

University of South Florida Scholar Commons

Graduate Theses and Dissertations

Graduate School

2009

An intermediate extended literacy routine to support struggling third grade readers

Jeani Z. Fullard University of South Florida

Follow this and additional works at: http://scholarcommons.usf.edu/etd Part of the <u>American Studies Commons</u>

Scholar Commons Citation

Fullard, Jeani Z., "An intermediate extended literacy routine to support struggling third grade readers" (2009). *Graduate Theses and Dissertations*. http://scholarcommons.usf.edu/etd/1974

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

An Intermediate Extended Literacy Routine to Support Struggling Third Grade Readers

by

Jeani Z. Fullard

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy Department of Childhood Education College of Education University of South Florida

Major Professor: Susan Homan, Ph.D. Stephen Micklo, Ph.D. Jeffery Kromrey, Ph.D. Margaret Hewitt, Ph.D.

> Date of Approval: December 18, 2008

Keywords: guided reading, early literacy, reading comprehension, reading fluency, small group instruction

© Copyright 2009, Jeani Z. Fullard

Table of Contents	
List of Tables	iii
List of Figures	iv
Abstract	vi
Chapter 1: Introduction	1
Literacy Issues	2
Government Influence on Educational Issues	
The Problem	11
Purpose of the Study	17
Research Questions	
Definition of Terms	
Limitations	21
Chapter 2: Review of Related Literature	22
Introduction	
Effective Schools	
Effective Teachers	
Effective Teachers of Reading	
Effective Classroom Reading Curriculum Design	
At-risk Students	
School Factors	
Acquisition of Fluency and Reading Comprehension	
Grouping for Reading Instruction	
Guided Reading in the Intermediate Grades	
Conclusion	
Chapter 3: Method	65
Introduction	
Purpose	
Research Questions	
Setting and Sample	
Research Design	
Independent Variable	
Procedure	
Dependent Variable	
Baseline/Comparison Condition	
1	

Table of C

Experimental Control	79
Measures	79
Reliability and Validity	80
Repeated Measures	80
Visual Analysis	
Chapter 4: Results	86
The Context of the Study	86
Sample	87
Study Participants	88
Baseline Data	88
Analysis of Research Questions	
Individual Student Assessment Discussion	94
Research Question 4 Discussion	
Chapter 5: Discussion	124
Introduction	124
Study Overview	127
Implications and Summary	128
Conclusions	134
Limitations	134
Recommendations for Future Study	135
References	137
Appendices	158
Appendix A: Human Participant Protection Completion Certificate	
Appendix B: IRB Approval Letter	
Appendix C: IRB Parent Consent Form	
Appendix D: IRB Student Consent Form	
Appendix E: Study Timeline	
Appendix F: Sample Lesson	
Appendix G: Strategy Lessons	
About the Author	End page

List of Tables

Table 1:	Grade 4 Achievement Levels
Table 2:	School Effectiveness by Poverty and Reading Performance
Table 3:	Time Spent in Reading Instruction by School Effectiveness Levels31
Table 4:	Percent of Teachers Frequently Observed Using Various Approaches to Comprehension Instruction
Table 5:	Six Common Features of Effective Literacy40
Table 6:	Demographics of School
Table 7:	Assessment Chart70
Table 8:	Architecture of the Mini-lesson74
Table 9:	Sample Focus Lesson
Table 10:	Specific Strategies Used to Address Needs77
Table 11:	Timeline of the Study87
Table 12:	Pinellas County Assessment System (PCAS) Reading Criteria
Table 13:	Baseline Data for Study Participants90
Table 14:	Summary of Individual Student PCAS, Timed Reading and Narrative Retelling Scores
Table 15:	Interpretation of GORT-3 Standardized Scores for Comprehension120
Table 16:	Pre/Post Test Standard Scores for Comprehension121

List of Figures

Figure 1:	NAEP 1999 trends in academic progress
Figure 2:	Grade 4 scale scores for reading: Florida vs. National Public7
Figure 3:	Florida Grade 4 reading achievement level percentages8
Figure 4:	Line graphs illustrating common response patterns83
Figure 5:	Diagram of multiple-baseline design
Figure 6:	Data from a hypothetical example of an alternating treatment design85
Figure 7:	Student A1 PCAS, Timed Reading and Narrative Retelling scores95
Figure 8:	Student A2 PCAS, Timed Reading and Narrative Retelling scores97
Figure 9:	Student A3 PCAS, Timed Reading and Narrative Retelling scores
Figure 10:	Student A4 PCAS, Timed Reading and Narrative Retelling scores101
Figure 11:	Student A5 PCAS, Timed Reading and Narrative Retelling scores103
Figure 12:	Student A6 PCAS, Timed Reading and Narrative Retelling scores105
Figure 13:	Student A7 PCAS, Timed Reading and Narrative Retelling scores107
Figure 14:	Student R1 PCAS, Timed Reading and Narrative Retelling scores109
Figure 15:	Student R2 PCAS, Timed Reading and Narrative Retelling scores111
Figure 16:	Student R3 PCAS, Timed Reading and Narrative Retelling scores113
Figure 17:	Student R4 PCAS, Timed Reading and Narrative Retelling scores115
Figure 18:	Student R5 PCAS, Timed Reading and Narrative Retelling scores117
Figure 19:	Student R6 PCAS, Timed Reading and Narrative Retelling scores119

Figure 20:	Mrs. A's Class GORT-3 Pre- and Post-test Scores	122
Figure 21:	Mrs. R's Class GORT-3 Pre- and Post-test Scores	122
Figure 22:	Timed Readings: Classes Combined	130
Figure 23:	Running Record: Classes Combined	131
Figure 24:	Narrative Retellings: Classes Combined	132
Figure 25:	Comparison of comprehension scores for the GORT and Common Assessments	133

An Intermediate Extended Literacy Routine to Support Struggling Third Grade Readers Jeanie Z. Fullard

ABSTRACT

Large numbers of children in the United States are not functioning at adequate levels of literacy. Students who have weak reading proficiency skills are identified as *atrisk*; failure to acquire competency early in their schooling adversely affects performance in all academic fields and limits their potential for achievement in life. There is an extensive knowledge base about the skills and strategies children must learn in order to read well. Effective fluency and comprehension strategies need to be taught to help students become powerful, active readers who are in control of their learning.

This study evaluated a structured classroom model for delivery of small group reading instruction called the *Intermediate Extended Literacy Routine* (IELR). The IELR is a model for delivery of explicit reading instruction that incorporates fluency instruction with the intent to provide a bridge between word recognition and comprehension. This study examined the effects of the IELR on the achievement of third graders designated as struggling readers.

A repeated single subject experimental design was used. Thirteen students in two classrooms at the same west-central Florida school were given the IELR 4 days a week for 8 weeks. The IELR incorporated explicit strategy instruction and was delivered in the form of focused mini-lessons that targeted specific reading strategies the researcher identified as lacking in the subjects. Assessments of performance were made with timed readings, running records, narrative retellings, and the school district's reading comprehension common assessment tool. Results are presented in tabular and graphic form for analysis.

The IELR had a positive effect on reading rate (measured in words read per minute), reading accuracy and increased instructional level assessments: students who received the IELR maintained or increased their instructional level on running record assessments and showed evidence of increased reading rate on timed readings. Reading comprehension, measured by narrative retellings, did not improve for most students over the course of the study. Recommendations for future research include the use of a control group; oral (rather than written) retelling measures to assess comprehension, and a longer duration of IELR application to gauge its effectiveness.

Chapter 1

Introduction

Over the years there has been much controversy among educators and government agencies over educational issues. One major issue is children's acquisition of literacy skills. Each year reports in the media and from government agencies remind the public that large numbers of children are not functioning at adequate levels of literacy (Combs, 2006). The failure of some children to reach their literacy potential is not a new occurrence in our nation's schools. An increasing number of students are being identified as *at-risk* struggling readers, these are students who have weak reading skills and strategies and lack reading proficiency (Chall, Jacob, & Baldwin, 1990). Data from the 2002 and 2003 National Assessment of Educational Progress (NAEP) supports the growing concern about children's lack of literacy development in the United States (EPRU, 2002). The results for Grade 4 students across the United States reveal that only 32% of the students tested function at or above a proficient literacy level (Combs, 2006).

Emerging out of the concern over the failure of students to acquire proficient literacy skills, early literacy development and instruction has become an important subject of national educational policy. This chapter contains an overview of literacy issues in the 21st century and the government's influence on educational issues such as early literacy development, reading curriculum and funding.

