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## An investigation into teaching behaviors with reading groups of different achieving levels

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AN INVESTIGATION INTO TEACHING BEHAVIORS  
WITH READING GROUPS OF DIFFERENT  
ACHIEVING LEVELS

An Abstract of a Thesis  
Submitted  
In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts in Education

Sue Ann Gross  
University of Northern Iowa

July 1983

## ABSTRACT

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The specific purpose of this study was to investigate teacher behaviors within formal instructional reading periods to determine whether such instruction systematically differed as a function of reader group placement and the size of the group. The following problematic questions were addressed: (1) Relative to the school day, what proportion of the time is scheduled for formal reading instruction? (2) Relative to the total scheduled reading period, what amount of time and number of reading events are allocated to the low versus the high achieving group? (3) Relative to the time allocated to the low versus the high achieving group, what amount of time and number of reading events were allotted per group member? (4) What amount of teacher behaviors is concerned with each of the three major reading instructional areas (e.g., meaning emphasis, word identification emphasis, and other instructional emphasis) within the time allocated to the low versus the high achieving group? (5) Relative to the amount of teacher behaviors concerned with each of the three major reading instructional areas for the low versus the high achieving groups, what is the amount allotted per group member? and, (6) Within the low and high achieving groups, what types of skills are emphasized?

Four second-grade teachers and three fourth-grade teachers from

two Midwestern rural schools participated in the study. Each teacher was informally interviewed prior to participation in the study to obtain preliminary information including the amount of time scheduled for reading instruction, number of groups, number of students within each group, and materials used. Each classroom was observed a total of seven times for the entire scheduled reading instructional period. The Teacher Observation Instrument, developed by Moser (Note 1), was used to record the frequency of specified teacher behaviors occurring during 1-minute intervals within the low and high achieving groups' instructional period.

Results revealed that the time scheduled for formal reading instruction ranged from 60 to 75 minutes per day or approximately 17 percent of the school day. While there was no significant difference between groups regarding total time and total reading events, the data indicated that there was a highly significant difference per group member regarding the two variables, results contrary to those reported in the literature. Members within the low achieving group received more time and reading events per group member than members within the high achieving group.

In regard to each of the three major reading instructional areas for the low and high achieving groups, there was a significant difference in groups for meaning events and other instructional events. The low achieving group received more meaning events while the high achieving group received more other instructional events. There was no significant difference between groups relative to word

identification. Specific to the 14 categories, the low achieving group received significantly more events in the areas of comprehension, word meaning, phonics, and word identification than the high achieving group. In contrast, the high achieving group received significantly more events in the areas of discussion, structural analysis, and listens. The low group received more "word-based instruction", whereas the high achieving group had more opportunities to read, to discuss material, and to be heard by the teacher.

Descriptive information identifying the mean number of reading events concerned with 14 reading skill areas for the low and high achieving groups indicated that reading comprehension, word meaning, and oral reading were the categories accounting for the greatest instructional emphasis within the low group's instructional period. In contrast, oral reading, comprehension, discussion, and structural analysis were the reading categories observed most frequently within the high group's instructional period.

When the results were analyzed in relation to the number of members in each reading group, low versus high, a different instructional picture was yielded. The major conclusion, therefore, of this study is that the nature of the instruction provided a child is not only a function of reading group membership but also a function of the size of the group. Specifically, each low group member received significantly more instructional time and reading events than each high group member within his/her instructional period. Relative to the 14 categories, each member within the low achieving group

received significantly more reading events in the areas of comprehension, oral reading, word meaning, phonics, and word identification than each member within the high achieving group. Each low group member also received significantly more events in the non-instructional category than did each high group member.

AN INVESTIGATION INTO TEACHING BEHAVIORS  
WITH READING GROUPS OF DIFFERENT  
ACHIEVING LEVELS

A Thesis

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

Sue Ann Gross

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This Study by: Sue Ann Gross

Entitled: AN INVESTIGATION INTO TEACHING BEHAVIORS WITH READING  
GROUPS OF DIFFERENT ACHIEVING LEVELS

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## CHAPTER I

### THE PROBLEM

The status of reading achievement among school-aged children continues to be a major focus in education today, primarily an outgrowth of the concern over the decline in national reading test scores. As a result, many schools have implemented remedial classes, most states now require certification of reading teachers and specialists, nearly all universities require undergraduates pursuing a degree in education to participate in several reading methods courses, and many districts have established the improvement of instructional reading practices as a primary goal.

Although a substantial number of research investigations related to improving reading practices are evident in professional journals, few have offered effective solutions (Farr & Weintraub, 1975-76), and little influence on actual educational practices has been evident (Chall, 1967; Otto, 1978; Singer, 1978). Despite the fact that so few practical solutions for improving reading instruction are offered, the position is upheld that the skill of the teacher is more important than the method of instruction employed (Chall, 1978; Chall & Feldman, 1966; Jansky & DeHirsch, 1972; Robinson, 1968), and the classroom teacher is of utmost importance in preventing and treating reading problems and in promoting reading achievement (Chall, 1978).

Given that the teacher is important to learners of all proficiency levels, it is clear that the improvement of practices

depends on identifying the instructional practices specific to varying achievement levels. Goodlad (1977) contended that little is known relative to what teachers are doing in their classrooms. Even less is known about the actual teaching practices relative to reader achievement, that is, group membership level. Therefore, it is evident that there is a clear need to gather baseline, descriptive data of teacher behaviors within formal instructional reading periods (Durkin, 1978-79).

Durkin's (1978-79) landmark classroom study was designed to provide a detailed picture of classroom practices. Data were collected through the use of anecdotal records obtained through the observation of reading and social studies periods. Reading instructional practices were divided into 14 categories with 3-7 subcategories for each. She also included a non-instructional category. Moser (Note 1) operationalized the recording/anecdotal record analysis into an observation instrument, thus, providing an objective framework for further data collection and analysis. In order to provide a comprehensive framework for interpretation, her categories were combined by this researcher into three major instructional emphases, based on descriptions of developmental reading programs presented in major methods texts (Bond, 1976; Harris & Sipay, 1980; Spache & Spache, 1973). The three instructional emphases were as follows: meaning emphasis, word identification emphasis, and other instructional emphasis. This framework was designed to provide a broad, general picture of the reading instructional practices provided

to readers of varying achievement levels. The general picture could then be analyzed by subcategories to describe specifically the practices as they relate to varying reading proficiency levels. It was projected that with such documentations, it may be possible to design more effective environments and reading instruction for all children, regardless of reader-group placement.

#### Statement of the Problem

Allington (1978) has implied that teacher behaviors toward low groups may increase their problems over time. Despite this position, relatively few researchers have examined the instructional practices with the low achieving group versus the high achieving group. Although such investigations have noted a difference in the instruction provided readers of varying achievement levels, no one has considered the effect on a child within a group. Rosenshine (1970) raised the point that aggregation of data, i.e., considering a group as a homogeneous treatment variable, obscures variability among group members. Therefore, it was the intent of this study to investigate teaching behaviors within formal instructional reading periods to determine whether such instruction systematically differed as a function of reader group placement and the size of the group. The following problematic questions were addressed:

1. Relative to the school day, what proportion of the time is scheduled for formal reading instruction?
2. Relative to the total scheduled reading instruction period, what amount of time and number of reading

events are allocated to the low versus the high achieving group?

3. Relative to the time allocated to the low versus the high achieving group, what amount of time and number of reading events were allotted per group member?
4. What amount of teacher behaviors is concerned with each of three major reading instructional areas (e.g., meaning emphasis, word identification emphasis, and other instructional emphasis) within the time allocated to the low versus the high achieving group?
5. Relative to the amount of teacher behaviors concerned with each of the three major reading instructional areas for the low versus the high achieving group, what is the amount allotted per group member?
6. Within the high and low achieving groups, what types of skills are emphasized?

