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## Teacher Time-On-Task: An Analysis of Classroom Time Use for Two City School Systems, 1985

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To the Graduate Council:

I am submitting herewith a dissertation written by Suzanne Thomas Richards entitled "Teacher Time-On-Task: An Analysis of Classroom Time Use for Two City School Systems, 1985." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration.

Robert K. Roney, Major Professor

We have read this dissertation and recommend its acceptance:

George Harris, John Ray, Priscilla White

Accepted for the Council:

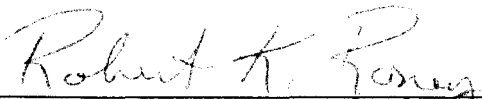
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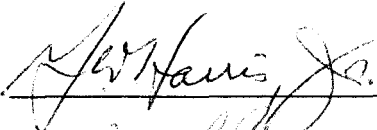
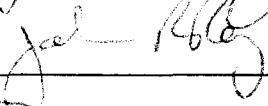

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TEACHER TIME-ON-TASK: AN ANALYSIS OF CLASSROOM TIME  
USE FOR TWO CITY SCHOOL SYSTEMS, 1985

A Dissertation  
Presented for the  
Doctor of Education  
Degree  
The University of Tennessee, Knoxville

Suzanne Thomas Richards

June 1986

## DEDICATION

This dissertation is dedicated to the memory of Murrel Calloway Thomas, my father, who taught me to do everything with class and to reach for the stars. It is also dedicated to my mother, Loualyce King Thomas who continues to inspire me with her intelligence, sense of humor, and love of life. The unconditional love of my parents has provided direction and quality to my life. Much love and gratitude to both of you.

## ACKNOWLEDGMENTS

Many thanks to Dr. George Harris, Dr. John Ray and Dr. Priscilla White who served as outstanding members of my doctoral committee. I would like to extend a special thanks to Dr. Robert K. Roney, my committee chairman, whose faith and trust in me made the doctoral program a much smaller mountain to climb. His wisdom, tempered with kindness and concern for an outspoken "rookie," paved the way for a very worthwhile endeavor. I will always be grateful. Thanks, too, to Melba Wilkins, my typist, and a major advisor for this dissertation. Thanks to friends and family for never giving up on me and for knowing that I would succeed even before I knew it myself. Gratitude is also expressed to Dr. Anne Meek, my mentor and my friend. I hope I can someday repay her kindness.

I would like to acknowledge the love that my daughter, Alyson, has shown me at all times, but especially throughout the difficult ones. I could not have reached this point without her unfaltering love and support.

Finally, I would like to acknowledge the presence of God in my life. It is only through His love that the impossible becomes possible and through his Spirit that our hopes and dreams are realized.

## ABSTRACT

Teacher use of classroom time was the focus of this 1985 study. An analysis of on- and off-task behavior of 38 randomly selected elementary teachers in grades three, four, and five comprised the data for the research. The effect of interruptions, both inside and outside the classroom, were analyzed as well as teacher on- and off-task percents by system and across grade levels.

The study showed that a majority of teachers were on-task over 70 percent of the instructional day, averaging just over 74 percent of on-task behavior. Interruptions accounted for a substantial portion of off-task behavior for some teachers with more interruptions occurring inside the classroom than from outside sources.

Teacher on- and off-task percents between school systems were comparable with System I displaying slightly higher percents than System II in on-task behavior, 77.1 percent and 71.8 percent, respectively. On- and off-task percents by grade level showed many similarities with fourth grade teachers from both systems scoring higher percents in on-task behavior.

Recommendations were made regarding further study of teacher time-on-task. Improvement in the teaching categories of set and closure was also recommended to teachers from both systems participating in the study.

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## CHAPTER I

### INTRODUCTION TO THE STUDY

Effective use of academic learning time has gained attention in the past several years, especially in the wake of the move in some states to incentive/merit programs and the continuing search for excellence in education. Much of the programmatic focus and current research has centered around students' use of time. Many studies have attempted to measure empirically the amount of time spent on learning in relation to progress gained in the classroom. Little study has been done, however, of teacher time-on-task. How does the amount of time teachers spend engaged in active instruction and other on-task behaviors affect learning in the classroom?

Franklin D. Roosevelt, in one of his famous Fireside Chats (February 23, 1942) once said, "Never before have we had so little time in which to do so much" (Bartlett's Familiar Quotations, 1980). That familiar quotation is certainly applicable when one examines teacher responsibilities in the classroom. Today's classroom teacher is accountable for a multitude of duties. Emphasis on upgrading standards, getting "back to the basics," and meeting children's needs on every level of instruction while striving to spark creativity and utilize the "teachable moment" are but a few of the responsibilities of a typical teacher's multi-faceted role. Utilizing every moment of every day has become a silent battle cry for teachers. Research has pointed out, though, that valuable time is being lost daily and that the war to gain excellence is losing ground (Karweit, 1984).

Current research has estimated that students lose an average of 16 percent of instructional time before ever getting to the classroom. Another 16 percent of instructional time is lost inside the classroom due to last minute organization, administrative procedures, student misconduct, and other interruptions. Time lost both inside the classroom and outside as well may affect and even hamper pupil concentration and achievement (Harrison, 1983). Some sources agree that increasing teacher time-on-task can reduce a loss of instructional time from 55 percent to 33 percent (Justiz, 1984) and that a positive correlation exists between the amount of time allocated to instruction and achievement (Saily, 1981; Martin, 1980; Sirotnik, 1981; Sanford, 1983). The existing research on teacher time-on-task and current negativism toward the teaching profession in general prompted the research for this study. With these thoughts in mind, the problem associated with time use in the classroom was examined.

## I. STATEMENT OF THE PROBLEM

Nancy Karweit (1984) wrote that studies showing how schools use time provided useful ways in which schools could improve. Karweit further pointed out the agreement in such studies that only about half the school day is used for instruction. Activities of a non-instructional nature (interruptions, transition from one class or activity to another, increased paperwork, etc.) accounted for a large portion of valuable instructional time that is often lost in an average day. Utilization of time, or what is left of it after non-instructional duties are performed, has become a problem on every level of instruction. Increased attention

by the media has also directed attention to the classroom teacher and his/her use of time.

## II. PURPOSE OF THE STUDY

The purpose of the study, therefore, was to observe and record teacher behavior in an effort to ascertain just how much time teachers spend in actual instruction and other on-task behaviors. The study further examined the obstacles preventing teachers from having a most valuable resource--TIME.

## III. IMPORTANCE OF THE STUDY

In light of current criticism of education as a profession, the need to examine at least some of the existing problems associated with teaching became apparent to the researcher. Since the teacher is the hub of the educational wheel, the need to examine his/her role emerged as the most significant piece of a complex educational puzzle. Observing and analyzing the teacher's use of time could shed further light on the problem associated with current educational ills. Actually observing teachers in their natural surroundings--the classroom--rather than relying on opinion and public reaction provided firsthand information regarding ways in which teachers spend time in the classroom.

## IV. ASSUMPTIONS, LIMITATIONS, AND DELIMITATIONS

The researcher assumed, since the sample was randomly drawn, that an acceptable cross-section of educators in the schools studied was

represented. It was assumed that teachers under observation behaved in much the same way as they would have on a "normal" day, had the researcher not been present. The researcher realized, however, that initial teacher response to an observer in the classroom may have altered the usual methods, strategies, and techniques normally used by the teacher under observation. Since each observation lasted a full seven hours, it was assumed that observed teachers eventually reverted to their usual patterns of behavior and their typical methods of instruction. Time constraints and sample size were delimitations of the study, although quite a large number of observations were made before the conclusion of the study.

Although all observations were conducted by one researcher, observer bias and personal judgement had to be considered in the analysis of data. Researcher consistency with each observation was vital and care was taken to insure impartiality based on the definitions of terms and categories.