1

Literacy Issues

Through the years there have been calls for several literacy initiatives. In the 1980s through the 1990s, our country went through what has been described as the national "reading wars." The reading wars raged between proponents of various instructional techniques, most notably between phonics (which emphasizes word recognition and decoding) and whole language (which emphasizes textual meaning). The "reading wars" were debates between traditional and progressive pedagogy in America's schools (Anderson, 1998; Combs, 2006). In 1985, a report from the Commission on Reading, "Becoming a Nation of Readers," called for a balance between explicit instruction in word recognition (phonics) and comprehension, as well as daily opportunities to read and write authentic, meaningful connected text (Anderson, Hiebert, Scott, & Wilkinson, 1985; Combs, 2006). The 1998 report of the Committee on Prevention of Reading Difficulties in Young Children recognized the need for balanced instruction that emphasized meaningful reading and writing with special attention given to the features of print, especially the features of the alphabetic system of our language (Combs, 2006; Snow, Burns, & Griffin, 1998).

In 2000, the National Reading Panel published a controversial report of researchbased reading instruction that became the cornerstone of U.S. federal reading education policy (US Department of Health and Human Services, 2000). The findings of this report lead to the most sweeping educational reform in this country's recent history, the No Child Left Behind Act of 2001 (NCLB).

On January 8, 2002, President Bush signed the NCLB into law. The NCLB contains some of the most comprehensive reforms of the Elementary and Secondary

Educational Act (ESEA) since it was instituted in 1965. One of the main characteristics of the new law is the emphasis placed on research-supported teaching methods, especially in the teaching of reading. The NCLB provides local districts with more flexibility in spending federal aid and requires annual math and reading tests. Schools that repeatedly find too many students failing the tests face sanctions. The NCLB is the latest federal government initiative to be enacted.

Government Influence on Educational Issues

In the 1970s the federal government initiated the National Assessment of Educational Progress (NAEP) that reported on student reading achievement. States began to create minimum competency levels for reading and started to make school achievement information public. After nearly 25 years these minimum competency levels in reading have evolved into newer, higher standards referred to as Basic Proficiencies by NAEP (Cunningham & Allington, 1999).

The Senate, Congress and the President are currently discussing the need for higher student achievement in reading in the national arena. The issues of reading achievement are also being debated in state legislative offices. School reading programs are being more closely scrutinized by educational administrators and policy makers. One of the reasons for the increased attention is the relatively low reading achievement of 9year-olds on the NAEP (Campbell, Voelkl, & Donahue, 1997), and the concern that reading failure is perceived as a barrier to progress in math and science (O'Sullivan, Reese, & Mazzeo, 1997).

In 1996, state and federal reading initiatives focused on the problem of reading failure at the kindergarten and primary levels (Moats, 2000). In 2000, the National

Institute of Children's Health and Human Development (NICHD) reported that researched-based instruction begun in the early grades significantly reduces the number of children experiencing reading difficulty in later years (NICHD, 2000). Moats (2001) states that reading failure begins early, takes root quickly, and affects students for life. Improvement in reading instruction for primary grade students is happening too slowly to have a positive impact on the growing numbers of students in the upper elementary grades who have experienced misguided reading instruction and scarce resources (Moats, 2001). The 1999 administration of the NAEP revealed that 44% of American fourth graders failed to achieve the new basic proficiency standard. According to this report, since 1983 over 10 million Americans have reached the 12th grade without learning to read at a basic level.

Since 1969, NAEP has conducted ongoing nationwide assessment of student reading achievement at Grades 4 (age 9), 8 (age 13), and 11 (age 17). Figure 1 provides a visual display of the long term trends in reading achievement from 1971 to 1999.

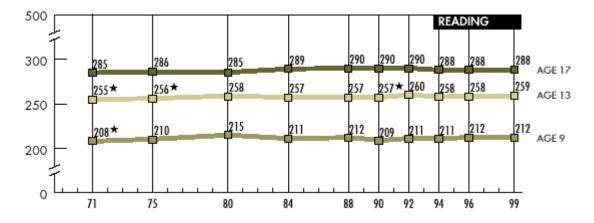


Figure 1. NAEP 1999 trends in academic progress

Note. Figure reproduced from National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1999 Long-Term Trend Assessment.

Long-term trends in reading achievement show minimal changes across the assessment years. In 1999, the average reading score for 9-year-old students was only slightly higher than it was in 1971. Thirteen-year-old students showed moderate gains in reading achievement; their average reading score was higher in 1999 than in 1971. There was an overall pattern of increases in reading scores for 17-year-old students, but the 1999 average score was not significantly different than in 1971.

NAEP assessment results provide information about what students know and can do. Additionally, NAEP provides information about what students *should* know and be able to do. This information comes from the NAEP achievement levels that are intended to measure how well students' actual achievement matches the achievement desired of them in different subjects assessed by NAEP. There are three achievement levels for each grade assessed by NAEP (Grades 4, 8 and 12): Basic, Proficient, and Advanced. The

Grade 4 criteria can be found in Table 1.

Table 1

Grade 4 Achievement Levels

Achievement Level	Criteria
Basic	Fourth grade students performing at the <i>Basic</i> level should
(208)	demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.
Proficient	Fourth grade students performing at the <i>Proficient</i> level should be able to demonstrate an overall understanding of the
(238)	text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connection between the text and what the student infers should be clear.
Advanced	Fourth grade students performing at the <i>Advanced</i> level should be able to generalize about topics in the reading
(268)	selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge text critically and, in general, to give thorough answers that indicate careful thought.

Examining student performance within different ranges of the score distribution provides some indication of whether or not overall trends in average scores are reflected in trends for lower-, middle-, or higher-performing Reading Quartiles. Among 9-year-old students, the average reading scores in each quartile range in 1999 were higher than in 1971. Among 13-year-old students, overall gains are evident in the upper quartile, and to a lesser extent, in the middle two quartiles. Among 17-year-old students, overall improvement is evident only in the lower quartile.

A review of scale scores from 1992 to 2003 indicates an upward trend for Florida fourth graders beginning in 1998, and shows them out-performing the National Public by 2003.

1992	Florida	208
	National Public	215
1994	Florida	205
	National Public	212
1998	Florida	206
	National Public	213
2002	Florida	214
	National Public	217
2003	Florida	218
	National Public	216

Figure 2. Grade 4 scale scores for reading: Florida vs. National Public

During the period 1998 – 2003, the percentage of Florida fourth graders achieving Proficient and Advanced ratings in reading increased; the details of this improvement are presented in Figure 3.

	Below Basic	Basic	Proficient	Advanced
1992	47	31	18	3
1994	50	28	17	5
1998	47	31	18	4
2002	40	33	22	5
2003	37	31	24	8

Figure 3. Florida Grade 4 reading achievement level percentages

Although there is evidence of increased reading achievement levels among fourth graders, no significant change was detected between 2002 and 2003 in the average score for this group. The average Grade 4 score in 2003 did not differ significantly from that in 1992 (U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, 1998, 2000, 2002, and 2003 Reading Assessments). As previously noted, the greatest reading increases were in the Proficient and Advanced categories (see *Figures 2* and *3*). The pressure for achievement accountability, especially in reading, is often not directed at the individual teacher or the individual grade level, but rather at the elementary school level (Kortez, Linn, Dunbar, & Shepard, 1991). This trend may be changing as states begin to look more closely at the issues of accountability and tie student achievement to

teacher pay. In an attempt to produce higher achievement in reading, sanctions for failure are now placed on the whole school in which reading achievement is exceptionally low (Yen & Ferrara, 1997).

Under the accountability provisions of the NCLB, all public school campuses, school districts, and the state are evaluated for Adequate Yearly Progress (AYP). Schools, districts and states are required to meet AYP criteria on three measures: Reading/Language Arts, Mathematics, and either Graduation Rate (for high schools and districts) or Attendance Rate (for elementary and middle/junior high schools). If a school, district, or state that receives Title I-Part A funds fails to meet AYP for two consecutive years, that campus, district, or state is subject to certain sanctions and may be required to offer supplemental education services, school choice, and/or take corrective actions.

The Florida Education Association (FEA), an NEA affiliate, has responded to the controversy surrounding the impact of NCLB on Florida schools. The president of FEA, Andy Ford, stated "This one-size-fits-all federal mandate is wreaking havoc on Florida schools and creating chaos for teachers, parents, students and administrators" (FEA, 2006).

