the shortest, 3 hours, 45 minutes.

For Grades 4-6, the median length of day reported by 77 cities is 5 hours, 30 minutes. The longest day is 6 hours, 45 minutes; the shortest, 4 hours, 30 minutes.⁴⁸

In 1960, the Educational Research Service⁴⁹ tabulated data concerning the length of the school day from 875 school districts. The data revealed that in 1958-59 in Grades 1-6 the pupils' median school day ranged from 6 hours, 29 minutes in Grade 1 to 6 hours, 42 minutes, in Grade 6.

In response to the question of whether or not there had been any changes in the length of school day between 1948-49 and 1958-59, 70 per cent of the districts reported that they had not changed the school day at any grade level, whereas 27 per cent of the districts with elementary grades had a shorter school day in 1958-59 than 10 years before, and 3 per cent reported a longer day.

⁴⁸Bathurst, op. cit., p. 32.

⁴⁹National Education Association, American Association of School Administrators and Research Division, Length of School Day and Class Periods in Urban School Districts, 1958-59, Educational Research Service Circular No. 7, 1960 (Washington, D.C.: The Association, November, 1960), pp. 2-3.

In another study conducted in 1960, Dean⁵⁰ reported results from 4,307 urban places concerning predictions of changes in the elementary school day during the next five years. Results revealed that 23.7 per cent of the respondents indicated a likelihood of some increase in the length of the elementary school day. Less than one per cent indicated a decrease, while 71.5 per cent reflected no change.

In 1965 the NEA⁵¹ conducted a poll of 326 school systems enrolling 12,000 or more students in which it was revealed that the average length of school day for pupils in Grade 1 was found to be 6 hours, 16 minutes. Each grade progressed slightly so that the average pupil in Grade 6 spent 6 hours, 37 minutes in school.

The survey asked whether any changes had been made in the length of the school day during the past five years. No change was reported by 74.2 per cent of the systems, 23.6 per cent revealed a lengthened school day, and 2.2 per cent reported a reduction in the school day in the past five years.

In viewing the above surveys, it may be said that most school systems have not appreciably changed the length of the elementary school day in the past twenty years. However, the fact remains that in 1960 one-fourth of Dean's

⁵⁰Stuart E. Dean, op. cit., p. 37.

⁵¹"Length of School Year and School Day," NEA Research Bulletin, XLIII, No. 4 (December, 1965), 103-105.

urban systems predicted an increase in the length of the elementary school day in the next five years and in 1965 that same amount indicated such a change. But, in comparing the 1960 poll reported by the Educational Research Service and the 1965 survey conducted by the NEA, one observes a decrease in the average length of the elementary school day. This appears to contradict the previous statement concerning an increase in the length of the elementary school day.

It appears therefore, since the length of the school day remains relatively unchanged, that the importance of having all essential school activities and experiences take place during the officially scheduled school day means that some readjustments in the use of time must be made. This implies that individual schools must continually evaluate their programs in light of their objectives, children, and communities which they serve. Educators need to give intensive thought and planning to some ways of saving teaching time. If an activity is not an integral part of the instructional program, then program adjustment must be made.

Administrative Requirements in Scheduling

The uses of available time in the elementary schools are, to some extent, governed by official school policy. Since the educational program of a district is

administered through the local school units, each building must fit into the scheme as a whole. Each elementary school provides for children of a certain types and of given ages and is assumed to render to its pupils certain procedures, processes, and experiences toward the attainment of the objectives of public education. Obviously the interpretation of the objectives and the manner in which they shall be attained differs, sometimes markedly, from system to system or even from school to school within the same system. In many cases the interpretation of objectives reflects on the process of scheduling in the elementary schools of a given school system to the extent that rigorous time allotment schedules are forced upon teachers. Otto discussed this factor of scheduling when he stated:

The indifferent manner with which time allotments are viewed by some principals suggests that the full significance of the importance of proper administration of the time schedule is not realized by many school executives. It is only after a careful consideration of the relative importance of the various objectives of elementary education and the relationship of the different school activities to these objectives, as well as the principles underlying the teaching and learning of various phases of the curriculum that one can approach scientifically the topic of time distribution. It is not an easy task to determine for a local school how the school time shall be distributed so that all desirable activities may be allocated their proper places in a school program.⁵²

⁵²Henry J. Otto, Elementary School Organization and Administration (New York: D. Appleton-Century Co., 1944), pp. 287-288.

Teachers have long been faced with the problem of apportioning the elementary school day to the various subjects and activities so that optimum learning might occur. This problem is often compounded by administrative requirements regarding time allotments which teachers also must observe.

Chronologically, this situation is not of recent origin; rather, it has existed for several years. One example of this situation occurred in 1913 when McMurry made a survey of the New York City Public Schools in which he examined the amount of time to be devoted to the various subject matter offerings as fixed by administrators:

The number of minutes per week to be devoted to each subject of study is also largely fixed for the principal by the Board of Superintendents. Where there is likely to be some doubt about how the time should be divided, in case a subject is not taught every day, even the exact length of each period of recitation is also fixed. For example, in the seventh year there are 120 minutes per week allowed for geography, and this must be divided into three periods. Some of the superintendents have stated that the principal is given great freedom in time allotment for studies, owing to the number of minutes per week set aside for "study and unassigned time." There is such a provision, and the maximum amount per week of such time, for any one grade, is 235 minutes in the seventh year. But, in all grades above the third, thirty minutes of this time per day, or 150 per week, is set aside by the superintendents for study of such subjects as require preparation. That leaves 85 minutes per week, or 17 per day, as the maximum amount in these five grades that can freely be assigned by the principal. The amount allowed in the first three grades ranges from 35 to 42 minutes per day. Thus, it is seen that the principal is given only a slight degree of freedom in

allotting time to the several branches of study.⁵³

In 1926 Bagley and Kyte made a study of the school systems in California. In this survey they found evidence concerning administrative requirements in time allotment schedules. This discovery resulted in the following statements:

Only 6 county courses contain suggestive programs which account for practically the whole day of all grades enrolled in a rural classroom. The teachers in these counties can appreciate the value of a program which indicates how they can budget all of their own school time and that of all of the pupils. Four of the courses include daily programs of recitation periods only. Such schedules fail to account for the entire time of either the pupils or the teacher. Hence these programs serve only as partial guides because they do not advise the teacher how to meet the needs of all groups of pupils throughout the school day.

Four other counties and 10 city school systems print in their courses of study time-allotment schedules. They are included for the purpose of indicating to the teachers the approximate distribution of time among the various subjects each day of the week in each grade. These tables assist teachers in making balanced programs.⁵⁴

In 1949 the U. S. Office of Education conducted a survey of elementary education in one hundred cities which revealed that time allotment schedules are occasionally issued by the administrative staff. Bathurst summarized

⁵³Frank M. McMurtry, Elementary School Standards (New York: World Book Co., 1913), pp. 189-190.

⁵⁴William C. Bagley and George C. Kyte, The California Curriculum Study (Berkeley, California: The University of California Printing Office, 1926), p. 67.

the point thus:

When the central office plans allotments of time, the allotments are expected to be adhered to somewhat rigidly in some cities. In other cities allotments are more flexible and teachers are permitted to vary them with respect to such things as needs of individual children or of classes or groups; to the time of the month or year in which the subject matter is to be taught; and to the use of subjects in connection with activities.

For example, 35 cities either use or expect to use the time allotments made by the central office. In 40 cities teachers are either not using or not required to adhere to the time allotments planned by the central office.⁵⁵

In a previously mentioned survey of sixty-eight school systems as conducted by the New England School Development Council, administrators were asked to tell whether the teachers in their school systems had relatively complete freedom, partial freedom, or no freedom in their decisions regarding the scheduling of class activities. Respondents revealed the following results:

Classroom teachers will be interested in the responses: 17 communities claimed that the teachers have complete freedom; 48 said that they give considerable freedom and provide a schedule of recommended time allocations; and three require their teachers to follow a definite time-allocation pattern.⁵⁶

In 1960 the U. S. Office of Education completed a survey to determine the current policies and practices in

⁵⁵Bathurst, loc. cit., p. 31.

⁵⁶New England School Development Council, op. cit., p. 9.

time allocations in the public elementary schools for Grades 1-6 of urban places with populations of more than 2,500 inhabitants.

The respondents were asked to indicate the basic underlying policy and the specific manner in which the policy was applied. With respect to the fundamental policy upon which the determinations of instructional time allocation were made, results revealed that the most common policy was that of "suggested time per subject," with slightly less than half the urban places employing that procedure. The designated policies of "no recommended time" and "block time" were about evenly distributed, each approximately 10 per cent of national practice. Dean has summarized the practices thus:

The most prevalent practice, then, takes the form of a suggested time allotment guidelines for teachers which, presumably, is permissive and non-restrictive.⁵⁷

The manner in which the practices were put into action with reference to instructional time allocation was another aspect of administrative procedure explored. Respondents were asked to indicate whether this was done by allocating minutes per week, allocating a percentage of time per week, or some other method of allocation. Results, as stated by Dean, were:

Nationally, for Grades 1 through 6, the most frequent procedure for instructional time allocation

⁵⁷Stuart E. Dean, loc. cit., p. 52.

is on the basis of minutes per week, 46.3 per cent of the total. The plan "percentage of time per week" is employed by 19.5 per cent of the urban places. "Other" accounted for 4.9 per cent and "no answer," 29.3 per cent.⁵⁸

In essence research indicates that teachers have to make provisions for administrative requirements when in the process of scheduling the elementary school day. It would appear, from today's knowledge of child growth and development, that this restriction would impede scheduling in the elementary school to the extent that teachers would not have adequate time to devote to the providing of children's individual differences. Even though many school systems report that official time allotment schedules exist, one wonders if teachers really adhere to such schedules.

Holmes summarized the point thus:

Official tables of time allotments do not, of course, represent actual distributions 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 classwork in arithmetic, or any other subject, which the published school schedule promises him. Eventually our standards must be based on the study of time actually consumed; but even then we shall have to allow for obstacles and interruptions, and meanwhile the assigned times show at least the official prescriptions from which actual times differ. They give us starting-points.⁵⁹

⁵⁸ Ibid., p. 54.

⁵⁹ Holmes, op. cit., p. 22.

Subject Organization

The selection and organization of learning experiences in any school program is an undertaking of grave import. Making decisions on what experiences the school shall provide for children brings into operation the educator's fundamental philosophy of the role of the school in this society and his accepted principles related to human development and the learning process.

A recent proposal that would markedly influence the organization of subject matter which would in turn cause teachers in the elementary school to evaluate their time allocations of current subject matter offerings, was made by Bruner when he stated:

We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development. It is a bold hypothesis and an essential one in thinking about the nature of a curriculum. No evidence exists to contradict it; considerable evidence is being amassed that supports it.⁶⁰

Bruner's statement implies that for many years some subject matter areas have been delayed on the grounds that they were too difficult for pupils in the elementary school. If Bruner's hypothesis is valid, a direct reflection would be observable in the teacher's scheduling process, for as teachers go about apportioning the school day,

⁶⁰Jerome S. Bruner, The Process of Education (New York: Alfred A. Knopf, Inc., 1960), p. 33.

provision would have to be made for the inclusion of subject matter areas that heretofore had been taught only in the secondary school. This would result in (assuming that the length of the school day remains unchanged) some subjects and/or activities getting less time than they originally received.

The situation which classroom teachers face, as they rationalize their time allotment schedules in lieu of the nature of their pupils, was posed in the form of a question by Lindsey when she stated:

Knowing as much as we do about physical, emotional, intellectual, and social development of children and their need for a great variety of learning experiences, how can we be sure that over a period of time, children are having a balance of activities?⁶¹

In other words, the problem lies in getting each teacher to provide an equitable distribution of the available teaching time for the elementary school subjects and activities in any given grade level, for the length of time that a classroom teacher may feel necessary to devote to a given subject and/or activity and the amount of time available for this subject are seldom in complete agreement. This is a problem for teachers and administrators to solve. By and large, this problem is solved through the use of a device, which is called the daily program, whereby the

⁶¹Margaret Lindsey, "Children's Time in School," Childhood Education, XXX, No. 4 (December, 1953), 166.

different subjects and activities are accorded their proper emphasis, sequence, and location.

After reviewing a large number of programs which were considered good, Caswell found that such programs possess certain distinctive characteristics. Caswell suggested that as teachers attempt to formulate the daily program, these distinctive characteristics should provide the basis for generalizations to be employed as guides in making the program that possesses desirable qualities.

Caswell's suggested guides were as follows:

1. The program should provide instruction time for all pupils approximating in amount accepted standards.
2. The program should distribute the available instruction time to the several subjects and activities in accordance with accepted standards.
3. The program should divide the instruction time for the various subjects and activities into teaching periods which make possible effective learning.
4. The program should encourage the organization of instruction in units based upon experiences of children.
5. The program should encourage teachers and pupils to plan their work systematically.⁶²

The daily program is a reflection of the curriculum of a given elementary school. By and large, there are three

⁶²Hollis L. Caswell, Program Making in Small Elementary Schools, Field Studies No. 1 (Nashville, Tennessee: Division of Surveys and Field Services, George Peabody College for Teachers, 1932), p. 13.

fundamental approaches to planning and organizing the elementary school curriculum. These approaches are differentiated by their varying emphasis on man's cultural heritage as categorized in school subjects, on man's social experiences and social organizations, and on the nature and needs of the individual and his perceived concerns about himself and his world.

After an examination of the programs and time schedules of many teachers at all grade level throughout the country, the Encyclopedia of Educational Research gave the following generalizations about the educational program of the elementary school:

1. The school day of the child in most elementary schools is bounded by the subject divisions into which the curriculum is divided. It is the rare teacher who organizes his program on any other basis. The differences, if any, are in the nature and quality of the experiences children are having within the subject form of curriculum organization.
2. In terms of time and emphasis, the reading school of yesteryear is still the reading school of today. It is the common practice in the primary grades to have two reading periods a day for most children; in the middle grades, a major amount of time is allotted to directing reading instruction. Combined with the related language activities or oral and written language, spelling, handwriting, and literature, this means that a large portion of the school day at all levels is given over to the teaching of the language arts.
3. Science, home and manual arts are conspicuous by their absence in the daily educational programs of many schools.

4. With the exception of arithmetic, the proportional emphasis of subject areas in the primary grades are about the same as similar emphases in the middle grades.
5. The social-studies program of the elementary school wavers between being organized on the basis of the broad field of social studies or on the more limited areas of history, geography, and civics.⁶³

Regardless of the curricular approach employed, the primary problem lies in adequately providing for individual differences that exist in the classroom, because if individual differences are actually recognized, the daily or weekly program of classroom teachers must be planned to give the teacher the occasion and the time to reach individuals and small groups. It appears that this need could be met by providing longer and more flexible periods and permitting teachers to vary the program and time allotment according to the needs of their pupils.