#### Importance of the Study

With the documentation of teacher behaviors toward groups of different proficiency levels, it may be possible to determine whether differential behaviors exist in relationship to time allocations and skills emphasized. The information obtained may be useful in assisting school personnel, consultants, and administrators working with classroom teachers in the organization and use of instructional reading time. In addition, in understanding differential treatments, it may be possible to implement more effective teaching strategies

that benefit all children, regardless of reader-group placement. Once teachers become more aware of their own behavior, as well as how it influences students' achievement, they can begin to develop alternative strategies for intervening in the learning process.

#### Assumptions

This study was based on the following assumptions:

1. The teachers who participated are typical of the second- and fourth-grade teachers within a Midwestern setting.
2. Seven observations per teacher are sufficient to provide a representative picture of instructional patterns for the teachers observed.
3. The Teacher Observation Instrument (TOI) provides a valid and reliable measure of the content of instructional practices during reading instructional periods.

#### Limitations

The following limitations were found in this study:

1. The selection of teachers observed came from two rural school districts, and thus, it can be argued that the results may not generalize to urban districts.
2. Observations extended over an 8-week period and, therefore, the results may not be representative of the instructional practices employed throughout the school year.

#### Definition of Terms

The following terms are directly related to this study and are defined below:



### Ability Grouping

The division of students into groups according to similar levels of intelligence and/or achievement in some skill or subject, either within or among classes, or between schools (Harris & Hodges, 1981).

### Low Achieving Group

Students within a classroom who are placed in a lower basal reader, most commonly on the basis of standardized readiness or reading tests, observation, and, following grade one, previous grouping (Alpert, 1975).

### High Achieving Group

Students within a classroom who are placed in a higher basal reader, most commonly on the basis of standardized readiness or reading tests, observation, and following grade one, previous grouping (Alpert, 1975).

### Reading Instruction

A systematic, guided series of steps, procedures, or actions intended to result in learning or in the reaching of a desired goal by students (Harris & Hodges, 1981). Reading instruction is normally accomplished through the use of a basal reading program.

### Basal Reading Program

A comprehensive, integrated set of books, workbooks, teacher manuals, and other materials for developmental reading instruction (Harris & Hodges, 1981).

### Teacher Observation Instrument (TOI)

The TOI is a recording device designed by Moser (Note 1) based on the categories identified by Durkin (1978-79) and reading methodology textbooks (Bond, 1976; Durkin, 1970; Harris, 1970; Smith, 1963), to collect data on teacher behaviors during scheduled reading instruction. See Appendix A for the definitions of each category.

As previously stated, the categories on the TOI were combined into the three major instructional emphases of: meaning emphasis, word identification emphasis, and other instructional emphasis. These terms are defined as follows:

#### Meaning Emphasis

Instruction and related activities enabling students to select appropriate meanings from words and passages. Categories include: comprehension, word meaning, listening, and silent reading.

#### Word Identification Emphasis

Instruction and related activities provided by the teacher enabling students to decode unknown words. Categories include: phonics, structural analysis, and word identification.

#### Other Instructional Emphasis

Teacher behaviors that have instructional potential but cannot be classified as meaning or word identification emphasis. Categories

include: study skills, oral reading, discussion, reads aloud,  
listens, demonstration, and tests.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

A major issue of concern in the professional literature centers around the question "How best do we teach poor readers?". Until recently, the research has been on determining which strategies, materials, and techniques were most appropriately used with such readers. In the last decade, greater attention has been given to such variables as allocated instructional time (Alpert, 1975), teacher-learner interactions (McDermott, 1980), teacher instructions (Alpert, 1975), and compensatory instructional time (Howlett & Weintraub, 1979). Generally, these studies depict reading instruction provided underachieving readers as different from that provided better readers.

Among the many variables that have been studied in relation to the instruction provided readers of different achieving levels, the amount of instructional time, teacher behaviors, and specific skills emphasized were considered in this study. This section briefly reviews the literature in these areas. The first section of the chapter reviews the literature concerned with the amount of instructional time. Next, the literature dealing with teacher behaviors is covered. The third section reviews literature on the specific skills emphasized for readers of different proficiency levels.

### Instructional Time

Kiesling (1977), among others (Cooley & Emrich, Note 2; Guthrie, Martuza, & Seifert, Note 3) found a positive relationship between the amount of instructional time and gain in reading achievement. The strongest relationship was found with children at or slightly below grade level and the weakest for those pupils above grade level.

Grant and Rothenberg (1981) analyzed the social environments in reading groups of varying ability levels. Eight first- and second-grade classrooms were observed for 15-30 hours. The observational device was a code scheme that categorized the quantity and quality of time devoted to each reading group. The results indicated that the top reading groups in comparison with lower ranking groups had more opportunity to: learn academic skills, demonstrate personal competence, participate in self-directed learning, and develop expectations for future academic success. It is apparent from this study that internal social processes contribute to subsequent differential opportunities for children placed in different achieving graded reading groups.

Research conducted by Alpert (1974) which focused on the observation of 90 reading group sessions revealed that teachers treat the low and high achieving groups similarly with respect to the amount and quality of reading group time, number of reading materials used, and number of good verbal behaviors. However, she felt that teachers show preferential treatment toward the low achieving group by placing a lower number of children within that reading group.

### Teacher Behaviors

Emans and Fox (1973) expressed the need for research that would help define the teaching behaviors which help children learn. Anderson, Evertson, and Brophy (1979) have conducted research toward this end. A control and an experimental group of teachers served as the subjects of their study. The treatment group was instructed in principles involving organization and management of small group reading instruction with young children. The organizational aspect dealt with getting children's attention, introducing the lesson, calling on children, and meeting individual needs within achieving groups. Management principles included responses to childrens' answers, suggestions for appropriate behavior when a child does not respond, and comments on praise and criticism. Results indicated that the teachers who were instructed in the principles had the children who produced higher reading gains.

### Classroom Teaching Behaviors

The Center for the Study of Reading at the University of Illinois has taken on the task of improving reading comprehension instruction in the elementary schools. As a result, Durkin (1978-79) conducted two of the most notable studies in the observation of classroom reading instruction. The purposes were first to determine whether elementary schools provided reading comprehension instruction and secondly to examine the amount of time actually spent on it. Three successive days were spent in each of 39 classrooms (grades three to six) in 14 schools when reading and social studies were taught.

Recorded was the time each different activity began and ended, a description of the activity, who was with the teacher at the time of the activity, and the source of the activity (e.g., workbook or chalkboard). A total of 17,997 minutes were spent in the classroom.

An analysis of the data suggested the following:

1. Practically no reading comprehension instruction was provided.
2. The frequency of other reading instruction was rare.
3. Generally, teachers were seen as questioners and assignment givers.
4. The social studies period was not a time devoted to instruction in reading comprehension, but as a time for children to master content area facts.

Although the study lacked an observation instrument, preventing a framework for data collection and analysis, it provided a starting point for future research.

Mason and Osborn (1982) were critical of Durkin because she defined comprehension instruction narrowly, distinguishing it from other aspects of instruction: assessment, application, helps with assignment, assignment, review of instruction, preparation for reading, and prediction. Although Durkin's data revealed that little time was devoted to comprehension instruction, a great deal of time was spent on comprehension assessment, help with assignment, and preparation for work. Therefore, the above cited critics conducted a study to determine if there was a shift to an emphasis on reading

comprehension instruction between the primary and intermediate level grades, and if so, what was its nature.