The NCLB established *Reading First* as a new, high-quality evidence-based program for the students in the United States. The Reading First initiative builds on the findings of years of scientific research that was compiled at Congressional request by the National Reading Panel. The primary goal of Reading First is to ensure that all children in U.S. schools learn to read by the end of Grade 3. According to the "United States Department of Education (USDE) Reading First Guidance," Reading First provides funds to Local Educational Agencies (LEA) for school districts with the highest numbers or percentages of kindergarten through Grade 3 students reading below grade level (Marzano, 2001).

The National Reading Panel (NRP) report of 2000 was written in response to a Congressional mandate to help parents, teachers, and policymakers identify key skills and methods central to reading achievement (Neuman, 2001). The NRP chose to review only major findings from experimental research studies and recommended: (a) developing phonemic awareness and phonics skills in kindergarten and Grade 1; (b) providing regular guided oral reading with focus on fluency; (c) providing silent reading for developing fluency, vocabulary and comprehension; (d) use of direct teaching of comprehension strategies, and noted that providing good comprehension strategy instruction is a complex instructional activity; and (e) inclusion of extensive, formal preparation in comprehension strategy teaching for all teachers.

In 1998 the Federal Reading Excellence Act (REA) was signed into law as a federal effort to redesign American reading instruction by setting criteria for the type of instructional practices to be supported with federal funds. Such funds have always had some control on how they might be used. The REA substantially increased restrictions on federal funds' use by requiring that federal monies allocated under this Act fund only research-based instructional practices.

The REA and several state education laws now require "rigorous, replicable, scientific evidence" to support the design of reading instruction and the selection of reading material. The rationale for this is that scientific evidence for methods and approaches that have worked well and facilitated reading improvement for large numbers of students can provide a foundation for teachers' instructional practices.

10

The Problem

In today's schools many children struggle to learn to read. The administration of the NAEP (2000) revealed that 44% of American fourth graders failed to achieve the new basic proficiency standard. Many teachers and parents affirm that reading failure has taken a tremendous toll on children's development of self confidence and motivation to learn, and has a negative effect on their later school performance.

Allington (2001) reports that for two decades American education has suffered a steady bombardment of criticism from politicians, policy makers, and pundits. As a result, questions about American children's reading proficiency have been the cornerstone of negative educational campaigning, causing many adults to believe that American schoolchildren have fallen behind children in other countries and that illiteracy is at epidemic proportions across our country. In response to such criticism, national standards and high-stakes testing have been promoted as ways to improve schooling (Allington, 2001).

Several theorists have proposed that tests should be used to define educational goals. Norm- or criterion-reference standardized tests are now abundant in classrooms as an attempt to provide both direction and support to teachers and schools. Test-driven instruction may serve policy makers, but critics argue that the major flaw is the questionable validity of the outcomes (Shepard & Airasian, 1988). Bracey (1987) also contends that when curriculum and instruction are directed by test-based objectives, the results can be fragmentation and a trivialization of education.

Given recent publicity about students being unable to read when they graduate from high school, it is natural and predictable that policy makers would react (Duffy &

Hoffman, 1999). One such reaction is the Florida State Statute SB-20-E that mandates any third grade student not performing satisfactorily on the Florida Comprehensive Assessment Test (FCAT) will be retained in Grade 3 unless he or she is exempt from retention by good cause.

Many students in the United States hold their own as readers at the early elementary level but begin to falter in the intermediate elementary grades, third through fifth. They continue to fall further behind in middle years and drop far behind in high school. Allington (2001) says that one contributing cause may be the misapplication of useful primary instructional techniques with older students who are having difficulty as readers.

Older students struggling with reading often avoid opportunities to practice reading because it is a slow, taxing and frustrating process for them (Ackerman & Dykman, 1996; Cunningham & Stanovich, 1997). These students need reading instruction grounded in research that is intensive enough to close the achievement gap between these poor readers and their grade-level peers. The instruction should be explicit and impart the skills missed in the primary grades (Torgesen, Wagner, Rashotte, Alexander, & Conway, 1997). There is no single perfect method for teaching reading and consequently, it can be argued that the pursuit of such a perfect method for teaching reading to all children distracts us from the real goal of trying to improve reading instruction (Duffy & Hoffman, 2001). Teachers need to learn how to design lessons that foster reading proficiency, fluency, and higher-order thinking for all students.

The new national and state standards for proficient reading target a more thoughtful literacy than that which has been traditionally taught in schools (Allington, 2001). These new reading proficiency standards usually require students to exhibit reading behaviors that allow them to read and answer extended response items. It requires the student to think about what is read and then explain or describe the thinking process used in the response. Being asked to think about what you have just read is a different skill from just being asked to recall the text read. Students are now being asked to demonstrate their skill as fluent readers on comprehensive tests that require analyzing what they read and responding with not only multiple choice responses but with short and long written responses as well.

These new literacy assessments provoke more thoughtful responses and are an attempt to move closer to measurement of proficiencies designed to identify a person as literate (Cunningham & Allington, 1994). One approach that may offer reading improvement for some students is flexible and fluid grouping of students for instruction. This reading model teaches fluency and comprehension strategies while addressing the skills and strategies desired by higher-order literacy standards. What works best in reading instruction has been an ongoing debate for years by researchers, educators, administrators, and legislators. Major issues revolve around how to group students for reading instruction and the teaching of strategies to create fluent readers (Ivey, 2000; Kulik & Kulik, 1987; Slavin, 1987; Tomlinson, 2000).

This debate centers on the desire that all children be provided with adequate instruction to ensure social and academic success and that they have equal opportunities to access needed knowledge as they learn to read (Oakes, Gamoran, & Page, 1991; Kulik & Kulik, 1987). Teachers are encouraged to employ instructional methods that promote the active involvement of students in their own learning (Tapscott, 1999). Grouping for instruction becomes a key issue when teachers are faced with the issues of increased class sizes and the widening diversity in the make up of such classes. Teachers are confronted with the unsettling task of meeting the needs of students who come with a wide variety of abilities, interests, skills, strategies, and levels of motivation, as well as having to deal with their many different racial, ethnic, linguistic and economic backgrounds (Au, 1997).

To meet the needs of a diverse student population, many teachers group students by instructional needs, thus differentiating instruction. Tomlinson (2000) describes differentiated instruction as the efforts of the teacher to respond to variance among learners in a classroom. Whenever a teacher singles out an individual student or a small group of students and varies the instruction in order to create the best possible learning experience he or she is differentiating instruction (Tomlinson, 2000). There is evidence to support the use of differentiated instruction in the elementary grades. If students are taught in ways that are responsive to their reading levels (Vygotsky, 1986) and their interests (Csikszentmihalyi, 1997), they are more successful in school and find it more satisfying (Tomlinson, 2000).

Today's teachers are faced with making difficult instructional decisions as they attempt to facilitate student learning in an effective and motivational manner. One of the major decisions teachers face is how to group students for within class instruction and what method to use to effectively meet each learner's needs (Lou, Abrami, & Spence, 2000).

A model using whole class instruction results in students being taught as a single unit, with no modifications made to address individual needs. The instructional emphasis is on uniformity, not on diversity. Whole group instruction loses sight of the various needs of the students (Cunningham, 2003; Ivey & Broaddus, 2001). The focus is on teacher explanation and encouragement and does not allow for student interaction with peers. The instruction is designed around a single set of materials appropriate to the learning activity rather than the varying needs and abilities of the students. Whole class instruction emphasizes the same educational objectives for the entire class, and engages a fixed pace of instruction for all students (Allington, 2001; Ivey & Broaddus, 2001).

In whole group instruction the delivery of new content material is often presented orally by the instructor and followed-up with seatwork to practice the skills taught. Whole group instruction lends itself to direct instruction by the teacher in an attempt to maximize instructional time, followed by guided and independent practice. This can result in extrinsic motivation for learning, as students may be motivated by tangible incentives to learn provided by the teacher (Lou, Abrami, & Spence, 2000). The use of whole group instruction can result in the strong getting stronger and the weak getting weaker. This is a generic one size fits all model of instruction (Stanovich, 1986).