## V. DEFINITION OF TERMS

Closure (CLO). Closure is bringing instruction to a close by recapitulation and summary. The teacher may use this portion of the lesson to relate instruction to life experiences, activities, and/or previous learning. Practical application of the lesson may also be emphasized. In short, closure is an organized end to the lesson.

Instruction or Teaching (TCH). Instruction includes explaining; questioning; responding to students; giving directions and using films,

filmstrips, overhead projectors, and other visual/teaching aids to make instruction relevant and meaningful. Oral reading by students and/or teacher and oral testing by the teacher was also included in this category since teachers often used these methods to enhance listening skills and to emphasize the importance of following directions. Orally checking workbook pages, homework, worksheets, and other instructional material with the students was included in the instruction category since teachers often used this time to clarify meaning and/or to reteach. Instruction is the actual teaching of the lesson.

Interruptions (INT). Breaks in the school day caused by someone other than the teacher are classified as interruptions. Interruptions included announcements on the intercom system, tardy students, fire drills, state mandated moment of silence, initial disruption/interruption by student(s). (Teacher's action or methods of discipline after the initial student interruption or misbehavior was categorized under the management category.) Interruptions include any breaks which cause the teacher to stop what he/she is doing and direct immediate attention to the interruption.

Management (MGT). Management activities include the required non-instructional duties of teachers which help the classroom function smoothly. Areas of management include calling roll; collecting money; independent testing of students; directing students to certain areas or groups; distributing, collecting, or grading papers; planning; distributing books and materials; working on book orders; fund raisers;

setting up visual aids; disciplining students; checking lesson plans; parent conferences; conferences or meetings with teachers, principal, or other school personnel; arranging desks to support the learning environment; lining children up for transition to other areas of the school; etc.

Monitoring and Adjusting (M&A). The monitor and adjust category constitutes awareness of students' involvement, participation, and understanding of the lesson. This category also includes adjusting methods and strategies to clarify the lesson and/or to meet individual student instructional needs.

Set (SET). A teaching technique used to involve all students in the lesson is establishing set. Set is used to make the upcoming lesson relate to previous learning. It is also used to set the goals, direction, and limits of the lesson to come.

Socialization (SOC). Socialization refers to visiting and relating with other adults and/or students on topics of a non-instructional nature. Socialization may occur at breaks, in the classroom, at lunch, during transition, etc.

Supervised Practice (SPR). The teacher's overseeing seatwork and other independent activities of students is categorized as supervised practice. The teacher often uses this time to observe practice after directing teaching. (Example: watching children practice cursive letters after direct teaching of a lesson in cursive writing.)

Teacher. The teachers in this study were regular classroom instructors in third, fourth, and fifth grade public elementary classrooms.

Transition (TRA). The time spent moving the group from one place to another is transition. Transition between classes or from one learning group to another is included in this category.

Uninvolved (UNI). The uninvolved category is total disengagement by the teacher.

Uninvolved but Supervising (UNS). Uninvolved but supervising is the non-academic supervision of students. The teacher has responsibility for students but is not teaching or managing. Activities included under this category include playground, assembly, or special program supervision.

## VI. RESEARCH QUESTIONS

Based on current time-on-task research (Karweit, et al., 1984) and other pertinent information regarding the present quality of education, the following research questions were formulated:

1. How much time do teachers use for direct instruction and other on-task behaviors?
2. How much instructional time is lost due to off-task teacher behavior?
3. How do interruptions, both inside and outside the classroom, affect teacher time-on-task?



4. How do teacher on- and off-task percents compare across grade levels in grades three, four, and five?

## VII. PROCEDURES

The study was conducted in two suburban school systems in East Tennessee. (See Appendix A for letter written to superintendents requesting approval.) Both school systems were comparable in size and served students of similar socio-economic backgrounds. The population of each community were predominantly middle class with each school system providing services and instructional programs which served the needs of all students regardless of economic or intellectual factors. Categorized as small city systems, each school district had a good reputation regarding instructional programs, well-qualified personnel, and high levels of expectations for educational achievement. Elementary teachers in grades three, four, and five were randomly selected. Teachers were not aware of the specifics of the study at its onset, nor were they aware of the day on which they would be observed. Superintendents from both systems contacted principals in order to brief administrators as to the nature of the study. Again, no specifics were provided to school personnel.

An observation form, which had been developed for a previous study of time-on-task, was revised and used to record teacher behavior. The observation form, originally developed by Robert K. Roney at The University of Tennessee, Knoxville, was based on current educational literature and Tennessee's Instructional Model which was being implemented in all Tennessee public schools. The original instrument, which allowed the observer to check one of several behavioral categories at 15 second intervals, was field tested at both the elementary and high

school level in the Fall of 1984. Categories were modified after the field testing and inter-observer reliability was checked before the 1984 study began. The final observation instrument was developed and used in a limited 1984 study of teacher time-on-task.

For the expanded 1985 study of teacher time-on-task, the observation form was again revised and field tested in a third grade classroom (see Appendix B). The researcher conducted all observations in an effort to obtain consistent and relatively unbiased judgements regarding specific teacher behavior.

Third, fourth, and fifth grade teachers from both systems used in the study were randomly drawn. In System I, 7 third grade teachers, 8 fourth grade teachers, and 4 fifth grade teachers were selected. From System II, 8 third grade teachers, 8 fourth grade teachers, and 5 fifth grade teachers were selected. Nineteen of 35 teachers in System I were observed (75 percent) and 19 teachers of 35 teachers in System II were observed (60 percent). A total sample of 41 teachers was originally selected. Three teachers in System II, however, declined observation.

The full-day observations began in early Fall 1985 and were concluded one week before Christmas vacation in December. Observations were made Monday through Thursday and lasted from 8:00 a.m. to 3:00 p.m. or from 8:30 a.m. to 3:30 p.m. depending upon individual school system schedules. Thirty-eight full day observations were made (one day per teacher in the sample) for a total of 266 hours of observation (15,960 minutes and/or 63,840 15-second intervals of observation time).

On each day of observation, the researcher was positioned in the classroom at the specified starting time. The observation instrument containing teacher behavior categories and the time recorded in 15-second

intervals was used to chart all teacher activities without exception. (It should be noted here that the order of teachers observed was also determined randomly.) Time-on-task categories included Set, Instruction, Monitoring and Adjusting, Supervising Practice, Closure, and Management. The other categories, which were considered off-task behaviors, included Transition, Interruptions, Socialization, Uninvolved but Supervising, and Uninvolved. (When transition required teacher management and/or involvement, the management category was checked and considered to be on-task-behavior.) Each teacher, therefore, was "shadowed" for an entire day with his/her behavior charted every 15 seconds. No judgement regarding the quality of teaching was made by the researcher. Consistency relating to category classification was based upon the researcher's adherence to definitions of categorical terms. Only full-time teachers were observed with alternates randomly selected in case of teacher absence or other unforeseen circumstances. Behaviors were collected and reported as frequency data.

#### VIII. ORGANIZATION OF THE STUDY

Chapter I of the study introduced the topic and stated the problem, purpose, and importance of the research. Definition of terms and procedures used for the research were outlined in detail with reference to the revised observation instrument located in the Appendix B. Chapter II is a review of current and related literature regarding the research of teacher time-on-task. The findings, including analysis and interpretation of the data, are found in Chapter III with the summary, conclusions, and recommendations of the research reported in Chapter IV.