Otto stressed this point when he stated:

The longer daily periods and flexible time allotments make it easier to develop sustained interest in significant themes, units of work, or centers of interest, to develop and exploit pupil interests, and to participate in excursions, construction projects, and other activities which are hardly possible if the day is divided into a series of ten- or twenty-minute periods. Frequently it has been found desirable to reduce the total number of different subject titles appearing on the schedule of recitations, thus building the curriculum around larger and more significant

⁶³Virgil E. Herrick, "Elementary Education--Programs," The Encyclopedia of Educational Research, ed. Chester W. Harris, (3rd ed. rev.; New York: The Macmillan Co., 1960), pp. 432-433.

units of work which, in the process of execution, would embody related knowledge and activities.⁶⁴

Stratemeyer and others suggested that large blocks of time are a characteristic of effective schedules. She summarized the point thus:

Large time blocks, rather than many short periods, characterize the program focused on experiences growing out of concerns of daily living. For a longer time block makes it possible to carry an activity through to a logical stopping point, or to undertake a variety of shorter tasks when this is desirable. Then, too, longer blocks provide for differences in the time individuals need to carry out activities and responsibilities common to the group as a whole, or to pursue special interests.⁶⁵

Hockett and Jacobsen, in discussing the nature of the daily program in the elementary school, suggested that flexibility was an integral aspect of the curriculum in each classroom when they stated:

A modern program of teaching requires a flexible daily schedule, with the provision of some time blocks of one or two hours duration, during which the pupils engage in various forms of physical and mental work related to the unit they are developing. These activities provide incentives for, and practice in, the mastery of skills of reading, writing, spelling, oral communication, and arithmetic; the techniques of art, music, and dramatics; and the art of living and working together harmoniously and effectively. Other definite time allotments are provided for efficient practice in the various skills and techniques demanded by these activities and by daily social

⁶⁴Henry J. Otto, Elementary-School Organization and Administration (New York: Appleton-Century-Crofts, Inc., 1954), p. 291.

⁶⁵Stratemeyer, op. cit., pp. 397-398.

life. The daily routine provides for such essential matters as health, physical welfare, and schoolroom administration. With flexibility of program, the teacher assumes the responsibility of ensuring breadth and balance in the experiences and knowledges gained by her pupils. Balance is achieved in the experiences of the week--or even a longer period--in some aspects of the work, since it is neither feasible nor essential that the children have experiences with each subject and type of work each day.⁶⁶

Daly, in discussing flexibility, issues a statement of caution when he wrote:

Flexibility, however desirable, should never be interpreted as a license to teach anything without regard for the total instructional program. It is not uncommon to find teachers reacting strongly to outside pressures by spending a disproportionate amount of time on the particular subject or area of currently high public concern.⁶⁷

Time schedules must be variable and flexible if we are to meet the educational needs of our pupil personnel in the elementary school. Caswell and Campbell summarized the point by stating:

So long as children differ radically in their capacities, abilities, aptitudes, and temperaments; so long as the ability and methods of teachers vary; so long as our lack of experimentally verified evidence is anything like as great on these problems as it now is; the much sought for optimum arrangement of subject matter and optimum allotment of time will not be attained except as the individual teacher has the insight and judgment to provide it for the individual pupils under his guidance.⁶⁸

⁶⁶ John A. Hockett and E. W. Jacobsen, Modern Practices in the Elementary School (New York: Ginn and Co., 1943), pp. 121-122.

⁶⁷ Ronald P. Daly, "The Daily Program in the Elementary School," The Education Digest, XXIII, No. 3 (November, 1957), 46.

⁶⁸ Caswell and Campbell, op. cit., p. 329.

In short, the key word is flexibility. For flexibility, if it is to contribute to the quality of instruction, must be interpreted as a responsibility as well as an opportunity for each teacher to tailor the daily program to the particular needs of the children.

Class Organization

In 1963, the NEA conducted a project aimed at examining the improvement of instruction. One specific area examined was the organization of the school and the classroom. They prefaced this particular decision area with the following question: "How should the school and the classroom be organized to make the most effective use of the time and talents of students and teachers?"⁶⁹

In other words, is there an optimum method of organizing the school and the classroom that would provide for the most equitable distribution of time to the various subject matter areas and/or activities in the elementary school? Is it possible that some organizational procedures cause the elementary school day to be skewed chronologically in the direction of a few select subjects and/or activities, while other subjects would be relatively neglected? Are there some methods of organizing classes whereby each teacher's talents are used efficaciously?

⁶⁹Schools for the Sixties (New York: McGraw-Hill Book Co., Inc., 1963), p. 71.

Many educators today are questioning the self-contained method of horizontally organizing the classroom in the elementary school. This traditional approach seems to lend itself to the idea that each teacher possesses equal instructional ability in all subject matter areas and/or activities. Unfortunately, this is a fallacious idea, for with today's knowledge of individual differences that exist among and within all learners, it seems a little ridiculous to presume that at a certain chronological point in a teacher's life, his various talents and interests would equalize.

If one teacher has the responsibility of providing instruction in all subjects for any given grade level, it seems feasible that, in view of his individual differences, this may result in more emphasis, attention, and time for some subjects than others.

Some school systems, in an attempt to ensure their students' receiving an equitable amount of time in all subjects and/or activities, have organized classes along departmental lines. This approach is more compatible with using each teacher's special talents than is the self-contained approach.

A plan that possesses characteristics of both the self-contained and the departmentalized classroom is the Dual Progress Plan, in which a home teacher is placed in charge of teaching reading, language arts, and the social

studies on a graded basis for one-half day, while for the other half-day special teachers of mathematics, science, music, arts and crafts, recreation and health, and foreign language operate from the ungraded approach.

Stoddard discussed the merits of this type of organization when he stated:

The system should reduce lost motion and aimless drill. The time saved should go to a tracking through of the child's concepts and understandings, the teacher acting as a kindly but firm guide who possesses the invaluable trait of expecting each child to do his best. This "best" is not simply the first attempt, the first recitation or report; it consists rather of better and better achievement through the mutual efforts of teacher and pupil.⁷⁰

Many school systems, in an attempt to make optimum use of each teacher's time and talents, have initiated team teaching. A few systems which warrant mention include Lexington, Massachusetts; Norwalk, Connecticut; and Claremont, California.

The Yale-Fairfield Study of Elementary Teaching is an example of a staff attempting to determine how elementary teachers' time could be used to best advantage and how the load of the elementary teacher might be adjusted to make teaching more effective and productive.

The study staff investigated the teacher's tasks, the amount of time required to fulfill them, and the accepted

⁷⁰George D. Stoddard, The Dual Progress Plan (New York: Harper and Brothers, 1961), p. 4.

pattern in which the work was scheduled.

Results revealed that "teachers complain that they are required to spend many minutes of the teaching day on irrelevant tasks only vaguely related to school objectives."⁷¹ This fact prompted the staff to recommend that all such tasks be promptly eliminated. The staff also found that "many legitimate responsibilities of the schools as a whole have been delegated to individual classrooms thus provoking wasteful duplication of time and effort which absorb teaching energy."⁷² This situation caused the staff to recommend discovery of such duplication and centralization of the responsibility.

In an attempt to improve instruction and make optimum use of each teacher's time and talents, the staff suggested:

If instruction is to be improved and the shortage of elementary teachers is to be alleviated the professional services of our best teachers must be more widely spread, and this can be made possible only through the use of teaching assistants and a more flexible organization so as to implement in the schools a new concept of optimum class size or pupil-teacher ratio.⁷³

The team teaching approach, in an attempt to make use of each teacher's special talents, frequently has large

⁷¹Yale-Fairfield Study of Elementary Teaching: Report 1954-1955, ed. Burton P. Fowler, abridged edition (New Haven, Connecticut: The Study, 1956), p. 138.

⁷²Ibid.

⁷³Ibid., pp. 139-140.

group instruction by one teacher. This in effect, releases other members of the team for planning, observation, or supervision. Quite frequently teams have non-professionals who handle non-professional tasks, a practice which results in released time for the professional members of the team.

Shaplin and Olds issued a statement of caution concerning the saving of time in the team teaching approach when they stated:

Another unrealistic claim frequently made about team teaching is that there will be great saving of time which can then be spent on further teaching and on increasing productivity. This claim occurs most frequently when clerical and other non-professional aides are a part of the team. However, as a result of the transfer of managerial functions to the teachers there are enormous increases in the amount of time required for planning, communication among team members, supervision, and evaluation; and these increases quickly absorb any saving of time in other areas. In dysfunctional teams the time spent on such managerial duties may actually bring about a reduction in teaching time and productivity. Any rationale for a team operation must consider the allocation of time necessary for these new managerial functions.⁷⁴

In summation, the question which arises when planning an instructional program that will approach, if not guarantee, an equitable distribution of time to the various subject offerings in the elementary school, is whether one teacher can adequately apportion the school day to all subjects of the curriculum, or whether the solution lies in each teacher's specializing in one or a

⁷⁴Judson T. Shaplin and Henry F. Olds, Jr., Team Teaching (New York: Harper and Row, 1964), p. 73.

few subjects. Unfortunately, no research exists which favors one approach over the other for guaranteed optimum distribution of time to the various subject matter areas and/or activities in the elementary school.

Perhaps the problem should be resolved in terms of the ways in which teachers should work with children, the philosophy and objectives of the school, the basic orientation of the curriculum, and the desired organization of the teaching-learning situations.

DeYoung and Wynn summarized the situation when they stated:

For answers to the departmentalized versus self-contained classroom dilemma, the graded versus non-graded problem, and the homogeneous versus heterogeneous grouping issues schools must turn, for the present at least, to their own educational philosophies rather than to research. If a school is committed to an organismic view of child development and an emphasis upon the total emotional, social, physical, as well as mental development of children; if it believes that education should be more life-centered than subject-centered and that knowledge among the subject fields should be related--then an ungraded, heterogeneous, largely self-contained classroom organization would seem to follow. But if the school wishes to emphasize the deliberate mastery of a body of pre-established essentials, organized around subject content set in sequence, and measured by uniform standards of achievement for all students, then the graded, departmentalized school with some form of homogeneous grouping is probably more appropriate.⁷⁵

⁷⁵Chris A. DeYoung and Richard Wynn, American Education (New York: McGraw-Hill Book Co., Inc., 1964), p. 474.

Summary

The quality and quantity of school work achieved by the pupils depend somewhat upon the total amount and distribution of time devoted to the various school subjects. In any examination of the adequacy and the operation of the instructional program in the elementary school, the element of time must inevitably enter into the picture. Everything done in the elementary school takes time.

The task of apportioning time to the various subject offerings necessitates (1) the establishment of priorities, (2) the invention, organization, and implementation of efficient procedures, and (3) the critical assessment of results obtained.

Of these three functions, the establishment of priorities is by far most important. By and large, decisions about educational objectives make the elementary school accountable to many groups in this society. Without question, these groups have imposed demands on the curriculum to the extent that either new subjects have been added, or the time allotted to some subjects has been changed. In general, any change of emphasis has been accomplished through a readjustment of time within the existing length of the school day, which has not changed noticeably since 1856.

Educators have long sought for optimum time

allotments. Unfortunately, many factors influence, if not determine, scheduling in the elementary school. It appears that so long as pupils vary in their abilities and needs, so long as environmental conditions vary as they now do, so long as organizational patterns constantly change, so long as the ability and methods of teachers vary, so long as changing theories of what is good education exists, the much-sought-for optimum allotment of time to the curriculum in the elementary school will not be attained except as the individual teacher has the insight to provide it for the individual pupils under his guidance.

The solution seems to lie in knowledgeable teachers remaining cognizant of the implications for teaching and learning in a dynamic, increasingly complex society. The teacher must be ready to re-examine continually what is being taught in how much time. As soon as one faces the fact that scheduling can be improved, he has made the first step in doing something about it. Whether the next step be large or small does not make too much difference. That the step is taken makes all the difference between a live, vibrant school or a dead, rigid, inflexible one.

Flexibility is the keynote to progress in planning and scheduling educational experiences in the elementary school. Unfortunately, rigidity sets in very quickly in public school, and educators must be ever watchful to maintain a high degree of suppleness in the elementary curriculum.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The primary purpose of this study was to determine the amount of time teachers allocate to each subject matter area and/or activity in the elementary school. This purpose was accomplished through the use of data collected from time allotment schedules revealed by classroom teachers from fifty elementary schools selected from thirty school systems in Oklahoma.

The data consist of classroom teachers' responses to a time allotment questionnaire. On this time allotment questionnaire, which was constructed expressly for the purpose of examining scheduling practices, classroom teachers of Grades 1-6 were asked to indicate their individual distribution of time to the various subject offerings in the elementary school.

In order to assure representativeness in the selection of the sample and to investigate time allotment practices of classroom teachers in school systems of various sizes, thirty school systems were selected from a numerically

ranked list of total school enrollment figures. The thirty school systems were divided into three groups of ten. One group was composed of the systems which ranked as the ten largest, from which three elementary schools were randomly selected from each system, or a total of thirty elementary schools. One elementary school was randomly selected from each system of the second group, which included the ten systems located near the fiftieth percentile of the numerically ranked systems, a total of ten elementary schools. The remaining group consisted of one elementary school from each of the systems which ranked as the ten lowest, yet possessed a classroom teacher in each grade level in Grades 1-6.

Each classroom teacher in the thirty school systems was sent a time allotment packet (see Appendix) which contained a letter explaining the study and the directions for completing the questionnaire, a curriculum sheet, a completed sample questionnaire, a blank questionnaire, and a stamped self-addressed envelope. Of the 530 packets mailed, 496, approximately 94 per cent, were returned.

Basically, the purpose of this study was an attempt to answer the following question: Does a wide variability of time allotment to the various subject matter areas and/or activities exist among classroom, grades, and/or elementary schools?

The mean (M^1) was used to compute the average amount of time in minutes per week and the percentage of time in each grade allotted to the various subject matter areas and/or activities as reported by classroom teachers in the large, medium, and small school districts.

In order to secure an overall mean for the combined groups, the weighted mean (M_w^2) was applied to each subject matter area and activity in each grade level according to the number of cases in the group from which it was derived.

Findings of the present investigation are reported under two headings: first, analysis of data related to composite time allotment practices as revealed by classroom teachers in each of the three groups; and second, analysis of data related to time allotment practices reported on each specific grade level. A discussion of the summary, findings, conclusions, and recommendations are to be presented in Chapter V.

Group Time Allotment Practices

The figures in Table 1, which is concerned with the average time allotment practices of classroom teachers in small school systems, indicate that reading, which received an average of 24.15 per cent of the school day in

¹Guilford, loc. cit., p. 44.

²Ibid., p. 63.

TABLE 1.--The Average Amounts of Time in Minutes Per Week and Percentages of Time in Each Grade Level Allotted to the Elementary Subjects and/or Activities by Classroom Teachers in Group 1 (the Ten School Systems with Smallest Enrollment Figures).