An alternative model to whole group instruction is small group guided reading instruction, in which students are taught in several small groups and are grouped by ability (Fountas & Pinnell, 1999). The practice of grouping students by ability increased at the turn of the century and became a common practice in elementary classrooms for several decades (Barr, 1975). The social organization of grouping is not solely responsible for reading success or failure of a given reading program; it is, however, believed that the organization of students does play a crucial role in the facilitation of teaching, learning, and classroom management (Pikulski, 1991).

15

Another issue that needs to be addressed in reading instruction is the teaching of fluency and comprehension strategies. Teachers too often assess fluency and reading comprehension rather than actively and effectively teaching reading strategies to their students (Alvermann, 2002; Ivey& Broaddus, 2001; Tovani & Keene, 2000). Comprehension strategies are powerful tools to help a reader construct meaning from text. Scientifically based research says that text comprehension can be improved by instruction that helps readers use specific comprehension strategies (NRP, 2000). Unfortunately, research shows that very little comprehension instruction occurs in most classrooms (Durkin, 1993). Comprehension is of critical importance to reading skill development in children and is critical to their ability to obtain an education. Reading comprehension has become the essence of reading, essential to academic learning as well as lifelong learning (Durkin, 1993).

The NRP (2000) noted three major themes in the research on the development of reading comprehension skills. First, reading comprehension is a complex process: It is a cognitive process that cannot be totally understood without a clear understanding of the role that vocabulary plays in the understanding of what is being read. Second, comprehension is an active process that requires the reader to make intentional connections between what the reader knows and what the author has written. Finally, teacher preparation and training are tied to the effective ability to better prepare students to develop and apply competent reading comprehension strategies. Because these three themes serve as the foundation for understanding how to best facilitate development of comprehension abilities in readers, the major findings from the NRP report will be further explored in the rationale section.

Research over 30 years has shown that instruction in fluency and comprehension helps students understand what they read, remember what they have read, and communicate with others about what they read. Fluency and comprehension strategy instruction needs to be taught because it helps students become powerful, active readers who are in control of their reading and their learning (Armbruster, Anderson, & Ostertag, 1987). Overall, students need instruction in monitoring fluency and comprehension, using semantic organizers, answering and generating good questions, recognizing story structure and summarizing. These strategies have a firm scientific basis for improving reading comprehension. (Armbruster, Anderson, & Ostertag, 1987; Calfee & Brown, 1979; Duffy, 2003; Tovani & Keene, 2000; Good & Stipek, 1983; Hiebert, 1983).

While there are no easy answers or as Allington (2001) says, no quick fixes, for optimizing reading achievement, there is an extensive knowledge base to show the skills and strategies children must learn in order to read well. These skills and strategies provide the basis for sound curricular and instructional decisions as well as instructional approaches that can help prevent the consequences of early reading failure (Neuman & Dickinson, 2001).

Purpose of the Study

Based on the previous information, the need for research in the area of grouping for reading instruction at the individual's instructional level is evident. In designing more effective reading instruction, there will always be a need for research to improve programs that will foster higher student achievement levels in reading. According to Allington and Cunningham (1999), we need not be searching for the one best way to teach all children to read for certainly this attempt is doomed to fail; this is a search for the impossible.

The purpose of this study is to evaluate a structured classroom model for delivery of reading instruction called the Intermediate Extended Literacy Routine (IELR). The IELR is a model for the delivery of explicit reading instruction that incorporates the fluency instruction that provides a bridge between word recognition and comprehension as well as providing text comprehension instruction. Text comprehension instruction is an important part of the IELR guided reading routine. Students are taught to monitor their comprehension. Students learn to be aware of what they do understand, identify what they do not understand, and use appropriate fix-up strategies to resolve problems in comprehension. This model involves flexible, like-needs grouping that allows teachers the opportunity to provide effective support for students' literacy learning.

Reading instruction must address the needs of the reader. Since children differ, their reading instruction needs to differ. The instruction needs to be designed and modified by the teacher to meet the individual needs of the readers. Therefore, the purpose of this study is to examine more closely the reading achievement levels of students being taught using the IELR guided reading model in intermediate third grade classrooms.

Research Questions

This study is designed to answer the following research questions:

 What are the effects of the Intermediate Extended Literacy Routine (IELR) on reading fluency of third graders identified as struggling in reading as measured by Timed Readings and Running Records?

- 2. What are the effects of the IELR on reading comprehension of third graders identified as struggling in reading as measured by narrative retellings at increasing levels of difficulty?
- 3. What are the effects of the IELR on reading comprehension of third graders identified as struggling in reading as measured by the reading comprehension common assessment from the Pinellas Classroom Assessment System (PCAS)?
- What are the effects of IELR on reading fluency of third graders identified as struggling in reading as measured by Gray Oral Reading Test-Fourth Edition (GORT-3)

Definition of Terms

To clarify the meaning of specific terms used in this study, the following definitions are applicable:

Guided Reading Group. A teaching approach designed to help individual students learn how to process a variety of increasingly challenging texts with understanding and fluency (Fountas & Pinnell, 2001).

Fluency. The level of accuracy and rate where decoding is relatively effortless and where oral reading is smooth and accurate with correct prosody (National Reading Panel, 2000).

Comprehension. The capacity to perceive and understand the meanings communicated by texts (Durkin, 1993).

Self-monitoring. The process by which readers are aware of what they do understand, identify what they do not understand, and use fix-up strategies to resolve problems with comprehension (National Reading Panel, 2000).

Schema. The background knowledge or what a person already knows about a topic

Differentiated small group instruction. Making instruction for reading specialized by modifying it for students needs (Fountas & Pinnell, 2001).

Dynamic grouping. Grouping for reading instruction in which teachers change the composition of the groups regularly to accommodate the different learning paths of the readers (Fountas & Pinnell, 2001).

Gradient text. The ordering of text according to a specific set of characteristics (Fountas & Pinnell, 2001).

Leveled text. The ordering of the difficulty levels of text readability according to ascending or descending difficulty (Fountas & Pinnell, 2001).

Florida Comprehensive Assessment Test (FCAT). The standardized test used in primary and secondary public schools of Florida. First administered in 1998, it replaced the CTBS, Terra Nova, and HSCT exams.

Lexile. An absolute scale for measuring reader performance. Lexile Measure is a number indicating the reading demand of the text in terms of semantic difficulty (vocabulary) and syntactic complexity (sentence length). The Lexile scale ranges from 200 to 1700.

Reader's lexile. A measure of a child's level of reading comprehension skills

Text lexile. A measure that describes the difficulty level of reading materials (books, journal articles, periodicals, textbooks, etc.).

Lexile framework. A tool that makes it possible to place readers and text on the same scale.

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS). A set of standardized, individually administered measures of early literacy development. They are designed to be short (one minute) fluency measures used to regularly monitor the development of pre-reading and early reading skills.

Struggling reader. A student who has weak reading skills and strategies and lacks reading proficiency.

Limitations

There are factors to consider in a study such as this that may be considered limitations. The small sample size (n=13) is one such consideration. The study participants are a convenience sample from a single, large, urban, west coast, Florida school district. The participants were designated as struggling readers and came from a heterogeneous group of students with varied backgrounds.

The participants received the treatment in a single subject design; this might have an effect on internal validity due to interaction of the students with other support programs to which they may have been assigned. Maturation and attrition may also threaten the internal validity of the study.

Chapter 2

Review of Related Literature

Introduction

This chapter includes a review of relevant literature concerning theory and current research related to the study. The research reviewed is presented in seven general categories: (1) effectiveness (of schools, teachers, teachers of reading and classroom reading instruction); (2) at-risk students; (3) school factors; (4) acquisition of fluency and reading; (5) comprehension; (6) grouping for instruction; and (7) guided reading in intermediate grades.

Effective schools

Research on effective schools conducted over the past 40 years provides us with a great deal of information on effective schools and accomplished elementary teachers of reading (Taylor, Pressley, & Pearson, 2000). From this research we learn that effective teachers and schools maintain an academic focus that keeps students engaged in learning and on task, and teachers provide direct instruction (Brophy, 1973; Durkin & Biddle, 1974; Stallings & Kaskowitz, 1974). Effective teachers emphasize higher level thinking skills more than lower level skills; they use modeling and explanation to teach strategies for decoding and comprehending text, and provide more small- group than whole- group instruction (Knapp, 1995; Roehler & Duffy, 1984; Taylor, Pearson, Clark, & Walpole, 2000).

