

1994

## In-class and pull-out models of remedial reading instruction for fourth-grade students: A descriptive study

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## **In-class and pull-out models of remedial reading instruction for fourth-grade students: A descriptive study**

### **Abstract**

This descriptive study was conducted to document and describe two approaches to remedial reading instruction, in-class or pull-in and out of class or pull-out models. The success of each of these models of remedial reading instruction was determined through evaluation of growth in reading as well as assessment of changes in student attitudes toward reading when placed in either in-class or pull-out settings. Significant growth in the area of reading development was demonstrated by students participating in both the in-class and pull-out models of instruction. Students in both settings also maintained or developed a positive attitude toward reading, but they expressed a preference for the pull-out model of instruction.

**IN-CLASS AND PULL-OUT MODELS  
OF REMEDIAL READING INSTRUCTION  
FOR FOURTH-GRADE STUDENTS:  
A DESCRIPTIVE STUDY**

**A Graduate Project  
Submitted to the  
Department of Curriculum and Instruction  
In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts in Education  
UNIVERSITY OF NORTHERN IOWA**

**by**

**Elaine Hoke-Hoffman**

**May 1994**

This Research Paper by: Elaine Hoke-Hoffman

Entitled: In-Class and Pull-out Models of Remedial Reading Instruction  
for Fourth-Grade Students: A Descriptive Study

has been approved as meeting the research paper requirement for the  
degree of Master of Arts in Education.

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## ABSTRACT

This descriptive study was conducted to document and describe two approaches to remedial reading instruction, in-class or pull-in and out of class or pull-out models. The success of each of these models of remedial reading instruction was determined through evaluation of growth in reading as well as assessment of changes in student attitudes toward reading when placed in either in-class or pull-out settings.

Significant growth in the area of reading development was demonstrated by students participating in both the in-class and pull-out models of instruction. Students in both settings also maintained or developed a positive attitude toward reading, but they expressed a preference for the pull-out model of instruction.

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## CHAPTER I

### THE PROBLEM

#### Statement of the Problem

Since their inception, special instructional programs for children experiencing difficulty learning to read and write have most often resulted in children leaving their regular classroom to go to a reading or resource room (Allington, 1993). According to Allington, this traditional reliance upon the pull-out model in delivering special education instructional support is currently being questioned in many school districts. Critics of pull-out programs question the lack of congruence with the developmental reading program, classroom instruction missed during pull-out instruction, the loss in instructional time in moving from classroom to pull-out setting (Allington, Steutzel, Shake, & Lamarche, 1986), and the negative effects of labeling students ( Gelzheiser, Meyers, & Pruzek, 1992). As a result, there is an increased emphasis on moving away from instructional support models that pull students experiencing reading difficulties out of their classroom during the school day.

Given the concerns about pull-out programs, several alternative models have been proposed, including an in-class model in which the reading specialist works with students in the classroom alongside the regular or developmental teacher. This in-class approach to remedial reading instruction is based upon the beliefs that (a) the effect of labeling

by peers would be diminished (Boles, 1990), (b) more cooperation between classroom and reading specialists would occur, (c) continuity between the developmental program and the remedial program would increase, (d) classroom teachers would benefit professionally from the close interaction with the reading specialists, and (e) greater student achievement in reading would result (Bean & Eichelberger, 1985).

### Purpose of the Study

This study was conducted to document, describe, and compare the implementation of a pull-out and an in-class approach to remedial reading instruction at the fourth-grade level. Research focused on comparisons of growth in reading fluency, accuracy, and comprehension; formal and informal observations of student attitudes toward reading; and assessment of student perceptions of and preferences for the pull-out or in-class model of instruction.

### Definition of Terms

#### Pull-out Instructional Model

A pull-out model of remedial reading instruction is one in which students experiencing difficulty in reading leave the regular classroom to receive instruction from a special reading teacher. There is much variation in the implementation of pull-out programs. Students may be scheduled for one-to-one or group reading instruction. They may receive support from the special reading teacher on a daily basis or on a scheduled basis ranging from 1 to 4 days per week. Some students miss

the regular classroom reading instruction during pull-out instruction, while others miss a different curricular activity.

### In-class Instructional Model

In an in-class model of remedial reading instruction, the reading specialist works with students in the classroom alongside the regular or developmental teacher. As in the pull-out model, there are many variations in the implementation of the in-class model of instruction. One teacher may teach the large group, while the other teacher circulates around the room, paying particular attention to the needs of the students with disabilities. The teachers might divide the class in half, each teaching the same information to a smaller group. One of the teachers may wish to provide remediation for students who need it (those identified with reading difficulties and those without), while the other provides enrichment for the rest of the class. Both teachers may choose to teach the whole group at the same time, reinforcing the other's instruction and ideas through modeling, role-playing, describing, retelling, prompting, and so on. In the descriptions outlined above, the classroom teacher and the specialist teacher plan instruction together. However, in some in-class models, lessons are planned by each teacher individually. One example of this is one in which two programs are taught side-by-side. That is, the special reading teacher uses his/her instructional materials with students experiencing reading difficulties at one location in the classroom while the classroom teacher instructs the

remaining students in the classroom. In this model, collaboration between the classroom and special reading teacher focuses on general goals for pupils, pupil progress, and logistical concerns.

### The Reading Process

Reading involves understanding messages expressed in written language. It is an interactive process involving the reader, the text, and the context in the creation of meaning. In the reading process, individuals self-monitor cues for meaning, prior knowledge, predictions, sentence structure, and letter sounds in order to get meaning from a given text.

### Running Records

Running records are a diagnostic, instructional tool in which the educator records everything a child says and does as s/he tries to read a given text. A tick or check mark is used to record each correct word read. Incorrect words or responses are written above the text. If a child succeeds in correcting a previous error, it is recorded as a self-correction (SC) and is no longer an error. Omissions and insertions are recorded as are teacher prompts (e.g., "try that again" or supplying the correct word). Repetition of a word or words is not recorded as error behavior. The educator can analyze running records to determine the child's oral language skills, which cues s/he depends upon, cross-checking strategies, and self-correction behavior. These records may also be used to determine the appropriate reading level of difficulty for the child

by calculating the percentage of words read correctly in the given passage. It is important to note that errors which are self-corrected or which do not change the meaning of the text are not recorded as errors in calculating the percentage of words read correctly.

### Reading Levels

A reading level for accuracy is determined by calculating the percentage of words read correctly in a given passage.

### Repeated Reading

Repeated reading refers to a systematic practice of using timed oral rereadings to develop reading fluency. The method involves selecting an instructional-level passage for the child, timing the first unrehearsed oral reading of the passage and successive readings after practice, and keeping a chart of the student's rate after successive timings. When the student is able to read the passage at or above a predetermined goal rate, a new passage is begun and the method is repeated.

This method of repeated reading is not intended to directly aid comprehension, but rather to help students acquire sight words and practice reading fluently and confidently. As they practice rereading their passages for timing, their reading rate for that passage climbs dramatically. Keeping a chart that shows these increases is highly motivating, especially for older readers.

## Reading Strategies

Readers may use a variety of cues, or signals, to determine words they do not recognize at sight. Cues available from the context include semantic (meaning-related) cues and syntactic (grammar-related) cues. Using these cues to help figure out an unknown word is called contextual analysis. Cues available within the word itself include the letters and speech sounds they may represent, called graphemic (letter-related) and phonological (sound-related) cues, and word parts like base words, affixes, syllables, and the like. Using graphemic and phonological cues (primarily the latter) is called phonic analysis. Using word parts is called structural analysis. Good readers use contextual, phonic, and structural analysis to figure out unrecognized words, using all three appropriately and usually in conjunction with each other, without depending entirely on one strategy.

Given the above strategy information, students in this study were taught the "read on" strategy. This strategy incorporates four steps for students to use when they encounter an unknown word: (1) skip the word and read on, (2) think about what makes sense in the sentence and look at the chunks in the word, (3) try each of the letter sounds together, (4) put in a word that makes sense and keep reading. Thus, students are encouraged to use contextual, structural, and phonic analysis to determine unknown words.

### Significance

This study is significant because it closely examined two current approaches to remedial reading instruction. The data collected in the pull-out and in-class settings helped document the effectiveness of each model of instruction.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

The purpose of this chapter was to review current research in the field of remedial reading regarding the use of in-class and pull-out models of instruction. Research focusing on the rationales, advantages, and disadvantages of each instructional approach was examined.