Subject Offerings	Grades					
	1		2		3	
	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	63.50	3.90	70.00	4.29	56.00	3.27
Social Studies	19.00	1.17	18.00	1.10	105.00	6.13
Reading	694.50	42.70	576.00	35.27	418.00	24.42
Recess	152.00	9.35	162.50	9.95	144.50	8.44
Arithmetic	189.00	11.62	203.00	12.43	231.50	13.52
Spelling	27.50	1.67	110.00	6.74	122.50	7.16
English Language	15.00	0.92	137.50	8.42	197.00	11.51
Handwriting	76.00	4.67	69.50	4.26	88.00	5.40
Art	68.50	4.18	46.00	2.82	49.50	2.89
Music	75.00	4.61	47.00	2.88	57.00	3.33
Science	38.50	2.34	79.00	4.84	71.50	4.18
Physical Education	30.50	1.84	21.00	1.29	37.50	2.19
Health Education	30.50	1.84	55.50	3.40	40.00	2.34
Foreign Language	0.00	0.00	0.00	0.00	0.00	0.00
Unassigned or Free Time	46.00	2.83	25.50	1.56	76.50	4.47
Miscellaneous	103.50	6.36	12.50	0.77	17.50	1.02
Total	1626.50	100.00	1633.00	100.00	1712.00	100.00

TABLE 1--Continued

Grades							
4		5		6		Total Time Grades 1-6	
Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
87.50	4.85	60.00	3.34	60.00	3.43	66.17	3.84
210.00	11.64	219.50	12.20	193.50	11.05	127.50	7.41
282.00	15.63	257.50	14.32	266.50	15.21	415.75	24.15
135.00	7.48	78.00	4.34	73.50	4.20	124.25	7.22
246.50	13.66	257.50	14.32	249.50	14.22	229.42	13.33
115.50	6.40	104.50	5.81	126.50	7.22	101.08	5.87
184.00	10.20	183.00	10.18	174.00	9.93	148.42	8.62
61.50	3.41	39.00	2.17	49.50	2.83	63.92	3.71
63.50	3.51	57.50	3.20	25.50	1.46	51.75	3.01
71.00	3.93	114.00	6.34	90.00	5.14	75.67	4.40
110.00	6.10	96.00	5.34	117.00	6.68	85.33	4.97
46.50	2.58	135.50	7.53	120.00	6.85	65.17	3.79
70.00	3.88	86.50	4.81	118.50	6.77	66.83	3.89
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76.50	4.24	110.00	6.12	70.50	4.03	67.50	3.92
45.00	2.49	0.00	0.00	17.00	0.97	32.58	1.90
1804.50	100.00	1798.50	100.00	1751.00	100.00	1721.33	100.00

Grades 1-6, holds the primary position in the elementary school curriculum to the extent of a maximum of 42.70 per cent of the school day in Grade 1 to a minimum of 14.32 per cent of the school day in Grade 5.

Arithmetic, which ranks second in the distribution of time to the various subject offerings, is allocated an average of 13.33 per cent in Grades 1-6. An interesting relationship is observable in the average amounts of time delegated to reading and arithmetic. The largest and smallest average percentages of time allocated to reading instruction occur in Grade 1 and Grade 5 respectively, whereas in the average percentages of time apportioned to instruction in arithmetic in the same grades, the opposite is evident.

Other areas of wide variation include those which receive an increasing percentage of instructional time in the sequence of grades. An example of such a pattern is science, which receives 2.34 per cent of the time in Grade 1 and 6.68 per cent of the time in Grade 6. Other areas having similar chronological configurations include: English language, social studies, spelling, physical education, and health education.

In short, over one-half of the school day in Grade 1 is devoted to reading and arithmetic combined, yet these same subjects receive less than one-third of the total time in Grade 6.

Another area which warrants mention is foreign language, which evidently is not an aspect of the curriculum in any of the elementary schools in this particular group of ten systems.

The figures in Table 2, which shows the average time allotment practices of classroom teachers in Group 2, reveal that reading maintains the dominant position with an average time allotment of 24.24 per cent of the elementary school day in Grades 1-6. A wide range of difference is observable when comparing the percentages of time allocated to reading instruction by classroom teachers of various grade levels to the extent that in Grade 1, reading commands 38.58 per cent of the school day, while only 12.38 per cent of the school day is devoted to the same subject in Grade 5. It is of particular interest to note that in Grade 5, the average amount of time allocated to reading is surpassed by social studies.

Arithmetic, which on the average receives 13.20 per cent of the total time in the school day, ranks second in the utilization of time scheduled to the curriculum in Grades 1-6. Unlike reading, in which the amounts of time allotted throughout Grades 1-6 varies widely, the apportionment of time to instruction in arithmetic is reasonably stable.

However, social studies and English language, which on the average receive a relatively large percentage of the

TABLE 2.--The Average Amounts of Time in Minutes Per Week and Percentages of Time in Each Grade Level Allotted to the Elementary Subjects and/or Activities by Classroom Teachers in Group 2 (the Ten School Systems Located at or Near the Fiftieth Percentile of the Initial List of Total School Enrollment Figures).

Subject Offerings	Grades					
	1		2		3	
	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	72.06	4.46	71.15	4.21	69.64	4.15
Social Studies	45.29	2.80	87.69	5.19	76.43	4.55
Reading	623.53	38.58	521.77	30.90	422.86	25.20
Recess	155.88	9.65	147.29	8.72	144.29	8.60
Arithmetic	196.47	12.16	184.23	10.91	234.29	13.96
Spelling	24.12	1.49	126.54	7.49	120.71	7.19
English Language	17.65	1.09	117.31	6.95	172.14	10.25
Handwriting	109.41	6.77	71.54	4.24	60.36	3.60
Art	90.88	5.62	65.38	3.87	40.36	2.40
Music	62.94	3.89	74.62	4.24	93.57	5.58
Science	52.94	3.28	48.08	2.85	88.93	5.30
Physical Education	27.35	1.69	20.77	1.23	32.50	1.94
Health Education	27.65	1.71	52.31	3.10	38.21	2.28
Foreign Language	0.00	0.00	0.00	0.00	0.00	0.00
Unassigned or Free Time	55.00	3.40	39.62	2.35	47.86	4.46
Miscellaneous	55.00	3.40	60.38	3.58	8.93	0.53
Total	1616.17	100.00	1688.68	100.00	1678.06	100.00

TABLE 2--Continued

Grades							
4		5		6		Total Time Grades 1-6	
Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
75.00	4.28	79.17	4.49	56.25	3.27	70.63	4.18
186.25	10.63	302.50	17.15	245.42	14.26	147.38	8.71
312.92	17.86	218.33	12.38	266.25	15.47	410.92	24.24
106.25	6.06	81.25	4.61	60.42	3.51	119.50	7.07
252.50	14.41	243.75	13.82	240.83	13.99	223.25	13.20
115.83	6.61	74.17	4.20	107.92	6.27	91.50	5.41
176.25	10.06	164.50	9.33	213.33	12.40	136.06	8.04
64.17	3.66	45.42	2.57	44.58	2.59	68.56	4.10
42.50	2.43	31.25	1.77	21.67	1.26	51.31	3.03
103.75	5.92	109.17	6.19	103.33	6.00	89.31	5.28
125.42	7.16	202.50	11.48	171.67	9.98	109.56	6.48
45.83	2.62	84.58	4.80	99.58	5.77	49.38	2.92
52.08	2.97	24.17	1.37	15.00	0.87	34.75	2.05
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75.83	4.33	79.17	4.49	71.67	4.34	60.50	3.58
14.58	0.83	23.75	1.35	0.00	0.00	28.81	1.70
1752.16	100.00	1763.77	100.00	1720.91	100.00	1691.40	100.00

total time in Grades 1-6, (8.71 per cent and 8.04 per cent respectively) have a progressively increasing percentage of time devoted to each subject from grade to grade. A comparison of the increase in the percentage of time given to English language between Grade 1 and Grade 2 is noteworthy.

Here again, as was found to be the case in the smallest schools (Table 1), instruction in foreign language was not reported by any classroom teacher from this particular group of ten school systems.

The data in Table 3, which reveals the average time allotment practices as reported by classroom teachers in Group 3, indicate that reading receives 26.18 per cent on the average in Grades 1-6, which is the most time allocated to any subject in the elementary school curriculum. So far as the amount of time given to reading on each grade level is concerned, a progressively smaller percentage of the school day in the elementary school is allotted to reading instruction throughout the grade sequence.

Not so with some subject matter areas. For example, arithmetic, which on the average receives 13.57 per cent of the school day in Grades 1-6, varies little from grade to grade in the percentage of time devoted to it by classroom teachers. Other areas possessing this characteristic include art, music, health education, and foreign language.

In still other areas of the elementary school curriculum, considerable time allotment gain occurs between

TABLE 3.--The Average Amounts of Time in Minutes Per Week and Percentages of Time in Each Grade Level Allotted to the Elementary Subjects and/or Activities by Classroom Teachers in Group 3 (the Ten School Systems with the Largest Enrollment Figures).

Subject Offerings	Grades					
	1		2		3	
	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	81.27	5.20	78.31	4.88	79.73	4.77
Social Studies	42.25	2.70	51.95	3.24	86.56	5.18
Reading	623.77	39.90	553.15	34.45	424.20	25.36
Recess	141.80	9.07	130.00	8.10	119.27	7.13
Arithmetic	194.40	12.44	188.22	11.72	232.09	13.18
Spelling	17.20	1.10	91.10	5.67	100.09	5.98
English Language	38.00	2.43	97.54	6.07	149.82	8.96
Hand-writing	91.27	5.84	63.56	4.27	78.45	4.69
Art	66.69	4.27	69.34	4.32	81.15	4.85
Music	75.41	4.82	71.03	4.42	80.75	4.81
Science	50.47	3.23	72.73	4.53	104.18	6.23
Physical Education	28.20	1.80	42.47	2.64	56.02	3.35
Health Education	12.67	0.81	16.61	1.03	14.54	0.86
Foreign Language	0.33	0.02	1.27	0.08	0.45	0.03
Unassigned or Free Time	23.60	1.51	36.10	2.25	39.18	2.34
Miscellaneous	75.84	4.85	37.46	2.33	26.36	1.58
Total	1563.17	100.00	1605.84	100.00	1672.48	100.00

TABLE 3--Continued

Grades							
4		5		6		Total Time Grades 1-6	
Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
67.24	3.96	71.30	4.19	68.18	4.02	74.72	4.53
183.28	10.78	166.48	9.79	184.16	10.86	114.45	6.93
318.55	18.74	316.78	18.64	282.29	16.65	432.19	28.16
85.26	5.02	82.59	4.86	81.55	4.81	108.86	6.60
235.34	13.85	250.46	14.73	256.64	15.31	223.99	13.57
97.07	5.71	109.54	6.44	94.07	5.55	81.15	4.92
160.60	9.45	168.06	9.89	191.00	11.26	128.98	7.78
36.98	2.18	32.78	1.93	21.47	1.27	57.03	3.45
73.64	4.33	73.54	4.33	73.56	4.34	72.60	4.40
100.53	5.92	90.67	5.33	98.02	5.78	85.37	5.17
137.95	8.12	174.65	10.27	155.56	9.17	111.78	6.77
89.41	5.26	89.28	5.25	99.84	5.89	65.17	3.95
18.19	1.07	9.17	0.54	14.82	0.87	14.30	0.87
5.69	0.33	3.89	0.23	3.27	0.19	2.37	0.14
71.12	4.18	51.39	3.02	49.00	2.89	43.96	2.66
18.62	1.10	9.35	0.55	22.36	1.31	34.17	2.07
1699.47	100.00	1699.90	100.00	1695.79	100.00	1650.56	100.00

Grade 1 and Grade 6. English language, science, social studies, and physical education are subjects showing gains.

A comparison of the varying amounts of time devoted to recess and physical education warrants mention. In Grade 1 recess receives 9.07 per cent of the school day, while 1.80 per cent of the total time is devoted to physical education. In Grade 6, recess is given 4.81 per cent and physical education is allotted 5.89 per cent of the school day. This approximates a complete reversal in the amounts of time allocated to both areas from Grade 1 to Grade 6.

The figures in Table 4, which shows the combined means of the reported time allotment practices of the classroom teachers in the three groups examined in this study, indicate that reading, which on the average receives 25.62 per cent of the school day in Grades 1-6, holds the dominant position in the apportionment of time to the various subject matter areas and/or activities in the elementary school. Progressively smaller amounts of time are allocated to reading instruction so far as grade level is concerned, to the extent that 39.95 per cent of the time in Grade 1 is given to reading, while 16.28 per cent of the time is apportioned to the same subject in Grade 6. Additional subjects and/or activities revealing a similar chronometrical extenuation include handwriting, recess, and miscellaneous.

TABLE 4.--The Overall Average Amounts of Time in Minutes Per Week and Percentages of Time in Each Grade Level Allotted to the Elementary Subjects and/or Activities by Classroom Teachers in All Groups.

Subject Offerings	Grades					
	1		2		3	
	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	77.99	4.94	76.16	4.69	74.94	4.48
Social Studies	40.48	2.56	53.48	3.30	87.10	5.20
Reading	630.67	39.95	550.96	33.96	423.18	25.28
Recess	145.15	9.20	136.71	8.43	126.90	7.58
Arithmetic	194.22	12.30	189.39	11.67	232.41	13.89
Spelling	19.36	1.23	99.02	6.10	106.58	6.37
English Language	32.35	2.05	105.55	6.51	159.75	9.54
Hand-writing	92.79	5.88	69.15	4.26	76.46	4.57
Art	70.90	4.49	65.87	4.06	69.91	4.18
Music	73.29	4.64	68.67	4.23	79.82	4.77
Science	49.71	3.15	69.59	4.29	97.34	5.82
Physical Education	28.28	1.79	36.41	2.24	49.51	2.96
Health Education	16.91	1.07	27.01	1.67	21.90	1.31
Foreign Language	0.25	0.02	0.00	0.00	0.00	0.00
Unassigned or Free Time	31.03	1.97	35.37	2.18	45.44	2.72
Mis-cellaneous	75.08	4.76	38.05	2.35	22.15	1.32
Total	1578.45	100.00	1622.28	100.00	1673.69	100.00

TABLE 4--Continued

Grades							
4		5		6		Total Time Grades 1-6	
Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent	Minutes	Per Cent
70.94	4.12	71.05	4.12	65.26	3.82	73.04	4.38
187.06	10.38	194.93	11.31	194.92	11.42	121.34	7.28
313.14	18.21	293.43	17.03	277.74	16.28	426.77	25.62
94.63	5.50	81.78	4.75	77.21	4.52	112.44	6.75
293.31	13.91	250.33	14.53	253.18	14.84	224.53	13.48
102.19	5.94	103.29	5.99	100.44	5.89	85.23	5.12
165.88	9.64	169.47	9.84	192.27	11.27	132.12	7.93
44.13	2.57	35.59	2.07	28.71	1.68	59.72	3.59
67.70	3.94	64.75	3.76	59.23	3.47	66.64	4.00
97.33	5.66	96.66	5.61	97.81	5.73	84.83	5.09
132.58	7.71	168.70	9.80	153.06	8.97	108.22	6.50
77.51	4.51	94.62	5.49	102.42	6.00	62.62	3.76
29.75	1.73	21.71	1.26	28.31	1.66	23.95	1.44
4.13	0.24	2.76	0.16	2.34	0.14	1.70	0.10
72.50	4.21	63.49	3.68	55.32	3.24	49.48	2.97
21.31	1.24	10.39	0.60	18.18	1.07	33.11	1.99
1720.06	100.00	1722.95	100.00	1706.41	100.00	1665.71	100.00

Some areas exhibit relatively stable percentages of time at each grade level. For example, arithmetic, which on the average receives 13.48 per cent of the school day in Grades 1-6, varies from 11.67 per cent in Grade 2 to 14.84 per cent in Grade 6. Other areas possessing a similar pattern of time allotment constancy are opening exercises, art, music, health education, foreign language, and unassigned or free time.