However, even with all that research tells us about effective schools and teachers, the fact remains that many students are not reading well enough to keep up with the demands of schooling and fall further behind with each school year (Taylor, Pressley, & Pearson, 2000). Stringfield, Millsap, and Herman (1997) conducted a 3-year study of schools implementing special strategies to improve reading achievement. Instruction was mainly delivered in a teacher-led format, focused on discrete skill instruction, and much of the teacher's time was taken up by management concerns. Stringfield, Millsap, and Herman also reported that their observations showed little evidence of students engaged in sustained reading or applying what they were learning. The results suggest that these teachers were not using best practices for effective schools. Even schools recognized as effective still had ample room for instructional improvement, which, if implemented, would render greater gains in reading achievement.

The Committee on the Prevention of Reading Difficulties in Young Children advocates the importance of systemic, school-wide restructuring efforts in reading (Snow, Burns, & Griffin, 1998). They recommend that poor performing schools consider reading reform efforts that focus on both school-wide organizational issues and improved classroom instruction. Stringfield, et al. (1997) found that schools that began reform programs that focused on primary grades had greater reading achievement gains than those schools that spread their resources across the elementary grades and into the secondary grades. They also concluded that schools that used externally developed programs had greater achievement gains than schools that developed their own programs.

There are many factors that can contribute to lower student achievement. In a national study of 400 Chapter 1 schools, researchers found that high levels of poverty, a

greater percentage of retentions, and higher levels of student disciplinary actions were related to lower student achievement (Puma, Karweit, Price, Ricuitti, Thompson, & Vaden-Keirnan, 1997). A study conducted by the Charles A. Dane Center (1999) highlighted nine high-performing urban elementary schools in which important similarities were found across the schools. Positive influences on student achievement were associated with schools that had a collective sense of responsibility for school improvement that includes a focus on putting children first, well behaved student populations, and increased time spent on instruction. These schools also provided teachers with time for collaborative planning and learning that focused on instructional issues, instructional leadership and support.

Stringfield et al. (1997) conducted a longitudinal study of schools using special strategies for educating disadvantaged children. The study addressed several questions: (a) What do children do differently in high-effect and low effect schools? (b) How stable are schooling patterns (academic learning time) in high- and low- effect schools? and (c) What are the roles of programs such as special education, state compensatory education, and federally funded compensatory education in determining overall effect?

The study design included three parts: a best evidence synthesis and critical review of school effectiveness literature, analyses conducted as part of Phase IV of the Louisiana School Effectiveness Study (LSES), and analyses conducted as part of Phase V of the LSES. As part of the study, the researchers visited 16 previously identified, matched outlier elementary schools and collected data from (1) low- and high- inference classroom observations; (2) student, teacher, and principal school climate questionnaires and interviews; (3) program coordination, questionnaires of principals, classroom

teachers, Chapter 1 teachers and special education teachers; (4) new teacher induction interviews; and (5) integrated, high-inference ratings of instructional processes at student, teacher, and school levels. They obtained program outcome measures that included statemandated criterion-referenced test scores, norm-referenced test scores and writing samples. Chapter 1 TIERS data and student attendance and academic self-concept measures were also evaluated. Analysis of the results investigated the stability of school effects over time; level of program coordination in more effective and less-effective schools; relationships among students, teacher, program and school processes; effects of those processes on multiple student outcomes; and effects of district- and state-level polices on school, classroom and student processes and outcomes. Researchers in the LSES Phase V analyses tested hypotheses regarding natural change in schools and districts in a less extensive 9-year follow-up (Stringfield, Millsap, and Herman, 1997). Findings revealed that about half of the schools retained their effectiveness status over a 9-year period; the stability was about the same for both effective and less effective schools. Such basic factors as socio-economic status (SES), urban makeup, and grade level affected the success of strategies used to make schools more effective. The importance of the principal throughout all the phases was more pronounced than expected. The study found several cases in which schools improved dramatically over time as well as several cases where schools became less effective.

Stringfield et al. (1997) found schools that showed the greatest achievement gains worked hard at the initial implementation and the long-term maintenance of the innovation. They further noted the importance of systematic self-improvement in the schools; the changes continued to evolve and expand. This study also found support for the idea that students placed at high risk for academic failure could achieve at levels that met national averages. In the large national study of 400 Chapter 1 schools, researchers found that greater application of grade retention policies and higher levels of student disciplinary actions were related to lower student achievement (Puma et al., 1997). High performing, high poverty schools had lower than average teacher and student mobility, principals had more years of experience, and there was a more orderly school environment than in the average high-poverty school. There was also greater parent and community involvement as well as a better school climate in the high-performing, highpoverty schools. (Puma et al., 1997).

There is no single factor that makes a school effective. Effective schools may have different curricula and different approaches to teaching and learning. These schools are, however, places where the environment nurtures student achievement and personal development, teachers engage students, and class size or student population is small. In effective schools, ground rules set the tone for respectful behavior. Further, when school improvement processes based upon effective schools research are implemented, the proportion of students who achieve academic excellence either increases, or, at the very least, remains the same.

Effective Teachers

Effective teachers have been the focus of a considerable amount of research spanning several decades. Rosenshine and Furst (1973) found several teacher behaviors consistently related to student achievement. These behaviors include: clarity, variability, enthusiasm, task orientation, teacher directness, use of criterion material, use of structuring comments, and multiple levels of questioning. Effective teachers are able to produce better achievement regardless of curriculum material, pedagogical approach, or reading program used. What the effective teacher does with the reading program, not the program itself, makes the difference.

Researchers agree that the impact of decisions made by the teacher is far greater than the impact of decisions made at the school level (Marzano, 2003). Wright, Horn, and Sanders (1997) analyzed the achievement scores of 60,000 students in Grades 3, 4 and 5 in five subject areas (mathematics, social studies, science, language arts, and reading) and found the most important factor affecting student learning is the teacher. They further noted that effective teachers appear to be effective with students at all academic levels, regardless of the levels of heterogeneity in their classrooms. If the teacher is ineffective, students instructed by that teacher will make inadequate progress regardless of how similar or different the students are in academic achievement. Effective teachers can have a profound influence on student achievement.

Researchers have identified many variables that correlate with teacher effectiveness. Kathleen Cotton (1995) has identified 150 variables; Fraser, Walberg, Welch and Hattie (1987) have 30 variables they consider components of teacher effectiveness. These lists of variables can be organized in many ways. Cotton uses seven categories to organize the 150 variables she has identified: (1) planning; (2) setting goals; (3) classroom management and organization; (4) instruction; (5) teacher-student interaction; (6) equity; and (7) assessment.

Marzano (2003) has developed three teacher-level factors (instructional strategies, classroom management, and classroom curriculum design) to organize the research on teacher effectiveness. Marzano's three factors and Cotton's seven categories contain

similar descriptors and reflect the same types of conditions for evaluating teacher effectiveness. The teacher-level factors can be discussed separately, but they cannot be separated in terms of their impact on student achievement (Marzano, 2003). More effective teachers use more effective instructional strategies. The expert teacher has a wide variety of instructional strategies and the knowledge of when these strategies should be employed.

In his book *First Lessons: A Report on Elementary Education in America* (1986), former Secretary of Education William Bennett outlines the need for a well thought out list of research-based strategies. Bennett strongly makes the point that good teaching is not a mystery and research can provide clear guidance on what makes effective teaching (Marzano, 2003). Of over 40 research-based practices identified by Bennett, the following 10 pertain to classroom instruction: the use of experiments, teacher estimation strategies, teacher expectations, effort, reinforcement, classroom time management, direct instruction, memorization, questioning, homework, and classroom assessment.

Bert Creemers (1994) developed a similar list of instructional strategies that added advanced organizers, ability grouping, and clarity of presentation. Marzano (2003) suggests that effective teachers have more strategies at their disposal than do less effective teachers. After presenting lists of instructional strategies, he encourages taking action steps to promote effective teaching. He recommends providing teachers with an instructional framework for units that use researched-based strategies.

Effective Teachers of Reading

To help schools reach the goal of all children reading on grade level by the end of Grade 3, researchers and professional organizations have synthesized much of the recent research on learning to read, effective school reform programs, early reading interventions and effective classroom practices. In an attempt to look at what they feel is missing in the area of research on effective schools and teachers, Taylor, Pearson, Clark and Walpole (2000) designed a single study to look at school and teacher factors contributing to children's reading success. The study was designed to examine school factors and teacher factors contributing to primary grade students' reading growth and reading achievement. The researchers investigated school and classroom variables in effective, moderately effective, and less effective schools. They also compared classroom practices of accomplished and less accomplished teachers (Taylor et al., 2000). The study was conducted in four states (Virginia, Minnesota, Colorado and California), included 14 schools, and involved 70 first, second and third grade teachers. Across the schools involved, students who qualified for subsidized lunches comprised 28-92% of the populations.