A questionnaire was given to the teachers within a school district in a small industrial city to assess their beliefs, expectations, and plans for teaching reading. From the 90 percent who responded, 10 third- and 10 fourth-grade teachers' reading classes were observed. The questionnaire results indicated a change over grade in procedure and method of organization of the classroom and that teachers believed that word level instruction should be replaced by text level comprehension instruction in the upper grades. However, the observations indicated that there was little actual change in emphasis. Noted was a small decrease over grade in word level instruction and no increase in text level comprehension instruction. There was, however, a small increase over grade in silent reading. The overall conclusion was that the reading instruction practices did not conform to teachers' beliefs. As a result, it was recommended that major instructional changes may be required in order to provide students with adequate text level comprehension instruction.

As a result of the need for additional descriptive studies, Moser (Note 1) developed an observation instrument based on the categories identified by Durkin (1978-79) and in reading methodology texts (Bond, 1976; Durkin, 1970; Harris, 1970; Smith, 1963). Her research was designed to identify and describe the frequency of teacher behaviors that occur during classroom reading instruction.



Generally, the findings were consistent with Durkin's observational study.

### Reading Group Practices

In studying the formation of reading groups, research conducted by Weinstein (1976) in three first-grade classrooms found that reading group membership stabilized after the first month of school for the high and low achieving groups. Twelve observational visits made to each classroom during the months of September, October, and January further revealed different patterns of student-teacher interactions for high, middle, and low achieving reading groups. Among these differential patterns, noted were that the low achievers received high rates of praise and that teachers waited twice as long for a response from high expectancy pupils than from low expectancy pupils.

Other research has shown that teachers tend to respond differently to high and low achieving students, as well as displaying differential treatment. Stern and Shavelson (1981) investigated how teachers' judgments of students' proficiency influenced the way they grouped students for reading instruction and the effects of such grouping on teachers' planning and instructional behavior. Two teachers in a team-taught fifth/sixth-grade classroom were observed over a period of 6 months. Results indicated that reading achievement was the basis for grouping students. Once grouped, the unit for making teaching decisions became the group and not the individual child.

Several researchers have focused on teachers' verbal behaviors following oral-reading errors in reading groups. Allington (1980b) directed a study on the incidence and type of verbal interruption behaviors that occurred during primary-grade classroom reading instruction and contrasted the interruptions for high and low achieving readers.

Twenty teachers were selected to participate in the study. Audiotape recordings were made of a reading instructional session for the two groups of children the teacher designated as the best and poorest readers. The teachers' verbal behaviors cued by the errors noted were categorized based upon the following: no interruption, at error, after error, graphemic, phonemic, semantic and syntactic, and teacher pronounce.

Based upon an analysis of variance with repeated measures, the poor readers were interrupted at a higher rate of incidence than the good readers and they had a higher proportion of unacceptable responses than did better readers. In addition, teachers were far less likely to interrupt good readers than poor readers, and the remarks directed at the poor readers focused attention to graphemic or phonemic characteristics of the target word or to simply pronounce the word. Comments to good readers directed attention to semantic or syntactic information. The preceding results are congruent with other research (Hoffman & Clements, 1981).

Allington (1980a) also examined the amount of actual reading of connected text, orally or silently, assigned during classroom reading

instruction. Twenty-four first- and second-grade teachers from four school districts served as the subjects for the study. Research assistants visited each classroom to observe the reading instruction provided students identified by the teacher as assigned to low and high achieving reading groups. Observers noted the passages read or audiotape recorded the entire instructional session. From this, the number of words read by students during the reading group sessions was computed.

An analysis of variance on the mean number of words read by the students in the two reading groups indicated that students in the high ability group read twice as many words per session as the low ability students. Other results were as follows: poor readers were seldom asked to read silently, the teachers emphasized visual or phonic characteristics when treating the poor readers' errors (often noted out of the context in which they occurred), and the good readers' errors were often analyzed in the context in which they occurred with emphasis placed on the syntactic or semantic appropriateness of the response.

Earlier research by Allington (1977) investigated the actual amount of reading that poor readers were doing during remedial and corrective reading instruction and proposed teaching strategies to increase the amount of reading done within these instructional settings. An informal survey was completed which counted the number of words read in context by students from several remedial reading sessions. The total number of words read in context by each

individual was considerably small. No student read more than 110 words and none read less than 24. By each student, a mean number of 43 words were read. Isolated skills instruction had apparently become the primary focus of these remedial reading lessons.

#### Skills Emphasized

Although skills instruction has been deemed essential by many investigators and practitioners, it has been argued that skills instruction is not enough (Allington, 1975; Conklin, 1973). Allington (1975) has contended that an opportunity to read is necessary in order to develop the ability to read fluently.

A study to determine whether teachers vary the nature of the reading instruction with differing achieving groups was conducted by Alpert (1975). Fifteen second-grade classes in 11 New York City Catholic schools which served a middle-class population were used to carry out the research.

Tape recordings of 90 reading group sessions (15 teachers x 2 reading groups x 3 sessions) were classified according to an adaptation of Chall's (1967) classification system. Specifically, each session was classified as one of the following: meaning, meaning-code, or code. "Meaning" was defined as those sessions in which no phonics were taught and visual recognition of the whole word, getting the thought, and reading whole sentences were emphasized. "Meaning-code" were those sessions in which meaning was of prime concern and phonics was taught as one of a group of word attack

skills. Sessions classified as "code" were defined as those sessions in which teaching the sound value of letters was emphasized.

Differences in materials across achieving groups were considered by asking teachers to list the names of specific readers by the high achieving groups and the low achieving groups throughout the academic year. The readability levels of the readers were obtained from the Fry Readability Graph and the number of readers.

Results from a chi-square test indicated that significantly more high reading group sessions were classified as "meaning" and more low reading group sessions were classified as "meaning-code." The "code" classification was emphasized in few sessions with either reading group. Teachers used more readers with the high ability groups as well as more difficult readers. In conclusion, the findings were cited as supporting evidence that differences in teacher treatment with the two reading groups are consistent with differences in group needs.

Another notable study was completed by Martin and Evertson (1980). The purpose of the study was to determine if: (a) teachers treated differing ability groups differently, (b) if the behavior affected mean group achievement, and (c) if so, was the effect similar for both high and low achieving groups.. Data were collected by classroom observers who recorded academic interactions between the teacher and student that were initiated by the teacher. A total of 14 classes consisting of 39 reading groups were observed. The major findings indicated that low achieving groups received more praise, a

finding consistent with Brophy and Good (1970). Higher achieving groups spent more time reading new material, were more attentive, read more different material, and were required to complete more difficult tasks. In addition, they had longer turns to read orally. Greater achievement was attributed to those reading groups within a class in which more students had higher proportions of successful interactions and in which the teacher showed a greater tendency to sustain interactions.

In reference to the Stern and Shavelson (1981) study previously cited in this chapter, it was noted that the low achievers received highly structured assignments dealing with decoding and basic comprehension skills. High achieving students received less structure and the focus of instruction concentrated on sophisticated comprehension skills.

#### Summary

Learning to read has been presented in several skill-based formats, an hierarchical series of small steps. The poorest readers, by virtue of group placement, seem to receive the heaviest doses of skills instruction and the least amount of actual reading. Although skills instruction is essential, it has been argued that skills instruction is not enough (Allington, 1975; Conklin, 1973). In order to develop the ability to read fluently, an opportunity to read is necessary. Another concern not addressed in the literature relates to the analysis of data by groups (Rosenshine, 1970). While Alpert (1974) found differences in the number of group members by low versus

high achieving group placement, investigators have not examined the function of group size in considering the effect of instruction on children. Therefore, it was the intent of this investigation to add supportive data to an already accumulating body of research data that will help identify the differential treatments provided readers of both low and high achievement levels relative to time allocated and skills emphasized. As a result, it may be possible to design more effective reading instruction for all ability levels.

In consideration of the several criticisms directed toward the various studies reviewed in this section, this study viewed comprehension instruction as encompassing the following: application, assessment, assignment, helps with assignment, instruction, prediction, and preparation. In addition, results were corrected for the size of the group as group size varies from classroom to classroom and from group to group.