## CHAPTER II

### A REVIEW OF RELATED LITERATURE AND RESEARCH

The search for innovative ways to improve public education in the United States continues to challenge educators yet often draws criticism from the media and general public. Merely improving instructional methods and upgrading the curriculum have not satisfied current educational leaders nor appeased the lay person's cry for excellence in education . While improvement to specific various areas of the school program is necessary, concentrating on the total school environment has gained some attention as a result of current research on effective schools. Basically , the effective schools research lists the following five components as necessary ingredients for effective schools:

1. Strong instructional leadership from school administrators (principals, in particular)
2. Concentration on the basic skills
3. A school climate conducive to learning
4. High expectations and teacher belief that all students can achieve
5. Systemized monitoring and assessment of student achievement (Brookover, et al., 1982).

While some researchers in the past have disagreed regarding the particular characteristics that make certain schools effective, most consider time to be an "influencing variable" when measuring school efficiency and effectiveness (Seifert and Beck, 1984). The significance of the time variable has prompted mountains of research on the subject at least from the perspective of pupil time-on-task. Since

the concept of time is so broad, it is necessary briefly to discuss and to define time as it applies to educational processes.

Various adjectives have been used to define types of time use often observed in the classroom. Seifert and Beck (1984) defined allocated time as "the time available during school hours for a student to work on instructional objectives." Nerenz and Knop further stated that allocated time refers to those portions of time that teachers set aside for "particular aspects of the curriculum program" and that teachers' use of allocated time is related to pupil performance and achievement" (Nerenz and Knop, 1982; Steere and Willy, 1985).

Engaged time, on the other hand is the amount of time--number of minutes--that students are actively involved in the lesson and/or content of the curriculum (McIntyre, Copenhaver, Byrd, Norris, 1983; Nerenz and Knop, 1982). Engaged time, therefore, is an intricate part of allocated time and has been connected to teacher behavior and pupil performance and achievement.

Yet another measure of classroom learning is academic learning time which is the length or amount of time a student spends on a particular task where he/she can perform and master the task successfully. Seifert and Beck (1984) tie the three components of time together by stating that academic learning time is derived from engaged time. Engaged time, on the other hand, is that part of allocated time when the student is paying attention. Whatever form of time is under observation, past research and current study have suggested, and several have empirically shown, a correlation between the amount of time spent on learning and achievement (Carroll, 1963; Bloom, 1976;

Talmage and Rasher, 1979; Rosenshine, 1980; Martin and Canty, 1980; Probst, 1980; Huitt and Segars, 1980; Sirotnik, 1981; Corby, 1981; Sanford and Evertson, 1982; Brophy, 1980; Karweit, 1982; Moore, 1984; Pemberton, 1984).

Researchers began to realize the importance of effective use of instructional time as early as 1826. Mann's 1928 report of time use in schools from 1826-1926 examined available data regarding the length of the school day. Mann also looked at schooling in various cities and found wide discrepancies in the amount of time allotted to academic subjects. According to one analysis of Mann's findings, students in cities with the highest allocations of time received 11.8 times more instruction in reading, 4.4 times more instruction in math, and 48 times more instruction in spelling than those students receiving the lowest allocations of time (Corby, 1981).

The work of Carroll (1963) and Coleman (1966) also examined the quality of schooling. Coleman addressed the amount of time spent in school and found no correlation between the amount of time spent in school and student achievement test scores. Researchers of the sixties questioned some of Coleman's findings, insisting that quality of schooling was important and that time spent on instruction significantly affected student outcome and achievement.

Researchers of the 1970's began concentrating on and examining the "individual teacher as a unit of analysis" (Brophy, 1982). Data were collected and analyzed after researchers began actively to observe teacher behavior. Previously, much of the data collected regarding teacher behavior had been written data in such areas as teacher

attitudes and personality. Brophy (1982) pointed out that teachers were beginning to be observed under more "naturalistic conditions" and that observations were frequent and extensive enough to produce a reliable sample of teacher behavior (Brophy, 1982). In short, methods of classroom observations were improved and researchers began to look not only at student time-on-task but also began examining the effects of the amount of time teachers spend on task as well.

The Conant Report (1974) also focused on the teacher as the key to instruction. Observations of 47 elementary school teachers were made, each lasting the length of an entire school day. Conant found that only 30 percent of time was spent in actual academic instructional activities. In a study 6 years later, however, 25 second grade teachers and 21 fifth grade teachers were studied. It was reported that 58 percent of class time was spent on academic instruction (Rosenshine, 1980). Differences in methodology probably accounted for the vast differences in the two studies. Conant's methodology required direct observation of teacher behavior. Rosenshine's data, on the other hand, were based on logs which were kept by each teacher throughout the year. It is important to examine methodology when measuring teacher time-on-task. Collection of data on both teacher and students can provide valuable feedback to teachers (Moore, 1984).

Studies of teacher and pupil time-on-task must be done during the 175-180 (6 to 7 hour) days allotted for instruction. The amount of time allotted for school has remained fairly stable over the past 100 years yet students are expected to assimilate a dramatic increase of material (Anderson, 1980). Educators are faced with setting priorities

for instruction and emphasizing the vital areas of the curriculum--the basic skills. Today's teachers must be more than knowledgeable. They must be efficient managers and, at times, jugglers of subject matter, special classes, the arts, and a myraid of other concerns. They must also do this juggling effectively. Graham and Heimerer cited the 1971 work of Rosenshine and Furst in their research of teacher effectiveness. Ten variables were identified to discriminate between more effective and less effective teachers. Clarity, variability , enthusiasm, questioning, and probing were among the list set forth by researchers in the early seventies (Graham and Heimer, 1981). In short, effective teachers plan, implement, and use their time wisely.

Perhaps the most significant study of time use in the classroom was a 1976-77 study. The Beginning Teacher Evaluation Study (BTES) combined observations of students in classrooms with teachers' logs of allocated time for each subject and each student selected. The researchers found that teachers' allocation of time to instruction was associated positively with student learning. It was also found that the percentage of allocated time in which students are active was also associated with learning (Fisher, et al., 1980; Karweit, 1980). Teacher use of allocated time can be a "powerful tool" for fostering student achievement and can be largely controlled by the teacher (Sanford and Evertson, 1982).

Another observational log type study was conducted in the seventies to determine the amount of time spent or allocated to each subject. The sample consisted of six elementary language arts classrooms. Teachers recorded their activities in logs and were also



observed for a full day to determine any variations in allotted time for each classroom. Many variations in time allotment were noted with non-instructional time in the 6 classrooms varying from 27 percent to 42 percent (Roehler, Schmidt, and Buchman, 1979). It should be noted that non-instructional time is not always off-task and wasted time. Supplying students with busy work, however, when the teacher is really buying time is a deception and an erosion of the students' 8,500 hours (Miller and Miller, 1979). Archanbault (1979) concluded that the correlations between teacher and observer ratings were acceptable based on reliability estimates and that data collected on more than 7,000 students and more than 3,000 teachers revealed variations of instructional quality and intensity within school districts over time and between various types of students.

Researchers of the eighties also focused on use of instructional time. The Fort Worth Independent School District developed a plan for evaluation of time use in 1979-80. Classroom observations were made in fourth, seventh, and tenth grades; and, like in many of the seventies studies, several variations of time use were found. Direct teaching time ranged from 0 to 45 minutes at the elementary level, 52 minutes at the middle school level, and 50 minutes at the high school level (Lysiak, 1980). Interruptions and interferences such as socializing, disciplining, public address announcements, and taking exorbitant amounts of time to do managerial tasks were cited as reasons for time loss. (Disciplining students and the public address system accounted for most interruptions.)

Rose Harrison's descriptive study on the effects of teachers and student work in the classroom was presented in 1983. Three types of interruptions were recorded: visitors, the public announcement system, and out-of-class instruction (pull-out programs). Harrison found that teachers and students were negatively affected by repeated interruptions and that about one half hour of class time (per day) was used to try to eliminate distractions. Visitor interruptions were cited as the most distracting to the total classroom, while pull-out programs affected teachers more negatively than the public address system which distracted students more (Harrison, 1983).

