DOCUMENT RESUME

ED 363 412 PS 021 782

AUTHOR Yorks, Patti M.; Follo, Eric J.
TITLE Engagement Rates during Thematic and Traditional Instruction.
PUB DATE 93
NOTE 45p.; Uneven type density may affect legibility.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Conventional Instruction; Elementary Education; *Elementary School Students; Grade 3; Grade 4; *Interdisciplinary Approach; Measures (Individuals); Multigraded Classes; Student Attitudes; Teacher Attitudes; *Thematic Approach; *Time on Task
IDENTIFIERS Mixed Age Groups; *Student Engagement

ABSTRACT

This study investigated the engagement rates of 25 students in a mixed-age classroom of third- and fourth-graders. The time on task of the students was compared using thematic, interdisciplinary instruction and traditional, single-subject instruction. Engagement rates were determined using an engagement rate observation form, students' self-perceptions, and teacher reflections. The results indicated that the students' engagement rates were higher during thematic instruction than during traditional instruction. Two appendixes contain copies of the engagement rate observation form and the student self-evaluation form. Contains 16 references. (Author/MDM)

ENGAGEMENT RATES DURING THEMATIC AND TRADITIONAL INSTRUCTION

PATTI M. YORKS

ERIC J. FOLLO

OAKLAND UNIVERSITY

1993

Running Head ENGAGEMENT RATES DURING INSTRUCTION

Abstract

This study investigated the engagement rates of students in a mixed-age classroom of 3rd and 4th graders. The time on task of the students was compared using thematic and traditional instruction. Engagement rates were determined by using an Engagement Rate Observation Form, students' self-perceptions, and teacher reflections. The results indicated that the students' engagement rates were higher during thematic instruction as compared to traditional instruction.

TABLE OF CONTENTS

INTRODUCTION.....4
Allocated Time.....4
Engaged Time.....5
Academic Learning Time.....6
Integrated Thematic Teaching.....7

SETTING.....8

METHOD.....12
Engagement Rate Observation Form.....12
Observer.....13
Observation Periods.....14

RESULTS OF OBSERVATIONS.....17
Traditional Observation I.....17
Traditional Observation II.....20
Traditional Observation III.....22
Thematic Observation I.....25
Thematic Observation II.....28
Thematic Observation III.....30

DISCUSSION.....33

RECOMMENDATIONS.....38

REFERENCES.....40

APPENDIX.....43

Engagement Rates During Thematic and Traditional Instruction

The purpose of this study was to investigate the engagement rates of students in a mixed-age classroom of 3rd and 4th grade students during traditional and thematic teaching. Many studies have investigated the effects of time on academic achievement. Three variables of time: (1) time allocated for learning, (2) time actually needed for learning, and (3) time engaged in learning have been shown to relate to academic achievement for students (Gettinger, 1985).

Allocated Time

Allocated time is defined by Steere and Wiley (1985) as the time allocated to the teaching of a particular subject. Time actually needed for learning is that time the student needs to advance from nonmastery to a predetermined level of mastery (Gettinger, 1985). These two variables of time vary greatly for individual students, teachers, classrooms, and schools. Allocated time varies with the number of days in the school year, hours in the instructional day, and use of the time by the principal and individual teacher. In general, research supports a

relationship between total time allocated and academic achievement (Fredrick & Walberg, 1980).

Time needed for achieving mastery varies with the individual learning rate of each student. Students must have sufficient time for learning according to their individual differences in order to achieve mastery.

Engaged Time

Intimately connected with allocated time and time needed for learning is engaged time. Engaged time is "that portion of the allocated time during which the child is actually working or paying attention (Steere & Wiley, 1985, p. 3)." Ultimately, engaged time would have a critical effect on academic achievement.

In a study of the properties of attention during reading lessons it was found that the percentage of engaged time was positively related to reading achievement (Imai, Anderson, Wilkinson, & Yi, 1992). Similarly Tracz and Gibson (1986) found a significant correlation between student engagement and achievement in reading and language.

In a review of studies conducted over the last 50 years which examined the effects of time on learning, Karweit (1984) found a wide range of correlations

between time and learning from .10 to .70. In a review of time and learning, Fredrick and Walberg (1980) also found a modest relationship between time spent in learning and academic achievement.

Academic Learning Time

The California Beginning Teacher Evaluation Study (BTES) evaluated the effects of time allocation and time use on students' academic achievement. Since time allocated for learning is not always equal to time spent engaged in learning, this study looked at the variable of Academic Learning Time which is defined as the amount of time that students are actively engaged in academic activities on which they are experiencing high rates of success (Murphy, 1992). In an analysis of the data in the BTES study, several findings addressed the relationship between time and learning. It was found that Academic Learning Time is positively associated with achievement in reading and mathematics. The data also supported that in general the proportion of allocated time that students are engaged is a positive predictor of academic achievement (Egbert & Kluender, 1984).