## CHAPTER III

### METHODS AND PROCEDURES

This chapter provides a description of (a) the target population, (b) the instrument selection, (c) the procedures employed in this study, and (d) the method for data collection and analysis. Each of these areas is discussed in the respective sections that follow.

#### The Target Population

The subjects who participated in this study consisted of four second-grade teachers and three fourth-grade teachers from two Midwestern rural school districts. The highest degree earned by all seven teachers was a Bachelor of Arts in Education.

The classrooms ranged in size from 19 to 26 students, while the number of reading groups ranged from two to three. Two of the seven classrooms were departmentalized and five were self-contained. All seven classrooms used the basal reader approach for instruction. Four classrooms used the Ginn Rainbow Edition as a basal reader, while three used the Houghton Mifflin series. Student size for the low achieving groups ranged from 2 to 10, while the high achieving groups ranged from 4 to 14 students.

#### Instrument

The Teacher Observation Instrument (TOI) was selected as the recording device for this study because it provides an objective description of the teacher behaviors during reading instruction. Content validity of the TOI is based on Durkin's (1978-79) 15



categories which are utilized on the instrument. These include: comprehension (text), phonics, structural analysis, study skills, oral reading, silent reading, listening, word meaning, word identification, discussion, reads aloud, listens, demonstrations, tests, and non-instruction (see Appendix A for definitions of each category). Each category is divided into specific subareas (e.g., comprehension, application, assessment, assignment, helps with assignment, *instruction, prediction, and preparation*). Specific definitions and examples of behaviors appropriate for each subarea are also identified to ensure precise coding (see Appendix A).

Reliability of the instrument has been established through three procedures. The first procedure was training to criterion of at least 90 percent agreement (Hatcher, Strathe, & Moser, Note 4; Moser, Note 1). The second procedure was intrarater reliability ( $r = .95$ , Moser, Note 1). The third procedure was interrater reliability. Moser's results showed  $r > .9$ . The mean percent of agreement reliabilities reported in Hatcher, Strathe, and Moser was 87 percent (for 5 observers), 87.6 percent (for 4 observers), and 90 percent (for pairs of observers). The TOI, therefore, was judged to be of sufficient reliability for use in this study.

#### Procedures

Permission was secured from the school boards and administrators from two Midwestern rural school districts. Second- and fourth-grade classrooms were selected for observation, and teachers were encouraged by the building principal to participate in the study. Preliminary

information including the amount of instructional time scheduled for reading, number of groups, number of students within each group, and materials used was obtained through informal teacher interviews.

Each classroom was observed seven times for the entire reading instructional period by two, three, or five observers designated as coders. The observations extended over an 8-week period. The Teacher Observation Instrument (TOI) (Moser, Note 1) was used to record the frequency of teacher behaviors occurring at 1-minute intervals. The observers used a stopwatch with a 60-second sweep, observed for 50 seconds, and recorded for 10 seconds. See Appendix B for a sample of the observational recording form.

As previously stated, five research assistants were designated as observers, three with extensive training in reading and two without. Initially, training sessions were conducted with video tapes of two fourth-grade teachers. Criterion of at least 90 percent agreement was set, which was accomplished in approximately 3 hours. In order to assess interrater reliability, the five observers were placed in a single fourth-grade class. Since the reliability was determined to be over .9, observations began on a staggered schedule in the fourth grade in each of the two schools, followed by a switch to the second grade classes using a similar schedule. A schedule of the observations is included in Appendix C.

#### Data Analysis

The time scheduled for formal reading instruction and the proportion relative to the school day for each of the seven teachers

was documented. The mean number of minutes and the mean proportion per day was then calculated for this sample.

For each observation, the amount of instructional time each teacher allocated to the low and to the high achieving group in terms of minutes was recorded as well as the number of students within each group. In addition, the number of reading events that occurred within the time allocated to the low and to the high achieving groups was tallied. The mean number of minutes and the mean number of reading events were computed for each group. Proportions were then calculated relative to the mean number of minutes scheduled per day for formal reading instruction. The  $t$  test for the difference in means was the statistical analysis used to determine significant differences between the groups regarding total time and total reading events.

Relative to each group's allocated time, the mean number of minutes and the proportion of time per each group member was calculated, as well as the mean number of reading events and proportion of events per each group member. The  $t$  test for the difference in the means was the statistical analysis used to determine significant differences between group members regarding time and reading events.

The frequency of reading events concerned with meaning, word identification, and other instructional events within the time allocated to the low and to the high achieving groups was tallied. The mean number of events for each of the three major reading skill areas was calculated and the proportions determined relative to the

mean number of reading events per group. The  $t$  test for the difference in means was the statistical analysis used to determine significant differences between groups regarding the three areas.

The mean number of reading events and proportions concerned with meaning, word identification, and other instructional events was then calculated relative to each group member. The  $t$  test for the difference in means was the statistical analysis used to determine significant differences between group members regarding the three areas.

To determine the skills emphasized for the low and for the high achieving groups, the frequency of teacher behaviors regarding the 14 separate skill areas from the TOI were tallied for each group. The means for each group relative to the separate skill areas was determined. The  $t$  test for the difference in means was the statistical analysis used to determine significant differences between groups regarding the skill areas of comprehension, oral reading, word meaning, discussion, tests, phonics, structural analysis, silent reading, study skills, listens, word identification, reads aloud, listening, and demonstrations. The means for each group member regarding the reading skill areas cited were also determined, and the  $t$  test on the difference in means was the statistical analysis used to determine significant differences in group members relative to each area. The hierarchy of skills emphasized for each of the two groups was then constructed.

The non-instruction category was included within the sections relative to the 14 skill areas in order to reflect an accurate picture of the low and high achieving group's instructional period. The .05 level was the accepted significance level.

## CHAPTER IV

## RESULTS

This chapter presents the results of the statistical analyses and attempts to answer the questions raised in Chapter 1. Prior to data analysis, an interrater reliability check indicated that there were no significant differences between observers. Therefore, data analysis proceeded and the following results relative to each question were obtained.

Question 1: Relative to the school day, what proportion of the time is scheduled for formal reading instruction?

The time scheduled for reading instruction and the proportion relative to the school day for each of the seven teachers is presented in Table 1. For this sample, two teachers scheduled 60 minutes per day, and five teachers scheduled 75 minutes per day. This accounted for approximately 17 percent of the school day. An average number of 70.71 minutes per day was devoted to reading instruction.

Question 2: Relative to the total scheduled reading instruction period, what amount of time and number of reading events are allocated to the low versus the high achieving group?

The means, standard deviations, and proportions of time allocated to each of the two groups during the scheduled time are presented in Table 2. Also presented are the means, standard deviations, and proportions of reading events for the time allocated to the low versus the high achieving groups during scheduled time. Table 2 shows that

Table 1  
Proportion of Time Scheduled for Formal  
Reading Instruction Relative to the School Day

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Teacher	Minutes per Day	Proportion of School Day
1	75	.185
2	60	.148
3	60	.148
4	75	.185
5	75	.185
6	75	.185
7	75	.185

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$\bar{x} = 70.71$   $\bar{x} = .174$

---

Table 2  
Means, Standard Deviations, and Proportions  
During Scheduled Time Per Group

Group			$t$	Proportion
<u>Minutes</u>				
Low	$\bar{x}$	18.84		.266
	s	10.92	.33 (.743)	
High	$\bar{x}$	18.27		.258
	s	13.30		
<u>Reading Events</u>				
Low	$\bar{x}$	18.45		.260
	s	11.50	.46 (.647)	
High	$\bar{x}$	17.64		.258
	s	13.07		

Note: The probability of the  $t$  is presented in parentheses.



the  $t$  test for the difference in means indicates that there was no significant difference in amount of instructional minutes spent with the low compared with the high achieving group. It can also be seen that there was no significant difference in the mean number of reading events that occurred during scheduled time between the two groups. It should be noted that each group received about 25 percent of the scheduled time and about the same in the percent of reading events during the scheduled instructional time.