Another elementary school time study examined teacher time use regarding instruction in the basic skills. The researchers found that primary grade teachers spend more time on basic skills than intermediate teachers but that intermediate teachers concentrate more time on arithmetic and writing skills (Heller and Lamberti, 1981). The researchers also asserted that more instructional time is being spent in many of the basic skills areas now than was recommended in the preferred time studies of the 1960's.

The research has already shown that how teachers use their time often governs progress and achievement in the classroom. All components of instruction and other on-task behaviors can be utilized effectively to promote learning, interaction, and a greater understanding of the lesson. Figure 1 compares the average use of time to effective use of time according to one source.

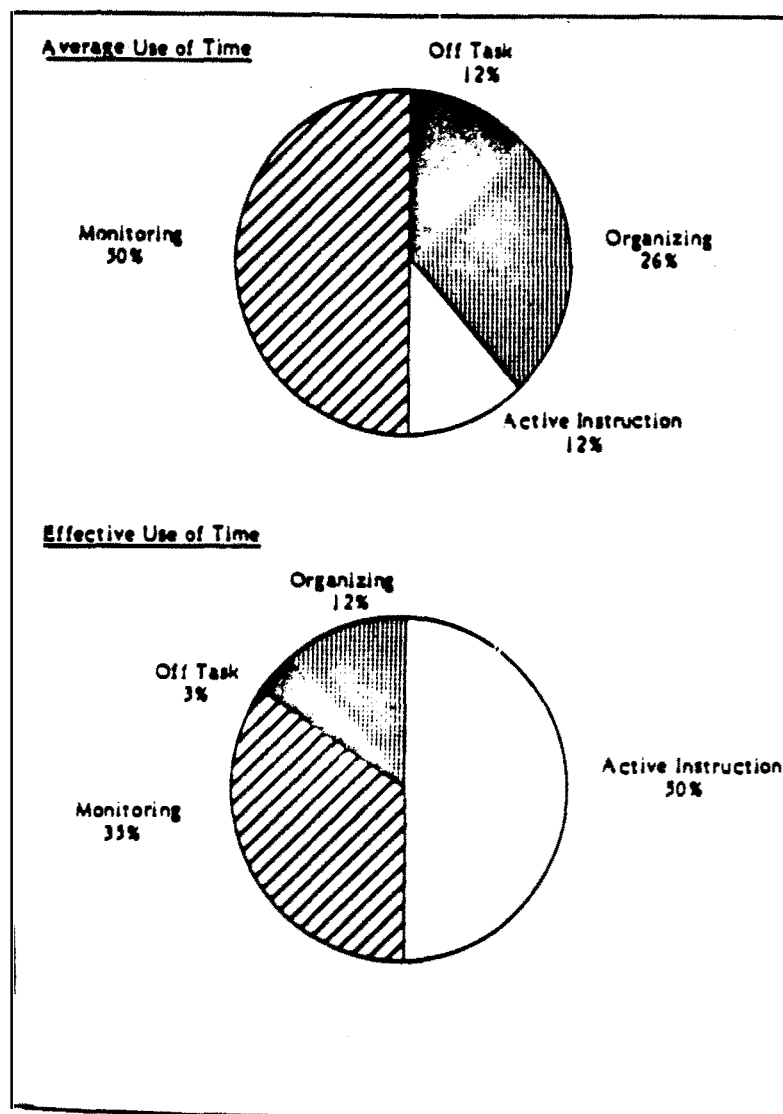


FIGURE 1

ALLOCATED TIME FOR A 50-MINUTE READING PERIOD

Source: Jane Stallings, "Effective Use of Classroom Time." Appalachia Educational Laboratory, Charleston, West Virginia, August, 1984.

In summary, the research before 1976 contained a scant amount of data regarding "accurate" records of allocated time (Berliner, 1976; Martin and Canty, 1980). Research of the seventies, coupled with later study, has given researchers not only new insight into the subject of time-on-task, but has also provided new evidence that links classroom practices, time-on-task, and learning outcomes (Karweit and Slavin, 1980). Problems associated with methodology and technique have often obscured, if not altered, the result of significant time studies. Care must be taken by the researcher to define terms clearly, obtain inter-observer reliability, and increase the number of observations. Researchers continue to find that the most effective teachers spend a large portion of time-on-task involved in direct instruction/management techniques and that those teachers also effectively utilize maximum time while minimizing disruptions (Roehler and Duffy, 1981; Pemberton, 1984).

Although the findings, methodology, and observation instruments of earlier research of time-on-task varied, the intent of this study was to closely examine teacher use of time in the classroom. By actually observing and recording teacher activity in 15-second increments, the researcher could examine on- and off-task behaviors in addition to discovering those obstacles which may prevent teachers from doing that which they are hired to do--instruct, guide, and direct the activities of students.

## CHAPTER III

### FINDINGS AND DISCUSSION OF THE DATA

The design of the study was, in part, based upon earlier research which also examined percent of on- and off-task teacher behavior. This researcher was a member of a 1984 research team which randomly selected teachers in kindergarten through twelfth grades. The 1984 study was limited to twelve teachers (total) in all grades. Although inter-observer reliability was difficult to obtain and the sample was small, the study provided the research team with a fair amount of relevant data regarding use of teacher time in the classroom.

The present study utilized information gleaned from the earlier study, allowing the researcher to revise the observation instrument in an effort to develop accurate and reliable methods of data collection. A larger sample was drawn and observations were conducted in third, fourth, and fifth grades only. In the 1984 research, methods of teaching varied so greatly across grade levels based upon the ages of students, it was decided that more reliable methods of observation could be conducted using only the intermediate grades. The tables presented in this section represent the observations of one researcher in third, fourth, and fifth grade classrooms.

#### I. FINDINGS

Current research suggests that students lose approximately 32 percent of instructional time both inside and outside the classroom in

an average day (Harrison, 1983). Some sources, as previously stated, point out that as much as 55 percent of instructional time is lost due to a variety of off-task teacher behaviors (Justiz, 1984). Table I reports the composite on- and off-task percents of teachers in both school systems used in the study (percents by category for each teacher are presented in Appendix C).

Teacher scores ranged from a low of 48.4 percent to a high of 89.9 percent. On-task behaviors included Set, Instruction, Monitor and Adjust, Supervised Practice, Closure, and Management. Technically, the Transition category could have been categorized as on-task behavior, but for the purpose of the study, Transition was categorized as off-task when no direct intervention was required by the teacher. When Management behavior was required during Transitional times, the (on-task) Management category was marked rather than the Transition (off-task) category. The average on-task behavior in the combined systems was 74.4 percent with 11 teachers scoring above 80 percent in on-task behavior.

Also displayed in Table I are off-task percents for the total number of teachers in the study. Off-task behaviors included Transition (unless an on-task behavior was observed), Interruptions, Socializing, Uninvolved Supervision, and Uninvolved. Teacher scores ranged from 19.1 percent to 51.6 percent in off-task behavior. Eight of 30 teachers displayed off-task behavior over 30 percent of the time.