Two areas which approximate a pattern of stability except for time allotments reported in a particular grade level are English language and spelling. Specifically, English language receives 2.05 per cent of the time in Grade 1, yet in Grade 2 this increases to 6.51 per cent; spelling is given 1.23 per cent of the time in Grade 1 and 6.10 per cent in Grade 2, but in Grades 2-6, time allotments reported for both English language and spelling show relatively unaltered percentages. In short, little time is devoted to formal instruction in English language and spelling in Grade 1.

There are some subject matter areas and/or activities--namely social studies, science, and physical education--which show progressively larger percentages of time allotments throughout the grade sequence. For example, social studies, the area having the greatest gain percentage-wise, which on the average is allocated 7.28 per cent of the school day in Grades 1-6, receives 2.56 per cent of the time

in Grade 1 as a minimum and gradually increases grade by grade to a maximum of 11.42 per cent of the time received in Grade 6.

Two areas that receive a relatively small amount of time in Grades 1-6 are health education and foreign language: health education is given 1.73 per cent of the time in Grade 4, which is the maximum percentage allocated to instruction in health education in any grade, and foreign language is given a maximum percentage of 0.16 per cent in Grade 5. It is of particular importance to note that only 11 of the 496 respondents to the time allotment questionnaire reported any time apportioned to foreign language, and that language was Spanish.

An analysis of the average percentages of time allocated to the three major subject domains as reported by classroom teachers of Grades 1-6 in fifty selected elementary schools in the thirty school systems examined in this study is exhibited in Table 5.

In an attempt to add clarification and meaning to these results, this writer feels it necessary to report repeatedly on time allotment practices of several earlier studies previously examined in Chapter 2. Table 6 shows the results of the average percentages of time devoted to the three major subject domains in Grades 1-6 as revealed by various studies as far back as 1914 to and including this current study.

TABLE 5.--The Relative Percentages of Time Allotted to the Three R's, the Content Subjects, and the Special Subjects by 496 Classroom Teachers of Grades 1-6 in Fifty Selected Elementary Schools of Thirty School Systems During the 1967-1968 School Year.

	Group 1 (The Ten Smallest School Systems)	Group 2 (The Ten School Systems Near the Median)	Group 3 (The Ten Largest School Systems)	Composite
The Three R's: Reading English Language Spelling Handwriting Arithmetic	55.68	54.99	55.90	55.74
The Content Subjects: Social Studies Science	12.38	15.19	13.70	13.78
The Special Subjects: Physical Education Recess Art Music Opening Exercises Health Education Foreign Language Unassigned or Free Time Miscellaneous	31.97	26.81	30.39	30.48

TABLE 6.--The Relative Percentages of Time Allocated to the Three R's, the Content Subjects, and the Special Subjects in 1914, 1926, 1930, 1936, 1958, and 1968.

	The Three R's	The Content Subjects	The Special Subjects
1914 ^a	55.3	12.5	31.8
1926 ^b	51.7	11.8	36.5
1930 ^c	37.3	20.4	42.3
1936 ^d	51.4	14.3	34.3
1958 ^e	53.6	18.4	28.0
1968	55.74	13.78	30.48

^aHolmes, op. cit., pp. 21-27.

^bMann, op. cit., pp. 51-152.

^cCovert, op. cit., pp. 1-10.

^dKyte and Lewis, op. cit., pp. 23-25.

^eSan Diego Public Schools, op. cit., pp. 1-21.

With the exception of Covert's study of eighty consolidated schools in 1930, the data in Table 6 reveal some interesting patterns. It is observable that for the past fifty-four years, the average amounts of time given to the Three R's has maintained a relatively stable pattern to the extent of a slight excess of over one-half of the total time in Grades 1-6. However, during this identical span of years, the apportionment of time to the content subjects and special

subjects has tended to be erratic in nature. By and large, when the content subjects receive more time from one study to the next, the special subjects are allotted correspondingly less time, and vice versa.

Grade Level Time Allotment Practices

In an attempt further to examine differences in the average amounts of time in minutes per week and the percentages of time allocated to the various subject matter areas and/or activities in Grades 1-6, a table is used to show each grade level's time allotment practices as reported by classroom teachers in each group of ten systems.

In Table 7 the results of the average time allotment practices as revealed by teachers of Grade 1 are shown for each group and the combined groups. In analyzing each group's replies for each subject matter area and/or activity, two outcomes are evident: stability and variability. Stability is shown to the extent that the average percentage of each group's time allotment practices are comparatively similar to some subjects and/or activities. For example, the time devoted to reading, which on the average receives 39.95 per cent of the time for the combined groups, varies little from group to group. Additional areas have similar patterns of time allotment constancy include recess, arithmetic, spelling, art, music, science, and physical education.

TABLE 7.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by 102 Teachers of Grade 1 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 1			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	63.50	3.90	72.06	4.46
Social Studies	19.00	1.17	45.29	2.80
Reading	694.50	42.70	623.53	38.58
Recess	152.00	9.35	155.88	9.65
Arithmetic	189.00	11.62	196.47	12.16
Spelling	27.50	1.67	24.12	1.49
English Language	15.00	0.92	17.65	1.09
Handwriting	76.00	4.67	109.41	6.77
Art	68.50	4.18	90.88	5.62
Music	75.00	4.61	62.94	3.89
Science	38.50	2.34	52.94	3.28
Physical Education	30.50	1.84	27.35	1.69
Health Education	30.50	1.84	27.65	1.71
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	46.00	2.83	55.00	3.40
Miscellaneous	103.50	6.36	55.00	3.40
Total	1626.50	100.00	1616.17	100.00

TABLE 7--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
81.27	5.20	77.99	4.94
42.25	2.70	40.48	2.56
623.77	39.90	630.67	39.95
141.80	9.07	145.15	9.20
194.40	12.40	194.22	12.30
17.20	1.10	19.36	1.23
38.00	2.43	32.35	2.05
91.27	5.84	92.79	5.88
66.69	4.27	70.90	4.49
75.41	4.82	73.29	4.64
50.47	3.23	49.71	3.15
28.20	1.80	28.28	1.79
12.67	0.81	16.91	1.07
0.33	0.02	0.25	0.02
23.60	1.51	31.03	1.97
75.84	4.85	75.08	4.76
1563.17	100.00	1578.45	100.00

Conversely, the time allotment to some subjects and/or activities varies considerably, revealing a progressively increasing percentage of time from Group 1 to Group 3. For example, English language receives 0.92 per cent of the time in Group 1, 1.09 per cent in Group 2, and 2.43 per cent in Group 3. Opening exercises and social studies also fall in this category.

Also, other subjects such as health education, miscellaneous, unassigned or free time, and handwriting indicate variability by following an erratic pattern of time allotment percentages that fluctuates from one group to the other two groups.

It is of interest to note that miscellaneous, which on the average receives 4.76 per cent of the time for the combined groups, is allocated 6.36 per cent of the time in Group 1--more than this area receives than in any other group. This large percentage causes miscellaneous to be ranked fourth in the average percentages of time allotments reported by teachers of Grade 1 in Group 1.

An analysis of the time allotment practices as reported by the 102 teachers of Grade 1, shown in Table 8, reveals a wide range of differences so far as the amount of time allocated to the various subject offerings is concerned. Some examples of the maximum and the minimum amounts of time in minutes per week allotted to the same subject and/or activity are as follows: reading, 1040-275;

TABLE 8.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 1 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	1
Social Studies	225	0	47
Reading	1040	275	0
Recess	300	30	0
Arithmetic	525	75	0
Spelling	150	0	78
English Language	285	0	68
Handwriting	300	0	12
Art	250	0	17
Music	175	0	10
Science	225	0	30
Physical Education	180	0	58
Health Education	90	0	61
Foreign Language	25	0	101
Unassigned or Free Time	225	0	58
Miscellaneous	330	0	32

arithmetic, 525-75; recess, 300-30; social studies, 225-0; spelling, 150-0; English language, 285-0; handwriting, 300-0; art, 250-0; science, 225-0; physical education, 180-0; health education, 90-0; unassigned or free time, 225-0; and miscellaneous, 330-0.

It is of additional interest to note the large numbers of the teachers of Grade 1 that report no time for formal instruction in some areas. These areas include social studies, 47; spelling, 78; English language, 68; science, 30; physical education, 58; health education, 61; unassigned or free time, 58; and miscellaneous, 32.

Of the 102 teachers of Grade 1 responding to the time allotment questionnaire, only one respondent indicated any time given to foreign language, and that amount was twenty-five minutes per week.

Except for reading, spelling, and English language, the average percentages of the time allotment practices for the combined groups, as reported by eighty-two teachers of Grade 2 and shown in Table 9, are strikingly similar to those reported by the one hundred two teachers of Grade 1 included in Table 7. The percentage of time allocated to reading by the combined teachers of Grade 2 is 33.96 per cent, which is approximately 6.00 per cent less than it received in Grade 1. Whereas spelling was allotted 1.23 per cent on the average in Grade 1, it receives 6.10 per cent in Grade 2, and English language increased from 2.05

TABLE 9.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by Eighty-Two Teachers of Grade 2 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 2			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	70.00	4.29	71.15	4.21
Social Studies	18.00	1.10	87.69	5.19
Reading	576.00	35.27	521.77	30.90
Recess	162.50	9.95	147.31	8.72
Arithmetic	203.00	12.43	184.23	10.91
Spelling	110.00	6.74	126.54	7.49
English Language	137.50	8.42	117.31	6.95
Handwriting	69.50	4.26	71.54	4.24
Art	46.00	2.82	65.38	3.87
Music	47.00	2.88	74.62	4.24
Science	79.00	4.84	48.08	2.85
Physical Education	21.00	1.29	20.77	1.23
Health Education	55.50	3.40	52.31	3.10
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	25.50	1.56	39.62	2.35
Miscellaneous	12.50	0.77	60.38	3.58
Total	1633.00	100.00	1688.68	100.00

TABLE 9--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
78.31	4.88	76.16	4.69
51.95	3.24	53.48	3.30
553.15	34.45	550.96	33.96
130.00	8.10	136.71	8.43
188.22	11.72	189.39	11.67
91.10	5.67	99.02	6.10
97.54	6.07	105.55	6.51
68.56	4.27	69.15	4.26
69.34	4.32	65.87	4.06
71.03	4.42	68.67	4.23
72.73	4.53	69.59	4.29
42.47	2.64	36.41	2.24
16.61	1.03	27.01	1.67
0.00	0.00	0.00	0.00
36.10	2.25	35.37	2.18
37.46	2.33	38.05	2.35
1605.84	100.00	1622.28	100.00

per cent in Grade 1 to 6.51 per cent in Grade 2. The remaining subjects and/or activities indicate little or no change so far as the comparison of the percentages of time for the combined groups between Grade 1 and Grade 2 is concerned.

There are some subject offerings listed in Table 9 in which the average percentages remain relatively unchanged from group to group. These include opening exercises, recess, arithmetic, handwriting, physical education, and unassigned or free time.

However, there are some subjects and/or activities in which the average percentages of time vary considerably among the three groups of teachers. For example, social studies, which on the average receives 3.30 per cent of the time for the combined groups, is given 1.10 per cent by the teachers in Group 1, increases to 5.19 per cent in Group 2, then decreases to 3.24 per cent in Group 3--in short, an erratic pattern. Other subjects and/or activities likewise indicating wide percentage differences among the three groups of the teachers of Grade 2 are reading, spelling, English language, art, music, science, health education, and miscellaneous.

It is particularly noticeable that of the eighty-two teachers of Grade 2 participating in this survey, not one indicates formal instructional time in foreign language.

Again, as was the case with the results of the teachers of Grade 1, the apportionment of time to the various subjects and/or activities by the teachers of Grade 2 is found to have a wide range of differences. Table 10 shows the wide range of differences found in Grade 2 in which the maximum and the minimum amounts of time in minutes per week given to the same subject or activity that are pronounced include reading, 920-270; social studies, 225-0; arithmetic, 315-0; spelling, 225-0; English language, 330-0; handwriting, 225-0; music, 195-0; science, 250-0; physical education, 165-0; health education, 150-0; unassigned or free time, 300-0; and miscellaneous, 255-0.

Several teachers of Grade 2 report no allotted time for formal instruction in some areas. These areas include social studies, 30; English language, 14; handwriting, 11; physical education, 44; health education, 35; foreign language, 77; unassigned or free time, 31; and miscellaneous, 40. The remaining areas of the curriculum in Grade 2 in which no formal instruction was allocated is reported by ten or fewer teachers.

Data in Table 11 show the results of the time allotment practices as reported by seventy-nine teachers of Grade 3. An analysis of the results for the combined groups reveals that reading, which on the average receives 25.28 per cent of the time, is the paramount subject in

TABLE 10.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 2 in Fifty Selected Elementary Schools^a in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	1
Social Studies	225	0	30
Reading	920	270	0
Recess	225	65	0
Arithmetic	315	0	1
Spelling	225	0	3
English Language	330	0	14
Handwriting	225	0	11
Art	150	0	6
Music	195	0	10
Science	250	0	10
Physical Education	165	0	44
Health Education	150	0	35
Foreign Language	0	0	77
Unassigned or Free Time	300	0	31
Miscellaneous	255	0	40

^aThe time allotment results of five teachers of Grade 2, currently teaching in departmentalized situations, were not used in the results shown in this table.

TABLE 11.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by Seventy-Nine Teachers of Grade 3 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 3			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	56.00	3.27	69.64	4.15
Social Studies	105.00	6.13	76.43	4.55
Reading	418.00	24.42	422.86	25.20
Recess	144.50	8.44	144.29	8.60
Arithmetic	231.50	13.52	234.29	13.96
Spelling	122.50	7.16	120.71	7.19
English Language	197.00	11.51	172.14	10.25
Handwriting	88.00	5.40	60.36	3.60
Art	49.50	2.89	40.36	2.40
Music	57.00	3.33	93.57	5.58
Science	71.50	4.18	88.93	5.30
Physical Education	37.50	2.19	32.50	1.94
Health Education	40.00	2.34	38.21	2.28
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	76.50	4.47	47.86	4.46
Miscellaneous	17.50	1.02	8.93	0.53
Total	1712.00	100.00	1678.06	100.00

TABLE 11--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
79.73	4.77	74.94	4.48
86.56	5.18	87.10	5.20
424.20	25.36	423.18	25.28
119.27	7.13	126.90	7.58
232.09	13.18	232.41	13.89
100.09	5.98	106.58	6.37
149.82	8.96	159.75	9.54
78.45	4.69	76.46	4.57
81.15	4.85	69.91	4.18
80.75	4.81	79.82	4.77
104.18	6.23	97.34	5.82
56.02	3.35	49.51	2.96
14.54	0.86	21.90	1.31
0.00	0.00	0.00	0.00
39.18	2.34	45.44	2.72
26.36	1.58	22.15	1.32
1672.48	100.00	1673.69	100.00

the curriculum in Grade 3. Interestingly enough, the average apportionment of time to formal instruction in reading by each group is almost identical, percentage-wise. Arithmetic, which on the average is allocated 13.89 per cent by the combined groups, also maintains percentage stability among the three groups. All remaining areas indicate varied percentages among the three groups.