While the correlations between time and learning vary, there is certainly enough research to give the

relationship merit. Given these relationships between time and learning, I wanted to measure the effects on the engagement rates of the students in my mixed-age classroom when implementing thematic teaching as opposed to traditional teaching. While there is no specific engagement rate which signifies success or failure, Steere and Wiley (1985) suggest that teachers attempt to maintain a classroom engagement rate of 80-85%. They state that engagement rates under 65% are definite reasons for concern.

With limited time during the school day, teachers must attempt to maximize the time that is available. One idea is to employ a model of teaching that would encourage students to spend a higher percentage of their time actively engaged in learning.

Integrated Thematic Teaching

The literature cites many benefits of taking an integrated approach to teaching. Integrated Thematic Instruction (ITI), also referred to as thematic teaching, is "based on interfacing how students learn, instructional methods and strategies, and the curriculum (Bartz & Miller, 1991, p. 20)." Curriculum is viewed as a whole, not as a series of separate subjects. Connections are made within the different

learning areas, making the curriculum more meaningful to students. Integrating the curriculum by using thematic instruction naturally connects with children's learning and development because children learn in an integrated fashion (Traill, 1992; Gareau & Kennedy, 1991).

Considering the apparent benefits of thematic teaching while also recognizing the difficulty of effectively utilizing time in a mixed-age classroom, I wanted to investigate the engagement rate of my students when using the thematic approach to learning. It was the purpose of this study to compare the engaged time, also referred to as time on task, of the students in my mixed-age classroom during thematic teaching and traditional teaching.

Setting

I conducted my research in my own classroom at Dowdall Elementary School, one of four elementaries in the Kearsley Community School District located in Flint, Michigan. Dowdall is a 1st through 5th grade school comprised of 350 students of low to middle socioeconomic status.

My particular classroom included myself and 25 students, 14 of whom were in the 4th grade and 11 of

whom were in the 3rd grade. In total there were 16 boys (7 fourth graders and 9 third graders) and 9 girls (7 fourth graders and 2 third graders). Three 4th graders received special services in the form of a gifted pull-out program one day per week. Two of these students also left the classroom for 75 minutes each morning to participate in an accelerated mathematics class. Two 3rd graders frequently received remedial support outside of the classroom in reading and mathematics.

Students were in attendance from 8:55 a.m. until 3:35 p.m. Students in my classroom received 6 hours of instruction per day, 5 hours of which were under my supervision. My time with the children in academic activities consisted of 2 1/2 hours in the morning and 2 1/2 hours in the afternoon. The additional hour of instruction that the students received each day was under the supervision of other teachers. Such subjects as health, science, physical education, Spanish, art, and music were taught during this time.

All remaining subjects which included language arts, reading, mathematics, and social studies were taught during the 5 hours per day that I was with the children. I was directed by the building principal to

teach separate language art, reading, and mathematics curricula to the 3rd and 4th graders to ensure that the children would receive their correct grade level subject matter. With our objectives for social studies being more loosely defined than those for language arts, reading, and mathematics, I was able to teach units simultaneously to the 3rd and 4th graders. Because mixed-age classrooms are seldom used in this district, efforts were made to reassure parents that their children would receive the appropriate educational objectives and curriculum for their grade level.

As a result of this direction, the instruction in my classroom became fragmented and segmented by grade level. From 9:00 to 11:00 a.m. was our reading and language arts time block. During this time I directed one grade level while the other students worked on seatwork and self-directed projects. After instructing one grade level I would then reverse the process with the other group receiving my direction while the other worked independently.

Mathematics was also taught in this manner. After doing one or two logic problems as a whole group at the beginning of the mathematics period, the 3rd and 4th

graders were then separated. Students worked independently on their particular assignments while I took turns directing each grade level.

These demands on classroom management and organization were evident from the beginning of the year. Designing and providing effective instruction simultaneously for two grade levels while maintaining an organized classroom were a challenge for the teacher. The students' challenge was to realize and adjust to this unique situation, especially in terms of working independently for extended periods of time. Despite the students' superior abilities to adapt to this organization as well as their excellent behavior and independent working skills, I was concerned that this organization, that is, teaching as if there were 2 separate classrooms, was not optimum for learning or teaching. In fact, studies conducted on time and learning in Dutch primary schools indicated that time engaged in learning was, on average, 6% lower in mixed-age classrooms than in single-grade classrooms (Roelofs, Veenman, & Lem, 1989). Concerned about my students' time on task and interested if another teaching method would have an effect on the students' engagement rates, I began my own investigation. I

examined the time on task of students in my mixed-age classroom during thematic unit teaching and traditional lesson teaching.