Table II displays the data for teacher on- and off-task behavior by system. Systems I and II show similar averages for both on- and off-task behaviors (77 and 71.7 percent, respectively). Although

TABLE I  
TOTAL PERCENT ON- AND OFF-TASK FOR INDIVIDUAL TEACHERS

TEACHER	PERCENT ON-TASK	PERCENT OFF-TASK
1	73.4	26.6
2	85.2	14.6
3	73.5	26.4
4	89.1	10.2
5	73.1	26.8
6	79.2	20.8
7	65.5	34.5
8	54.5	45.3
9	78.4	21.4
10	73.3	26.4
11	89.8	10.1
12	77.6	22.4
13	78.0	22.0
14	82.9	16.9
15	84.9	14.4
16	48.4	51.5
17	86.0	14.1
18	82.5	17.4
19	81.3	18.6
20	51.0	48.8
21	71.2	28.5
22	89.7	10.1
23	78.6	21.7
24	58.6	41.5
25	76.9	22.9
26	67.8	25.6

TABLE I (CONTINUED)

TEACHER	PERCENT ON-TASK	PERCENT OFF-TASK
27	86.2	13.5
28	74.3	25.6
29	70.6	29.2
30	74.1	25.7
31	68.2	31.6
32	73.8	26.0
33	64.2	35.6
34	78.8	21.1
35	70.4	29.4
36	56.7	43.1
37	83.6	16.2
38	72.2	27.8
Mean	74.4	25.6
Standard Deviation	10.5	10.5



TABLE II  
PERCENT ON- AND OFF-TASK BEHAVIOR OF  
TEACHERS BY SYSTEM

SYSTEM	ON-TASK		OFF-TASK	
	MEAN	SD	MEAN	SD
System I	77.0	8.2	23.0	.7
System II	71.7	12.0	28.2	12.0
Total	74.4	10.1	25.6	6.4

System I teachers charted slightly higher percents in on-task behavior, System II percents were not significantly lower in either on- and off-task categories. The total on-task average for both systems was just under 75 percent.

The table of on- and off-task percents by category illustrates how time was spent in the classroom. Table III contains teacher on-task percents in the categories of Set, Teaching, Monitor and Adjusting, Supervising Practice, Closure, and Management. The lowest on-task percents were recorded in set--with the highest percent in this category reaching 2.9 percent--and Closure, where the highest percent observed was 1.7 percent. Seventeen of 38 (44.7 percent) teachers scored 0.0 percent in the Closure category. The average amount of time spent in Management activities was 46.1 percent. Approximately 39 percent of the 38 teachers observed spent over half their time in Management.

Teaching was generally considered to include Set, Direct Instruction, Monitoring and Adjusting, Supervising Practice, and Closure. On the average, 21.3 percent of time was spent in Direct Instruction. When the teaching category was combined with the other instructional categories, the average on-task percents for instructional activities was approximately 28 percent.

The data displaying teacher off-task percents are displayed in Table IV. Off-task behaviors included Transition, Interruptions, Socializing, Uninvolved Supervision, and Uninvolved. The Transition category, as stated previously, could have been included in the on-task

TABLE III  
PERCENT OF TEACHER TIME-ON-TASK BY CATEGORY, FALL 1985

TEACHER	SET	TEACHING	MONITOR AND ADJUST	SUPERVISING PRACTICE	CLOSURE	MANAGEMENT
1	.5	10.7	2.9	13.3	.1	45.9
2	1.4	16.0	1.0	13.5	.2	50.1
3	2.9	20.0	2.0	4.6	.2	43.8
4	1.9	23.3	1.0	3.2	.5	59.2
5	1.0	3.9	0.0	0.0	0.0	68.2
6	1.5	18.1	2.4	5.8	.3	51.1
7	1.4	12.6	.8	2.6	.2	47.9
8	1.0	18.1	.4	6.7	0.0	28.3
9	.5	11.6	.1	14.5	0.0	51.7
10	1.3	18.6	.8	4.1	0.0	48.5
11	1.4	15.2	.5	2.3	0.0	70.4
12	.7	21.4	1.3	3.3	0.0	50.9
13	1.4	23.3	1.3	7.9	.5	43.6
14	.1	39.0	.5	1.8	.1	41.4
15	2.0	24.3	1.1	3.0	.3	54.2
16	.9	22.0	.7	3.7	0.0	21.1
17	.5	0.0	0.0	0.0	0.0	85.5
18	1.7	45.9	.7	1.8	1.0	31.4
19	1.4	22.2	.2	5.5	0.0	52.0
20	.4	13.7	0.0	.1	0.0	36.8
21	1.2	33.4	.2	4.9	.2	31.3
22	1.7	36.4	1.1	4.5	1.0	45.0
23	.9	10.9	.2	6.5	0.0	60.1
24	2.0	29.8	.5	2.3	.1	23.9
25	1.7	26.6	.1	.1	.5	47.9
26	.3	20.1	.3	12.7	.2	34.2
27	2.2	32.0	1.1	7.7	1.7	41.5
28	.5	21.5	0.0	.4	0.0	51.9
29	1.4	27.6	0.0	9.8	0.0	31.8
30	1.5	25.8	.6	5.2	.2	40.8
31	.5	16.3	0.0	3.9	.1	47.4
32	2.0	29.4	.2	1.5	.2	40.5
33	.5	13.1	0.0	1.0	0.0	49.6
34	.2	12.6	.1	2.4	0.0	63.5
35	2.9	28.8	0.0	3.5	0.0	35.2
36	0.0	18.0	0.0	2.4	0.0	36.3
37	1.2	22.7	.8	7.8	.1	51.0
38	.9	26.1	.5	3.2	.1	41.4
Mean	1.2	21.3	.7	4.7	.2	46.2
SD	.7	9.3	.9	3.9	.4	13.0

TABLE IV  
PERCENT OF TEACHER TIME-OFF-TASK BY CATEGORY, FALL 1985

TEACHER	TRANSITION	INTERRUPTIONS	SOCIALIZATION	UNINVOLVED, BUT SUPERVISING	UNINVOLVED
1	2.8	3.9	3.5	5.3	11.1
2	1.5	2.2	10.0	0.0	.9
3	2.5	1.2	9.3	12.4	1.0
4	2.1	3.8	1.6	1.8	.9
5	2.1	2.7	15.2	.1	6.7
6	2.9	3.4	8.5	5.7	.3
7	3.4	4.6	15.4	6.3	4.8
8	2.3	2.2	28.9	6.7	5.2
9	3.9	.4	0.0	8.1	9.0
10	1.8	.4	0.0	22.9	1.3
11	1.9	2.3	4.8	0.0	1.1
12	2.9	1.2	11.3	0.0	7.0
13	4.2	.4	13.3	3.6	.5
14	.3	.4	12.2	0.0	4.0
15	1.7	1.2	6.9	.6	4.0
16	2.7	4.5	33.2	8.8	2.3
17	1.5	1.8	7.3	0.0	3.5
18	1.6	2.0	8.3	4.3	1.2
19	.9	2.6	7.9	2.0	5.2
20	2.0	12.5	20.2	6.2	7.9
21	.2	6.9	10.8	8.8	1.8
22	1.2	.4	8.3	0.0	.2
23	2.2	2.3	8.9	4.8	3.5
24	4.2	3.8	21.5	6.9	5.1
25	6.1	3.5	6.8	5.4	1.1
26	1.5	1.7	18.8	6.9	3.0
27	1.0	1.3	6.3	1.3	3.6
28	2.7	2.6	8.7	7.3	4.3
29	2.8	10.2	14.1	1.0	1.1
30	2.7	1.1	15.7	6.1	.1
31	1.7	1.7	8.3	4.2	15.7
32	3.3	3.6	6.9	6.4	5.8
33	3.9	12.2	11.7	2.4	5.4
34	.6	2.6	13.5	1.8	2.6
35	1.1	4.9	5.5	12.2	5.7
36	1.7	10.3	15.3	11.0	4.8
37	1.3	2.7	.3	4.2	7.7
38	2.9	5.2	8.3	7.6	3.8
Mean	2.3	3.4	10.7	5.1	4.0
SD	1.2	3.1	7.1	4.6	3.3

behaviors. In general, teachers did not usually exhibit on-task behaviors during transitional times. When an on-task behavior was necessary during transition, however, the on-task category was marked rather than the Transition category. Interruptions accounted for an average of 2.8 percent with most interruptions occurring inside the classroom (see Table IV). The Socialization category showed the highest percentage of off-task behavior ranging from a low of 0.0 percent by two teachers to a high of 33.2 percent for one teacher in the study. Uninvolved Supervision and Uninvolved received low scores, 5.1 percent and 4.0 percent, respectively. The Uninvolved category--total disengagement by the teacher--showed that 55 percent of the teachers in the study charted off-task behavior less than 4 percent of the school day.