#### Pull-out Model of Remedial Reading Instruction

The development of the pull-out model in the 1960s, which has been so unanimously adopted in compensatory and special education, appears to be based in part upon Federal policies and professional beliefs (Allington & Johnston, 1986). That is, Federal policies for Chapter 1 programs included a "supplement-not-supplant" provision in which the intent of this clause was to ensure that Federal monies were not used to support existing instructional programs. However, misinterpretations of this provision led to the belief that Chapter 1 programs needed to provide different instruction and materials than that provided in the regular classroom. Meanwhile, professionals of a previous era encouraged the use of separate and different curricular materials to meet the instructional needs of special populations (Allington & Johnston, 1986). The small-group clinical model adopted by Chapter 1 teachers and special education teachers mirrored the clinical model so prevalent in university-based clinics where these support teachers



received specialized training. Over the past 20 years, theories of literacy development have advanced from behaviorist to constructivist and connectionist models of comprehension. However, Federal and state regulations and pedagogy for children who find learning to read difficult have remained relatively static (McGill-Franzen & Allington, 1991).

A few studies provide some insight into teachers' views of the positive outcomes of pull-out programs. This research can be summarized within three major categories: curriculum/instruction, professional growth, and student adaptation.

### Positive Outcomes

Curriculum/Instruction. One curricular strength that classroom teachers commonly noted is that more specialized materials are available in pull-out programs (Meyers, Gelzheiser, Yelich, & Gallagher, 1990). Teachers also stated that such programs support concepts and skills taught in class (Conroy, 1988). Educators expressed the belief that the instruction provided in a pull-out setting is more intense and structured than that of the regular classroom (Meyers et al., 1990) and the setting provided a less distracting environment (Conroy, 1988; Meyers et al., 1990).

Professional growth. Classroom teachers felt that they benefited professionally from working with specialist teachers (Ammer, 1984).

They also stated that many pull-out teachers are outstanding teachers with special or additional qualifications (Conroy, 1988; Meyers et al., 1990).

Student adaptation. In the area of student adaptation, teachers reported that students receive more individualized instruction in pull-out programs since they are better able to adapt to the needs of individual students (Meyers, Gelzheiser, Yelich, & Gallagher, 1990). They also stated that such programs allow students to make academic progress (Ammer, 1984; Chiapone, 1984; Conroy, 1988), raise student self-esteem, and are less intimidating than the regular classroom (Conroy, 1988; Meyers et al., 1990).

However, much research has been conducted to disclaim the positive outcomes and convey the negative results of pull-out programs. This research will be shared using the same general categories as the above documentation conveying the positives of pull-out programs: curriculum/instruction, professional growth, and student adaptation.

### Negative Results

Curriculum/Instruction. Gelzheiser and Meyers (1991) conducted an observational study to determine the percentage of time spent on different aspects of instruction by classroom, remedial, and resource teachers. Evidence was not found to support the argument that instruction in special and remedial programs is more intensive, structured, or proactive.

According to a study conducted by McGill-Franzen and Allington (1990), services provided in the pull-out model of instruction were not more individualized than those provided in the regular classroom. In fact, regardless of whether the specialist services were organized to supplement or supplant the classroom reading and language arts program, special education and remedial instruction were not individualized; rather, they were routinized, often producing an inappropriate fit between the child and the materials and tasks. In most instances, remedial instructional groups were formed with the same limitations as those in the regular classroom: small groups using material too easy for some and too hard for others, and undifferentiated independent work, either completed on their own or monitored by an aide, so that the specialist teacher could conduct group instruction.

An additional negative result of pull-out programs cited by researchers is the impact of missing curriculum during scheduled pull-out times (Allington et al., 1986; McGill-Franzen & Allington, 1991; Meyers et al., 1990). Teachers expressed concerns that students fell behind in the other curriculum area missed and were unable to catch up (McGill-Franzen & Allington, 1991).

Professional growth. Much research has been conducted and theoretical writings presented concerning whether or not pull-out programs support the concepts and skills taught in the regular classroom. These studies concluded that there was a lack of congruence between

the instruction provided in the regular classroom and that provided in the special pull-out program (Allington & Johnston, 1989; Allington, Stuetzel, Shake, & Lamarch, 1986; Ammer, 1984; Bean, Cooley, Eichelberger, Lazar, & Zigmond, 1991; Johnston, Allington, & Afflerbach, 1985; McGill-Franzen & Allington, 1990; 1991). Each of these researchers attributed the lack of congruence to poor coordination and communication between the regular classroom teacher and the pull-out teacher.

Student adaption. The issue of improved self-esteem is also being questioned. In a study conducted in 1990 (Meyers, Gelzheiser, Yelich, & Gallagher), teachers expressed concern that the socioemotional needs of students were not met in the pull-out setting because they did not spend enough time with their peers in the regular classroom and as a result they did not fit in. Teachers also shared concerns that children who were pulled out of the regular classroom frequently displayed reactions of frustration and worry regarding missed work and/or additional curricular demands (Meyers et al., 1990). Conroy (1988) also noted the negative social stigma students in pull-out models experience.

#### In-class Model of Remedial Reading Instruction

Research has been conducted on in-class remedial reading instruction as an alternative to the pull-out model in order to determine teacher and student perceptions and program effectiveness. The advantages of the in-class model can be discussed through five major

categories: integration of remedial students, congruence of curriculum, professional growth, congruence of instruction and expectations, and student perceptions of self-concept.

### Advantages

Integration of remedial students. According to a study conducted by Gelzheiser and Meyer (1990), one advantage of pull-in or in-class remedial reading instruction is the integration of normally achieving, remedial, and handicapped students. Some research indicates that this integration promotes greater growth for handicapped children by increasing their ability to function appropriately in the "norm" group, exposing them to the peer norm for social skills development, and providing peer tutors in academic areas (Sevakis & Harris, 1992). In addition, according to the teachers in Gelzheiser and Meyers' study (1990), many handicapped and remedial students reported that they preferred pull-in to pull-out instruction because they could remain with their peers and receive help.

Congruence of curriculum. Research conducted by Allington and Johnston (1986) focused on the importance of congruence between curricula, philosophies, and methodologies across instructional settings in order for remedial instruction to be effective. The in-class model allows for better coordination in the curricula used by classroom and

specialist teachers than does the pull-out model (Bean & Eichelberger, 1985; Gelzheiser & Meyers, 1990). In addition, this congruence enables teachers to hold common expectations and goals for students (Boles, 1990).

Professional growth. Many studies have documented the benefits of specialist teachers working together with regular classroom teachers in an in-class setting. Graham (1991) reported that specialist teachers give support to teachers as they cope with increased workloads. Sevakis and Harris (1992) noted that the in-class approach allows specialist and regular classroom teachers to observe and become familiar with materials, techniques, and strategies used by each other. Gelzheiser and others (1991) determined that specialist and classroom teachers hold more frequent collaborative meetings than do those in the pull-out model. This collaboration focused on instruction and was viewed as improving teachers' skills in the delivery of instruction. According to these researchers, pull-in programs served as vehicles for staff development for both classroom and specialist teachers.

Congruence of instruction and expectations. Another benefit of pull-in instruction is that the specialist teacher is able to observe, plan, and evaluate more effectively when observing students functioning in the regular classroom on a daily basis, and the problem of effective transition from pull-out to regular classroom education is eliminated (Sevakis, & Harris, 1992). Specialist teachers noted that they were better able to

determine where their students fit in the regular classroom (Boles, 1990) and relate remediation to regular instruction (Friend & Cook, 1992).

Much of the research on in-class remediation reflected an increased use of individualized instruction in the regular classroom (Bean et al., 1985; Gelzheiser, & Meyers, 1990).

Student perceptions of self-concept. Enhanced self-esteem was viewed as one of the most important successes of the in-class instructional approach (Sevakis & Harris, 1992). According to Boles (1990), teachers sensed a difference in the attitude and self-image of their special needs children. In-class remediation had diminished the effect of labeling by peers which occurred when children repeatedly left the classroom for remediation. Through in-class instruction, remedial students were able to avoid the stigma associated with daily journeys in and out of the regular classroom (Friend & Cook, 1992).