Method

Engagement Rate Observation Form

I chose to use the Engagement Rate Observation Form published by the Association for Supervision and Curriculum Development (A.S.C.D.) and promoted by Reyes and Alter (1986) designed to help teacher practitioners observe and evaluate the time on task and academic learning time of their students.

This form (see Appendix A) was designed to measure an individual student or a group of students' time on task percentage rate. The Engagement Rate Form makes use of a time sampling technique to identify students' off task behaviors in three categories. The categories of non-engagement are (1) socializing, (2) uninvolved, or (3) waiting. Everyone not in these categories is in a category of (4) engagement. Every five minutes during the set observation time a visual sweep of the classroom is to be made in a predetermined order and those students who are off task are to be coded with an S (socializing), U (uninvolved), or W (waiting) for that particular sweep. Directions for the observer are

given on the form. Information such as where students are seated, who is absent, and the classroom activities occurring can also be recorded on the form. The Engagement Rate can be calculated by dividing the total number of on task occurrences by the number of total possible occurrences. Conversely, the off task rate can be calculated by dividing the number of off task occurrences by the number of total possible occurrences.

Observer

To record the information on the Engagement Rate Form, an observer needed to be selected and trained. I needed an observer who met the following criteria: (a) an interest in children and research, (b) background experience in working with children, and (c) a willingness and ability to devote time to being trained and to observing in a classroom setting.

The observer I chose was Carol McDonough. Mrs. McDonough currently teaches adult enrichment classes and previously taught pre-school for three years in the Kearsley District. As part of her training I introduced Mrs. McDonough to the students prior to the formal classroom observations. During this introduction period, she visited the classroom twice

for 1 hour periods, familiarizing herself with the classroom and allowing the children to become comfortable in her presence. After introducing herself as our classroom observer, she simply watched the children while jotting down what she perceived as off task behaviors.

After the children were gone, the observer and I processed what had transpired during that class period. We discussed those behaviors that she had noted as off task and decided together which code (S, U, or W) best correlated with those behaviors.

As the final phase of the training, the observer conducted a trial observation under the same conditions that the formal observations were made. She observed a math lesson for 30 minutes, recording on 5 minute intervals those students not engaged with an S, U, or W. She also recorded the time and activity for each 5 minute period. Upon reviewing this practice Engagement Rate Form with the observer, I felt confident that she had a good understanding of on task versus off task behavior.

Observation Periods

There were 6 formal observation periods for the study. Three of those periods occurred during

traditional lesson teaching, thus establishing the baseline data. The remaining 3 observations occurred during thematic lesson teaching. Each observation lasted 30 minutes. Two of the baseline observations were conducted in the afternoon and the other in the morning. Similarly, two of the observations of the thematic lessons were conducted in the afternoon and the other in the morning. Also, in an effort to keep these lessons as parallel as possible, the same subjects; mathematics, reading, and social studies, were taught using traditional and thematic instruction.

In addition to these observations, I employed two other measurements which would ensure greater reliability of results. The students recorded their perceptions of their own time on task after each observed lesson. Immediately following the observed lesson, students received a teacher designed grid (see Appendix B for a sample grid) asking them to fill in how well they were on task during the lesson. The grids were designed to allow students to record their perceptions of their time on task separately for each component of the lesson. The components included such categories as "Introduction, Guided Practice, Sharing, and Independent Practice." Students placed a check in

a box labeled "Always, Most of the Time, Seldom, or Never" for each part of the lesson. Students were reassured that this information would in no way affect their grade. As a group we discussed the term "on task" and also discussed the four categories which they could choose to mark. I encouraged the students to complete these grids carefully and honestly.

In order to condense the data from these grids, I assigned a number value to each category. The number values were (a) 4 points for Always, (b) 3 points for Most of the Time, (c) 2 points for Seldom, and (d) 1 point for Never. I averaged the points for each grade level by adding up all of the points and then dividing by the number of students in that grade level who were present during the lesson. I also averaged the points for the entire class.

As another method of measuring time on task, I kept a log of reflections for each observed lesson. For the lessons during traditional lesson teaching and for the lessons during thematic teaching, I recorded my own perceptions. I recorded my behaviors, the students' behaviors, and my awareness of on and off task behavior in the students.

The time on task of the students in my mixed-age classroom during thematic unit teaching and traditional lesson teaching was compared using all three of the above methods. The purpose was not to measure my ability to keep the students on task; the students and I were constants. The variable was the mode of instruction, specifically traditional and thematic instruction.

Results of Observations

Observation I

The first formal observation occurred on the morning of April 21, 1993. This was a traditional lesson in reading. At the beginning of this lesson the 3rd graders worked independently in their journals while I worked with the 4th graders on a problem solving passage in their reading book. Then I directed the 3rd grade group while the 4th graders read independently.