Question 3. Relative to the time allocated to the low versus the high achieving group, what amount of time and number of reading events were allotted per group member?

The means, standard deviations, and proportions of time per group member during the low and high groups' instructional periods are presented in Table 3. Also presented are the means, standard deviations, and proportions of reading events allocated to each group member during each group's instructional period. Table 3 shows that the  $t$  test for the difference in means indicates that there was a significant difference between the average number of instructional minutes spent with a member of the low versus the high group. It can also be seen that there was a significant difference in the mean number of reading events per pupil that occurred during allocated time within the two groups. Specifically, each low group member received on the average more time and reading events during the instructional period than each member within the high achieving group. It should be noted that, given the number of pupils within a group, the average

Table 3  
Means, Standard Deviations, and Proportions  
During Time Allocated per Group  
Corrected for Group Size

Group	$\bar{x}$	$t$	Proportion
Minutes			
Low	$\bar{x}$ 4.42		.234
	s 3.23	6.62 (0.000)*	
High	$\bar{x}$ 2.01		.111
	s 1.51		
Reading Events			
Low	$\bar{x}$ 4.18		.226
	s 2.96	6.33 (0.000)*	
High	$\bar{x}$ 2.01		.113
	s 1.64		

Note: In parentheses are shown the probability values of the  $t$ s.

\*  $p < 0.001$

time allocated per member of the low group was 25 percent and of the high group was 11 percent. Relative to the reading events that occurred during allocated instruction, the average per low group member was 23 percent, while for the high group member it was 11 percent.

Question 4. What amount of teacher behaviors is concerned with each of three major reading instructional areas (e.g., meaning emphasis, word identification emphasis, and other instructional emphasis) within the time allocated to the low versus the high achieving group?

The means, standard deviations, and proportions concerned with each of the three major reading instructional areas for the low versus the high achieving group are presented in Table 4. Table 4 shows that the  $t$  test for the difference in means indicates that there was a significant difference between groups relative to two categories, meaning events and other instructional events, but no difference was shown for word identification events. Specifically, the low achieving group received more meaning events while the high achieving group received more other instructional events. It should be noted that for the low achieving group approximately 53 percent of the reading events that occurred within their instructional time were meaning events, about 16 percent were word identification events, and approximately 30 percent were other instructional events. In contrast, of the reading events that occurred within the high group's instructional period, about 31 percent were meaning events, approximately 14 percent were

Table 4  
Means, Standard Deviations, and Proportions  
Concerned with Three Major Reading Skill Areas  
Per Group

Group	$t$	Proportion
<b>Meaning Events</b>		
Low $\bar{x}$ 9.91		.537
s 9.04	3.96 (0.000)*	
High $\bar{x}$ 5.49		.311
s 6.33		
<b>Word Identification Events</b>		
Low $\bar{x}$ 2.95		.159
s 5.28	0.69 (0.492)	
High $\bar{x}$ 2.46		
s 4.68		.139
<b>Other Instructional Events</b>		
Low $\bar{x}$ 5.59		.302
s 7.80	-3.01 (0.003)**	
High $\bar{x}$ 9.69		
s 11.00		.549

Note: In parentheses are shown the probability values of the  $t$ s.

\*  $p < 0.001$

\*\*  $p < 0.01$

word identification events, and about 55 percent were other instructional events.

Question 5. Relative to the amount of teacher behaviors concerned with each of the three major reading instructional areas for the low versus the high achieving group, what is the amount allotted per group member?

The means, standard deviations, and proportions concerned with the three major reading instructional areas per group member within the low versus the high achieving group are presented in Table 5. On Table 5 it can be seen that the  $t$  test for the difference in means indicates that there was a significant difference per group member relative to meaning and word identification events, but not for other instructional events. Of the reading events that occurred within each group's instructional period, each low group member received more meaning and word identification events than each high group member. It should be noted that each low group member received 20 percent of the meaning events that occurred within the group's instructional period, approximately 24 percent of the word identification events, and about 26 percent of the other instructional events. In contrast, each high group member received approximately 13 percent of the meaning events that occurred within the group's instructional period, about 10 percent of the word identification events, and 10 percent of the other instructional events.

Question 6. Within the high and low achieving groups, what types of skills are emphasized?

Table 5  
Means, Standard Deviations, and Proportions  
Concerned with Three Major Reading Skill  
Areas Corrected for Group Size

Group	$\bar{x}$	$s$	$t$	Proportions
<u>Meaning Events</u>				
Low	$\bar{x}$ 1.99			.200
	$s$ 1.79		5.93 (0.000)*	
High	$\bar{x}$ 0.74			
	$s$ 1.07			.135
<u>Word Identification Events</u>				
Low	$\bar{x}$ 0.72			.244
	$s$ 1.26		3.47 (0.001)**	
High	$\bar{x}$ 0.25			
	$s$ 0.46			.102
<u>Other Instructional Events</u>				
Low	$\bar{x}$ 1.47			.263
	$s$ 2.20			
High	$\bar{x}$ 1.02		1.76 (0.080)	
	$s$ 1.20			.105

Note: In parentheses are shown the probability values of the  $t$ s.

\*  $p < 0.001$

\*\*  $p < 0.01$

The means regarding the 14 separate skill areas, as well as the non-instruction category from the TOI, relative to the low versus the high achieving group are presented in Table 6. It can be seen that the  $t$  test for the difference in means revealed that there were significant differences in the following seven areas: comprehension, phonics, word meaning, discussion, structural analysis, listens, and word identification. Specifically, the low achieving group received more reading events in the areas of comprehension, word meaning, phonics, and word identification; the high achieving group received more structural analysis, more discussion, and a greater opportunity to be heard. It should be noted that the non-instruction category revealed the highest mean for both groups.

The means corrected for the number of members in a group regarding the 15 areas are presented in Table 7. Table 7 shows that the  $t$  test on the difference in means revealed that there were significant differences per group member relative to the following five areas: comprehension, oral reading, word meaning, phonics, and word identification. Members within the low achieving group received more reading events in all of the above reading skill areas than members within the high achieving group. The non-instructional category had the highest mean, and the  $t$  test for the difference in means indicates that low group members received significantly more emphasis within this area.

The hierarchy of skills emphasized for the low and for the high achieving groups are presented in Table 8. As previously stated, the

Table 6  
 Summary of the Instruction and  
 Non-Instruction Categories

Category	Group	x	t	Probability
Comprehension	Low	5.29		
	High	3.05	2.80	0.006*
Oral Reading	Low	2.01		
	High	3.14	-1.53	.128
Word Meaning	Low	3.52		
	High	1.49	3.23	0.001*
Discussion	Low	1.40		
	High	2.96	-2.93	0.004*
Tests	Low	1.32		
	High	1.28	0.06	0.951
Phonics	Low	1.82		
	High	0.77	2.25	0.026**
Structural Analysis	Low	0.53		
	High	1.57	-2.19	0.030**
Silent Reading	Low	1.05		
	High	0.94	0.25	0.801
Study Skills	Low	0.65		
	High	1.25	-1.37	0.174
Listens	Low	0.17		
	High	1.01	-2.77	0.006*
Word Identification	Low	0.60		
	High	0.12	3.32	0.001*
Reads Aloud	Low	0.04		
	High	0.05	-0.31	0.760
Listening	Low	0.05		
	High	0.01	0.78	0.434
Demonstrations	Low	0.00		
	High	0.00	0.000	1.000
Non-Instruction	Low	5.68		
	High	4.35	1.86	.065

\* p < 0.01

\*\* p < 0.05



Table 7  
 Summary of the Instruction and  
 Non-Instruction Categories Corrected for  
 Group Size