### Problems

However, there were problems associated with the implementation of pull-in programs. These problems can be grouped into five general categories: logistical difficulties, personal and/or professional difficulties, lack of time, lack of training and support, and insufficient evidence that the in-class model will eliminate problems associated with the pull-out model.

Logistical difficulties. According to Bean & Eichelberger (1985), some of the primary weaknesses of the pull-in model were logistical

difficulties. Teachers noted space problems, insufficient materials, and inadequate management of and difficulty in transporting materials. In addition, scheduling problems and a lack of flexibility in classroom schedules in order to accommodate the specialist teacher at a fixed time were reported (Bean & Eichelberger, 1985; Boles, 1990; Gelzheiser & Meyers, 1990).

Personal and/or professional difficulties. Another problem associated with the pull-in model is the difference in teaching styles and instructional strategies held by the specialist and classroom teacher (Bean & Eichelberger, 1985). Gelzheiser and Meyers (1990) found that teachers sometimes had honest differences of opinion as to appropriate instructional goals for students. Meanwhile, teachers felt they had lost much of their autonomy and the discretion to make their own decisions about curriculum and the business of teaching (Boles, 1990).

Lack of time. Because teachers teach together in the same classroom in this instructional model, time is needed to plan together the types of instructional activities to be presented. Teachers expressed concern regarding the lack of collaborative planning time in their schedules (Bean & Eichelberger, 1985; Friend & Cook, 1992; Gelzheiser & Meyers, 1990; Graham, 1991). Graham (1991) found that 87% of the teachers included in her study noted that more time was required for in-class instruction to work adequately. Three specific areas where more time was needed were identified: time to consult, time to plan, and more



time for in-class instruction to take place in the classroom. However, according to Gelzheiser and Meyers (1990), teachers were usually inexperienced with collaborative planning, so at times they focused on less important issues and did not use planning time efficiently.

Lack of training and support. Research conducted by Graham (1990) concluded the need for more teacher inservice and preservice training regarding implementation of in-class instruction. According to Bean and Eichelberger (1985), teachers articulated a lack of inservice and ambiguity of teacher roles. In a 1992 Pennsylvania study, McKinley stressed the need for guided practice and administrative support throughout implementation of the in-class model of instruction.

Insufficient evidence. Instructional time and materials used in in-class and pull-out settings were documented in a study conducted by Bean et al. (1991). Results of this study showed that students in the in-class setting spent more time in transition and less time in instruction than did the students in the pull-out setting. These students also received less reading instruction time (360 minutes per week) than did students in the pull-out setting (460 minutes per week). Finally, due to the greater difficulty level of the in-class materials, remedial students experienced a great deal of difficulty reading the textbook. In these instances, the reading specialist tended to give more support by providing additional clues to help students complete assignments correctly.

## Summary

### Pull-out Model

Traditionally, a pull-out model of instruction has been utilized in compensatory and special education. This instructional approach has many perceived advantages, but also incorporates some disadvantages. Some of the strengths of the pull-out approach include more specialized materials, support of concepts and skills taught in the regular classroom, a more intense and structured setting, a less distracting environment, outstanding specialist teachers with added qualifications, more individualized instruction, increased ability to adapt to student needs, increased student self-esteem, and a less intimidating environment than the regular classroom. However, researchers question these advantages and have even found some of these perceived strengths to be actual weaknesses of the model. Critics argue that instruction in special and remedial programs is not more intense, structured, or proactive. In addition, studies show that the instruction provided in the special pull-out program is not congruent with that of the regular classroom as a result of poor coordination and communication between regular and specialist teachers. Other studies have found that pull-out instruction is not more individualized than that of the regular classroom, and students experience a negative stigma because they have to leave their classrooms to receive instructional support. Finally, critics report the

negative impact of missing curriculum in the regular classroom during scheduled pull-out times.

### In-class Model

In an effort to eliminate the concerns associated with pull-out programs an alternative model, the in-class model, has been proposed. The strengths of in-class remedial instruction include integration of remedial students in the regular classroom, congruence of curriculum, professional growth of both the regular and specialist teacher, congruence of instruction, and improved student self-concept. However, some critics fear that the in-class model will not eliminate the problems associated with pull-out programs and are concerned that it may generate new problems that may also reduce program effectiveness. Some problems of the in-class model include: logistical problems (e.g., scheduling problems and concerns with lack of space/ materials); difference in teaching styles, instructional strategies, and opinions as to appropriate goals for students; loss of autonomy and control in decision making about curriculum; lack of time (e.g., for consulting, planning, and in-class instruction); and lack of teacher preservice and inservice training. Finally, in a study conducted by Bean et al. (1991), students in the in-class setting spent more time in transition, less time in instruction, received less reading instruction per week, and experienced a higher rate of reading error due to the difficulty level of the textbook than did students in the pull-out model.

After reviewing the research and theoretical writings regarding pull-out and in-class remedial reading instruction, this researcher conducted a study to further compare these two instructional models. The study was conducted to document, describe, and compare the implementation of a pull-out and an in-class approach to remedial reading instruction at the fourth-grade level. Research focused on comparisons of growth in reading fluency, accuracy, and comprehension; formal and informal observations of student attitudes toward reading; and assessment of student perceptions of and preferences for the pull-out or in-class model of instruction.

## CHAPTER III

### METHOD

The purpose of this study was to provide a description of the implementation of in-class and pull-out approaches to remedial reading instruction and to determine the success of each program through evaluation of growth in reading as well as assessment of changes in student attitudes toward reading and placement in in-class or pull-out settings.

This study was conducted in a school district located in a large, affluent metropolitan area. The elementary school building in which this study was conducted accommodated a range of low- to high-income families. However, the building did not qualify for funding through Federal Chapter 1 guidelines in which monies are appropriated based on the percentage of students receiving free and reduced cost lunch programs. Therefore, the district provided the funds to accommodate a reading specialist who served as a support to students, teachers, parents, and administrators. There were three sections of each grade level in this K-6 school building which housed approximately 470 students when this study was conducted. The reading specialist supported an average of 55 students on a regularly scheduled basis throughout the school year.

In order for a student to receive support from the reading specialist, s/he was generally referred by a teacher or parent. All students in first grade completed the components of the Diagnostic Survey (Clay, 1992, pp. 16-32) to aid in the early identification of students experiencing difficulties learning to read. All first-grade students were ranked from high to low based on their scores on the Diagnostic Survey. Students who ranked in the lowest 20% to 25% in each classroom qualified for reading support, dependent on teacher opinion and the number of students the reading specialist was able to accommodate.

The reading specialist administered the Basic Reading Inventory (Johns, 1991) to students in Grades 2 through 6 who had been referred for reading support. This Basic Reading Inventory (BRI) was administered in order to determine each referred student's independent, instructional, and frustration level of reading. An independent reading level is the level at which the student reads fluently with excellent comprehension and without teacher guidance. An instructional reading level is the level at which the student can make maximum progress in reading with teacher guidance. A frustration reading level is the level at which the student is unable to pronounce many of the words and/or is unable to comprehend the material satisfactorily (Johns, 1991, p. 3). The BRI incorporates the following criteria for determining reading accuracy levels (Johns, pp. 31-36, 1991):

<u>Percentage of Words Read Correctly</u>	<u>Reading Accuracy Levels</u>
98% - 100%	Independent Reading Level
96% - 97%	Instructional Reading Level
95% and below	Frustration Reading Level

The BRI also identified the following criteria for reading comprehension levels (Johns, 1991, pp. 31-36):

<u>Percentage of Questions Answered Correctly in a Given Passage</u>	<u>Comprehension Levels</u>
90% - 100%	Independent Level
80% - 85%	Independent/Instructional Level
75%	Instructional Level
55% - 70%	Instructional/Frustration Level
50% or less	Frustration Level

Students in these grades qualify for reading support based on teacher opinion and a frustration level score at their grade level in words read correctly or comprehension on the BRI. All students who had received reading support in the previous year were monitored to determine if continued support was needed.

Students in kindergarten through Grade 3 received additional reading support through the pull-out model of instruction. Students in Grades 4 through 6 generally received support through the in-class model of instruction. However, two fourth-grade boys who were new to the building had been placed in classrooms that did not receive in-class support by the reading specialist and were later identified as students in

need of reading support. Due to difficulties in scheduling and for purposes of this study, these 2 students were instructed in a pull-out model of instruction. The comparison group consisted of 4 boys who had been identified as students in need of reading support the previous year and had been placed in the same classroom in order to accommodate an in-class model of instruction. Students in both the pull-out and in-class models of support received instruction from the same reading specialist. Research was conducted and data collected for this study over a period of 4 months during the school year.