Twenty-two students were present for this lesson. Amy and Brandon were absent; Robert was receiving remedial support outside of the classroom. During the 7 sweeps the observer recorded 10 marks for Socializing, 11 marks for Uninvolved, and 1 mark for Waiting (see Table 1). This resulted in 22 off task

Table 1

Engagement During Traditional Reading Lesson

N=22

	Sweep						
	1	2	3	4	5	6	7
Assigned	22	22	22	22	22	22	22
Engaged	20	19	20	21	14	18	20
Socializing	2	2	0	0	5	0	1
Uninvolved	0	1	1	1	3	4	1
Waiting	0	0	1	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 85.7\%$$

occurrences out of 154 possible occurrences. Upon calculating the Engagement Rate from the Engagement Rate Form, there was a rate of 85.7%. This would indicate that during this particular lesson, the students were on task and engaged in learning 85.7% of the time.

The students' self-evaluations indicated that overall they viewed themselves as being on task approximately 82.5% of the time. Upon averaging the scores for each student's self-evaluation grid, there was a range of scores for the 4th graders of 58% to 100% on task; only one student scored herself below 75%. The range of scores for the 3rd graders was 63% to 100% on task.

In reviewing my perception of this lesson, I noted that I spent a great deal of time going back and forth between grade level groups. I also noted that while the 4th graders seemed very intent during their independent reading, it was difficult to know if they were truly reading and comprehending well. In addition I noticed that the 3rd grade students seemed to be easily distracted when I left their group to work with the 4th graders.

Observation II

The second observation tc k place on the afternoon of April 29, 1993. This observation was of a traditional lesson in social studies. During this lesson the 4th graders read a chapter in their text about Michigan. They were then to answer five questions which we would discuss later. The 3rd graders worked mostly with direction from myself; we read and discussed together the articles in their Weekly Readers. At the end of the 3rd grade whole group lesson, they were assigned to answer several questions in their Weekly Readers independently.

Twenty-four students were present for this lesson. Tessa was absent on this day. During the 7 sweeps, the observer recorded 33 marks for Socializing, 3 marks for Uninvolved, and 0 marks for Waiting (see Table 2). This resulted in 36 off task occurrences out of a total of 168 possible occurrences making the Engagement Rate 78.6%. This would indicate that the students were actively engaged in the learning assignment 78.6% of the time and unengaged 21.4% of the time.

The students viewed themselves as being on task 89.5% of the time. Looking at individual self-evaluations, the 3rd graders gave a range of

Table 2

Engagement During Traditional Social Studies Lesson

N=24

	Sweep						
	1	2	3	4	5	6	7
Assigned	24	24	24	24	24	24	24
Engaged	20	21	17	14	16	24	20
Socializing	3	3	5	10	8	0	4
Uninvolved	1	0	2	0	0	0	0
Waiting	0	0	1	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 78.6\%$$

scores of 63% to 100%. The 4th graders assessed their on task behavior in a range of 69% to 100%.

Upon reviewing my reflections on this lesson, I found that I sensed much distraction and boredom in the students. For example, I noted that the 4th graders immediately engaged themselves in their reading of the chapter on Michigan, but after about 15 minutes several students became off task and began socializing with their neighbors. The 3rd graders appeared on task during the part of the lesson in which I worked directly with them; however, when assigned to work independently, they needed several reminders to concentrate on their assignment.

Observation III

This traditional lesson in mathematics took place during the afternoon of May 3, 1993. I reviewed the previous day's lesson on division with the 4th graders, had students do practice problems on the board, and then assigned the 4th graders to complete a page from their mathematics textbooks. The 3rd graders drew arrays to solve division facts while I worked with the 4th graders. After assigning the 4th graders to work independently, I went over the arrays with the 3rd

graders together and then assigned them several problems to complete from their textbooks.

Twenty-three students were present during this lesson. Amy and Brandon were pulled out to work on a separate enrichment project. During the 7 sweeps the observer recorded 27 marks for Socializing, 5 marks for Uninvolved, and 0 marks for Waiting (see Table 3). This constituted 32 off task occurrences out of 161 possible occurrences resulting in an Engagement Rate of 80.1%. This percentage rate would indicate that students were actively engaged 80.1% of the time and unengaged 19.9% of the lesson period.

The self-evaluation grids revealed that overall the students perceived that they were on task 83.6% of the time. The scores that the 4th graders assigned themselves ranged from 69% to 100%. The range of scores for the 4th graders was 58% to 100%. This wide range may be a result of two students who had difficulty working independently and who scored themselves at 58% time on task. The remaining 3rd graders scored themselves at 83% and higher.