It is of interest to note the specific group of teachers in which the greatest percentage of time is allocated to the various subject offerings in Grade 3. In Group 1, social studies, English language, handwriting, health education, and unassigned or free time receive the greatest average percentage of time by the three groups, while in Group 2, recess, arithmetic, spelling, and music are allocated the largest average percentage of time by the three groups. In Group 3, opening exercises, reading, art, science, physical education, and miscellaneous receive the largest average percentage of time by the three groups.

Here again, as was the case in Grade 2, no teacher reported instructional time for foreign language in Grade 3.

The varying average percentages of time apportioned to the same area by the three groups of teachers are relatively stable when compared to the maximum and the minimum amounts of time given to the same subject or activity in Grade 3 which are shown in Table 12. A few of the subjects

TABLE 12.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 3 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year^a.

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	1
Social Studies	375	0	10
Reading	720	255	0
Recess	250	75	0
Arithmetic	465	75	0
Spelling	250	0	2
English Language	375	0	1
Handwriting	225	0	10
Art	225	0	10
Music	240	0	4
Science	225	0	8
Physical Education	165	0	31
Health Education	150	0	38
Foreign Language	0	0	70
Unassigned or Free Time	300	0	27
Miscellaneous	225	0	40

^aThe time allotment results of nine teachers of Grade 3, currently teaching in departmentalized situations, were not used in the results shown in this table.

and/or activities in which wide differences exist are reported in minutes per week social studies, 375-0; reading, 720-255; recess, 250-75; arithmetic, 465-75; spelling, 250-0; English language, 375-0; handwriting, 225-0; art, 225-0; music, 240-0; science, 225-0; unassigned or free time, 300-0; and miscellaneous, 225-0.

Each respondent indicates some time apportioned to each of the following: reading, arithmetic, and recess. Only few teachers report no instructional time allocation to the remaining subjects and/or activities in Grade 3 except for physical education, which is not taught by thirty-one teachers; health education, which is not reported by thirty-eight teachers; miscellaneous, which is not taught by forty teachers; and foreign language, which no time for formal instruction is reported by seventy teachers.

The time allotment practices as reported by nine teachers currently teaching in departmentalized situations in Grade 3 are excluded from the results shown in Table 12.

The results of the time allotment practices reported by eighty teachers of Grade 4 are shown in Table 13. An analysis of the results for the combined groups indicates that reading, which on the average receives 18.21 per cent of the time, continues to dominate the curriculum in all three groups of the teachers of Grade 4. It is noticeable that the average percentages of time devoted to reading

TABLE 13.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by Eighty Teachers of Grade 4 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 4			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	87.50	4.85	75.00	4.28
Social Studies	210.00	11.64	186.25	10.63
Reading	282.00	15.63	312.92	17.86
Recess	135.00	7.48	106.25	6.06
Arithmetic	246.50	13.66	252.50	14.41
Spelling	115.50	6.40	115.83	6.61
English Language	184.00	10.20	176.25	10.06
Handwriting	61.50	3.41	64.17	3.66
Art	63.50	3.51	42.50	2.43
Music	71.00	3.93	103.75	5.92
Science	110.00	6.10	125.42	7.16
Physical Education	46.50	2.58	45.83	2.62
Health Education	70.00	3.88	52.08	2.97
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	76.50	4.24	75.83	4.33
Miscellaneous	45.00	2.49	14.58	0.83
Total	1804.50	100.00	1752.16	100.00

TABLE 13--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
67.24	3.96	70.94	4.12
183.28	10.78	187.06	10.88
318.55	18.74	313.14	18.21
85.26	5.02	94.63	5.50
235.34	13.85	239.31	13.91
97.07	5.71	102.19	5.94
160.60	9.45	165.88	9.64
36.98	2.18	44.13	2.57
73.64	4.33	67.70	3.94
100.53	5.92	97.33	5.66
137.95	8.12	132.58	7.71
89.41	5.26	77.51	4.51
18.19	1.07	29.75	1.73
5.69	0.33	4.13	0.24
71.12	4.18	72.50	4.21
18.62	1.10	21.31	1.24
1699.47	100.00	1720.06	100.00

instruction varies slightly from group to group. Arithmetic, which on the average is allocated 13.91 per cent of the time, ranks second in the curriculum, while social studies, which on the average is allotted 10.80 per cent of the time, ranks third; its highest rank in Grades 1-4. English language ranks fourth with an average time allotment of 9.64 per cent. In looking at each group's average percentages of time devoted to these four subjects which rank highest in the curriculum of Grade 4, a relatively stable pattern of percentages is evident except in reading. The average percentages of the remaining subjects and/or activities of the curriculum in Grade 4 also indicate an erratic pattern among the three groups.

When the combined groups' average percentages of the time allotments to the various subjects and/or activities as shown by the teachers of Grade 4 included in Table 13 are compared with those reported by the teachers of Grade 3 shown in Table 11, the following noteworthy changes are evident: reading receives 7.00 per cent less; recess is allotted 2.00 per cent less; social studies is given over 5.00 per cent more; and, handwriting, science, physical education, and unassigned or free time each approximates a 2.00 per cent gain. All remaining subjects and/or activities indicate little or no percentage change.

Data in Table 14 show a wide range of differences as reported by sixty teachers of Grade 4 distribution of

TABLE 14.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 4 in Fifty Selected Elementary Schools^a in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	3
Social Studies	300	0	1
Reading	560	150	0
Recess	210	0	8
Arithmetic	390	100	0
Spelling	225	0	1
English Language	375	100	0
Handwriting	150	0	14
Art	195	0	7
Music	175	0	4
Science	255	0	2
Physical Education	225	0	22
Health Education	165	0	33
Foreign Language	150	30	60
Unassigned or Free Time	200	0	12
Miscellaneous	150	0	35

^aThe time allotment results of twenty teachers of Grade 4, currently teaching in departmentalized situations, were not used in the results shown in this table.

time to the various subjects and/or activities. The time allotment practices as reported by twenty teachers currently teaching in departmentalized situations in Grade 4 are excluded from the results shown in Table 14.

The maximum and the minimum amounts of time in minutes per week allocated to the same subject or activity that are markedly wide include reading, 560-150; social studies, 300-0; recess, 210-0; arithmetic, 390-100; spelling, 225-0; English language, 375-100; art, 195-0; science, 255-0; physical education, 225-0; foreign language, 150-30; and unassigned or free time, 200-0.

Several teachers of Grade 4 report no allotted time for formal instruction in some areas. These areas include handwriting, 14; physical education, 22; health education, 33; foreign language, 60; unassigned or free time, 12; and miscellaneous, 35.

An analysis of the average percentages of the time allotment practices for the combined groups, as reported by seventy-six teachers of Grade 5 and shown in Table 15, reveals that the following subject areas receive an almost identical percentage as that reported by the eighty teachers of Grade 4 included in Table 13: opening exercises, spelling, English language, art, music, health education, and foreign language. A grade level comparison of the remaining subjects and/or activities indicates a change of less than 2.00 per cent.

TABLE 15.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by Seventy-Six Teachers of Grade 5 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 5			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	60.00	3.34	79.17	4.49
Social Studies	219.50	12.20	302.50	17.15
Reading	257.50	14.32	218.33	12.38
Recess	78.00	4.34	81.25	4.61
Arithmetic	257.50	14.32	243.75	13.82
Spelling	104.50	5.81	74.17	4.20
English Language	183.00	10.18	164.58	9.33
Handwriting	39.00	2.17	45.42	2.57
Art	57.00	3.20	31.25	1.77
Music	114.00	6.34	109.17	6.19
Science	96.00	5.34	202.50	11.48
Physical Education	86.50	4.81	24.17	1.37
Health Education	135.50	7.53	84.58	4.80
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	110.00	6.12	79.17	4.49
Miscellaneous	0.00	0.00	23.75	1.35
Total	1798.50	100.00	1763.77	100.00

TABLE 15--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
71.30	4.19	71.05	4.12
166.48	9.79	194.93	11.31
316.78	18.64	293.43	17.03
82.59	4.86	81.78	4.75
250.46	14.73	250.33	14.53
109.54	6.44	103.29	5.99
168.06	9.89	169.47	9.84
32.78	1.93	35.59	2.07
73.54	4.33	64.75	3.76
90.67	5.33	96.66	5.61
174.65	10.27	168.62	9.80
89.28	5.25	94.62	5.49
9.17	0.54	21.71	1.26
3.89	0.23	2.76	0.16
51.39	3.02	63.49	3.68
9.35	0.55	10.39	0.60
1699.90	100.00	1722.95	100.00

There are several subjects and/or activities in which the average percentages vary considerably among the three groups of teachers. Two of these subjects warrant mention, namely social studies and science. Social studies, which on the average is allotted 11.31 per cent by the combined groups, receives 12.50 per cent of the time by the teachers in Group 1, increases to 17.15 per cent of the time in Group 2, then decreases to 9.79 per cent of the time in Group 3. Science follows a similar pattern to the extent that on the average it is allocated 9.80 per cent by the combined groups, 5.34 per cent of the time by Group 1, 11.48 per cent of the time in Group 2, and 10.27 per cent of the time in Group 3. Other subjects and/or activities which have wide percentage differences among the three groups of the teachers of Grade 5 are reading, spelling, art, physical education, health education, and unassigned or free time.

It is noteworthy that in Group 2 the average percentage of time allotted to reading is not the largest of all areas of the curriculum in Grade 5; it is surpassed by social studies and arithmetic. This is the first instance in which reading has ranked other than first in any group throughout all previous grade levels examined.

Of the seventy-six teachers' of Grade 5 time allotment practices shown in Table 15, only four indicated formal instructional time in a foreign language, and in

each case the language is Spanish.

Here again, as has been the case in each previous grade level examined, the apportionment of time to the various subjects and/or activities by fifty-four of the teachers of Grade 5 is found to possess a wide range of differences, as shown in Table 16. The time allotment practices as reported by twenty-two teachers of Grade 5 currently teaching in departmentalized situations are excluded from the results shown in Table 16.

The maximum and the minimum amounts of time in minutes per week given to the same subject or activity that warrant mention are reading, 600-150; social studies, 525-50; recess, 225-0; arithmetic, 450-150; spelling, 225-0; English language, 250-75; art, 200-0; music, 450-0; science, 300-0; physical education, 240-0; health education, 165-0; foreign language, 90-30; and unassigned or free time, 375-0. In other words, the time allotment practices of every teacher of Grade 5, as reported in Table 16, indicates some time devoted to formal instruction in the following areas: reading, social studies, arithmetic, and English language.

Several teachers of Grade 5 report no allocated time for formal instruction in some areas. These areas include recess, 13; handwriting, 16; art, 11; music, 6; physical education, 12; health education, 32; foreign language, 50; unassigned or free time, 13; and miscellaneous, 33.

TABLE 16.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 5 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.^a

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	3
Social Studies	525	50	0
Reading	600	150	0
Recess	225	0	13
Arithmetic	450	150	0
Spelling	225	0	3
English Language	250	75	0
Handwriting	110	0	16
Art	200	0	11
Music	450	0	6
Science	300	0	2
Physical Education	240	0	12
Health Education	165	0	32
Foreign Language	90	30	50
Unassigned or Free Time	375	0	13
Miscellaneous	150	0	33

^aThe time allotment results of twenty-two teachers of Grade 5, currently teaching in departmentalized situations, were not used in the results shown in this table.

Except for English language, science, and reading, the average percentages of time allotment practices for the combined groups, as reported by seventy-seven teachers of Grade 6 and shown in Table 17, are almost identical to those reported by the seventy-six teachers of Grade 5 included in Table 15. The percentage of time allotted to English language by the combined teachers of Grade 6 is 11.27 per cent, or approximately 1.50 per cent more than it received in Grade 5. Whereas science was allocated 9.80 per cent on the average in Grade 5, it receives 8.97 per cent in Grade 6, and reading decreases from 17.03 per cent to 16.28 per cent in Grade 6. The remaining subjects and/or activities indicate little or no change, so far as the comparison of the percentages of time for the combined groups between Grade 5 and Grade 6 is concerned.

An analysis of the time allotment practices of the three groups of the teachers of Grade 6 reveals that the average percentages of time given to some subjects and/or activities remain relatively unchanged from group to group. These subjects are opening exercises and music. In the remaining subjects and/or activities the average percentages of time devoted to these various subject offerings among the three groups of teachers vary from a few areas showing slight differences to a few areas showing considerable differences. The areas in which the average percentages of time vary slightly among the three groups of teachers

TABLE 17.--The Average Amounts of Time in Minutes Per Week and the Percentages of Time Allotted to the Elementary Subjects and/or Activities by Seventy-Seven Teachers of Grade 6 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.

Subject Offerings	Grade 6			
	Group 1 (The Ten Smallest School Systems)		Group 2 (The Ten School Systems at the Median)	
	Minutes	Per Cent	Minutes	Per Cent
Opening Exercises	60.00	3.43	56.25	3.27
Social Studies	193.50	11.05	245.42	14.26
Reading	266.50	15.21	266.25	15.47
Recess	73.50	4.20	60.42	3.51
Arithmetic	249.50	14.22	240.83	13.99
Spelling	126.50	7.22	107.92	6.27
English Language	174.00	9.93	213.33	12.40
Handwriting	49.50	2.83	44.58	2.59
Art	25.50	1.46	21.67	1.26
Music	90.00	5.14	103.33	6.00
Science	117.00	6.68	171.67	9.98
Physical Education	120.00	6.85	99.58	5.77
Health Education	118.50	6.77	15.00	0.87
Foreign Language	0.00	0.00	0.00	0.00
Unassigned or Free Time	70.50	4.03	71.67	4.34
Miscellaneous	17.00	0.97	0.00	0.00
Total	1751.00	100.00	1720.91	100.00

TABLE 17--Continued

Group 3 (The Ten Largest School Systems)		Combined Groups	
Minutes	Per Cent	Minutes	Per Cent
68.18	4.02	65.26	3.82
184.16	10.86	194.92	11.42
282.29	16.65	277.74	16.28
81.55	4.81	77.21	4.52
256.64	15.13	253.18	14.84
94.07	5.55	100.44	5.89
191.00	11.26	192.27	11.27
21.47	1.27	28.71	1.68
73.56	4.34	59.23	3.47
98.02	5.78	97.81	5.73
155.56	9.17	153.06	8.97
99.84	5.89	102.42	6.00
14.82	0.87	28.31	1.66
3.27	0.19	2.34	0.14
49.00	2.89	55.32	3.24
22.36	1.31	18.18	1.07
1695.79	100.00	1706.41	100.00

are reading, recess, arithmetic, physical education, miscellaneous, unassigned or free time, handwriting, and spelling. The areas in which the average percentages of time vary considerably among the three groups of teachers are science, social studies, health education, art, and English language. For example, health education is given 6.77 per cent of the time by the teachers in Group 1, while it only receives 0.87 per cent of the time in the remaining two groups. The average percentages of time delegated to science follow a similar pattern to the extent of receiving 6.68 per cent of the time by the teachers in Group 1, increasing to 9.98 per cent in Group 2, then slightly decreasing to 9.17 per cent in Group 3. The range of average percentages of time devoted by the three groups of teachers to social studies, art, and English language is not as pronounced, but does approach the percentages received by health education and science.