Permission was obtained from the administrator of the building to use information from the fourth-grade pull-out and in-class reading programs as part of this research. Students involved in this study and their parents were informed that research would be conducted and data collected in their remedial reading setting to be included in a descriptive research paper.

### Pull-out Model of Remedial Reading Instruction

#### Procedures

Two fourth-grade boys left their classrooms during writing workshop instructional time to receive reading support from the reading specialist. They traveled to the special reading room three times per week and received a total of 90 minutes of added reading support. These students also received 300 minutes of reading instruction per week in the regular classroom setting.



The instruction in the pull-out setting was provided through tradebooks, as was the instruction in the regular classroom setting. The tradebooks selected for instruction in the reading room were chosen for interest and appropriate level of difficulty. The level of difficulty was determined by conducting running records to identify the student's instructional reading level. However, the tradebooks used in the classroom setting were the result of curriculum adoption decisions and included a wide variety of reading difficulty levels.

Students in the pull-out setting were taught procedures, routines, and expectations necessary for an efficient reading environment. These routines provided a consistent framework for students while encouraging them to observe, question, and comment on their own reading behaviors. These procedures, routines, and expectations are listed below.

### Reading Strategies

Students in the pull-out setting were taught to apply basic reading strategies when confronted with an unknown word in a given text. These strategies included the use of contextual, phonic, and structural analysis to determine unrecognized words. Students were instructed to use all three appropriately and usually in conjunction with each other, without depending entirely on one strategy. One of the ways these strategies were reinforced was through the "read on" strategy. This strategy incorporates four steps for students to use when they encounter an

unknown word: (1) skip the word and read on, (2) think about what makes sense in the sentence and look at the chunks in the word, (3) try each of the letter sounds together, (4) put in a word that makes sense and keep reading.

### Running Records

The reading teacher took running records of each student's reading from the selected tradebook for instruction. On a weekly basis, running records were taken in which Clay's criteria for determining reading accuracy levels were used (Clay, 1992, p. 21).

<u>Percentage of Words Read Correctly</u>	<u>Reading Accuracy Levels</u>
95% - 100%	Easy Reading Level
90% - 94%	Instructional Reading Level
89% and below	Hard Reading Level

The student and reading teacher together then identified strengths and weaknesses of the student's reading record and set goals based on this analysis. These goals included increased use of the read on strategy or particular steps of the strategy, self-correcting behaviors, or self-monitoring behaviors in order to achieve a balanced approach in determining unknown words. Students were also encouraged to ask questions, verbalize observations, or comment about their reading or the selected text in order to give the reading teacher added information about the student's reading and perceptions.

### Reading Fluency

The reading specialist also recorded repeated readings of each student on a weekly basis. These 1- minute timings were composed of reading excerpts taken from the tradebooks selected for instruction. Each student reread the selection from two to five times and the number of correct words read per minute was recorded on a graph (see Appendix B). Students were able to see increases in their rates and continued to work toward achieving an average fourth-grade reading rate of 105 to 135 words per minute.

The reading teacher also modeled fluent reading by reading aloud portions of the selected tradebook for instruction. In addition, students participated in readers theater, a form of dramatics in which scripts are always read, not recited, and acting is kept minimal while readers use their voices and gestures to interpret literature.

### Reading Comprehension

The reading teacher used the selected tradebooks to provide lessons in using prior knowledge, prediction, and awareness of story structure to enhance student comprehension. Some examples of strategies used to activate prior knowledge are webbing and previewing. The webbing strategy is one in which a topic and related terms or phrases are written. Lines can then be drawn to connect associated terms and phrases (see Appendix C). Students were also taught how to preview a selection and share what they already know about that topic

or predict what kinds of information might be found in it. Guided discussions of stories read and listened to included discussion of setting, characters, significant events, problem, and resolution of the problem. Students also practiced retelling stories to help them understand and remember stories and develop sense of story.

### Journal Writing

Upon arrival at the reading room, each student wrote a minimum of four sentences in his journal. Students were allowed to choose their own topics for writing and were encouraged to plan ahead what they wished to write. If a student could not think of a topic, the reading teacher provided alternative topics from which he could choose to write. After writing was completed, the reading teacher selected one misspelled word from the piece and provided phonic, structural, or sight word instruction. In addition, one sentence was chosen for editing and the reading teacher supplied the number of corrections needed. The student then made the necessary corrections with help as needed.

### In-class Model of Reading Instruction

#### Procedures

Four fourth-grade boys received reading support from the reading specialist in an in-class instructional model. Two of the boys had received reading support the previous year through the pull-out program, and the other 2 were new to the remedial reading program. The reading specialist came to their classroom two times per week for a total of 90

minutes of reading support. These students also received 210 minutes of reading instruction from the regular classroom teacher throughout the week.

The instruction in the in-class model was provided through tradebooks that were determined through curriculum adoption decisions and included a wide variety of reading difficulty levels. Because some of the tradebooks were at a frustration reading level for students, lessons and procedures were sometimes adapted to meet student needs.

### Collaborative Lesson Planning

Collaborative lesson planning was necessary since the classroom teacher and specialist teacher taught together in the same setting. The two teachers met formally for approximately 30 minutes each week. Since lack of planning time was a concern of both teachers, this planning time was scheduled after the regular school day had ended. The two teachers also held short, informal meetings periodically to discuss instruction and/or students as was necessary.

### Teacher Roles

The reading specialist's role in the classroom varied from day to day dependent on lessons planned, teacher strengths and preferences, and student needs. One teacher sometimes taught the entire class while the other teacher monitored the needs of students and/or reinforced the instruction and ideas presented. At other times, both teachers taught the whole group at the same time, reinforcing the other's instruction through

modeling, role-playing, describing, retelling, and other instructional strategies. Typically, the teachers divided the class in half, each teaching the same information to a smaller group.

After completion of the lesson for the entire classroom, the reading specialist typically worked with small groups or individuals needing reading support. Since some of the tradebooks were at a frustration level of reading for some students, the specialist provided adaptations, such as reading portions of the book aloud, pairing remedial students with good readers to read a portion of the book together, or reading together in a small group that included good readers who were comfortable reading aloud. These adaptive strategies also helped alleviate the burden of increased homework loads for slower, less skilled readers. Although this instruction was usually aimed at the 4 remedial reading students, the reading specialist was also able to support other students experiencing reading difficulties who had not qualified for remedial reading support.

As in the pull-out model of instruction, the reading specialist took individualized running records and repeated readings in the same manner and for the same purposes. Reading strategies and comprehension were taught by the classroom and specialist teacher incorporating the same philosophies and similar techniques as were used in the pull-out model of instruction. Journal writing was not included in the in-class setting; however, students edited spelling,

mechanical, and/or content errors in their written responses regarding tradebooks read. In addition, these students did not miss writing workshop instruction as did the pull-out group and were able to focus on these types of editing skills in that setting.

### Method of Analysis

Throughout the course of this study, observational information concerning the development of remedial reading students was maintained in the form of anecdotal records. Developing competency in the use of appropriate reading strategies, increases in self-monitoring and self-correcting behaviors, growth in fluency, development of reading comprehension, and changing student attitudes were collected in these field notes.

A six-question reading survey (see Appendix D) was given to the students as a pretest and as a posttest in order to determine student attitudes toward reading. Students were also interviewed by the reading specialist in order to determine student perceptions of their reading strengths and weaknesses, whether or not they needed reading help, how other students perceived them and the help they received in remedial reading, advantages and disadvantages of the pull-out and in-class programs and preferences for the in-class or pull-out program. The surveys and interviews were administered as part of the lesson during the first week of remedial reading instruction, and they were readministered during the last week of the study.

### Basic Reading Inventory (BRI)

Student growth in reading was determined through a pretest and a posttest evaluation of graded passages contained in the BRI (Johns, 1991). The BRI is an individually administered informal reading test composed of a series of graded word lists and graded passages. Five types of comprehension questions follow each passage: topic, fact, inference, evaluation, and vocabulary. This inventory was appropriate for evaluation of growth in student reading since assessment of reading strategies, fluency, and comprehension were included in the instrument.