My perception of the students' engagement rates was similar for both age groups. The 4th graders seemed quite engaged during the review and practice

Table 3

Engagement During Traditional Mathematics Lesson

N=23

	Sweep						
	1	2	3	4	5	6	7
Assigned	23	23	23	23	23	23	23
Engaged	21	21	18	18	15	20	16
Socializing	2	2	4	5	6	2	6
Uninvolved	0	0	1	0	2	1	1
Waiting	0	0	0	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 80.1\%$$

session and they worked fairly well independently. It became obvious, however, that as the time went on it was difficult for the students to keep on task. Similarly, the 3rd graders seemed to enjoy drawing arrays to solve division facts but they had difficulty toward the end of the period with working independently. I also noted that it appeared as if the 3rd graders had more difficulty than the 4th graders with staying on task when I was not directly working with their group.

Thematic Lesson Observation I

This lesson took place on the morning of May 10, 1993. This lesson was part of our thematic unit on fairy tales and folktales. The concentration of this theme was "What do fairy tales and folktales tell us about ourselves and others?" This lesson which I categorized as a social studies lesson, dealt with analyzing character and personality traits based on what a character says or does in a story. I began the lesson by reading Snow White to the students and then as a whole group, mapping Snow White and the Evil Queen's characteristics. After a discussion with the students on internal versus external characteristics, I

then asked the children to map their own characteristics based on things that they do.

Twenty-three students were present during this lesson. Amy and Brandon were pulled out for enrichment at this time. As shown in Table 4, the observer recorded 7 marks for Socializing and no marks for Uninvolved or Waiting during the 7 sweeps. Seven off task marks out of a total of 161 possible occurrences resulted in an Engagement Rate of 95.7%. This would indicate that students were actively engaged 95.7% of the lesson and that they were unengaged only 4.3% of this time period.

The self-evaluation grids indicated that in general students perceived themselves as on task 92.2% of the time. The range of scores for the 3rd graders was 55% to 100%; only one student scored herself below 90%. The range was similar for the 4th graders; their range was 75% to 100%.

I noted several items in my reflection of this lesson. First, I noted that there was a lot of discussion going on during this lesson period. I found this much easier to facilitate than if I had been teaching two different lessons simultaneously. Second, the discussion occurring during this period concerned

Table 4

Engagement During Thematic Social Studies Lesson

N=23

	Sweep						
	1	2	3	4	5	6	7
Assigned	23	23	23	23	23	23	23
Engaged	23	21	23	23	23	21	20
Socializing	0	2	0	0	0	2	3
Uninvolved	0	0	0	0	0	0	0
Waiting	0	0	0	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 95.7\%$$

the lesson we were working on in class. Finally, I noted that the children seemed to be genuinely enjoying this activity and were actively engaged.

Thematic Lesson Observation II

This lesson took place on the afternoon of May 12, 1993. The focus of this lesson was to analyze folktales in order to determine what moral or message the hold. I categorized this lesson as a reading lesson since most of the time students were engaged in reading and analyzing what they read. At the beginning of the lesson I read aloud "The Fox and the Grapes" and as a group we tried to discern the meaning behind this tale. Next, I put the students into groups of 3 or 4 and gave them a choice of fables. They read one fable and analyzed it by rewriting it in the form of a modern day newscast.

Twenty-three students were present for this lesson. Brandon and Tom were absent. As shown in Table 5, the observer noted only 7 marks for Socializing and none for Uninvolved or Waiting during the 7 sweeps. This resulted in an Engagement Rate of 95.7%. This would indicate that students were actively engaged in this lesson 95.7% of the time and unengaged only 4.3% of the time.

Table 5

Engagement During Thematic Reading Lesson

N=23

	Sweep						
	1	2	3	4	5	6	7
Assigned	23	23	23	23	23	23	23
Engaged	23	21	23	22	20	22	23
Socializing	0	2	0	1	3	1	0
Uninvolved	0	0	0	0	0	0	0
Waiting	0	0	0	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 95.7\%$$

The self-evaluation grids showed that the students perceived themselves as on task 91.9% of the time. The range of scores for individual 3rd graders was 67% to 100%. Ten of the 11 3rd graders had scores of 92 or above on their self-evaluation grids. The range of scores for 4th graders was 75% to 100%.

My reflection on this lesson also indicated my perception of a high engagement rate among the students. There was a lot of enthusiasm during this lesson; several groups asked for additional time to work on this task. Overall, there was much activity and discussion.

Thematic Lesson Observation III

This lesson took place on the afternoon of May 18, 1993. In this lesson students gathered data and created graphs; I categorized this as a math lesson. At the beginning of the lesson I polled the students' favorite fairy tales and then as a group we discussed different ways in which we could display the data. After this, I assigned students to poll 10 classmates to find out their favorite fairy tales and then display their data in a graph.

Twenty-one students were present for this lesson. Amy and Rachel were absent and Brandon and Dustin had

been pulled out for enrichment. During 7 sweeps the observer recorded 10 marks for Socializing and none for Uninvolved or Waiting (see Table 6). Out of a total of 147 possible occurrences, this resulted in an Engagement Rate of 93.2%. This would indicate that overall, the students were actively engaged in this lesson 93.2% of the time and unengaged 6.8% of the time.