Interruptions were charted both inside and outside the classroom. Interruptions from within included student disruption, misconduct, and/or any other behavior which required the teacher to stop what he/she was doing to attend to the need. Outside interruptions included announcements over the public address system, fire or tornado drills, tardy students, parent, teacher, or principal visitations and the like. Table V displays these data by 15-second intervals.

Interruptions came from inside the classroom more often than from outside. One teacher charted 165 15-second intervals from within the classroom which amounted to just over 41 minutes of lost of time due to interruptions. Outside interruptions were minimal in most cases. It should be noted here that outside interruptions constituted a category over which the teacher had no control.

TABLE V  
INTERRUPTIONS BY TYPE NUMBER 15-SECOND INTERVALS  
INSIDE AND OUTSIDE THE CLASSROOM

TEACHERS	INSIDE THE CLASSROOM	OUTSIDE THE CLASSROOM
1	55	9
2	9	28
3	8	12
4	33	31
5	16	29
6	8	49
7	40	37
8	19	18
9	3	4
10	3	4
11	33	5
12	17	3
13	4	3
14	3	4
15	16	17
16	59	17
17	0	30
18	14	7
19	8	36
20	165	45
21	32	86
22	2	4
23	17	21
24	41	22
25	53	5

TABLE V (CONTINUED)

TEACHERS	INSIDE THE CLASSROOM	OUTSIDE THE CLASSROOM
26	21	8
27	21	1
28	34	10
29	129	43
30	3	11
31	12	17
32	51	10
33	147	59
34	23	20
35	21	62
36	132	42
37	35	10
38	138	12
Mean	37.5	21.8

Table VI contains teacher on- and off-task percents by grade level and system. Third, fourth, and fifth grade teachers in System I were consistent in both on- and off-task behaviors. System II teachers of the same grades showed a wider discrepancy in percent totals.

Table VII displays the data by grade level in both systems. Fourth grade teachers exhibited a higher percentage of on-task behavior (77.5 percent) with fifth grade teachers scoring the lowest in on-task behavior (70.4 percent).

## II. DISCUSSION OF THE DATA

The purpose of the study was to investigate the ways teachers spend time in the classroom. Four research questions were formulated to guide and direct the research. The full-day observations of each of the 38 teachers in the sample provided the researcher with valuable information regarding teacher on- and off-task behavior.

The first research question was directed toward instruction and other on-task teacher behaviors. How much time do teachers spend on-task? Table I, page 22, displays these data. Although the percents in the teaching category were low, it must be noted that teachers at the elementary level used a variety of teaching techniques and strategies. Often teachers provided learning experiences concurrently with classroom management practices. Students were rarely idle, even when teachers were exhibiting management rather than instructional behaviors. Several teachers prepared materials and equipment for follow-up lessons or reinforcement activities while children practiced



TABLE VI  
TEACHER ON- AND OFF-TASK PERCENTS BY GRADE LEVEL,  
system I AND II

GRADE	NUMBER	ON-TASK MEAN	OFF-TASK MEAN
<u>System I</u>			
3	7	77.1	22.9
4	8	77.6	22.4
5	4	76.2	23.8
Total	19	77.1	22.9
<u>System II</u>			
3	7	70.3	29.7
4	7	77.3	22.7
5	5	65.7	34.4
Total	19	71.8	28.3

TABLE VII  
COMPOSITE ON- AND OFF-TASK PERCENTS BY  
GRADE LEVEL

GRADE	ON-TASK MEAN	OFF-TASK MEAN
3	73.7	26.3
4	77.5	22.5
5	70.4	29.6
Total Mean	74.4	25.6

skills from the lesson previously presented. Teacher use of additional media (filmstrips, listening centers, learning packets, etc.) also supplemented the instructional program. On the average, teachers scored 74.4 percent in on-task behavior which was well above the on-task percents cited in earlier research. However, teaching scores were relatively low when compared to management scores and were especially low when compared to previous research of teacher time-on-task. Management percents (mean, 46.2) accounted for more than half of teacher on-task time. Direct teaching time percents could be increased if less time was spent in management and more time devoted to the areas of set, direct teaching, monitoring and adjusting progress, supervising practice, and gaining closure to the lesson. While management tasks are vital to effective teacher performance and support learning activities in many ways, direct teaching and supervised practice need to be maximized if optimal learning is to be achieved. Nine of 38 teachers fell below 70 percent in on-task behavior.

On-task behavior by school system, displayed in Table II, page 24, shows little difference in on-task behavior by system. System I (77.0 percent) charted minimal superiority over System II (71.7 percent) in on-task behavior. Again, the researcher made no judgement regarding the quality of teaching but rather observed the amount of time devoted to instruction and other on-task teacher behaviors.

Table III, page 26, displays the percent of teacher time-on-task by category. Weaknesses in the areas of Set and Closure were notable. Lessons often began with no relation to previous learning and/or life experiences. Little direction was given regarding the goals

and objectives of the lesson to come. Lessons often ended when the allotted class time was over with little or no summation of what had transpired in the lesson. Frequently, a bell signifying the end of class time was the only closure given to the lesson.

The monitor and adjust portion of instruction is designed to check student progress and understanding of the lesson. It is also a time for teachers to adjust methods and strategies based on student need. According to some teachers in the study, the monitor and adjust technique was developed as a part of the Tennessee Instructional Model and taught to teachers in TIM training sessions. Students in both systems were occasionally asked by teachers to give a "thumbs up" signal when the presentation of material was clear. The use of the monitor and adjust technique enabled teachers to scan the room detecting those children having problems with a particular skill or concept. Percents were low in this on-task category and do not reflect the way many teachers adjusted teaching styles to suit need or to reteach a portion of the lesson that was particularly difficult.

The management category, which had the highest percents of on-task teacher behavior, included many tasks for which teachers are responsible. Classroom management or lack of it--may influence the instructional program. Table III, page 26, shows that teacher scores in management ranged from 21.1 percent to 85.5 percent. The table does not illustrate, however, that the teacher charting 85.5 percent in management had acute laryngitis on the day of observation. While no direct (lecture-type) instruction was given, students were taught using a variety of self-directed lessons and strategies devised by the

teacher. Students were on-task throughout the day even though teacher behavior was charted as management.

Another teacher scoring high in the management category (68.2 percent) did little teaching on the day of observation. Students were assigned to books on different levels of difficulty. Work was done independently with little or no assistance from the teacher. It must be emphasized again that no judgment was made regarding the quality of teaching or the outcome of the learning. The table does not reflect the quality but rather the quantity of instruction that occurred the day of the observation. It is reasonable to assume that another day of observation would yield different categorical percents in some cases and remain relatively consistent in others. Nevertheless, the data derived from these observations demonstrate that teachers are managers.

The second research question examined the amount of instructional time that was lost as a result of off-task behavior. Often called "lag" time, off-task behavior included those times when the teacher was not involved in the instructional processes, planning, or implementation of the curricular program. Table I, page 22, contains the total percent of off-task teacher time. Off-task scores ranged from 19.1 percent to 51.6 percent with several teachers exhibiting low off-task percents. These data seem to demonstrate a wide range of off-task behavior. Many teachers work diligently; others are not as task oriented. Table II, page 24, compares off-task percents by system. System I teachers averaged 23 percent showing a slight edge over System II with 28.2 percent. One can only speculate about the amount of off-task behavior that occurs when no observer is present.