### Summary

Two fourth-grade boys received remedial reading instruction in a pull-out setting in the fall of 1992. Instruction focused on the identification and improvement of student reading strategies, growth in fluency rates, and development of comprehension in tradebooks selected for instruction. Students also received editing instruction through their daily journal writing.

The comparison group consisted of 4 fourth-grade boys who received remedial reading instruction in an in-class setting. The instructional philosophies, curriculum, and techniques of this setting matched those of the pull-out setting. Students received editing instruction in their written responses to literature and during writing workshop instruction provided by the classroom teacher.



Each student's development of reading strategies, growth in fluency, and development in comprehension was observed, noted, and evaluated in both instructional settings. Changes in student attitudes about reading and perceptions and preferences of in-class and pull-out settings were documented and assessed throughout the 4 months of the study.

## CHAPTER IV

### RESULTS

The success of both the in-class and pull-out models of remedial reading instruction were evaluated through examination of pre- and posttest data collected through the Basic Reading Inventory (Johns, 1991), reading surveys, and student interviews. These assessment instruments were used to determine growth in reading, changes in student attitude toward reading, and perceptions of and preferences for placement in in-class or pull-out models of instruction.

#### Evaluation of Reading

Growth in reading development was evaluated for this study by an examination of pre- and posttest information collected through the Basic Reading Inventory (BRI). The elements identified by the BRI structured the evaluation and subsequent comparisons of student growth. Attention was given to the following: (a) instructional grade level for oral reading, (b) instructional grade level for oral reading comprehension, (c) instructional grade level for silent reading comprehension, and (d) fluency rate for silent reading.

### Instructional Grade Level For Oral Reading

Table 1 illustrates the growth exhibited by all remedial reading students by the end of the 4 month study. Pre- and posttest scores for students participating in the pull-out (PO) and in-class (IC) models of instruction are presented for instructional grade levels of oral reading. In addition, grade level growth in oral reading is also shown for each remedial student.

Table 1

### Instructional Grade Levels and Growth in Oral Reading

<u>Student</u>	<u>Instructional Model</u>	<u>Instructional Grade Level For Oral Reading</u>		<u>Growth in Oral Reading</u>
		<u>Pre</u>	<u>Post</u>	
1	PO	4.5	7.0	2.5
2	PO	1.0	3.0	2.0
3	IC	4.0	7.0	3.0
4	IC	3.5	5.5	2.0
5	IC	3.5	8.0	4.5
6	IC	4.5	8.0	3.5

Note. PO = pull-out model and IC = in-class model.

The average growth in oral reading for pull-out students was 2.25 years compared to an average growth of 3.25 years for in-class students.

### Instructional Grade Level for Oral Reading Comprehension

Table 2 reflects growth in oral reading comprehension levels of pull-out and in-class students. Again, pre- and posttest scores are presented, as well as grade level growth in oral reading comprehension throughout the 4 month study.

Table 2

### Instructional Grade Levels and Growth in Oral Reading Comprehension

<u>Student</u>	<u>Instructional Model</u>	<u>Instructional Grade Level For Oral Reading Comprehension</u>		<u>Growth in Oral Reading Compre.</u>
		<u>Pre</u>	<u>Post</u>	
1	PO	3.5	7.0	3.5
2	PO	2.5	4.5	2.0
3	IC	6.0	7.5	1.5
4	IC	4.0	4.5	0.5
5	IC	4.5	6.5	2.0
6	IC	6.0	7.5	1.5

The average growth in oral reading comprehension for pull-out students was 2.25 years compared to an average growth of 1.38 years for in-class students.

### Instructional Grade Level for Silent Reading Comprehension

Table 3 illustrates each student's growth in silent reading comprehension.

Table 3

### Instructional Grade Levels and Growth in Silent Reading Comprehension

<u>Student</u>	<u>Instructional Model</u>	<u>Instructional Grade Level For Silent Reading Comprehension</u>		<u>Growth in Silent Reading Compre.</u>
		<u>Pre</u>	<u>Post</u>	
1	PO	3.5	3.5	0.0
2	PO	2.5	3.5	1.0
3	IC	5.0	6.5	1.5
4	IC	2.0	4.5	2.5
5	IC	5.0	6.5	1.5
6	IC	5.5	7.0	1.5

The average growth in silent reading comprehension for pull-out students was 0.50 years compared to an average growth of 1.75 years for in-class students.

### Reading Fluency Rates in Words per Minute

Table 4 shows each student's increase in fluency rate at his instructional reading level.

Table 4

Student Fluency Rates at Instructional Reading Levels

<u>Student</u>	<u>Instructional Model</u>	<u>Words Read Per Minute In Silent Reading</u>		<u>Growth in Words Read Per Minute</u>
		<u>Pre</u>	<u>Post</u>	
1	PO	86	100	14
2	PO	25	52	27
3	IC	63	86	23
4	IC	67	67	0
5	IC	57	100	43
6	IC	60	80	20

The average increase in silent reading fluency rate for pull-out students was 20.5 words per minute compared to an average increase of 21.5 words per minute for in-class students.

Assessment of Student Attitude Toward Reading

A six-question reading survey (see Appendix C) was administered as both a pretest and a posttest to the students involved in this research in order to determine their attitudes toward reading. The responses the students provided to these prompts at the beginning and ending of the study indicated that students in both the pull-out and in-class settings maintained a positive attitude toward reading.

### Reading is . . .

Pretest. The 2 students in the pull-out setting responded that reading is "fun." One student also added that reading is "sometimes hard," and the other student added that "you learn new words and new stuff."

Of the 4 students in the in-class setting, only 1 wrote that reading is "fun." Two other students noted that reading is "when you read writing out of a book or a story." The last student noted that reading is "neat."

Posttest. When students responded to this question after 4 months of remedial reading instruction, the 2 pull-out students again noted that reading is "fun." One student wrote that he "chooses to read during inside recess."

Three of the 4 in-class students stated that reading is "fun" at the conclusion of the study. One student also expressed that reading is "sometimes adventurous." Another student recognized that reading is "sometimes boring and sometimes fun, depending on what you're reading." The fourth student asserted that reading is "easy."

### I Like/Don't Like to Read Because . . .

Pretest. The 2 students in the pull-out setting both stated that they liked to read because it's fun. One student added that he likes to learn what happens in the story he's reading.

Two of the 4 in-class students asserted that they liked to read. One student shared that he liked to read when it's fun, but he didn't like to

read when it's boring. One student determined he did not like to read but was unable to state why not.

Posttest. The 2 pull-out students again noted that they liked to read because it is fun while 3 of the 4 in-class students shared that they liked to read. The student who did not like to read at the time of the pretest stated in the posttest that he "likes to read because it helps me learn." The fourth student responded that he "likes to read when it interests me."

#### I Read When . . .

Pretest. The 2 students in the pull-out setting noted that they read when they have homework to do or whenever else they have to read. The 4 in-class students each responded differently to the question of when they read. Students stated they read when "I go to school, I feel good, I can, and whenever I feel like it."

Posttest. The two pull-out students stated they read when they have time instead of when they have to, as in the pretest. Two of the in-class students reported that they read when they want to. Another student noted that he "reads every night," while the fourth student responded that he reads whenever he likes.

#### People Read . . .

Pretest. One of the students in the pull-out setting related that people read because "they think it's fun." The other student believed "people like to read and can learn new things by reading."



Three of the in-class students noted that people read because "it's educational and/or you learn from reading." The fourth student felt that people read because "they like it."

Posttest. One pull-out student stated that "reading is good for you because you need to practice it, and you can learn new things." The other student felt that people read because they want to.

One in-class student reflected that people read because "it's fun or else because they have to." Another stated "you need to read to get a job." A third student listed three reasons people read: "it's thrilling, to get to sleep, or for enjoyment." The fourth student believed people read because they like it.

#### What I Do Best In Reading Is . . .

Pretest. The 2 students in the pull-out setting determined that their strength in reading is "sounding out words." Two of the in-class students were unable to identify a strength in reading. A third student noted that "sounding out words" was his strength, while the fourth perceived "reading" as his strength.

Posttest. One student in the pull-out setting again identified "sounding out words" as his reading strength, but also noted that he "could read a book to completion." The other student determined that his use of the read on strategy was what he did best in reading.