Analysis of the students' self-evaluation grids indicated that the students perceived themselves as being on task 96.1% of the time. Self-perceptions for the 3rd graders ranged from 85% to 100%. Self-perceptions for the 4th graders ranged from 60% to 100%.

In my reflection on this lesson, I noted how focused the children had been during this period. They had appeared enthusiastic about getting their data by interviewing classmates. The students put effort into their graphs; 2 4th graders chose to create a pie chart and used calculators to help them determine percentages. I sensed a high level of involvement and enthusiasm during this lesson.

Table 6

Engagement During Thematic Mathematics Lesson

N=21

	Sweep						
	1	2	3	4	5	6	7
Assigned	21	21	21	21	21	21	21
Engaged	20	19	19	21	20	19	19
Socializing	1	2	2	0	1	2	2
Uninvolved	0	0	0	0	0	0	0
Waiting	0	0	0	0	0	0	0

$$\text{Engagement Rate} = \frac{\text{Total Engaged}}{\text{Total Assigned}} = 93.2\%$$

Discussion

Many interesting findings can be made upon reviewing the results of the observations. A notable finding of this study is that the engagement rates did increase for the students in my classroom when thematic instruction was employed. This was of particular interest to me since it was my goal to determine whether thematic lesson teaching would affect the engagement rates of my students. As shown in Table 7, the engagement rates, as determined using the Engagement Rate Observation Form, were 85.7%, 78.6%, and 80.1% for the traditional lessons. The engagement rates for the thematic unit lessons were 95.7%, 95.7%, and 93.2%. It appears from this data that students were more actively engaged during the thematic lessons than the traditional lessons.

It was also apparent that the students perceived themselves as being on task more frequently when engaged in the lessons which focused on the thematic unit of study. Students' self-perceptions as calculated from teacher-made self-evaluation grids, indicated that during the traditional lessons students perceived themselves as on task at rates of 82.5%, 89.5%, and 83.6%. During the thematic unit lessons,

Table 7

Summary Table of Engagement Rates

	S	U	W	Engagement Rate	Student Perception
Traditional					
Reading	10	11	1	85.7	82.5
Social St.	33	3	0	78.6	89.5
Math	27	5	0	80.1	83.6
Thematic					
Reading	7	0	0	95.7	91.9
Social St.	7	0	0	95.7	92.2
Math	10	0	0	93.2	96.1

students perceived themselves as on task 92.2%, 91.9%, and 96.1% of the time.

My reflections on these lessons also seemed to correlate with the findings from the Engagement Rate Observation Forms and the students' self-perception grids. In my reflections I noted that the students were enthusiastic and actively involved during the thematic unit lessons. I sensed sincere interest and motivation during these lessons. During the traditional lessons I also noted that, in general, the students were engaged; however, I also observed that it appeared that many of the students were bored. They did their assignments with relatively high engagement rates, but they seemed to work mechanically, with little apparent enthusiasm.

It has been suggested by some researchers (Karweit, 1988; Blackadar & Nachtigal, 1986) that in certain instances trying to increase students' engagement rates is a waste of time. Blackadar and Nachtigal (1986) state that if data is collected which reveals that students' engagement rates are already fairly high (in the range of 75% or higher), then investing time and energy into improving them even more is unwise.

The baseline data in my study reveals that the intial engagement rates of the students in my classroom were 82.5%, 89.5%, and 83.6%; these rates were well within the suggested range of 75% or higher. However, I chose to experiment with another mode of teaching to observe its effect on the engagement rates of the students in my classroom for several reasons.

The first reason was that this study did not look at the engagement rates of students for an entire day. This study concerned itself with the percentage of time that students were actively engaged during 6 planned lessons. That did not constitute taking into account all uses of available school time such as lunch, recess, bathroom breaks, and transition periods which would certainly reduce the overall engagement rate. The purpose of this study was to investigate the engagement rates of the students only during these particular lessons in order to determine how thematic teaching would influence the students' engagement rates.

I also thought that it was worthwhile to address the engagement rates of my students because of the way in which the class was organized. With mixed-age grouping and the challenge of teaching as if there were

2 separate classrooms, I was continuously moving between the 2 grade levels, often leaving the students to work independently. While a certain amount of independent work is desirable, I sensed that this complete separateness of the grade levels was not the best situation for my students.

Additional findings from this study reveal that students enjoyed working as a whole class during the thematic lessons. Students expressed enjoyment in not using text books during the thematic unit lessons. The following are quotes from the students recorded during a class discussion of which lessons were most interesting and why.