Table IV, page 27, provides a breakdown of teachers' off-task percents by category. As stated earlier, the Transition category was marked only when students were moving from one place or group to another (changing reading groups, moving from class to class, etc.). Direct involvement by the teacher was not usually required in this area. Percents across systems were low (mean, 2.3 percent).

The Interruption category which research says should have accounted for a large portion of off-task time (Harrison, 1983), was the most surprising outcome of the research. Interruptions were minimal and accounted for very little off-task time (see Table V, page 29).

Teacher Socialization also yielded surprising results. Most teacher Socialization occurred with children as they arrived at school in the morning or were leaving in the afternoon. The state mandated duty-free lunch systems may have boosted the Socialization percents and the interactions teachers had with other adults during that 25 to 30-minute period. It is worth noting here that two teachers scored 0 percent in the Socialization category and 23 of the 39 teachers in the sample were charted at 10 percent or less in this off-task category. Socialization percents may have also been higher than normal because of the tendency of teachers to acquaint the researcher with classroom procedures. Many teachers welcomed interaction with another adult. Given these circumstances teacher socialization was minimal and occurred mainly during duty-free lunch or before, and after the time allotted for instruction.

The Uninvolved but Supervising category was checked during non-academic times. Playground activities, for example, required the teacher's presence without direct involvement. When direct intervention was required by the teacher during these times (fights between children, hurt and/or crying child, etc.), the Management category was checked. Percents in the Uninvolved but Supervising category were low (5.1 percent) as were the percents in the Uninvolved (total disengagement) category. Only two of the 38 teachers in the sample exhibited uninvolved behaviors over 10 percent of the time.

The effect of interruptions--inside and outside the classroom--on teacher time-on-task provided the basis for the third research question. Table V, page 29, displays these data. Outside interruptions were those interruptions over which the teacher had no control. Table V, page 29, shows the number of 15-second intervals charted for interruptions. The average number of Interruptions from outside the classroom was 21.8 15-second intervals or just over 5 minutes of lost time. Interruptions from within the classroom were more frequent, averaging 37.5 15-minute intervals or just over 9 minutes of interrupted time. Inside interruptions came most often from students, yet discipline problems were infrequent. In Table V, page 29, Teacher 33 charted 147 15-second intervals of inside interruption which totaled 37 minutes of lost time. Most of those interruptions were from students demanding attention throughout the instructional day. Eleven teachers, however, accrued less than 10 15-second intervals of interrupted time for just over 2 minutes of lost/lag time. In general, interruptions were infrequent, particularly from outside the classroom.

The fourth research question pertained to teacher on- and off-task percents across grade levels. Tables VI, page 32, and VII, page 33, display these comparisons. Table VI, page 32, displays the grade level data by system. Averages in grades three, four, and five in System I show favorable percents in teacher time on- and off-task behavior (77.1 and 22.9 percent, respectively). By comparison, System II shows some discrepancy between grade levels, particularly between on- and off-task percents in fourth and fifth grades (77.3 and 65.7 percent, respectively, for time-on-task). Percents for fifth grade in System II were poorest for on- and off-task behavior comparison. Grade four in System I averaged higher in on-task behavior, slightly edging fourth grade in System II by .3 percent. Total mean by grade levels were relatively close, 77.1 in System I and 71.8 in System II.

Table VII, page 33, summarizes on- and off-task percents by grade level for combined systems. Overall, fourth grade teachers in both systems showed a higher percent of on-task behavior (77.5 percent) with third grade teachers coming in second (73.7 percent) and fifth grade teachers following a close third (70.4 percent). On-task (74.4) and off-task (25.5) percents were respectable in light of current research that asserts that as much as 55 percent of time is lost in an instructional day (Justiz, 1984).

The research described in this section was an informative study of teacher on- and off-task behavior. Although previous time-on-task research indicates that teachers lose a major portion of the instructional day to interruptions and other off-task behaviors, the study described here did not show that an exorbitant amount of time was



lost because of interruptions. Findings regarding teaching time were comparable to current research and were low in some cases, with nearly half of all time spent on management tasks. It was interesting to note the similarities between school systems and across grade levels as well. In general, teachers exhibited a wide range of on-task behaviors a major portion of the day with interruptions contributing minor time losses to the instructional program.

## CHAPTER IV

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### I. SUMMARY

Over the years, time-on-task research has indicated that teachers lose a high percentage of instructional time during the school day (Karweit, et al., 1984). The research described in the present study, however, showed that teachers participating in the time-on-task observations were on-task a major portion of the instructional day. Interruptions, which have typically influenced time use in the classroom, were minimal and frequently came from inside the classroom. Teacher on- and off-task percents across grade levels were comparable with fourth grade teachers showing slightly higher percents of on-task behavior.

#### II. CONCLUSIONS

Although teachers exhibited a wide array of style and methodology, the researcher concluded that many teachers in the study were not widely using the Tennessee Instructional Model, as evidenced by percents in the set and closure categories. Teaching the lesson was only one part of the total picture. Teachers were, in essence, managers in charge of much more than the deliverance of instruction.

Even considering the variety of tasks teachers are expected to perform, instructional time was lost in the classroom. For the most

part, teachers were concerned about time allotted for instruction and were anxious to complete managerial tasks (grading papers and the like) which would give them more time for instruction, but management demanded a disproportionate amount of time.

Teacher off-task percents provided some interesting conclusions. The researcher concluded that teacher socialization was limited to children in most cases, but may have been heightened by the addition of state mandated duty-free lunch which was initially designed to provide release and adult interaction time to teachers. Few teachers participated in this "off" time, relishing the few minutes given to them (25 minutes in most cases) for adult company. Teachers not taking advantage of duty-free lunch were content to eat alone or in the company of children. It was evident that some teachers were uncomfortable with this "free" time and were not certain as to whether or not they should participate in this recent luxury. The researcher concluded that many teachers granted themselves minimal off-task time.

Although there were interruptions in the instructional program the researcher concluded that interruptions, from outside or within the classroom, had little or no effect on instruction except in those rare instances where a student dominated his/her teacher's time by persistent demands for attention and disruptive behavior. Many interruptions were unavoidable and, in most cases, detracted from the lesson for only a second or two. The way in which teachers handled interruptions made them hardly noticeable.

Based upon the data presented, the researcher concluded that middle elementary teachers in each system and across grade levels

experienced many of the same problems and concerns associated with time use in the classroom. Tasks were similar and never limited to just teaching the lesson. Many variables influenced teacher use of time and were found to be relatively consistent from classroom to classroom. A final conclusion, therefore, was that the pursuit of more time was a common denominator for all teachers participating in the study. Some were more obsessed than others with the utilization of time, but the lack of it (time) was a problem that all teachers shared.

### III. RECOMMENDATIONS

Increasing the amount of time used for Set and Closure in the lesson is one recommendation of this study. Setting the stage for the lesson by relating it to life experiences and previous learning determines the tone of the lesson and may influence the outcome of the learning. Gaining Closure to the lesson by recapitulation and summary is equally important and should not be overlooked. Those things that happen between Set and Closure--the lessons--should be given credence by the use of these techniques. It is therefore recommended that teachers continue to use and to fine-tune their skills in setting up and closing the lesson.

Since many teachers showed high percents in the management category, it is also recommended that teacher training institutions take a closer look at the importance of management skills in the classroom. Additional management training or implementation of management courses into teacher education programs may be beneficial when determining teacher preparedness in the classroom. Inservice

training in management for those teachers already in the field is also recommended since many tasks teachers are asked to perform require classroom management expertise. It is also recommended that further research be done in the area of management since many teachers spend much of their time performing management duties. Perhaps more time could be extracted from the management category toward higher percents in the areas of instruction.