Category	Group	x	t	Probability
Comprehension	Low	1.09	4.27	0.000*
	High	0.46		
Oral Reading	Low	0.58	2.02	0.045**
	High	0.30		
Word Meaning	Low	0.64	5.07	0.000*
	High	0.16		
Discussion	Low	0.32	0.76	0.448
	High	0.27		
Tests	Low	0.39	1.58	0.116
	High	0.13		
Phonics	Low	0.44	3.51	0.001*
	High	0.07		
Structural Analysis	Low	0.09	-1.48	0.140
	High	0.17		
Silent Reading	Low	0.25	1.38	.169
	High	0.11		
Study Skills	Low	0.14	-1.01	0.314
	High	0.5		
Listens	Low	0.03	-1.75	0.081
	High	0.08		
Word Identification	Low	0.19	3.52	0.001*
	High	0.01		
Reads Aloud	Low	0.01	0.71	0.481
	High	0.005		
Listening	Low	.0073	0.75	0.456
	High	.0017		
Demonstrations	Low	0.00	0.00	1.000
	High	0.00		
Non-Instruction	Low	1.51	5.18	0.000*
	High	0.50		

\* p < 0.001

\*\* p < 0.05

Table 8

Hierarchy of Skills Emphasized Across 15 Categories  
for the Low and High Achieving Groups

Low	$\bar{x}$	High	$\bar{x}$
Comprehension	5.29	Oral Reading	3.14
Word Meaning	3.52	Comprehension	3.05
Oral Reading	2.01	Discussion	2.96
Phonics	1.82	Structural Analysis	1.57
Discussion	1.40	Word Meaning	1.49
Tests	1.32	Tests	1.28
Silent Reading	1.05	Study Skills	1.25
Study Skills	0.65	Listens	1.01
Word Identification	0.60	Silent Reading	0.94
Structural Analysis	0.53	Phonics	0.77
Listens	0.17	Word Identification	0.12
Listening	0.05	Reads Aloud	0.05
Reads Aloud	0.04	Listening	0.01
Demonstrations	0 00	Demonstrations	0.00
Non-Instruction	5.68	Non-Instruction	4.35

non-instruction category revealed the highest means for both groups. Within the low group, the skills that accounted for the greatest emphasis were comprehension, word meaning, oral reading, phonics, discussion, tests, and silent reading. The skill areas of study skills, word identification, structural analysis, listens, listening, reads aloud, and demonstrations were rarely observed within the low group's instructional period.

Within the high achieving group, the skills that accounted for the greatest emphasis were oral reading, comprehension, discussion, structural analysis, word meaning, tests, study skills, and listens. The reading skill areas of silent reading, phonics, word identification, reads aloud, listening, and demonstrations were rarely observed within the high group's instructional period.

## CHAPTER V

## DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

This chapter briefly summarizes the research study. The results of the data analyses are discussed in detail relative to the questions raised in Chapter I. The discussion section is followed by sections on conclusions and implications.

Summary

The purpose of this study was to investigate teacher behaviors within formal instructional reading periods to determine whether such instruction systematically differed as a function of reader-group placement and the size of the group. The investigation addressed the following problematic questions:

1. Relative to the school day, what proportion of the time is scheduled for formal reading instruction?
2. Relative to the total scheduled reading instruction period, what amount of time and number of reading events are allocated to the low versus the high achieving group?
3. Relative to the time allocated to the low versus the high achieving group, what amount of time and number of reading events were allotted per group member?
4. What amount of teacher behaviors is concerned with each of three major reading instructional areas (e.g., meaning emphasis, word identification emphasis, and other

instructional emphasis) within the time allocated to the low versus the high achieving group?

5. Relative to the amount of teacher behaviors concerned with each of the three major reading instructional areas for the low versus the high achieving group, what is the amount allotted per group member?
6. Within the high and low achieving groups, what types of skills are emphasized?

#### Discussion

In regard to Question 1, how much time is scheduled for reading instruction relative to the school day, the data analysis indicated that the time scheduled varied from classroom to classroom. Reading periods varied from 60 to 75 minutes per day, with a mean of 70.71 minutes. The proportion of the total school day allotted for reading instruction ranged from approximately 15 to 19 percent, with a mean of 17 percent. These findings are consistent with Moser (Note 1).

With respect to Question 2, that is, what amount of time and number of reading events are allocated to the low versus the high achieving group relative to the scheduled reading period, the data analysis revealed that the low group received an average number of 18.84 minutes of instruction, while the high group received an average of 18.27 minutes of instruction per day. Both low and high achieving groups received approximately one-fourth of the scheduled reading period, with no difference between the time spent with each group. These results are consistent with other research which has shown that

teachers are consistent across groups regarding the amount of time they allocate for instruction (Alpert, 1975).

The results also suggested that the low group received an average number of 18.45 reading events within their instructional period. Similar findings for the high group were noted, specifically, an average number of 17.64 reading events occurred within their instructional reading period. Therefore, approximately 18 reading events occurred within 18 minutes of instructional time for each group, with no difference between groups. In addition, data revealed both groups received about the same number of non-instructional events, i.e., the low group received an average number of 5.68 non-instructional events within their instructional period while the high group received an average of 4.35 non-instructional events. Teacher behaviors within this category centered around checking pupils' assignments, managing disruptive individuals, distributing materials, and waiting for the transition of groups to occur. Research has supported that the occurrence of non-instructional events are evident within instructional reading periods (Durkin, 1978-79; Moser, Note 1).

In regard to Question 3, what amount of time and number of reading events were allocated per group member relative to the allotted group time, data analysis revealed that low group members received significantly more instructional time than did the high group members. Each low group member received an average of 4.42 minutes of instruction while each high group member received an average number of 2.03 minutes of instruction. This highly significant difference

between group members relative to instructional time is a function of the size of the respective groups. In common with other research (Alpert, 1974), in this study there were fewer members within the low group than the high group. These results indicate clearly that an analysis of data per group member yields a different picture of what is happening to a child within the low compared with the high group. In addition, these results are consistent with Alpert's contention that teachers do make an attempt to meet the needs of their students by placing a fewer number of children in the lower achieving groups. It is questionable as to whether or not this could be classified as preferential treatment (Alpert's term) toward low achieving groups.

Relative to the reading events allocated to each group member, data analysis indicated that each low group member received an average number of 4.18 events, while each high group member received an average of 2.01 events, a highly significant difference. Each low group member received twice as many reading events than each high group member. As previously discussed, this difference was a function of group size.

With respect to Question 4, that is, what amount of teacher behaviors is concerned with each of three major reading instructional areas (e.g., meaning emphasis, word identification emphasis, and other instructional emphasis) within the time allocated to the low versus the high achieving group, data analysis revealed significant differences between groups in two areas, meaning and other instructional events. The low group received more meaning events

while the high group received more other instructional events. It appears that, for the low group, teacher emphasis was placed on the assessment of materials read (comprehension) at the literal level and the provision of word meaning instruction and pronunciation, aspects related more to bottom-up processing. The high group had greater opportunity to read orally, discuss the material, and to be heard by the teacher and fellow classmates. The instructional practices for the high group were more focused on top-down processing, that is the construction of meaning from the materials read. These results for reading groups are consistent with research supporting the position that low achieving groups have more word-based, replication of meaning instruction while the high achieving groups have greater opportunity to read orally and interact with the teacher (Allington, 1980a, 1980b; Martin & Evertson, 1980).

In regard to Question 5, what is the amount allotted per group member relative to the amount of teacher behaviors concerned with each of the three major reading instructional areas, data analysis which corrected for group size indicated a different pattern. Specifically, each low group member received more meaning and word identification events than each member within the high group. While these results are contradictory to those reported by Allington, Alpert, and Martin and Evertson, none of the above investigations considered the size of the group in their analyses. Given that the low groups are usually smaller, this study would indicate that a poor reader on the average receives more time and reading events than does a member of the high



group. Not analyzing the data in relation to the number of children in the reading group obscures the picture of what is actually happening to a child during "group" instruction. It should also be noted that the average number of events for each individual was relatively small, regardless of group placement.