"It's more fun doing it together." (Tom, 4th grade)

"It's better doing it as a whole group, not half the class." (Marlana, 4th grade)

"Doing work from the book is tiring." (Jason, 3rd grade)

"From the book it's boring. The other way it's more exciting." (Rachel, 4th grade)

"It's [thematic lessons] fun and we're more quiet with fun stuff." (Jessica, 3rd grade)

These quotes from the students may indicate why the engagement rates increased during the thematic lessons. It is apparent from their comments that the students enjoyed working as a whole group as well as working without their traditional text books. The thematic approach motivated the students by capturing their interest. This corresponds with Chao's (1990) assertion that the use of thematic units does increase motivation because the individual needs and interests of the students are being met.

Recommendations

The results of this study revealed that for this particular classroom, thematic teaching was beneficial in terms of the quantity of time students were actively engaged in learning. Discussions with the students also indicated that their interest and motivation increased during thematic teaching as compared to traditional teaching.

I would recommend the use of thematic teaching in elementary classrooms. I would especially endorse its use in mixed-age classrooms, where traditional organization and teaching can be quite cumbersome. Thematic teaching allows for whole class instruction

and captures the students' enthusiasm by meeting their interests.

Certainly no single teaching method is appropriate for all circumstances. The interests and needs of the students must be addressed when deciding on different modes of teaching. Each classroom situation is unique and educators need to be aware of teaching methods which best fit their situation.

For mixed-age classrooms, thematic teaching enables teachers to provide direct instruction to both grade levels simultaneously. This eases the complexity of the classroom organization while providing an environment where students are more apt to be actively engaged in learning. The amount of time students are engaged in learning is a concern for all teachers; however, because the complexity of mixed-age classrooms may lead to lower student engagement rates, time must be of special concern for teachers of mixed-age classrooms. Teaching through thematic units is one method that teachers of mixed-age classrooms can use to try to increase the time on task of their students.

References

Bartz, D. E., & Miller, L. K. (1991). Twelve teaching methods to enhance student learning. Washington, D.C.: National Education Association, Committee on Civil and Human Rights of Educators. (ERIC Document Reproduction Service No. ED 340 686)

Blackadar, A. R., & Nachtigal, P. (1986). Cotopaxi Westcliffe follow through project. Aurora, CO: Mid-Continent Regional Educational Lab. (ERIC Document Reproduction Service No. ED 285 705)

Chao, H. H., & Smith, C. (1990). Expanding thematic units beyond the textbook. Bloomington: Indiana University, Smith Research Center. (ERIC Document Reproduction Service No. ED 333 368)

Egbert, R. L., & Kluender, M. M. (1984). Time as an element in school success. Lincoln: The Nebraska Consortium. (ERIC Document Reproduction Service No. ED 246 028)

Fredrick, W. C., & Walberg, H. J. (1980). Learning as a function of time. Journal of Educational Research, 73, 183-193.

Gareau, M., & Kennedy, C. (1991). Structure time and space to promote pursuit of learning in the primary grades. Young Children, 46, 46-51.

Gettinger, M. (1985). Time allocated and time spent relative to time needed for learning as determinants of achievement. Journal of Educational Psychology, 77, 3-11.

Imai, M., Anderson, R. C., Wilkinson, I. A., & Yi, H. (1992). Properties of attention during reading lessons. Journal of Educational Psychology, 84, 160-172.

Karweit, N. (1984). Time-on-task reconsidered: Synthesis of research on time and learning. Educational Leadership, 41, 32-35.

Karweit, N. (1988). Time-on-task: The second time around. NASSP Bulletin, 72, 31-39.

Murphy, J. (1992). Instructional leadership: Focus on time to learn. NASSP Bulletin, 76, 19-26.

Steere, B. F., & Wiley, R. C. (1985). Using time-on-task to supervise and improve instruction. Joplin, MO: Missouri Southern College. (ERIC Document Reproduction Service No. ED 254 910)

Tracz, S. M., & Gibson, S. (1986). Effects of efficacy on academic achievement. Marina del Ray, CA: California Educational Research Association. (ERIC Document Reproduction Service No. ED 281 853)

Traill, R. (1992). A time for learning, a time for joy. Part 2: The early years. Winnipeg: Manitoba Department of Education and Training. (ERIC Document Reproduction Service No. ED 348 173)

Reyes, D. J., & Alter, G. J. (1986). Applying teacher effectiveness research in the classroom. (ERIC Document Reproduction Service No. ED 274 105)