Teachers in the study were observed for one hour of reading instruction each month from December to April to get an overall picture of instructional practices. Two Grades K-3 teachers from each school with two low and two average readers per teacher served as subjects. To secure an index of overall school effectiveness, the researchers created a composite score based upon the overall school mean for students' gains on three individually administered reading measures (words correct per minute, reading words in isolation and retelling of a passage). The school average on a standardized test was used for Grade 3 students. Based on this information, the schools were clustered into three categories. Four schools were considered to be most effective, six schools were designated as moderately effective, and four schools were judged to be least effective.

Table 2 presents relevant data on socio-economic status of the schools in the study.

Table 2

	Percentage free/reduced price lunch	Mean Grade 3 standardized reading test percentile	
Most effective schools	59	51	
Moderately effective schools	69	40	
Least effective schools	45	43	

School Effectiveness	, by Poverty ar	nd Reading	Performance
School Bjjeenreness			erjormentee

Note. Data from Taylor et al., 2000

One variable that separated the most effective schools from the other schools in the study was time spent in small group instruction for reading. Reading instruction in the most effective schools included teacher-directed reading of narrative and expository text. The reading instruction incorporated work on phonics, phonemic awareness, vocabulary, fluency, and comprehension (the five research-based instructional practices touted in NCLB as the underpinnings of good reading instruction.) Students in the more effective schools spent more time in small group instruction across these activities than did students in less effective schools (see Table 3).

Table 3

	Minutes in	Minutes in	Minutes in	Total minutes
	small group	whole-group	independent reading	reading
	reading	reading		
Most effective	60	25	28	134
schools				
Moderately	26	37	27	113
effective schools				
Least effective	38	30	19	113
schools				

Time Spent in Reading Instruction by School Effectiveness Levels

Note. Data from Taylor, Short, Shearer, & Frye, 1999

Table 4 shows the study findings on comprehension instructional practices. The teachers in the most effective schools used more higher level questions with their students than did the teachers in the moderately effective and least effective schools. Although the teachers in the most effective schools were more balanced in their use of instructional tools than the teachers in the moderately effective and least effective schools, it was noted that there was not much comprehension activity in these classrooms in general.

Table 4

			Writing in
	Text-based	Higher level	response to
	questions	questions	reading
Most effective schools	37	37	47
Moderately effective	34	7	24
schools			
Least effective schools	45	0	27

Percent of Teachers Frequently Observed Using Various Approaches to Comprehension Instruction in Grades 1-3 by School Effectiveness levels

Note. Data from Taylor, Short, Shearer, & Frye, 1999

The study points out several other factors that distinguished the most effective schools from moderately and least effective schools. Teachers in the most effective schools communicated more with parents and felt good home-to-school connections played a great role in their success. In four of the most effective schools, the teachers reported that reading was a priority in their building and that this was a factor that contributed to their success. Taylor et al. (2000) summarized their findings by stating that sound decisions (including the use of a collaborative model of reading instruction and effective classroom practices) contributed to the success of the most effective schools.

In another study, Taylor, Peterson, Pearson and Rodriguez (2005) analyzed a small subset from year one of a larger national study on school reform in reading that was funded by the Center of Early Reading Achievement (CIERA). The purposes of this more focused analysis of the findings from the study were to: (a) describe the teacher practices that were observed in the classrooms, especially those derived from the last four decades of research on effective teachers; (b) examine the relationship between teachers' practices and students' growth in reading achievement; and (c) provide vignettes that describe what effective practices look like in action.

The participants in the study were drawn from 80 high-poverty (70-95% of the students qualified for free or reduced lunch) schools. Across the schools, 2-68% of the students were non-native speakers of English and 67-91% were members of minority groups. The schools involved were geographically diverse; they were located in the rural southeast, a large mid-west city, and a large southwestern city. Two teachers per grade level from each school were randomly selected to take part in the classroom observations. The teachers were asked to divide their class into three groups (high, average and low) of students according to their reading levels. Two children from each group (six students per classroom) were randomly selected for observation. The average class size was 25.

The students were given a battery of literary assessments in the fall and spring. Grades 1 - 6 assessments included the Gate-MacGinitie Reading Test, 4^{th} ed., passages from the Basic Reading Inventory, 7^{th} ed., and tests of fluency. Grades K – 1 assessments included letter names and sounds, phonemic awareness, word dictation, and concepts of print. Each teacher was observed three times for an hour during their reading instruction to document their teaching practices. The criterion for inter-observer agreement was 80% in coding scores for each of the seven categories of the coding scheme (Scanlon & Gelzheiser, 1992). The observation protocol combined qualitative note taking and a quantitative coding process. The researchers analyzed the classroom observations data to investigate the relationship between classroom instructional practices and students' growth in reading. The research-based classroom practices analyzed included (Taylor, Pressley, & Pearson, 2002):

Whole-group: the percentage of 5-minute segments in which whole-group activities were coded.

Small group: the percentage of 5-minute segments in which small group activities were coded.

Word skills: a sum of a number of 5-minute segments in which the Level 4 activities dealing with word skills were observed, divided by the number of segments in which the Level 3 code was designated as reading.

Comprehension skills or strategies: the percentage of 5-minute segments in which comprehension skills and strategies were coded, divided by the number of Category 3 reading segments coded.

Lower level questioning or writing about text: the percentage of 5-minute segments in which Category 4 activities dealing with lower level talking or writing about text were observed, divided by the number of Category 3 reading segments coded.

Higher level questioning or writing about text: the percentage of 5-minute segments in which Category 4 activities dealing with higher level talking or writing about text were observed, divided by the number of Category 3 reading segments coded.

Teacher telling: the percentage of 5-minute segments in which the teacher was coded as telling children information.

Teacher using recitation: the percentage of 5-minute segments in which the teacher was coded as engaging children in recitation.

Teacher coaching: the percentage of 5-minute segments in which the teacher was coded as coaching children for independence.

Students actively responding: an aggregated variable; the percentage of responses in which children were coded as engaging in reading, writing, or manipulating out of the total number of coded responses.

Data analysis from this study revealed that whole-group instruction across all grade levels was coded more often than small group instruction. This finding is in contrast to what Taylor, Pearson, Clark, and Walpole (2000), found in an earlier study of primary grade reading instruction in schools that were beating the odds (see Table 3). A greater occurrence of small group instruction was found to be characteristic of the most effective schools in the earlier study. Word work activities were observed more in Grades K-1 than in Grades 2-6, and comprehension work was seldom observed in the primary grades. These findings were similar to those that Taylor, Short, Shearer, and Frye (1999) found in previous studies of primary grade reading instruction in effective, low-income schools. A relatively small amount of higher level questioning or writing related to stories read was observed and this finding was consistent with results of earlier studies, but Taylor, Pearson, Clark and Walpole (2000) note that effective teachers in more effective schools are more frequently observed asking higher order questions than less effective teachers in less effective schools (Knapp, 1995; Taylor, Pressley, & Pearson, 2002). (See Table 4.)

Teacher interaction styles were also reported. Telling and recitation were major interaction styles of teachers in all grades, but coaching was seldom observed. In their earlier study (Taylor, Pearson, Clark, & Walpole 2000), the level of teacher interaction style differed depending on the level of teacher accomplishment; less accomplished teachers were observed telling, while accomplished teachers preferred coaching as their main interaction style. Students in this study were observed engaged in passive responding more often than active responding across all grade levels. This is in contrast to what Pressley et al. (2001) found in exemplary first grade teachers' classrooms, where teachers had their students actively engaged in actual reading and writing. These results were reported to emphasize the characteristics of the most accomplished teachers in effective classrooms.

Taylor et al. (1999), following the work of Bryk and Raudenbush (1989), used Hierarchical Linear Modeling (HLM) analyses to assess the relationship between teacher instructional practices and students' reading and writing achievement. The outcome measures were fluency, measured by the number of words read correctly on a grade level passage in one minute, and comprehension, measured by the comprehension subset of the Gates- MacGinitie reading tests. These assessments were given to students in the fall and again in the spring of the school year. The HLM analysis for fluency revealed that for Grade 1, the incidence of students coded as actively responding was positively related to the spring scores, whereas the HLM analysis for Grades 2 and 3 showed that telling had a significant negative relationship on the spring scores. Teacher and student actions accounted for the negative relationship between telling and spring scores.