Relative to Question 6, what types of skills are emphasized within the low and high achieving groups, data analysis revealed an hierarchy of skills emphasized for each achieving group. The hierarchy that emerged for the low group, ranked from most to least frequent, consisted of the following: comprehension, word meaning, oral reading, phonics, discussion, tests, silent reading, study skills, word identification, structural analysis, listens, listening, reads aloud, and demonstrations. The categories of comprehension, word meaning, oral reading, and phonics received the greatest emphasis.

In contrast, the hierarchy (in decreasing order of emphasis) that emerged for the high group consisted of the following: oral reading, comprehension, discussion, structural analysis, word meaning, tests, study skills, listens, silent reading, phonics, word identification, reads aloud, listening, and demonstrations. This would suggest that the categories of oral reading, comprehension, discussion and structural analysis are the skill areas most greatly emphasized for the high achieving groups. These findings are consistent with research reported by Martin and Evertson (1980) for social interaction and Allington (1980a, 1980b) for greater occurrence of oral reading. Less

emphasis was placed on word meaning and phonics, while structural analysis and discussions were more frequently observed. Reading and the discussion of material had seemingly taken the place of concentrated skills instruction. Generally these results reveal that while teachers appear to allocate similar times and number of reading events to low versus high achieving groups, the nature of the instruction is different when the various instructional emphases and the size of the group are considered.

#### Conclusions

Generally, the results for the instruction provided to the low and high reading groups suggest the following specific conclusions related to group instructional practices:

1. While the amount of time scheduled for reading instruction may vary somewhat from teacher to teacher, the proportion of the total school day is relatively consistent. In addition, each achieving group received approximately the same amount of instructional time as well as the number of reading events occurring within their instructional period. However, both groups received a rather limited proportion of instruction during the scheduled period. These results are consistent with the data on time and amount of instruction reported by Alpert (1974), Moser (Note 1), and Durkin (1978-79).

2. In analyzing the data relative to the instructional versus the non-instructional aspect, it was found that non-instructional activities accounted for the greatest emphasis within each group's instructional period. These activities centered around organization and management of the reading program, mainly such activities as paperwork and discipline. These results are consistent with the data on the occurrence of non-instructional activities within instructional reading periods as reported by Durkin (1978-79) and Moser (Note 1).
3. In examining the nature of the instructional practices during allocated time in relation to the three instructional emphases, the low achieving group received more meaning events within their instructional period, while the high achieving group received more other instructional events. For each group, approximately the same number of word identification events were observed. Specific to the 14 categories, the low achieving group received significantly more events in the areas of comprehension, word meaning, phonics, and word identification than the high achieving group. In contrast, the high achieving group received significantly more events in the areas of discussion, structural analysis, and listens. Relative to the nature of the instruction provided to the low group, these results appear somewhat contradictory to Allington's (1980a, 1980b) and Alpert's (1974) results. The low group in this study

did receive more "word-based instruction" however, which is similar in definition to the instruction identified by these investigators. In this study, the high achieving group had more opportunities to read, to discuss material, and to be heard by the teacher, results consistent with Martin and Evertson (1980).

4. The hierarchy of skills identified for the two groups were somewhat different. Comprehension, word meaning, oral reading, and phonics were the reading categories observed most frequently within the low group's instructional period. In contrast, oral reading, comprehension, discussion, and structural analysis were the reading categories observed most frequently within the high group's instructional period. Other categories of reading instruction were either not observed with any great frequency or not observed at all for either the low or high achieving group. The hierarchy for the low group is consistent with Moser (Note 1), while the hierarchy that emerged for the high group is consistent with Allington (1980a, 1980b) and Martin and Evertson (1980).

When the results were analyzed in relation to the number of members in each reading group, low versus high, a different instructional picture was yielded. The major conclusion, therefore, of this study is that the nature of the instruction provided a child

is not only a function of reading group membership but also a function of the size of the group.

Specifically, the following conclusions are drawn:

1. Each low group member received significantly more instructional time and reading events than each high group member within his/her instructional period.
2. Relative to the three instructional emphases, each member within the low achieving group received more meaning events and word identification events within his/her instructional period than each high group member.
3. Specific to the 14 categories, each member within the low achieving group received significantly more reading events in the areas of comprehension, oral reading, word meaning, phonics, and word identification than each member within the high achieving group. Each low group member also received significantly more events in the non-instructional category than did each high group member.
4. Teachers appeared, based on the results of the study, to be making some instructional modifications according to the needs of individuals in terms of the size of the reading groups and the types of instruction emphasized.

#### Implications

Throughout the literature review authors and researchers have emphasized the need for additional research. The results of this study suggest that more needs to be learned about classroom reading

instruction and the teacher behaviors directed at groups of varying achievement levels, as well as what is happening to individual children within a reading group. Future research should address the following questions and problems:

1. Future research studies that investigate teacher behaviors with groups of various achievement levels should direct attention to the number of individual students in a group within the analysis to gain a clear picture of what is actually happening to a child during "group" instruction and whether the nature of the instruction does actually result in higher achievement.
2. Since the low and high achieving groups received approximately one-fourth of the scheduled time for their instructional period, it is important to determine the time allocated to the average achieving group as well. A clearer picture of how scheduled time is distributed between groups may be determined as a result.
3. Additional descriptive studies should be undertaken to include all grade levels so that a clearer picture of what is "normal" for each grade level may be determined. It may be possible, thus, to determine whether there is a shift in instructional emphasis from the lower elementary grades to the upper elementary grades.
4. While teachers appeared to be making some instructional modifications to the needs of students within varying reading

groups, studies need to examine the awareness and intent of the teacher along with the related teaching practices employed with reading groups and with individuals within those groups.

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**APPENDICES**

## Appendix A

Reading Comprehension

Reading comprehension involves obtaining appropriate meaning from written units larger than the single word (Harris, 1970). The following categories for classifying teacher behaviors related to reading comprehension may be applied to instruction with a single child, a small group, or a whole class.

Comprehension-application. The teacher does or says something in order to determine whether comprehension instruction enables students to understand connected text (Durkin, 1978-79). This activity is done under direct supervision of the teacher. Example: if the class is working on how to identify the main idea of a paragraph, the teacher selects new paragraphs and has the students demonstrate how to identify the main idea of each. This category includes checking assignments if discussion of answers is included.

Comprehension-assessment. The teacher does or says something to determine a student's understanding of the reading of more than a single word (Durkin, 1978-79). Example: The teacher asks questions about what students have read.

Comprehension-assignment. The teacher gives an assignment that requires the comprehension of connected text (Durkin, 1978-79). Example: The teacher assigns a cloze exercise. (Note: a list of questions about material to be read given before reading begins is Comprehension-preparation; if questions are given with directions such

as, "After you have read the story answer the questions at the end," it is Comprehension-assignment.)

Comprehension-helps with assignment. The teacher does or says something in order to help students having difficulty with a comprehension assignment. Example: The teacher raises questions or suggests a part to be reread.

Comprehension-instruction. The teacher does or says something to help students understand or work out the meaning of more than a single word (Durkin, 1978-79). Example: The teacher explains how to figure out the meaning of an unfamiliar phrase.

Comprehension-prediction. The teacher does or says something to aid students in predicting events (Durkin, 1978-79). Example: After the first part of the story is read the teacher may ask, "What do you think will happen next?".

Comprehension-preparation. The teacher does or says something to help prepare students for reading a selection before reading begins (Durkin, 1978-79). Example: The teacher provides background information or raises a question to be answered.