Two of the students in the in-class setting related that "reading faster" was a reading strength for them. A third student conveyed that

"figuring out new words and reading with expression" were his strengths. The fourth student felt that remembering what he read was what he did best.

### I Need Help in Reading When . . .

Pretest. The two students in the pull-out setting believed they needed help when they came to a hard word or sentence. Three of the four students in the in-class setting also felt they needed help in figuring out and/or pronouncing big words. The fourth student was unable to determine an area with which he needed help.

Posttest. Figuring out big, long, hard words continued to be of concern for the two students in the pull-out setting.

Each of the in-class students identified a different need in reading. These areas of concern included reading with expression, reading faster, writing, and remembering what's read.

### Assessment of Perceptions of and Preferences for Pull-Out or In-Class

#### Models of Instruction

Interviews were conducted with individual students at the beginning and end of this study in order to determine students' preferences for the pull-out or in-class models of reading instruction. These interviews were centered around the following five questions:

- 1) Do you need support or help in reading?
- 2) What are the advantages and disadvantages of the pull-out reading support model?

- 3) What are the advantages and disadvantages of the in-class reading support model?
- 4) How do other students perceive students receiving reading support from the reading teacher?
- 5) If you could choose a pull-out or in-class reading support model, which would you choose? Why?

### Do You Need Support or Help in Reading?

Beginning of the study. The 2 students in the pull-out setting responded that they needed help with their reading. One student stated a need for "help with hard words," while the other noted that he was unable to read what's on a page and needed help in order to know what happens in a story.

Of the 4 students in the in-class setting, 2 were unsure about the need for reading support and responded "so-so" and "sort of." A third student reflected that he was "OK without (reading) help." The fourth student determined a need for help because he "had trouble reading some books over the summer."

End of the study. The two pull-out students again stated a need for reading help, especially with "big, harder words and books with lots of new, harder words." Three of the 4 in-class students reflected a need for reading support, especially with "chunking big or hard words." One of the above 3 students also noted a need to be able to read faster. The fourth student determined that he sometimes needed reading help depending

on what he was reading.

### What Are the Advantages and Disadvantages of the Pull-out Reading Support Model?

Beginning of the study. Both students in the pull-out setting were able to identify advantages of the pull-out reading support model. One student determined "You don't have to do as much or as hard of work" in the reading room as compared to the regular classroom. The other student stated that he liked "to check out books from the reading room and the reading and writing we do in the reading room." One of the students was able to identify a disadvantage in the pull-out setting. He reflected that he missed reading or writing when he came to the reading room, but since he did not have to make up the missed work, he did not mind the loss of regular classroom time.

Three of the 4 students in the in-class setting were able to identify an advantage in the pull-out setting for reading instruction. Two students believed the reading room would be a "quieter" place where they could think better. The third student stated that he would be able to learn more in the reading room. One student was able to identify a disadvantage in the pull-out setting. He stated that during the previous year, he "got to miss math" but had more homework. He expressed that he liked missing math but did not like the added homework.

End of the study. The 2 students in the pull-out setting described several advantages, but no disadvantages in the pull-out model of

instruction. The advantages of the pull-out program included no distractions or interruptions, the opportunity to check out books for independent reading, the fun of reading books and working together, the opportunity to learn new words and "stuff" we do not know, and more attention from the teacher.

Three of the 4 students in the in-class setting cited advantages in the pull-out model of instruction. These advantages included "lots of neat books and stuff, doing fun things, reading a lot, and it's a nice change to go to a different place." Two students stated that the reading room is "quieter, there is more room to spread out if you want, and there is a smaller number of people so that we can read together more."

### What Are the Advantages and Disadvantages of the In-class Reading Support Model?

Beginning of the study. One of the 2 students in the pull-out setting determined that an advantage of the in-class reading support model was that he would not have to walk down the hall to the reading room. The other student stated that a disadvantage in the in-class setting is that there is more talking and noise in the regular classroom.

Three of the 4 students in the in-class setting discussed advantages in the in-class reading support model. These advantages included that "It's quieter when there are two teachers in the regular classroom; It's fun to work with a different teacher; We get to do new things with the reading teacher; We get more attention and help when

there are two teachers in the room; We don't miss anything in the regular classroom," and "We don't have to walk down the hall to the reading room." One student noted that a disadvantage of the in-class setting is that "It's noisier in the regular classroom."

End of the study. Neither of the 2 students in the pull-out setting stated advantages in the in-class reading support model. However, they determined the following disadvantages of the in-class model: more distractions and interruptions, less attention from the teacher, and there are too many people who cannot agree on things.

One of the 4 students in the in-class setting identified advantages in the in-class reading support model. He noted that "It's quieter in the classroom with two teachers," and "Other students like working with the reading teacher." Three of the 4 students determined that a disadvantage of this model is that there is more noise in the regular classroom.

#### How Do Other Students Perceive Students Receiving Reading Support from the Reading Teacher?

Beginning of the study. One of the 2 pull-out students said that his friend wishes he could come to the reading room. The other student reflected that sometimes students "make fun" and other times students are jealous and wonder why they cannot come to the reading room for reading help.

Three of the 4 students in the in-class model stated that other students do not say anything about their work with the reading teacher. The fourth student shared that some students say they are glad they do not need reading help and tease him about needing a reading teacher.

End of the study. At the conclusion of the study, 1 of the pull-out students reflected that other students do not say anything about him getting reading help. The other student shared that once in a while other students ask him why he cannot read very well and why he needs help in reading.

Two of the in-class students noted that other students don't talk about the reading support they receive. A third student noted two friends who wished they worked with the reading teacher. The fourth student shared that once in a while other students say they are glad they do not need help with reading.

If You Could Choose a Pull-out or In-class Reading Support Model, Which Would You Choose? Why?

Beginning of the study. At the beginning of the study, the 2 students in the pull-out setting voiced a preference for the pull-out setting. Their reasons for choosing the pull-out setting included smaller amounts of work, less difficult work, less talking and noise, increased opportunities to check out books for independent reading, and more opportunities for reading and writing. One student added that perhaps in-class would be

"easier" (to implement) since the reading room is so far away from his regular classroom.

At the onset of the study, 2 of the 4 in-class students stated a preference for the pull-out setting because it was quieter in the reading room and they were able to think better. A third student shared that he liked both in-class and pull-out and that it did not matter which kind of reading help he got. The fourth student did not state a preference for either of the two support models.

End of the study. At the end of the 4 month study, the 2 students in the pull-out setting restated their preference for the pull-out support model. They shared that there were no distractions or interruptions, more opportunities to check out books for independent reading, more fun working and reading together, learn new words and "stuff" that we do not know, and get more help and attention from the teacher in the reading room compared to the regular classroom.

Three of the 4 in-class students declared a preference for the pull-out support model at the end of the study. They determined that in the reading room, "There are lots of neat books and stuff; We do more fun things; We read a lot; It's a nice change to go to a different place; It's quieter; There's more room to spread out," and "There's a smaller number of people so we can read together more." The fourth student again had no preference for in-class or pull-out reading support.



### Discussion

All students receiving reading support in either the pull-out or in-class setting showed growth in reading throughout the 4-month study. However, the growth in oral reading accuracy, oral reading comprehension, silent reading comprehension, and fluency rate for silent reading differed within and between the two groups studied. Table 5 shows the average growth in reading for each group in the four areas studied.

Table 5

#### Average Growth in Instructional Grade Levels

	<u>Oral Reading Accuracy</u>	<u>Oral Reading Comprehension</u>	<u>Silent Reading Comprehension</u>	<u>Silent Reading Fluency Rates</u>
<u>Pull-out</u>	2.25	2.25	0.50	20.5 wpm*
<u>In-class</u>	3.25	1.38	1.75	21.5 wpm*

Note. \* = words per minute

As noted in table 5, the average growth in oral reading comprehension for pull-out students was 2.25 years compared to an average growth of 1.38 years for in-class students. Meanwhile, the average growth in silent reading comprehension for pull-out students was 0.50 years compared to an average growth of 1.75 years for in-class students. Although this study incorporated a small sample population which cannot be generalized, this researcher speculated that instruction

in the pull-out setting was focused on more student oral reading while instruction in the in-class setting supported more student silent reading. Thus, the pull-out students showed a higher average increase in oral reading comprehension while the in-class students reflected a higher average increase in silent reading comprehension.