Telling and recitation were the major styles for delivery of instruction by teachers in all grades. Telling was observed 50-58% of the time and recitation for 60-65% of the time in Grades K-6. Coaching, however, was only observed 12-21% of the time. Teachers were observed using teacher-directed styles of telling and recitation for 60-70% of the instructional classroom time. For Grades 2 and 3, the HLM analysis revealed that 45% of the variance in spring scores was between teachers. For every 10% increase in teacher-directed event coding, student fluency scores decreased by a mean of 4.0 words correct per minute (Taylor, Pearson, Peterson, & Rodriguez, 2005).

The HLM analysis of comprehension scores for Grades 4- 6 revealed significant differences in reading comprehension. Increased time spent on higher level questions had a positive effect on spring comprehension scores; telling had a significant negative effect. It was noted that in the more effective schools, teachers were observed asking higher level, aesthetic questions 37% of the time. Higher level questioning was observed in moderately effective schools 7% of the time and in the least effective schools, it was not observed at all (see Table 4).

The summary of the findings of the descriptive data of the typical effective classroom indicates that a shift in certain teaching practices, such as higher level questioning, style of teacher interaction, and encouraging student involvement may be warranted (Taylor, Pressley, & Pearson, 1999). Classroom literacy instruction needs to reflect best practices as identified in the research. According to Taylor et al. (1999), the findings from their research at the classroom level in combination with earlier research suggests that in addition to what teachers teach, *how* teachers teach is also important to consider when seeking to make changes in reading instruction as a means to increase students' reading achievement.

Effective Classroom Reading Curriculum Design

Classroom curriculum design is another factor in effective teaching. According to Marzano (2003), the breakdown in student learning may be a result of poor classroom curriculum design. For this discussion, curriculum design as it relates to classroom instruction refers to the order and pacing of the content to be taught as well as the interaction of the students with the content that are under the control of the classroom teacher.

There are some curricular designs that are addressed at the school level, but teachers still need to be able to make decisions regarding curriculum design at the classroom level if they are to meet the unique needs of their students (Farr, Tulley, & Rayford, 1998; Marzano, 2003).

Ellen Whitener (1999) performed a meta-analysis of 22 studies and concluded that there was a strong relationship between a student's knowledge and experience with content, and the type of sequencing and pacing necessary to learn that content. Teachers often do not make decisions about how to pace and sequence the content lessons that they teach (Marzano, 2003). Roger Farr and colleagues found this to be a common situation at both the elementary and secondary level. Teachers often rely on the design of the textbooks to guide sequencing and pacing of instruction (Farr, Tulley, & Rayford, 1998).

Taylor and Pearson (2001) found that the most effective teachers were highly skilled at managing time as well as behaviors. They found that highly effective teachers are clear about the purposes of their activities and practices and their curriculum design allows for scaffolding to support student learning. Highly effective teachers also encourage self-regulation by teaching students to monitor their own learning. Teachers should make informed decisions about sequencing, pacing and presentation of instructional content. They need to recognize and articulate the specifics of the content to be taught, ensure that students have repeated exposures to the content, identify the procedures to be mastered, structure content and tasks using the principles of good instruction, and engage students in complex tasks that require them to address content in several ways (Marzano, 2003; Taylor & Pearson, 2001).

Teachers who are most accomplished in helping students thrive, especially in reading, are skilled in coaching and keeping all children academically on task. They have input in curriculum design and delivery of instruction. Findings of the study by Taylor and Pearson (2001) suggest that a combination of sound school-level decisions and collaborative efforts, coupled with effective practices within individual classrooms, are needed if schools are to succeed in improving elementary students' reading achievement.

Richard Allington (2002), responding to data from a study of Grade 1 and Grade 4 teachers in six states, concluded that effective reading proficiency rests largely on the ability of classroom teachers to provide expert, exemplary reading instruction. Allington and his colleagues at the National Research Center on English Learning and Achievement have studied some of the best elementary teachers in the United States over the last decade. The teachers were selected from schools that have significant numbers of socioeconomically disadvantaged students and have racial, ethnic, and linguistically diverse student enrollments that mirror the nation's population. The researchers spent at least 10 days or more observing and videotaping each teacher.

Allington (2002) studied teachers who were most effective in developing reading and writing proficiency in their students. He identified six common features that he referred to as The Six Ts of effective elementary literacy: time, talk, texts, teaching, tasks,

and testing (see Table 5).

Table 5

Six Common Features of Effective Elementary Literacy

- Time Students of A⁺ teachers spend as much as half the day in reading and writing activities, a significantly higher proportion than in the average classroom. Extensive practice facilitates reading competency, and practice requires sufficient time.
 Texts Reading materials of appropriate complexity must be readily available. Lower-achieving students in particular require books they can successfully read. Motivation to read is nurtured by prior success in reading.
- Teaching Exemplary instructors provide ample doses of direct, explicit teaching. They model the cognitive processes, such as how to decode words, that skilled readers must master. The best reading teachers model and demonstrate frequently throughout their lessons.
- Talk Successful reading teachers have a higher rate of student talk than found in most classrooms. The quality of the student talk also differs; rather than merely responding to teachers' questions, the student talk focuses on ideas, problem solving, strategies, and hypotheses. The teachers also use more open-ended questions.
- Tasks Longer and fewer reading assignments are the norm. Emphasis is given to reading whole books or extended small group research projects. Students are often given choices from a menu of possible tasks.
- Testing In assessing student performance, teachers tended to stress effort and improvement more than achievement. This practice does require that teachers know their students well. Very little use of commercial test preparation materials was observed.

Allington (2002) noted that reading instruction cannot be packaged or

regurgitated from a common script because it must be responsive to students' needs.

According to Allington, if we truly hope to achieve the goal of the NCLB, we must focus

on creating a much larger number of effective, expert teachers who manage to get better results no matter what curriculum materials or reading approach they use.

There is no single answer to the question of how to best reshape our schools' reading programs and curriculum designs to provide teachers with instructional practices that they can employ in their effort to help all students read well by the time they leave elementary school. Currently in the United States, improving children's reading achievement is a major goal of the No Child Left Behind Act. We have ample research from the last 40 years on what makes effective schools and effective teachers, and there is a wealth of information to help schools and teachers move toward that goal (Taylor & Pearson, 2001).

Pulling it all together is the challenge. Ongoing professional development that allows teachers the opportunities to work together within buildings to reflect on their teaching practices is needed to ensure that all students have a chance to succeed and that no child is left behind. Through research, we have gained knowledge about what makes schools effective. The question remains, however, of whether the techniques, processes and procedures that undoubtedly work in schools will also get results with at-risk students.

At-Risk Students

Who are at-risk students? Defining the term is a controversial issue. Traditionally, at-risk students were those students whose appearance, language, culture, values, communities and/or family structures didn't match those of the dominant white culture that schools are designed to serve and support (Hixson & Tinzmann, 1990). Goodlad and Keating (1990) contend that minorities, the poor, and immigrants were perceived to be

culturally or educationally disadvantaged or deprived. McDill, Natriello and Pallas (1986) provide a broader set of characteristics that correlate with a high likelihood of dropping out. These include demographic, socioeconomic and instructional issues such as living in high growth states, living in unstable school districts, being a member of a low-income family, having parents who are not high school graduates, speaking English as a second language, being the child of a single parent, having a negative self- image, being bored or alienated, having low self-esteem and leaving to pursue alternate work.

As it became obvious that the majority of the students labeled at-risk failed to achieve academically, the problem was often attributed to deficiencies in the students themselves, not the schools or the level of effective instruction they received (Goodlad & Keating, 1990). In recent years, however, the tendency to blame academic failure purely on the students, their community or their family has diminished. The issue of defining at risk remains a controversial part of the national discussion about underachieving students. Ideological and theoretical differences continue to exist among educators, policymakers and the general public about the role and responsibility of the students, their families and the schools (Hixson & Tinzmann, 1990; Natriello, McDill, & Pallas, 1990). Hixson and Tinzmann (1990) provide four general approaches to defining at-risk students that are commonly used by most schools and policymakers. They are the Predictive Approach, the Descriptive Approach, the Unilateral Approach and School Factors.