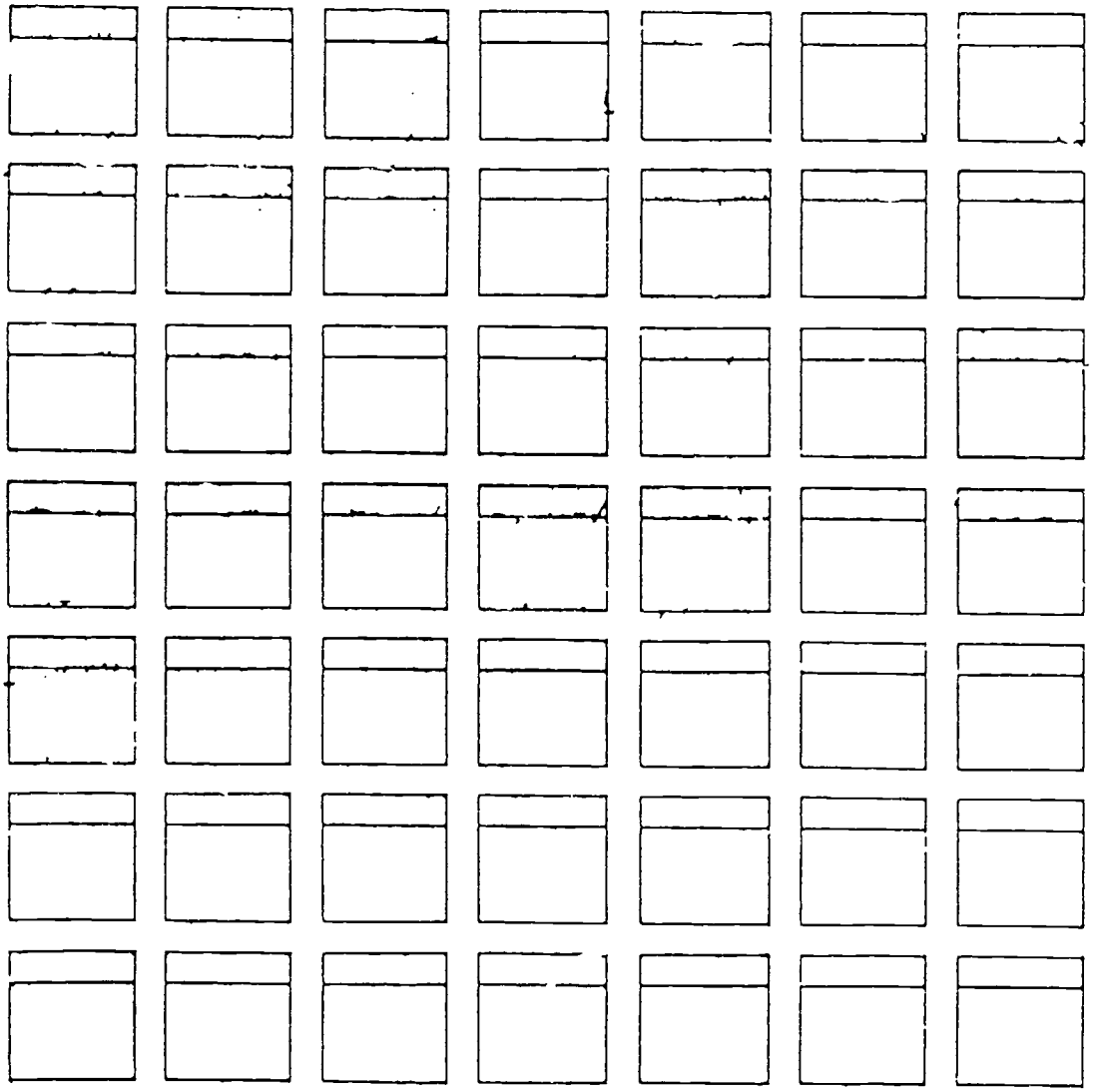
Roelofs, E., Veenman, S., & Lem, P. (1989). Training teachers in complex classroom organizations (mixed-age classes) to improve instruction and classroom management behaviour. Educational Studies, 15, 165-180.

Engagement Rate Observation Form

Teacher's Name _____ Date _____
Observer's Name _____ Time Begin: _____
End: _____

Sweep	Time	Activity	Sweep	Time	Activity
1.			6.		
2.			7.		
3.			8.		
4.			9.		
5.			10.		
6.					
7.					

(Front of Room)



Directions for the Observer

(Before the observation, the teacher being observed has filled in the students names.)

1. Fill in teacher name, date, and time.
2. When the time allocated for teaching begins, fill in the Time and Activity, and make a sweep of the students in a predetermined order. Mark only those who are non-engaged with a S, U, or W; a slash (/); and the number of the sweep (S/1).
3. Repeat step 2 every five minutes until the observation period ends.

Codes
S = Socializing
U = Uninvolved
W = Waiting

(Source: A.S.C.D. Video Handbook, "Effective Teaching For

Appendix B

Reading Lesson I (3rd grade)

I was on task:

	Always	Most of the time	Seldom	Never
Introduction				
Independent work in journals				
Sharing journal work				
Guided reading				