Of the seventy-seven Grade 6 respondents to this survey, only one indicated any formal instructional time in foreign language, and that amount is sixty minutes per week.

There are several areas shown in Table 18 in which the maximum and the minimum amounts of time in minutes per week allotted to the same subject activity warrant mention. These include social studies, 585-100; reading, 425-0; recess, 225-0; arithmetic, 420-165; spelling, 225-30;

TABLE 18.--The Maximum and the Minimum Amounts of Time in Minutes Per Week Allotted to the Same Subject and/or Activity in Addition to the Number of Classroom Teachers Reporting No Instructional Time to the Various Subject Offerings in Grade 6 in Fifty Selected Elementary Schools in Thirty School Systems During the 1967-1968 School Year.^a

Subject Offerings	Maximum Minutes Per Week	Minimum Minutes Per Week	Number of Teachers Reporting No Time
Opening Exercises	150	0	4
Social Studies	585	100	0
Reading	425	0	1
Recess	225	0	8
Arithmetic	420	165	0
Spelling	225	30	0
English Language	300	75	0
Handwriting	180	0	20
Art	90	0	20
Music	300	0	8
Science	300	0	3
Physical Education	300	0	12
Health Education	300	0	22
Foreign Language	60	0	46
Unassigned or Free Time	210	0	16
Miscellaneous	120	0	25

^aThe time allotment results of thirty teachers of Grade 6, currently teaching in departmentalized situations, were not used in the results shown in this table.

English language, 300-75; music, 300-0; physical education, 300-0; health education, 300-0; and unassigned or free time, 210-0.

Figures in Table 18 also indicate the areas in which several teachers of Grade 6 report no allotted time for formal instruction. These areas are handwriting, 20; art, 20; physical education, 12; health education, 22; foreign language, 46; unassigned or free time, 16; and miscellaneous, 25.

The time allotment practices as reported by thirty teachers of Grade 6 currently teaching in departmentalized situations are excluded from the results shown in Table 18.

Summary

It can be said with authority that reading clearly holds the paramount position in the apportionment of time to the various subject matter areas and/or activities in Grades 1-6. Arithmetic, which receives the second largest amount of time in Grades 1-6, also is given a large portion of instructional time. In short, the amount of time allocated to both reading and arithmetic definitely predominates over that received by the remaining subjects and/or activities in the elementary school curriculum.

Several areas receive relatively large amounts of time, yet no one area clearly surpasses that received by any

of the group in order to tank a distinguishable third. These areas are social studies, recess, English language, and science.

The amount of time some areas receive approaches negligibility. These areas include health education, foreign language, unassigned or free time, and miscellaneous.

The amounts of time allocated to each subject or activity in each grade level in the elementary school by the classroom teachers participating in this survey have an exceedingly wide range of differences. Without exception, each of the subject offerings in each grade level examined possessed time allotment diversity. In short, it is observable that little agreement exists as to the amount of time that should be and/or is apportioned to the various subject offerings in Grades 1-6.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The content of this chapter provides a review of the purposes and procedures of the investigation; a statement of the findings; a summarization of the conclusions of the study; and recommendations for use of the findings and for further study.

Summary

This study was designed to determine the amount of time classroom teachers allot to the various subject matter areas and/or activities in the elementary school.

The answers to the following questions were sought:

1. Does a wide variability of time allotment to the various subject matter areas and/or activities exist among classrooms, grades, and/or elementary schools?
2. Is there wide diversity of practice in different classrooms, grades, and/or elementary schools as to when a subject should begin and how long it should continue?

In attempting to answer these questions the following procedures were followed:

Each classroom teacher in Grades 1-6 in the fifty

selected elementary schools in thirty school systems was sent a time allotment packet which was constructed expressly for the purpose of securing information about the time allotment practices of classroom teachers. Each time allotment packet included the following: a letter explaining the study and directions as to how to complete the questionnaire, a curriculum sheet, a completed sample questionnaire, a blank questionnaire, and a stamped self-addressed envelope.

In an attempt to determine whether the distribution of time to the various subject offerings varies widely among classrooms, grades, and/or elementary schools throughout the state of Oklahoma, the mean $(M)^1$ was used to analyze the time allotment practices of classroom teachers in Grades 1-6 in each of the three groups of ten school systems, while the weighted mean $(M_w)^2$ was used to compute an overall mean for the combined groups in each subject matter area and activity in each grade level throughout the elementary school.

Findings

An analysis of the data obtained from the classroom teachers in the elementary schools in the ten school systems which had the smallest enrollment figures revealed

¹Guilford, loc. cit., p. 44.

²Ibid., p. 63.

the following findings:

1. In Grade 1, reading, which received 42.70 per cent of the time on the average, was the paramount subject matter area of the curriculum, while arithmetic, which on the average received 11.62 per cent of the time, ranked second.

2. In Grade 1, the average amount of time allocated to reading, arithmetic, recess, and miscellaneous combined was 70.03 per cent, while in Grade 6, these same areas combined received a 34.60 per cent of the time.

3. The average amount of time given to reading ranged from 42.70 per cent in Grade 1 to 14.32 per cent in Grade 5. Other areas indicated a broad range of time allotment from Grade 1 to Grade 6: social studies, 1.17 per cent to 11.05 per cent; spelling, 1.67 per cent to 7.22 per cent; English language, 0.92 per cent to 9.93 per cent; health education, 1.84 per cent to 6.77 per cent; physical education, 1.84 per cent to 6.85 per cent; and miscellaneous, 6.36 per cent to 0.97 per cent.

4. The time allotment in arithmetic, which varied little in the average percentage of time received throughout the grade sequence, ranged from 11.62 per cent in Grade 1 to 14.32 per cent in Grade 5.

5. Not one classroom teacher in the ten elementary school systems with the smallest enrollments indicated any allotted time for formal instruction in foreign language.

6. The average amount of time allocated to both reading and arithmetic in Grades 1-6 in the ten school systems with the smallest enrollments clearly surpassed that allotted to all other areas of the elementary school curriculum.

7. The total amount of time devoted to recess, spelling, English language, health education, and unassigned or free time in Grades 1-6 in the ten smallest school systems was the largest amount given to formal instruction in these specific areas by any group of classroom teachers examined in this study.

An analysis of the data secured from the classroom teachers in the elementary schools in the ten school systems with median enrollment figures resulted in the following findings:

1. English language and music received progressively larger percentages of time throughout the grade sequence. Additional areas which approached a similar time allotment pattern were social studies, science, and physical education.

2. Other areas were allocated progressively smaller percentages of time throughout the grade sequence. These areas included reading, recess, handwriting, and art.

3. A large time allotment gain from Grade 1 to Grade 2 was revealed in English language, 1.09 per cent to 6.95 per cent; and spelling, 1.49 per cent to 7.49 per cent.

4. Not one classroom teacher in the ten school systems with median enrollments indicated any time allocated to formal instruction in foreign language.

5. Except for Grade 5, the average amounts of time given to both reading and arithmetic in Grades 1-6 in the school systems with median enrollments clearly surpassed that allocated to all other areas of the elementary school curriculum.

6. The total amount of time given to formal instruction in social studies, handwriting, and music in Grades 1-6 in the ten school systems with median enrollments surpassed that devoted to those same areas by the classroom teachers in the elementary schools in both the ten smallest and ten largest school systems.

7. A departmentalized organizational structure in Grades 4-6 was revealed in three elementary schools of the ten school systems with median enrollment figures.

An analysis of the data from the classroom teachers in the elementary schools selected from the ten school systems with the largest enrollment figures resulted in the following findings:

1. In the school systems with large enrollments the total amount of time in Grades 1-6 devoted to reading, which on the average received 26.18 per cent, and arithmetic, which on the average received 13.57 per cent, was the largest amount given to formal instruction in these

two areas by any of the three groups of classroom teachers examined in this study. Opening exercises, art, science, physical education, and miscellaneous are additional areas in which the largest amount of time devoted to these areas was by the classroom teachers from the ten largest school systems.

2. Throughout the grade sequence, both health education and foreign language received the largest average amounts of time in Grade 4: 1.07 per cent and 0.33 per cent, respectively.

3. In Grade 1 the average amount of time devoted to reading, recess, arithmetic, and handwriting combined was 67.25 per cent of the total time, while in Grade 6 these same areas combined received a 38.02 per cent of the time.

4. A large time allotment gain from Grade 1 to Grade 2 in the school systems with large enrollments was revealed in English language (2.43 per cent to 6.07 per cent) and spelling (1.10 per cent to 5.67 per cent).

5. A relatively stable amount of time throughout the grade sequence was apportioned to each of the following areas: arithmetic, art, and music.

6. Nineteen of the selected thirty elementary schools in the ten school systems with the largest enrollment figures use departmentalized organizational structure.

7. Social studies, which on the average received

6.93 per cent of the total time in Grades 1-6, was allocated 2.70 per cent of the time in Grade 1, and then received progressively larger amounts of time throughout the grade sequence to 10.86 per cent in Grade 6. Additional areas possessing similar patterns of time allotment gain from grade to grade were English language, science, and physical education.

8. Conversely, several areas revealed a pattern of progressively smaller amounts of time throughout the grade sequence. These areas included reading, recess, and handwriting.

An analysis of the combined data of the classroom teachers in fifty selected elementary schools in the thirty school systems revealed the following findings:

1. In the total time allotted in Grades 1-6, reading, which on the average received 25.62 per cent of the time, ranked first in the elementary curriculum, while arithmetic, which was given 13.48 per cent on the average, ranked second. These two areas clearly surpassed all other subject matter areas and/or activities in the elementary school curriculum.

2. The total average amount of time apportioned to formal instruction in social studies, recess, English language, and science in Grades 1-6 received emphasis to the extent that each was allotted a reasonably large percentage, and yet no one of these areas dominated the

group in order to be ranked clearly as third.

3. Throughout the grade sequence, both health education and foreign language received their largest average amounts of time in Grade 4: 1.73 per cent and 0.24 per cent, respectively.

4. In Grade 1, social studies, spelling, English language, physical education, health education, foreign language, and unassigned or free time combined received 10.69 per cent of the time; yet in Grade 6, those same areas combined were allotted 39.62 per cent of the total time.

5. Several areas showed time allotment stability throughout the grade sequence. These areas included arithmetic, opening exercises, art, music, health education, foreign language, and unassigned or free time.

6. Reading received progressively smaller amounts of time throughout the grade sequence to the extent that in Grade 1, 39.95 per cent of the time was given to reading instruction, while 16.28 per cent of the time in Grade 6 was apportioned to the same subject. Additional areas revealing a similar extenuatory pattern were handwriting, recess, and miscellaneous.

7. Some subject offerings were allocated progressively larger percentages of time allotment throughout the grade sequence. These subjects included social studies, science, and physical education.

8. Of the 496 classroom teachers whose time allotment practices were examined, only eleven indicated any formal instructional time in foreign language, and in each case the language was Spanish. These eleven teachers were from elementary schools in the ten largest school systems.

An analysis of the data concerning the range of differences within each grade level's time allotment practices in the three groups of ten school systems resulted in the following findings:

1. Of the 102 teachers of Grade 1 whose time allotment practices were examined in this study, the following numbers of teachers gave no instructional time to the following areas: opening exercises, 1; social studies, 47; spelling, 78; English language, 68; handwriting, 12; art, 17; music, 10; science, 30; physical education, 58; health education, 61; foreign language, 101; unassigned or free time, 58; and miscellaneous, 32.

2. Several subjects in Grade 1 were revealed to have exceedingly broad ranges of time allocations. In minutes per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 225-0; reading, 1040-275; recess, 300-30; arithmetic, 525-75; English language, 285-0; handwriting, 300-0; art, 250-0; science, 225-0; physical education, 180-0; unassigned or free time, 225-0; and miscellaneous, 330-0.

3. Every teacher in Grade 1 participating in this study allotted time to reading, recess, and arithmetic.

4. Except for five teachers of Grade 2 who indicated that they were teaching in departmentalized situations, no instructional time was reported by the following numbers of teachers of Grade 2 in the following areas: opening exercises, 1; social studies, 30; arithmetic, 1; spelling, 3; English language, 14; handwriting, 11; art, 6; music, 10; science, 10; physical education, 44; health education, 35; foreign language, 77; unassigned or free time, 31; and miscellaneous, 40.

5. Several subjects in Grade 2 were revealed to have exceedingly wide ranges of time allotments. In minutes per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 225-0; reading, 920-270; recess, 225-65; arithmetic, 315-0; spelling, 225-0; English language, 330-0; handwriting, 225-0; music, 195-0; science, 250-0; physical education, 165-0; unassigned or free time, 300-0; and miscellaneous, 255-0.

6. Time allotments were unanimously reported for reading and recess by the teachers of Grade 2 who indicated that they were teaching in self-contained classroom situations.

7. Except for nine teachers of Grade 3 who indicated that they were teaching in departmentalized situations,

no time for formal instruction in the following areas was reported by the following numbers of teachers of Grade 3: opening exercises, 1; social studies, 10; spelling, 2; English language, 1; handwriting, 10; art, 10; music, 4; science, 8; physical education, 31; health education, 38; foreign language, 70; unassigned or free time, 27; and miscellaneous, 40.

8. Several areas in Grade 3 were found to have broad ranges of differences in time allotments. In minutes per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 375-0; reading, 720-255; recess, 250-75; arithmetic, 465-75; spelling, 250-0; English language, 375-0; handwriting, 225-0; art, 225-0; music, 240-0; science, 225-0; physical education, 165-0; unassigned or free time, 300-0; and miscellaneous, 225-0.

9. Time allotments were unanimously reported for reading, recess, and arithmetic by the teachers of Grade 3 who indicated that they were teaching in self-contained classroom situations.

10. Except for twenty teachers of Grade 4 who indicated that they were teaching in departmentalized situations, no instructional time was reported by the following numbers of the teachers of Grade 4 in the following areas: opening exercises, 3; social studies, 1; recess, 8; spelling, 1; handwriting, 14; art, 7; music, 4; science, 2;

physical education, 22; health education, 33; foreign language, 60; unassigned or free time, 12; and miscellaneous, 35.

11. Several areas in Grade 4 were revealed to have broad ranges of differences in time allotments. In minutes per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 300-0; reading, 560-150; recess, 210-0; arithmetic, 390-100; spelling, 225-0; English language, 375-100; art, 195-0; music, 175-0; science, 255-0; physical education, 225-0; health education, 165-0; and unassigned or free time, 200-0.

12. Time allotments were unanimously reported for reading, arithmetic, and English language by the teachers of Grade 4 who indicated that they were teaching in self-contained classroom situations.

13. Except for twenty-two teachers of Grade 5 who indicated that they were teaching in departmentalized situations, no instructional time was reported by the following numbers of the teachers of Grade 5 in the following areas: opening exercises, 3; recess, 13; spelling, 3; handwriting, 16; art, 11; music, 6; science, 2; physical education, 12; health education, 32; foreign language, 50; unassigned or free time, 13; and miscellaneous, 33.