### Word Meaning

Word meaning is concerned with understanding the meaning of single words (Durkin, 1978-79). The following categories may be applied to instruction with a single child, a small group, or a whole class.

Word meaning-application. The teacher does or says something to have students practice or use word meanings that have been taught



(Durkin, 1978-79). This is done under the direct supervision of the teacher. Example: The teacher has students use words in sentences that demonstrate their meaning. This category includes checking assignments if discussion of answers is included.

Word meaning-assignment. The teacher has students practice or use word meanings independently. Example: The teacher assigns a reading center where the student matches a word card with a picture card to show the meaning.

Word meaning-helps with assignment. The teacher does or says something, in order to help students having difficulty with a word meaning assignment. Example: The teacher identifies picture names for students matching word and picture cards.

Word meaning-instruction. The teacher gives direct instruction in individual word meanings. Example: The teacher introduces new vocabulary words or demonstrates word meanings.

Word meaning-assessment. The teacher does or says something to determine a student's understanding of a single word. Coding for this behavior will be under the word meaning category.

### Listening

Listening is concerned with the memory and understanding of auditory/verbal material (Durkin, 1978-79). The following categories may be applied to instruction with a single child, a small group, or a whole class.

Listening-assessment. The teacher does or says something to determine a student's understanding and memory of a verbal

presentation (Durkin, 1978-79). Example: The teacher asks questions about a selection after it has been read aloud to students.

Listening-assignment. The teacher has students practice or use listening skills on their own. Example: The teacher assigns a task involving the use of a tape recorder.

Listening-helps with assignment. The teacher does or says something, in order to help students having difficulty with a listening assignment. Example: The teacher points out important parts on a tape.

#### Silent Reading

The teacher waits while students read silently.

#### Word Identification Emphasis

Instruction and related activities provided by the teacher enabling students to decode unknown words.

#### Phonics

Phonics is concerned with "the study of relationships of speech sounds (phonemes) to the printed or written symbols that represent them (letters and letter strings, called graphemes) and their use in discovering the pronunciation of printed and written words," (Harris, 1970, p. 69). The following categories may be applied to instruction with a single child, a small group, or a whole class.

Phonics-application. The teacher does or says something to have students practice or use phonics skills that have been taught (Durkin, 1978-79). This is done under direct supervision of a teacher. Example: the teacher has a student give individual letter sounds and

blend them to form new words. This includes checking assignments if discussion of answers is included.

Phonics-assignment. The teacher has students practice or use phonics skills on their own. Example: The teacher assigns a worksheet on beginning sounds.

Phonics-helps with assignment. The teacher does or says something, in order to help students having difficulty with a phonics assignment. Example: The teacher points out the vowel or underlines the beginning sound.

Phonics-instruction. The teacher provides direct instruction in some aspects of phonics. Example: The teacher presents sound/symbol correspondence for consonants.

### Structural Analysis

Structural analysis is concerned with derived and inflected words, compounds, and contractions (Durkin, 1978-79). The following categories may be applied to instruction with a single child, a small group, or a whole class.

Structural analysis-application. The teacher does or says something to have students practice or use structural analysis skills that have been taught (Durkin, 1978-79). This is done under the direct supervision of the teacher. Example: The teacher has a student add endings to root words. This includes checking assignments if discussion of answers is included.

Structural analysis-assignment. The teacher has students practice or use structural analysis skills on their own. Example: The teacher assigns a worksheet on contractions.

Structural analysis-helps with assignment. The teacher does or says something, in order to help students having difficulty with a structural analysis assignment. Example: The teacher underlines endings or points out the root of a word.

Structural analysis-instruction. The teacher provides direct instruction in some aspects of structural analysis. Example: The teacher demonstrates how to form contractions.

#### Word Identification

The teacher directs students in identifying or recognizing single words (Durkin, 1978-79). Example: The teacher has students read a word list or flash cards.

#### Other Instructional Emphases

Teacher behaviors that have instructional potential but cannot be classified as meaning or word identification directed.

#### Study Skills

Study skills are concerned with activities designed to encourage independent study and learning. It includes such things as locating information, outlining, summarizing, notetaking, skimming, reading maps and graphs, and varying the rate of reading to suit the purpose or difficulty of the material (Harris & Sipay, 1980). The following categories may be applied with a single child, a small group, or a whole class.

Study skills-application. The teacher does or says something to have students practice or use study skills that have been taught (Durkin, 1978-79). This is done under the direct supervision of the teacher. Example: The teacher asks where to find specific information in an atlas, a dictionary, or an encyclopedia. This includes checking assignments if discussion of answers is included.

Study skills-assignments. The teacher has students practice or use study skills on their own. Example: The teacher assigns an article to be outlined independently.

Study skills-helps with assignment. The teacher does or says something, in order to help students having difficulty with a study skills assignment. Example: The teacher points out the topic sentences or paragraphs to be outlined.

Study skills-instruction. The teacher provides direct instruction in some aspect of study skills. Example: The teacher explains how to use the legend of a map.

### Oral Reading

Oral reading is concerned with having children read written material aloud (Durkin, 1978-79). The following categories may be applied to instruction with a single child, a small group, or a whole class.

Oral reading-application. The teacher directs students to practice or use those skills stressed for good oral reading (Durkin, 1978-79). This includes such things as phrasing, pausing, and expression and is done under the direct supervision of the teacher.

Oral reading-instruction. The teacher does or says something to aid students in improving the oral delivery of written material (Durkin, 1978-79). Example: The teacher demonstrates how to read a paragraph with expression.

Oral reading-listens to. The teacher spends time listening to students read aloud. Example: The teacher listens during round-robin reading.

### Tests

The teacher sets out to specifically test or assess a skill. Example: The teacher administers informal oral reading checks, standardized reading tests, or end of book tests.

### Discussion

This category is used when the teacher is directing a discussion that has instructional potential (Durkin, 1978-79).

### Reads Aloud

The teacher reads aloud to one or more students.

### Listens

This category is used when the teacher is listening to one or more students in instructional material (Durkin, 1978-79). Example: The teacher listens as students relate personal experiences to a story read.

### Demonstration

The teacher demonstrates something such as how to manipulate the tape recorder or record player.

## Non-Instruction

The teacher spends time doing something that is not related to reading instruction. Example: The teacher spends time talking to a classroom visitor.

Non-instruction-checks assignment. The teacher corrects or records assignments but does not provide instruction or follow-up to students. Example: The teacher sits at a desk recording grades or reads aloud while children check papers.

Non-instruction-collects materials. The teacher collects something such as papers, supplies, or textbooks.

Non-instruction-management. The teacher uses some type of behavior management technique. Examples: The teacher uses positive reinforcement, discipline through reprimand, or time-out. This includes both positive and negative aspects of management.

Non-instruction-waits. The teacher is not involved in instruction but is waiting. Example: The teacher waits while children pass papers or watch a film.

Non-instruction-listens. The teacher listens to students on a non-instruction subject.

Non-instruction-transition. The teacher waits between a change in classes or reading groups.





## Appendix C

## Observation Schedule

	Mon.	Tues.	Wed.	Thurs.	Fri.
1					
Jan. 31- Feb. 4	T1	T1			
2					
Feb. 7-11	T1	T1	T1	T1	T1
3					
Feb. 14-18	T2	T2	T2		T2
	T3	T3	T3	T3	T3
4					
Feb. 21-25	T2		T2	T2	
	T3			T3	
5					
Feb. 28-Mar. 4	T4	T4	T4	T4	
	T5	T5	T5		
6					
Mar. 7-11	T4	T4	T4		
	T5	T5	T5	T5	
7					
Mar. 14-18	T6	T6	T6	T6	
	T7	T7	T7		
8					
Mar. 21-25	T6	T6	T6		
	T7	T7	T7	T7	

T = Teacher