Table 5 showed that the average increase in silent reading fluency rate for pull-out students was 20.5 words per minute compared to an average increase of 21.5 words per minute for in-class students. Again, although this study cannot be generalized, this researcher speculated that these average increases in fluency were comparable due to the congruence of instruction in the pull-out and in-class settings. In both settings, the same instructional approaches were used to increase student fluency (e.g., repeated readings, models of fluent reading, and readers theater).

Students in the pull-out or in-class setting appeared to maintain or develop a positive attitude about reading throughout the 4-month period of the study. The 2 pull-out students asserted at the beginning and end of the study that they liked to read because it's fun. Of the 4 in-class reading support students, 2 maintained that they liked to read throughout the study. One student who had stated a dislike for reading at the beginning of the study declared at the end of the study, "I like to read because it helps me learn." The fourth in-class student again noted that he likes to read when it interests him.

Students in the pull-out and in-class reading support models were able to identify advantages and disadvantages of the two models of reading instruction. After considering these advantages and disadvantages, students stated a preference for one of the two support models. The 2 students in the pull-out setting asserted a preference for the pull-out model at the beginning and end of the study. Of the 4 students receiving in-class reading support, 2 students preferred the pull-out model at the beginning of the study. The other 2 students stated no preference for either of the support models. However, at the end of the study, 3 of the in-class students affirmed a preference for the pull-out model. The fourth student again had no preference for either reading support model. That is, at the end of the study, 5 of the 6 students receiving reading support determined a preference for the pull-out model and identified advantages of the model to support their choice.

## CHAPTER V

### DISCUSSION

Significant growth was demonstrated in reading development by students participating in both the in-class and pull-out models of instruction. Students in both settings also maintained or developed a positive attitude toward reading, but they expressed a preference for the pull-out model. Recommendations regarding in-class and pull-out reading support models are based on research collected and conducted throughout this study. These recommendations address the following areas of concern:

- 1) quality of instruction
- 2) student need for in-class or pull-out reading support
- 3) suggestions for improvement of the pull-out reading support model
- 4) suggestions for improvement of the in-class reading support model
- 5) the balance between use of pull-out and in-class reading support models.

#### Quality of Instruction

In the literature reviewed and research conducted throughout this study, it appeared that many of the deficiencies reflected in both the pull-out and in-class reading support models were a result of a lack of quality instruction. In the pull-out model, for example, some of the difficulties

cited were a lack of individualization, lack of congruence with regular classroom instruction, lack of communication with the regular classroom teacher, reduced amount of reading instruction time, stilted curriculum, and over-emphasis of skill work without sufficient amounts of actual reading. Meanwhile, the limitations of the in-class setting included logistical difficulties (e.g., problems with materials, scheduling, and space), professional difficulties (e.g., differences in teaching styles and strategies), lack of time (e.g., to plan and consult), and lack of teacher preservice and inservice training.

Perhaps, educators need to take a closer look at what is already being done, as in the pull-out reading support model, and take steps to improve the quality of instruction in these programs to alleviate the difficulties listed above. In the research conducted in this study, students in the pull-out model demonstrated much growth in oral reading accuracy, oral reading comprehension, silent reading comprehension, and silent reading fluency rates over a 4-month period. Perhaps this can be attributed to increased individualization, congruence with regular classroom instruction, communication with the regular classroom teacher, increased amounts of reading instruction time, and an emphasis on application of reading strategies in meaningful contexts. Indeed, more research is needed to determine the factors that led to student growth in this pull-out model of reading instruction.

Choosing to try a different approach, such as the in-class support model, without first preparing to minimize some of the same and/or added difficulties of the pull-out model appeared to also result in a lack of quality of instruction in the literature reviewed in this study. However, in the research conducted in this study, the students in the in-class setting also demonstrated much growth in oral reading accuracy, oral reading comprehension, silent reading comprehension, and silent reading fluency rates over a 4-month period. Again, more research is needed to determine the factors that led to student growth in this in-class model of reading instruction. However, this researcher hypothesized that the teachers in this study were able to overcome logistical and professional difficulties in working together. In addition, they devoted much added time beyond the regular school day to compensate for the lack of time available during the work day to plan, consult, and reflect. They voiced concerns regarding their ability to continue to commit the additional time needed in succeeding years.

#### Student Need for In-class or Pull-out Reading Support

In the research collected and conducted in this study, it appeared that scheduling and teacher or researcher preference mandated the type of reading support model implemented with students. The in-class reading support model was implemented in an effort to overcome the short-comings of the pull-out support model. For example, the in-class support model was incorporated in an effort to eliminate the negative

social stigma and peer labeling associated with the pull-out model. However, in the research conducted in this study, students in both support models did not indicate feelings of negative social stigma or peer labeling. More importantly, at the conclusion of the study, 5 of the 6 students receiving reading support stated a preference for the pull-out model of reading support and provided a rationale for their preference. Many of their reasons appeared to be both logical and insightful. They discussed issues such as no distractions or interruptions, more opportunities to check out books for independent reading, more help and attention from the teacher, it is quieter, and there are more opportunities to read in the pull-out model.

Perhaps educators need to look at why a pull-out or in-class reading support model is being implemented. Since there are advantages and disadvantages in both models, perhaps the setting should be determined based upon student need whenever possible and not on the belief that one model is superior to the other.

#### Suggestions for Improvement of the Pull-out Reading Support Model

As discussed previously, many of the deficiencies found in the pull-out reading support model were the result of a lack of quality instruction. It is suggested that school districts develop a preservice and ongoing inservice program to train reading support teachers in the implementation of effective pull-out instructional programs. This training should include strategies and methodologies to increase individualized

instruction, increase congruence with regular classroom instruction, improve communication with regular classroom teachers, develop enriched reading curriculum in which vocabulary is not stilted, reinforce an emphasis on sufficient amounts of actual reading, and provide instruction in teaching students effective reading strategies with a reduced focus on skill work. In addition, administrators must support this training and provide additional opportunities for regular classroom teachers and reading support teachers to discuss, plan, evaluate, and modify effective reading instruction. Finding time for effective communication between regular and support teachers appears to be a major inhibitor to the success of pull-out programs. A possible solution might be found in an early release time for students once a week, on alternate weeks, or once a month in order to provide this needed time for teacher collaboration.

#### Suggestions for Improvement of the In-class Reading Support Model

Many of the difficulties associated with the in-class reading support model might also be alleviated through preservice and ongoing inservice of both reading support teachers and regular classroom teachers. This training should outline and provide possible solutions for professional difficulties (e.g., differences in teaching styles, strategies, and opinions) and logistical problems in scheduling, space, and materials for instruction. An awareness of possible professional and logistical problems and possible solutions at the onset will help reduce



the frustration of dealing with unexpected difficulties throughout the implementation of the in-class model. As in the suggested inservice training for the improvement of the pull-out model, administrators must support the inservice training program and provide much needed time for regular classroom and support teachers to discuss, plan, evaluate, and modify effective reading instruction.

### The Balance Between Pull-out and In-class Reading Support Models

It is suggested that when a district determines to implement the in-class reading support model with the described suggestions in place, a balance is achieved between the amount of in-class and pull-out instruction provided. Reading support teachers would not have time to collaborate with regular classroom teachers at all grade levels, and when only one or two students in a grade require added support services, it may be more efficient to serve those students on a pull-out basis. In addition, specialist teachers may need flexibility to conduct diagnosis, and some students may benefit from intensive one-to-one or small group instruction away from the classroom. The type of reading support model implemented should be determined based on individual student need and the balance needed in order for the reading support teacher to provide quality instruction for his/her students.

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## APPENDIX A

Running Record

Name \_\_\_\_\_

Date \_\_\_\_\_

WPM \_\_\_\_\_

Accur. \_\_\_\_\_

S.C. \_\_\_\_\_

Goal: Uses multiple strategies when faced with unfamiliar words.