Inservice sessions on assertive discipline is also recommended to lessen, if not eliminate, the number of unnecessary student interruptions from within the classroom, particularly for those teachers who allowed a certain student or students to dominate with little regard to the lesson or to other members of the class. Additional training may alleviate some of these problems which can influence and hamper maximum time use.

Finally, it is the recommendation that the a study of teacher time-on-task be done over an entire school year rather than the three-month time frame allotted for this study. A larger sample comparing diverse school systems would yield greater results and provide further insight into the ways in which teachers spend time in the classroom.

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## APPENDIXES

## APPENDIX A

### SAMPLE LETTER OF APPROVAL

## SAMPLE LETTER OF APPROVAL

June 24, 1985

Dear

Your school system has been selected for participation in a study of teacher time-on-task for the 1985-86 school year. As part of my doctoral dissertation, I plan to observe and to record the instructional techniques of randomly selected teachers from your area. Your teachers should in no way feel threatened as complete anonymity is guaranteed.

If you agree to participate in the study, I would need a list of all teachers from your system in order to make the random selection. I would also need your support of the study through communication with your teachers.

The study is not designed to make any judgement regarding the quality of instruction and is not connected in any way to the Better Schools Program. The study is simply a measure of the amount of time teachers spend on actual classroom instruction. Classroom management, supervised practice, and other forms of instruction will also be observed, recorded, and analyzed.

I look forward to hearing from you and would appreciate the opportunity to talk with you further about the study should you agree to participate. I have enclosed a self-addressed stamped envelope for your reply. I will be glad to answer any questions you may have about the study.

Sincerely,

Suzanne T. Richards  
The University of Tennessee, Knoxville  
Department of Educational Leadership

Enclosure

STR/dcc

## APPENDIX B

### TEACHER OBSERVATION FORM

# TEACHER OBSERVATION FORM

TCHR. NO. \_\_\_\_\_ GRADE \_\_\_\_\_ OBS. \_\_\_\_\_ DATE \_\_\_\_\_

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## APPENDIX C

### TEACHER TIME-ON-TASK BY CATEGORY, SYSTEM I AND II



TEACHER TIME-ON-TASK NUMBER OF 15-SECONO INTERVALS BY CATEGORY, SYSTEMS I AND II

<u>TEACHER NUMBER</u>	<u>SET</u>	<u>TCH</u>	<u>M&amp;A</u>	<u>SPR</u>	<u>CLO</u>	<u>MGT</u>	<u>TOTAL PERCENT ON-TASK</u>	<u>TRA</u>	<u>INT</u>	<u>SOC</u>	<u>UNS</u>	<u>JNI</u>	<u>TOTAL PERCENT OFF-TASK</u>
1	9	179	48	222	2	772	73.3	47	66	59	89	187	26.7
2	24	270	68	227	4	843	85.5	25	37	168	0	15	14.5
3	48	337	35	77	4	736	73.6	42	20	156	209	16	26.4
4	32	393	17	53	8	995	89.9	35	64	26	30	15	10.1
5	18	65	0	0	0	1146	73.2	36	45	256	1	113	26.8
6	26	304	40	98	5	859	79.3	49	57	142	96	4	20.7
7	23	213	13	43	4	85	65.5	57	77	259	106	80	34.5
8	17	305	7	112	0	477	54.6	39	37	487	112	87	45.5
9	9	196	2	244	0	869	78.6	66	7	0	136	151	21.4
10	22	314	14	69	0	816	73.5	30	7	0	386	22	26.5
11	23	257	8	39	0	1184	89.9	32	38	80	0	19	10.1
12	11	361	21	56	0	856	77.7	48	20	190	0	117	22.3
13	24	393	21	132	8	733	78.0	70	7	224	60	8	22.0
14	2	656	8	31	2	696	83.0	5	7	205	0	68	17.0
15	34	409	18	49	5	911	84.9	28	33	116	10	67	15.1
16	15	371	12	60	0	355	48.4	45	76	559	148	39	51.6

<u>TEACHER NUMBER</u>	<u>SET</u>	<u>TCH</u>	<u>M&amp;A</u>	<u>SPR</u>	<u>CLO</u>	<u>MGT</u>	<u>TOTAL PERCENT ON-TASK</u>	<u>TRA</u>	<u>INT</u>	<u>SOC</u>	<u>UNS</u>	<u>UNI</u>	<u>TOTAL PERCENT OFF-TASK</u>
17	8	0	0	0	0	1438	86.0	25	30	122	0	59	14.0
18	29	772	11	31	16	528	82.6	27	34	140	72	20	17.4
19	24	374	3	93	0	874	81.4	15	44	132	33	88	18.6
20	7	231	0	1	0	619	51.1	34	211	341	104	132	48.9
21	20	562	3	83	4	526	71.3	4	116	183	148	31	28.7
22	29	612	18	76	18	757	89.9	20	6	140	0	4	10.1
23	15	184	4	110	0	1010	78.8	37	38	149	80	53	21.2
24	33	501	9	38	1	402	58.6	71	63	361	116	85	41.4
25	29	448	1	2	8	806	77.0	103	58	115	91	19	23.0
26	5	338	5	214	4	576	68.0	26	29	316	116	51	32.0
27	38	539	19	130	29	698	86.5	17	22	106	21	61	13.5
28	9	362	0	6	0	872	74.3	46	44	146	122	73	25.7
29	25	465	0	164	0	535	70.8	47	173	237	16	18	29.7
30	26	435	10	88	3	686	74.3	46	18	264	102	2	26.7
31	8	274	0	66	1	797	68.2	29	29	140	71	265	31.8
32	35	495	3	25	4	682	74.0	55	61	116	107	97	26.0
33	8	221	0	16	0	834	64.2	66	206	198	40	91	35.8

<u>TEACHER NUMBER</u>	<u>SET</u>	<u>TCH</u>	<u>M&amp;A</u>	<u>SPR</u>	<u>CLO</u>	<u>MGT</u>	<u>TOTAL PERCENT ON-TASK</u>	<u>TRA</u>	<u>INT</u>	<u>SOC</u>	<u>UNS</u>	<u>UNI</u>	<u>TOTAL PERCENT OFF-TASK</u>
34	3	213	2	41	0	1068	79.0	10	43	226	30	44	21.0
35	49	485	0	59	0	592	70.5	19	83	92	206	95	29.5
36	0	303	0	41	0	610	56.8	29	174	258	185	80	43.2
37	21	385	14	131	1	858	83.7	22	45	5	71	130	16.3
38	15	440	9	53	1	696	72.3	49	87	140	127	63	27.7

## VITA

Born and reared in Knoxville, Tennessee, Suzanne Thomas Richards completed a general elementary and high school education in Knoxville before entering The University of Tennessee, Knoxville, as an undergraduate in 1970. A Bachelor of Science degree in Elementary Education was awarded in 1975. Following the completion of undergraduate work, Ms. Richards was a teacher for Knox County Schools from 1975 to 1984.

In 1984, she became a graduate assistant in the Department of Educational Leadership at The University of Tennessee, Knoxville, while completing course work for the Master of Science degree in Educational Administration and Supervision. The Master of Science degree was awarded in June 1984.

With help from the Orin B. Graff Scholarship and the graduate assistantship, Ms. Richards began the doctoral degree program in Educational leadership in June 1984. Collateral areas for the doctorate were in Curriculum and Instruction and Child and Family Studies.

A member of Phi Delta Kappa, Ms. Richards has been active in local professional organizations and has served on several committees, one of which is the Journal Committee for Tennessee Educational Leadership. Her published articles have appeared in Tennessee Teacher, Teacher Educational Leadership, and Educational Leadership.

Ms. Richards has worked at the community college level as an Energy Education Specialist. She has one child, Patti Alyson Richards.