14. Several areas in Grade 5 were revealed to have broad ranges of differences in time allotments. In minutes

per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 525-50; reading, 600-150; recess, 225-0; arithmetic, 450-150; spelling, 225-0; English language, 250-75; art, 200-0; music, 450-0; science, 300-0; physical education, 240-0; health education, 165-0; and unassigned or free time, 375-0.

15. Time allotments were unanimously reported for social studies, reading, arithmetic, and English language by the teachers of Grade 5 who indicated that they were teaching in self-contained classroom situations.

16. Except for thirty teachers of Grade 6 who indicated that they were teaching in departmentalized situations, no instructional time was reported by the following numbers of the teachers of Grade 6 in the following areas: opening exercises, 4; reading, 1; recess, 8; handwriting, 20; art, 20; music, 8; science, 3; physical education, 12; health education, 22; foreign language, 46; unassigned or free time, 16; and miscellaneous, 25.

17. Several areas in Grade 6 were revealed to have broad ranges of differences in time allotments. In minutes per week, the maximum and the minimum amounts of time allocated to certain areas in which wide differences existed were: social studies, 585-100; reading, 425-0; recess, 225-0; arithmetic, 420-165; spelling, 225-0; English language, 300-75; handwriting, 180-0; music, 300-0; science,

300-0; physical education, 300-0; health education, 300-0; and unassigned or free time, 210-0.

18. Time allotments were unanimously reported for social studies, arithmetic, spelling, and English language by the teachers of Grade 6 who indicated that they were teaching in self-contained classroom situations.

Conclusions

From an analysis of the data collected in this study the following conclusions were drawn:

1. In the apportionment of time to the various subject offerings in the elementary schools examined in this study, reading, by and large, is the paramount subject matter area in Grades 1-6, while arithmetic distinctly ranks second. These two areas clearly dominate the curriculum in the elementary school.

2. Since each of several areas in Grades 1-6 receives a reasonably large allotment of time, and no one area is given a sufficient amount of time in order to rank a distinguishable third, the areas ranking third through sixth are English language, third; social studies, fourth; recess, fifth; and science, sixth.

3. Although the apportionment of time varies widely from one teacher to the next, on the average very little time is allocated to health education, foreign language, unassigned or free time, and miscellaneous in

Grades 1-6.

4. Opening exercises, arithmetic, and music are the few areas in which any degree of time allotment stability is reported in Grades 1-6 by classroom teachers in each of the three groups of ten school systems whose time allotment practices were examined in this study.

5. In each of the three groups of ten school systems, several subjects receive progressively larger amounts of time throughout the grade sequence. These areas are social studies, physical education, and science.

6. Conversely, several areas in each of the three groups of ten school systems are apportioned progressively smaller amounts of time throughout the grade sequence. These areas are reading, recess, and handwriting.

7. In the remaining subject matter areas and/or activities no identifiable time allotment patterns are observable in Grades 1-6. These include spelling, English language, art, health education, foreign language, unassigned or free time, and miscellaneous.

8. Throughout this study, several areas in Grades 1 were consistently shown to receive large amounts of time. These areas are reading, arithmetic, and recess.

9. Conversely, the average amounts of time that the teachers of Grade 1 in each of the three groups of ten school systems apportion to several areas approach negligibility. These areas include social studies, spelling,

English language, physical education, health education, and foreign language.

10. The large amount of time devoted to miscellaneous in Grade 1, is noteworthy because it is the most allotted to this area in any grade. This situation can be attributed to the fact that considerable time is given to show and tell, milk break, rest period, etc.

11. In each of the three groups of ten school systems examined in this study, the greatest change in time allotment between grades for any of the various curriculum areas in Grades 1-6 is indicated to exist between Grade 1 and Grade 2, in which both English language and spelling show a relatively large gain in time allotment. Social studies approximates being identified with the gain experienced by both English language and spelling, except for that in the ten smallest school systems, where the large gain in time allotment lies between Grade 2 and Grade 3.

12. Of all the subject matter areas and/or activities in Grades 1-6, one area, foreign language, undoubtedly ranks last in the average amount of time apportioned to it by the classroom teachers participating in this study. It is of interest to note that only eleven classroom teachers, all from the ten largest school systems, reported formal instruction in foreign language, and that language in each case was Spanish.

13. The time allotment practices of the classroom teachers of the fifty selected elementary schools in the thirty school systems examined in this study indicate that a departmentalized organizational structure exists in three elementary schools in the ten school systems with median enrollment figures and in nineteen elementary schools in the ten school systems with the largest enrollment figures.

14. In each of the three groups of classroom teachers whose time allotment practices were examined, the total average amount of time allocated to the various subject matter areas and/or activities in Grades 1-6 varies from group to group. The classroom teachers in the ten smallest school systems devote more time to some areas than do the other two groups of teachers. These areas are recess, spelling, English language, health education, and unassigned or free time.

15. In the ten school systems with median enrollment figures, the total average amount of time given to formal instruction in social studies, handwriting, and music in Grades 1-6 surpasses that devoted to these same areas by the other two groups of teachers.

16. In the ten largest school systems, the total average amount of time allotted to several areas in Grades 1-6 surpasses that devoted to the same areas by the other two groups of teachers. These areas are reading,

arithmetic, opening exercises, art, science, physical education, foreign language, and miscellaneous.

17. The average amounts of time given to the various subject matter areas and/or activities by the three groups of classroom teachers indicate that several areas receive the greatest amount of time in each grade level throughout the elementary school from one or two of the three groups to the extent that reading, art, and foreign language are given the most time by the ten largest school systems; social studies and unassigned or free time are allocated the most time by the ten school systems with median enrollment figures; English language and health education receive the most time by the ten smallest school systems; music and science are given the most time by both the ten largest school systems and the ten school systems with median enrollment figures; and physical education is allotted the most time by both the ten largest and the ten smallest school systems. The amount of time allocated to the remaining subjects and/or activities throughout the grade sequence was not dominated by any one or two of the three groups of teachers.

18. The amounts of time which the classroom teachers participating in this study allocated to each subject and/or activity at each grade level in the elementary schools have an exceedingly wide range. Without exception, each of the subject offerings at each grade level

examined possesses wide time allotment diversity.

Recommendations

The following recommendations are made upon the basis of findings of the study:

1. Although there probably can be no absolute rule to follow, the general acceptance of certain educational objectives and the practices which comprise the predominant pattern in most schools points the way to more satisfactory distribution of time in all elementary schools.
2. Educators need to strive for the clearest definition of each of the various elementary school curriculum areas in which the scope and the sequence of each subject and/or activity could be established.
3. Any recommendation made concerning time allotments for the various areas of the curriculum in the elementary school is suggestive. Therefore, assuming that the school day is approximately from 330 to 390 minutes in length, a reasonable balance of the curriculum in relation to educational objectives, subject matter priorities, and cultural imperatives would suggest that in Grades 1-3 the percentage proportions of the school day should be approximately 45 per cent devoted to language arts, which would include reading, spelling, English language, handwriting, and foreign language; 10 per cent allocated to each of

five areas, which include social studies, science and health education, recess and physical education, music and art, and arithmetic; and 5 per cent given to unassigned or free time, opening exercises, and miscellaneous combined. In Grades 4-6 the percentage proportions should be approximately 30 per cent allotted to language arts, which would include reading, spelling, English language, handwriting, and foreign language; 10 per cent devoted to each of two areas which include recess and physical education, and music and art; 15 per cent allocated to each of three areas which include social studies, science and health education, and arithmetic; and 5 per cent given to unassigned or free time, opening exercises, and miscellaneous combined.

4. Classroom teachers should be able to justify adequately the amount of time apportioned to each of the areas taught in the elementary schools.

5. Educators need to strive to define in the various subject offerings the minimum essentials necessary for the optimum development of each child in the elementary school.

6. Time allotment standards legally imposed on the elementary school need continuous evaluation.

7. Since prevailing practice, which does not necessarily mean desirable practice, varies immensely from teacher to teacher, time allotment guidelines should be based on scientific inquiry.

8. Teachers must endeavor to utilize time so as to assure maximum learning efficiency by both individuals and groups.

9. With knowledge increasing at the current rate, the possibility of increasing the length of the school day or week in the elementary school should be examined.

10. The amount of time devoted to the various facets of the curriculum in the elementary school should vary in accordance with the difficulty that various pupils experience with them, as well as the worth of the content and/or experience both to the individual and to society.

11. Time allotment schedules must be variable and flexible if the educational needs of pupil personnel in the elementary schools are to be met.

12. Educators' responsibility for a defensible adjustment of school time has increased considerably in lieu of the constantly changing definition of and the implications for the elements constituting good elementary education in a dynamic society.

13. Since decisions about time allotments are closely associated with over-all organization for instruction and curriculum design, a departmentalized organizational structure rather than a self-contained approach appears to be the solution to making it possible for each area of the elementary school curriculum to receive an equitable time allotment of the school day.

14. Educators, in conjunction with other interested personnel, need to attempt to establish a hierarchy of priorities, both for the individual and for the group, which should be recognized in scheduling time for the various subjects and school experiences.

Recommended Research

On the basis of insights derived from this study, the following suggestions are made for future investigation:

1. Research needs to be conducted comparing learning effectiveness through the utilization of the time allotment schedules suggested by the central office of a specific school system and the actual time allotment practices of classroom teachers in that same school system.

2. There is great need for scientific evidence on how much school time in which grades is required to achieve what levels of performance.

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APPENDIX

OKLAHOMA
CURRICULUM
IMPROVEMENT
COMMISSION

Office of the
Executive Secretary

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APPENDIX A

THE LETTER OF ENDORSEMENT FROM THE OKLAHOMA
CURRICULUM IMPROVEMENT COMMISSION



310 WILL ROGERS MEMORIAL BUILDING ■ STATE CAPITOL
OKLAHOMA CITY, OKLAHOMA 73105 ■ AREA CODE 405 JACKSON 1-3341-2

March 28, 1967

Dear Colleague:

Enclosed you will find a letter from Mr. James Gates from East Central State College, Ada, Oklahoma.

Under the direction of Dr. Fred Sloan of Oklahoma University, Mr. Gates is currently conducting a survey of selected elementary teachers throughout Oklahoma. This survey is concerned with the time allotment practices of classroom teachers.

The problem of apportioning the school day to the various subjects and activities is ever present in the elementary schools. Administrators and classroom teachers have long been interested in providing an equitable distribution of the pupil's time in school to the various subjects or areas of experience.

We, the Chairman and Executive Secretary of the Oklahoma Curriculum Improvement Commission, recommend that you give your support and cooperation to Mr. Gates in his endeavor.

W. D. Carr
Chairman

CW:wm

Sincerely yours,

Clifford Wright
Executive Secretary

APPENDIX B

THE LETTER TO SUPERINTENDENTS OF LARGE SCHOOL SYSTEMS
ASKING PERMISSION TO USE THEIR SCHOOL SYSTEMS IN
THE SURVEY OF TIME ALLOTMENT PRACTICES IN
THE ELEMENTARY SCHOOL

Name of Superintendent, Superintendent
Name of School System
Name of City, Oklahoma.

Dear Sir:

I am currently in the process of conducting a survey of the time allotment practices in the elementary schools in thirty of the school systems in Oklahoma.

Dr. Fred Sloan, at the University of Oklahoma in Norman, is directing this study of time allocation practices of the various subject matter areas and activities as revealed by teachers in the elementary schools.

Name of School System, with your permission, has been selected as one of the thirty to participate in this survey. Let me assure you that the purpose of this study is not to degrade instructional methods and techniques of any teacher, elementary school, or school system; nor will coercion be used in an attempt to give more or less time to any given subject matter area or activity. In fact each elementary teacher participating in this survey will be assured that all personal data will be considered confidential.

Basically, teachers participating in this survey will be asked to indicate on a questionnaire the amount of time devoted to each subject matter area and activity. This questionnaire is brief and will require only a few minutes to complete. Upon completion, the questionnaire will be returned by mail.

The elementary schools participating in this survey will meet the following requirements: (1) Include Grades one through six, and (2) Possess a classroom teacher for each grade level in Grades one through six.

Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers of each elementary school will be excluded from this study.

Because of the immensity of this survey, only three randomly selected elementary schools will be used in the Name of School System.

For your convenience I am enclosing a post card so that you may indicate whether you wish to participate in this study.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX C

THE SECOND LETTER TO SUPERINTENDENTS OF LARGE SCHOOL
SYSTEMS ASKING PERMISSION TO USE THEIR SCHOOL
SYSTEMS IN THE SURVEY OF TIME ALLOTMENT
PRACTICES IN THE ELEMENTARY SCHOOL

Name of Superintendent, Superintendent
Name of School System
Name of City, Oklahoma.

Dear Sir:

Recently, I sent you a request asking for permission to use the Name of School System in a survey concerning the amount of time that classroom teachers allocate to the various subject matter areas and activities in the elementary school. I realize that my initial letter concerning this survey was poorly timed because the process of beginning the school year is no small task. Since I have not received a reply, I assume that my initial letter was either laid aside or lost in the mail. Regardless of the case, I would appreciate your consideration on this survey.

Name of School System, with your permission, has been selected as one of the thirty school systems to participate in the survey of time allocation practices in the elementary school. Let me assure you that the purpose of this study is not to degrade instructional methods and techniques of any teacher, elementary school, or school system; nor will coercion be used in an attempt to give more or less time to any given subject matter area or activity.

Basically, teachers participating in this survey will be asked to indicate on a questionnaire the amount of time devoted to each subject matter area and activity. This questionnaire is brief and will require only a few minutes to complete. Upon completion, the questionnaire will be returned by mail.

The elementary schools participating in this survey will meet the following requirements: (1) Include Grades one through six, and (2) Possess a classroom teacher for each grade level in Grades one through six.

Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers of each elementary school will be excluded from this study.

Because of the immensity of this survey, only three randomly selected elementary schools will be used in the Name of School System.

For your convenience I am enclosing a post card so that you may indicate whether you wish to participate in this study.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX D

THE LETTER TO SUPERINTENDENTS OF MEDIAN AND SMALL SCHOOL
SYSTEMS ASKING PERMISSION TO USE THEIR SCHOOL SYSTEMS
IN THE SURVEY OF TIME ALLOTMENT PRACTICES IN THE
ELEMENTARY SCHOOL

Name of Superintendent, Superintendent
Name of School System
Name of City, Oklahoma.

Dear Sir:

I am currently in the process of conducting a survey of the time allotment practices in the elementary schools in thirty of the school systems in Oklahoma.

Dr. Fred Sloan, at the University of Oklahoma in Norman, is directing this study of time allocation practices of the various subject matter areas and activities as revealed by teachers in the elementary schools.

Name of School System, with your permission, has been selected as one of the thirty to participate in this survey. Let me assure you that the purpose of this study is not to degrade instructional methods and techniques of any teacher, elementary school, or school system; nor will coercion be used in an attempt to give more or less time to any given subject matter area or activity. In fact each elementary teacher participating in this survey will be assured that all personal data will be considered confidential.

Basically, teachers participating in this survey will be asked to indicate on a questionnaire the amount of time devoted to each subject matter area and activity. This questionnaire is brief and will require only a few minutes to complete. Upon completion, the questionnaire will be returned by mail.

The elementary schools participating in this survey will meet the following requirements: (1) Include Grades one through six, and (2) Possess a classroom teacher for each grade level in Grades one through six.

Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers of each elementary school will not be included in this study.

For your convenience I am enclosing a post card so that you may indicate whether you wish to participate in this study.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX E

THE SECOND LETTER TO SUPERINTENDENTS OF MEDIAN AND SMALL
SCHOOL SYSTEMS ASKING PERMISSION TO USE THEIR SCHOOL
SYSTEMS IN THE SURVEY OF TIME ALLOTMENT PRACTICES
IN THE ELEMENTARY SCHOOL

Name of Superintendent, Superintendent
Name of School System
Name of City, Oklahoma.

Dear Sir:

Recently, I sent you a request asking for permission to use the Name of School System in a survey concerning the amount of time that classroom teachers allocate to the various subject matter areas and activities in the elementary school. I realize that my initial letter concerning this survey was poorly timed because the process of beginning the school year is no small task. Since I have not received a reply, I assume that my initial letter was either laid aside or lost in the mail. Regardless of the case, I would appreciate your consideration on this survey.

Name of School System, with your permission, has been selected as one of the thirty school systems to participate in the survey of time allocation practices in the elementary school. Let me assure you that the purpose of this study is not to degrade instructional methods and techniques of any teacher, elementary school, or school system; nor will coercion be used in an attempt to give more or less time to any given subject matter area or activity.

Basically, teachers participating in this survey will be asked to indicate on a questionnaire the amount of time devoted to each subject matter area and activity. This questionnaire is brief and will require only a few minutes to complete. Upon completion, the questionnaire will be returned by mail.

The elementary schools participating in this survey will meet the following requirements: (1) Include Grades one through six, and (2) Possess a classroom teacher for each grade level in Grades one through six.

Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers of each elementary school will be excluded from this study.

For your convenience I am enclosing a post card so that you may indicate whether you wish to participate in this study.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX F

THE POST CARD ON WHICH SUPERINTENDENTS INDICATED WHETHER
OR NOT THEY WANTED THEIR SCHOOL SYSTEMS TO PARTICIPATE
IN THE TIME ALLOTMENT SURVEY

A SURVEY OF TIME ALLOTMENT PRACTICES IN THE ELEMENTARY SCHOOL

I would like to participate in this survey. (Yes) _____

I cannot participate in this survey. (No) _____

Signed _____

Superintendent

Name of School System

APPENDIX G

THE LETTER TO ELEMENTARY PRINCIPALS ASKING PERMISSION
TO USE THEIR SCHOOLS IN THE SURVEY OF TIME ALLOTMENT
PRACTICES IN THE ELEMENTARY SCHOOL

Name of Principal, Principal
Name of Elementary School
Name of City, Oklahoma.

Dear Name of Principal:

I am currently conducting a survey of time allotment practices of selected classroom teachers in the state of Oklahoma. This survey is under the direction of Dr. Fred Sloan of the University of Oklahoma at Norman, Oklahoma.

Name of Superintendent, the Superintendent, has authorized that Name of School System be included in this survey. Through a process of random selection, Name of Elementary School has been selected to participate in this survey.

The purpose of this survey is to determine the amount of time classroom teachers in the elementary school allot to the various subject matter areas and activities. Let me assure you that this survey is not intended to embarrass, harass, or force teachers to realign or adjust their daily schedule. I merely wish that they indicate on a questionnaire the amount of time devoted to each subject or activity. This questionnaire is brief and will require only a few minutes to complete. Because of the immensity of this survey, it will be impossible to personally visit with each teacher. Therefore, all communication will be handled by mail.

This survey will not require that you discuss its purpose, elements, or procedure with the teachers. After I receive your permission, materials will be sent to you that may be placed in the mailbox of each participating teacher. That material will include all necessary explanations as to how the questionnaire should be completed, plus an envelope to mail the completed material back directly to me.

In order for an elementary school to participate, it should possess a classroom teacher for each grade level in Grades 1-6. Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers will not be included in this survey.

I realize that the number of teachers eligible to participate in this survey will vary from school to school. Therefore, for your convenience, I am enclosing a post card so that you may indicate the number of participating teachers in your school.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX H

THE SECOND LETTER TO PRINCIPALS ASKING PERMISSION TO
USE THEIR SCHOOLS IN THE SURVEY OF TIME ALLOTMENT
PRACTICES IN THE ELEMENTARY SCHOOL

Name of Principal, Principal
Name of Elementary School
Name of City, Oklahoma.

Dear Name of Principal:

Recently, I sent you a request asking for permission to use the Name of Elementary School in a survey concerning the amount of time that classroom teachers allocate to the various subject matter areas and activities in the elementary school. I realize that my initial letter concerning this survey was poorly timed because the process of beginning the school year is no small task. Since I have not received a reply, I assume that my initial letter was either laid aside or lost in the mail. Regardless of the case, I would appreciate your consideration on this survey.

Let me assure you that this survey is not intended to embarrass, harass, or force teachers to realign or adjust their daily schedule. I merely wish that they indicate on a questionnaire the amount of time devoted to each subject or activity. This questionnaire is brief and will require only a few minutes to complete. Because of the immensity of this survey, it will be impossible to personally visit with each teacher. Therefore, all communication will be handled by mail.

This survey will not require that you discuss its purpose, elements, or procedure with the teachers. After I receive your permission, materials will be sent to you that may be placed in the mailbox of each participating teacher. That material will include all necessary explanations as to how the questionnaire should be completed, plus an envelope to mail the completed material back directly to me.

In order for an elementary school to participate, it should possess a classroom teacher for each grade level in Grades 1-6. Kindergarten teachers, teachers of combination rooms, teachers of exceptional children, and special teachers will not be included in this survey.

I realize that the number of teachers eligible to participate in this survey will vary from school to school. Therefore, for your convenience, I am enclosing a post card so that you may indicate the number of participating teachers in your school.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX I

THE POST CARD ON WHICH PRINCIPALS INDICATED WHETHER
OR NOT THEY WANTED THEIR SCHOOLS TO PARTICIPATE
IN THE TIME ALLOTMENT SURVEY

A SURVEY OF TIME ALLOTMENT PRACTICES IN THE ELEMENTARY SCHOOL

I would like to participate in this survey. (Yes) _____

I have _____ eligible teachers. (Number)

I cannot participate in this survey. (No) _____

Signed _____
Principal
Name of Elementary School
Name of School System

APPENDIX J

THE LETTER TO THE PRINCIPALS CONCERNING HOW TO
DISTRIBUTE THE TIME ALLOTMENT PACKETS TO
THE ELIGIBLE TEACHERS IN THEIR SCHOOLS

Name of Principal, Principal
Name of Elementary School
Name of City, Oklahoma.

Dear Name of Principal:

I want to thank you for your prompt reply concerning authorization of your teachers to participate in the survey of time allotment practices in the elementary school.

Enclosed you will find a separate packet for each participating teacher that you may place in the mailbox, or hand personally to each appropriate teacher. Each packet contains identical material which may be used by any teacher regardless of grade level taught.

In an attempt to keep check of teachers who might be tardy in returning the questionnaire to me, I would appreciate your assistance on one final matter. You will notice that each packet is numbered. On the enclosed post card would you please indicate the name of each teacher and the appropriate packet number, then return the post card to me.

Finally, let me convey my sincere appreciation for your assistance for participation in this survey.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX K

LETTER TO THE TEACHERS EXPLAINING THE STUDY
AND THE PROCEDURES FOR COMPLETING THE
TIME ALLOTMENT QUESTIONNAIRE

Dear Fellow Teacher:

Your principal has provided you with some materials concerning time allotment practices in Oklahoma. I am currently conducting a survey of certain selected classroom teachers in the elementary schools of various school systems throughout the state. Your superintendent and principal have authorized that you be permitted to participate in this survey.

The purpose of this survey is to determine how much time classroom teachers devote to the various subject matter areas and activities in the elementary school. Let me assure you that I have no intention of ridiculing or degrading your reported time allotment practices. You will be identified by number only and each teacher identification number will be held confidential. The results of your time allocation practices will not be available to anyone other than my dissertation committee without your written consent. I want to make it perfectly clear that your reported results will not be used in any evaluative form.

Because of the immensity of this survey, it will be impossible to personally visit with you. Therefore, all communication will be handled by mail, which necessitates that all instructions for completing the questionnaire be absolutely clear.

Before completing the time allotment questionnaire, please study the Curriculum Sheet. I constructed the Curriculum Sheet in order to guarantee uniformity and accuracy. Primarily, the definitions stress formal instruction in a particular subject or activity and secondly, include all aspects that entail learning in any given subject or activity. You will notice that Social Studies, for example, includes formal instruction in citizenship, geography, history, civics, and international and intercultural relations. I am enclosing a completed sample questionnaire that may be of some assistance.

Let me remind you that the purpose of this questionnaire is to determine how much time you spend on any given subject or activity and not how much time you would like or feel you should spend on any particular subject. This is not an opinion survey.

For your convenience, I am enclosing a self-addressed envelope so that you may return the completed questionnaire directly to me. Finally, let me convey my sincere appreciation for your assistance and participation in this survey.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX L

THE CURRICULUM SHEET

For your convenience, may I suggest some procedures that may be of some assistance in filling out the Time Allotment Questionnaire:

1. Study the Curriculum Sheet carefully.
2. Notice the completed sample Time Allotment Questionnaire.
3. Fill in the Time Allotment Questionnaire according to your individual schedule.
4. Return the completed Time Allotment Questionnaire to me.

Opening Exercises--includes ethics, flag salute, etc.

Reading--includes phonics, literature, dramatics, story-telling, library period, memorization of poems, etc.

English Language--formal study of composition, grammar, punctuation, etc.

Spelling--formal instruction in spelling

Handwriting--formal work in penmanship

Arithmetic--includes problem-solving, modern mathematics, measurements, etc.

Social Studies--formal instruction in citizenship, geography, history, civics, international and intercultural relations

Science--formal instruction including nature study, outer space, conservation, etc.

Art--formal instruction including picture-study, murals, puppets, handwork, drawing, etc.

Physical Education--formal instruction including folk-dancing, gymnastics, organized play, etc.

Recess--includes free play, supervised play

Foreign Language--formal instruction, including singing in a foreign language

Music--formal instruction including rhythm bands

Health Education--formal instruction in health study

Unassigned or Free Time--a period where no specific task is assigned but children may use for self-interests

Miscellaneous--any subject or activity not provided above

APPENDIX M

A SAMPLE OF A COMPLETED TIME ALLOTMENT QUESTIONNAIRE

TIME ALLOTMENT QUESTIONNAIRE # _____

Name of City or School System _____

Name of Elementary School _____

Grade Level Taught _____

Time Allotted to Each Subject or Activity

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-8:45					
8:45-9:00	Open.Exer.	Open.Exer.	Open.Exer.	Open.Exer.	Open.Exer.
9:00-9:15	↑	↑	↑	↑	↑
9:15-9:30	Reading	Reading	Reading	Reading	Reading
9:30-9:45	↓	↓	↓	↓	↓
9:45-10:00					
10:00-10:15	Arithmetic	Arithmetic	Arithmetic	Arithmetic	Arithmetic
10:15-10:30	↓	↓	↓	↓	↓
10:30-10:45	Recess	Recess	Recess	Recess	Recess
10:45-11:00	↑	↑	↑	↑	↑
11:00-11:15	Spelling	Handwriting	Spelling	Handwriting	Spelling
11:15-11:30	↑	↑	↑	↑	↑
11:30-11:45	Social	Social	Social	Social	Social
11:45-12:00	Studies	Studies	Studies	Studies	Studies
12:00-12:15	↑	↑	↑	↑	↑
12:15-12:30	Lunch	Lunch	Lunch	Lunch	Lunch
12:30-12:45	↓	↓	↓	↓	↓
12:45-1:00					
1:00-1:15	English	English	English	English	English
1:15-1:30	Language	Language	Language	Language	Language
1:30-1:45	↑	↑	↑	↑	↑
1:45-2:00	Science	HealthEdu.	Science	HealthEdu.	Science
2:00-2:15	Phys.Edu.	Phys.Edu.	Phys.Edu.	Phys.Edu.	Phys.Edu.
2:15-2:30	↑	Music	↑	Music	↑
2:30-2:45	Foreign		Foreign		Foreign
2:45-3:00	Language	↓	Language	↓	Language
3:00-3:15	↓	Art	↓	Art	↓
3:15-3:30	Unassigned		Unassigned		Unassigned
3:30-3:45	Free Time	↓	Free Time	↓	Free Time
3:45-4:00					
4:00-4:15					

APPENDIX N

THE TIME ALLOTMENT QUESTIONNAIRE ON WHICH EACH TEACHER'S
TIME ALLOTMENT PRACTICES WERE REPORTED

TIME ALLOTMENT QUESTIONNAIRE # _____

Name of City or School System _____

Name of Elementary School _____

Grade Level Taught _____

Time Allotted to Each Subject or Activity

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-8:45					
8:45-9:00					
9:00-9:15					
9:15-9:30					
9:30-9:45					
9:45-10:00					
10:00-10:15					
10:15-10:30					
10:30-10:45					
10:45-11:00					
11:00-11:15					
11:15-11:30					
11:30-11:45					
11:45-12:00					
12:00-12:15					
12:15-12:30					
12:30-12:45					
12:45-1:00					
1:00-1:15					
1:15-1:30					
1:30-1:45					
1:45-2:00					
2:00-2:15					
2:15-2:30					
2:30-2:45					
2:45-3:00					
3:00-3:15					
3:15-3:30					
3:30-3:45					
3:45-4:00					
4:00-4:15					

APPENDIX O

THE FOLLOW-UP LETTER TO TEACHERS

Dear Fellow Teacher:

Recently, I sent you some materials concerning time allotment practices in the elementary school. These materials were concerned with a survey of certain selected classroom teachers in several elementary schools throughout the state. Your superintendent and principal authorized that you be permitted to participate in this survey.

This survey is an attempt to determine how much time classroom teachers in the elementary school allot to the various subject matter areas and activities. Because of the immensity of this survey, it was impossible to personally visit you. This necessitated that all communication be handled by mail.

At this time, I have not received a reply from you. I realize that my initial letter concerning this survey was poorly timed because the process of beginning the school year is no small task. Since I have not received a reply, I assume that my initial letter was either laid aside or lost in the mail. Regardless of the case, I would appreciate your consideration on this survey.

For your convenience I am enclosing a set of materials for your examination. This includes a stamped self-addressed envelope so that you may return the completed questionnaire to me.

In the event you have recently mailed your completed questionnaire, please disregard this letter.

Finally, let me convey my sincere appreciation for your assistance and participation in this survey.

Sincerely yours,

(signed) James O. Gates, Jr.

APPENDIX P

TALLY SHEET FOR EACH TEACHER'S REPORTED
TIME ALLOTMENT PRACTICES

Time Allotment Questionnaire # _____

Grade Level Taught _____

Group # _____

City or System _____

Total Time Allotted to Each Subject or Activity in
Minutes Per Week

Opening Exercises	
Social Studies	
Reading	
Recess	
Arithmetic	
Spelling	
English Language	
Handwriting	
Art	
Music	
Science	
Physical Education	
Health Education	
Foreign Language	
Unassigned or Free Time	
Miscellaneous	