Activity: The student reads orally from the following text:

Sarah Plain and Tall, p. 30

Criteria: Substitutes words which do not change meaning

Self-corrects when meaning is not clear

\* visual (phonic)

\* meaning

\*syntax

Next to the barn was Papa's mound of hay for bedding, nearly half as tall as the barn, covered with canvas to keep the rain from rotting it. Papa carried the wooden ladder from the barn and leaned it against the hay. "There." He smiled at Sarah. "Our dune." Sarah was very quiet. The dogs looked up at her, waiting. Seal brushed against her legs, her tail in the air. Caleb reached over and took her hand. "it looks high up," he said. "Are you scared, Sarah?" "Scared? Scared!" exclaimed Sarah. "You bet I'm not scared!" She climbed the ladder,...

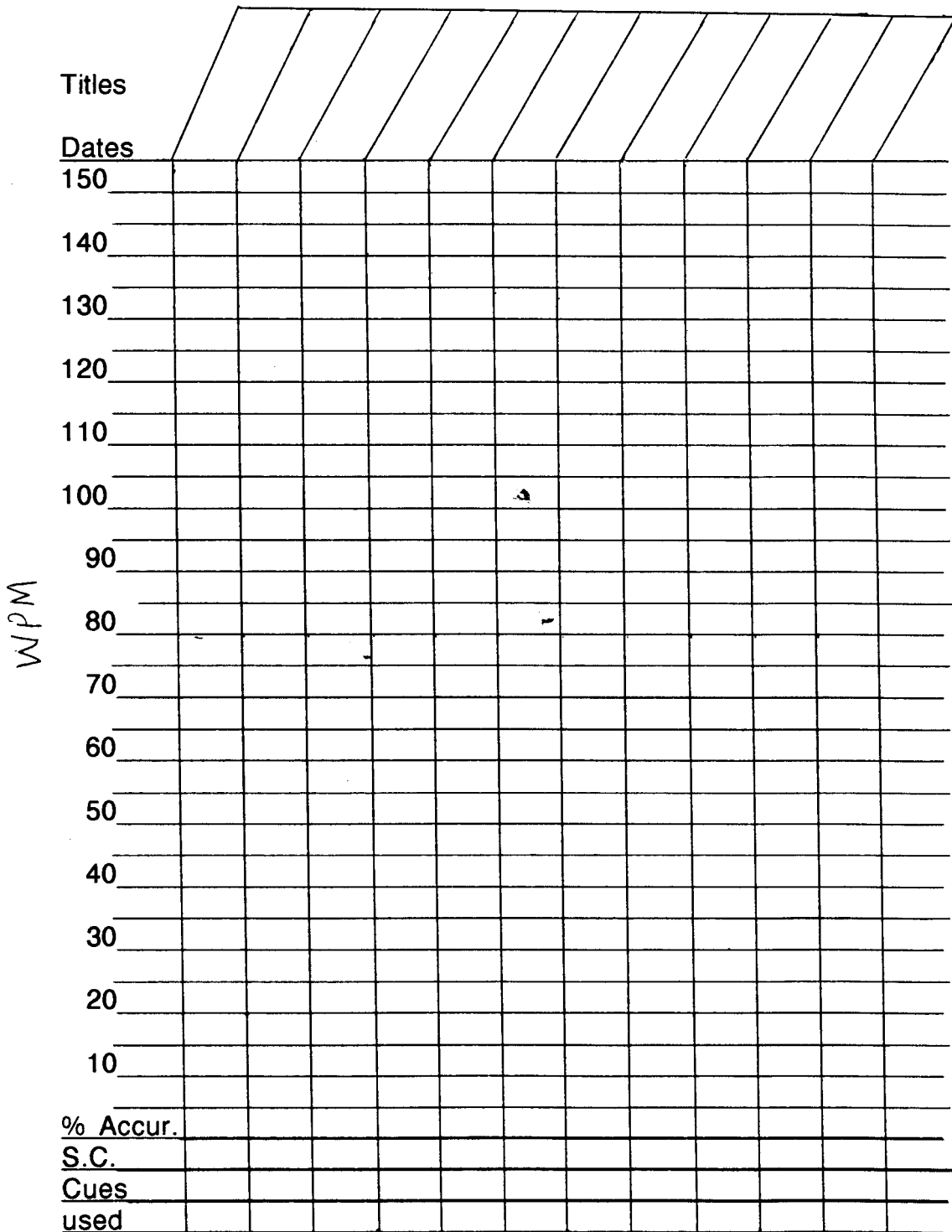
				Cues used	
E	SC	E	SC		

Comments:

## APPENDIX B

Repeated Readings Graph

Name \_\_\_\_\_

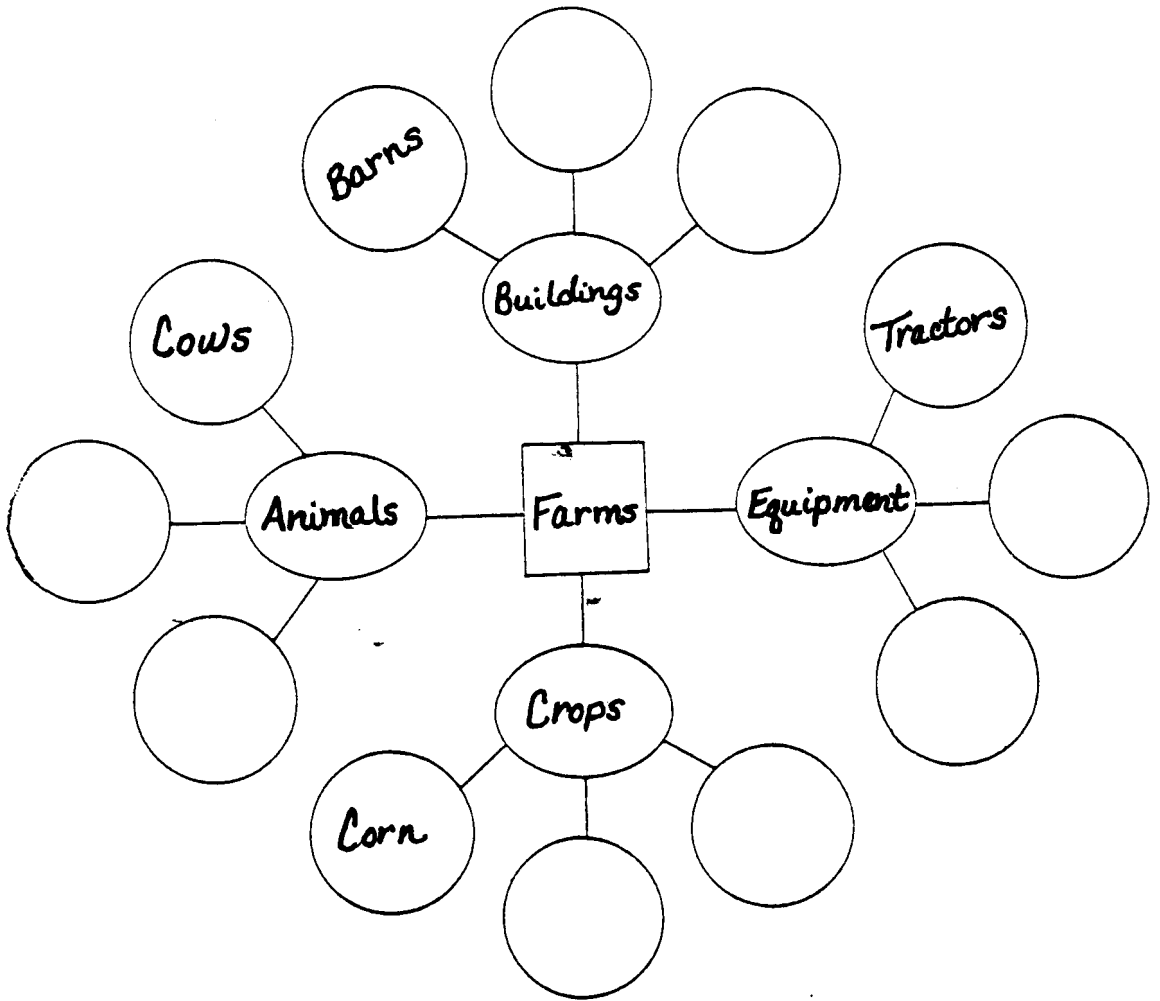


APPENDIX C

Web

Name \_\_\_\_\_

Date \_\_\_\_\_



## APPENDIX D

Reading Survey

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Reading is . . .

2. I like/don't like to read because . . .

3. I read when . . .

4. People read . . .

5. What I do best in reading is . . .

6. I need help in reading when . . .