The Predictive Approach uses certain student characteristics and conditions to assign the label of at-risk to a student. Conditions such as living with a single parent, being a member of a minority group, having limited English proficiency and so on are defined as at-risk indicators because, statistically, students with these indicators are more likely to be in the lower achieving groups and more likely to drop out of school. This approach and the Descriptive Approach are the two most commonly used approaches for identifying at-risk students. The Predictive approach has the benefit of being clear cut, uses information already available to the schools and other involved agencies, and is based on the idea of intervention rather than remediation of related academic and school problems. The Predictive Approach does have limitations and deficits. This model can promote stereotyping of students and leads educators and policymakers to create programs to identify the ways in which the student needs to change in order to fit into the existing school structures and programs (Goodlad & Keating, 1990). This early categorizing of students as at-risk can have an adverse affect on teacher and school expectations by lowering teachers' expectations of what the student is capable of achieving. The use of the Predictive Approach indicators often can put students in the position of being blamed for poor school performance based on conditions over which they have no control (Richardson & Colfer, 1990).

The Descriptive Approach uses a monitoring and intervention strategy. Unlike the Predictive Approach, which uses predisposing indicators, this approach waits until school problems occur and then identifies the student's problems after a pattern of poor academic performance. This approach is reactive in nature. Students who are already performing poorly in school are at risk because they have not been able to successfully maneuver through the system of regular school programs and it is very likely that they will continue perform poorly, falling further and further behind as they pass through the grades or eventually drop out. Their problems can become severe enough to make successful intervention or remediation unlikely. The Descriptive Approach can involve

supplementary programs rather than changes in the regular curriculum and programs in which the student is not successful. This practice can also deepen the negative impact of labeling and isolate struggling students from their peer role models and other support systems. Also, inclusion in ancillary programs often slows down the student's progress, increases the degree to which the student falls further behind, and lessens the student's belief that he can ever catch up (Levin, 1988).

There are programs from the Descriptive Approach that have reported success as intervention programs with students who are at risk of failing to learn to read. One such program is *Reading Recovery*. Many believe Reading Recovery is the best available program for preventing reading failure (Pinnell, Lyons, & DeFord, 1988; Swartz, Shook, & Hoffman, 1993). Dr. Marie Clay, a New Zealand educator, developed Reading Recovery in the 1970s to deal with the reading failure there. Dr. Gay Su Pinnell and Dr. Charlotte Huck introduced it in the United States through the Ohio State University in 1984 (Grossen & Coulter, 2004).

Reading Recovery involves program-trained teachers providing one-to-one tutoring in 30-minute daily sessions to the lowest 10 to 20% of Grade 1 students who have the prerequisite skills for Reading Recovery. Reading Recovery supporters say that the program brings the lowest performing children up to the average reading level of their peers by the end of Grade 1. This is accomplished with 60 lessons in 12 weeks of one-onone instruction. When students reach this goal they are "discontinued" from the Reading Recovery program. Each Reading Recovery-trained teacher, working a half-day with Reading Recovery, is expected to be able to tutor 8 students in one year. According to Hiebert (1994), the actual figures from the national database indicate that the average

number of students per teacher per year is a somewhat lower 5.5 (11 students for a fulltime equivalent teacher.) Because of Reading Recovery's popularity -- and its expense -many independent evaluators have raised questions and reviewed the research that is cited to support claims regarding its effectiveness (Grossen & Coulter, 2004).

Although the Descriptive Approach is one of the most commonly used approaches for identifying at-risk students, it is reactive in nature and does not address the issue of at-risk students until students are performing poorly. Interventions for these students need to be put into place before problems become severe enough to make successful intervention or remediation unlikely.

The fourth approach commonly used by schools and policymakers for defining atrisk students is the Unilateral Approach. This approach addresses egalitarian ideals and values while allaying the concerns of parents, educators and policymakers that too much time and attention is being spent on poorly performing students at the expense of the average and the more gifted students. This approach does, however, tend to ignore the need to attend to those students in the greatest need at the time; these are the students that are not able to function successfully within their current school organization and are performing at unacceptable academic levels.

School Factors

There are School Factors that can also become potential causes for students to be considered at-risk. School Factors that have been identified as hindering academic achievement of some students include inflexible scheduling; narrow curriculum; a primary focus on basic/lower-order skills; inappropriate, limited, and rigid instructional strategies; inappropriate texts and other instructional materials; over-reliance on

standardized tests to make instructional decisions; tracking; isolated pull-out programs; and teacher and administrator beliefs and attitudes toward both students and parents (Hixson & Tinzmann ,1990; Richardson & Colfer, 1990). The positive quality of this approach is that it does not blame poor academic achievement on circumstances beyond the student's control. The negative side is that analysis of school factors is not widely used by state or district level policymakers to allocate resources or develop program interventions for at-risk students (Hixson & Tinzmann, 1990). If there is to be success in restructuring schools with the ultimate goal of success for all students, there must be a focus on the problem of at-risk students (Goodlad & Keats, 1984).

Effective, high quality education can mean different things to different people. Some groups feel students should be better educated in the basic skills; others are more concerned that schools prepare students to be technologically literate; still others want schools to teach discipline, citizenship and positive democratic values (Durian & Butler, 2004). The concern for at-risk students is whether we as a nation can provide them with a quality education. The following findings emerge as a disturbing picture of the status of struggling students in the school setting: (a) most experts agree that 30% of students in schools today will drop out prior to graduating and this number is likely to increase in the coming years (Durian & Butler, 2004); (b) there does not appear to be a clear definition of who these students are (Mann, 1986); and (c) society will be responsible for the economic burden for failing to adequately educate these students (Levin, 1989).

What can be done to effectively engage and educate students who are at-risk of failing academically? Over the past decades a number of strategies and programs have been designed to provide extra help to low achieving students and to equalize distribution

of educational resources and opportunities (Legters, McDill, & McPartland, 1993). Headstart, Title 1 (now Chapter 1) and Upward Bound are a sample of the large federal programs initiated during the Johnson administration in the 1960s.The recently mandated No Child Left Behind Act signed into law in 2002 contains some of the most comprehensive reforms to the Elementary and Secondary Education Act since it was instituted in 1965.

Hodgkinson (1985) noted that successful programs combine intensive, individual training in basic skills with work-related projects, and found that when the relationship between education and work is clear, most potential dropouts can be motivated to stay in school and perform at a higher level. The strategies and programs examined by Legters, McDill and McPartland (1993) consistently revealed two phenomena of concern. The first they refer to as the "fade out" effect, in which students participating in a program make significant academic and /or behavioral progress only to have these gains drop off when they are promoted out of the program or move to another school. The second is an observation that individual programs often address only one source of a student's difficulties by providing extra help in reading or involving the student in a mentoring program. Few programs explicitly address the student as a whole person with many needs and experiences, all of which have an impact on his or her ability to learn (Legters, McDill, & McPartland, (1993).

Edmonds (1979) and Haberman (1995) studied the effects of poverty on at-risk students. Their conclusions are still relevant to today's at-risk students. Edmonds asserts that all children are educable and that the behavior of the school is critical in determining the quality of that education. In his research on schools serving poor populations, he found that there are effective schools that are successfully working with at-risk students. Haberman refers to these schools as "Star" schools. Star schools demonstrate certain characteristics such as strong administrative leadership; a climate of expectation in which no child is permitted to fall below minimum but attainable levels of achievement; an orderly, but not rigid, atmosphere that is conducive to instructional business at hand; an attitude which makes it clear that the pupil's acquisition of basic skills takes precedence over all other school activities; the ability to divert resources from other areas in order to further the fundamental objectives when necessary; and use frequent monitoring of pupil progress so teachers and the principal are constantly aware of pupil progress in relation to instructional objectives.

Although there are many successful school-based programs for at-risk students with rich curricular offerings, Levin (1986) asserts that an effective strategy to help disadvantaged, at-risk students must include the following components: enriched preschool experiences; a means to improve the effectiveness of the home as a learning environment; a program to improve the school's effectiveness in meeting the needs of the disadvantaged; and a program to assist those from linguistically different backgrounds to acquire skills in standard English.

According to Durian and Butler (2004), a review of research on both effective schools and at-risk students suggests that there may be value in applying effective schooling practices to programs for at-risk students. Effective school practices such as clear expectations for academic performance, strong leadership to support and guide instructional practices, and frequent monitoring of student academic progress are evident in programs that successfully meet the needs of at-risk students. The challenge to policy makers and educators is to develop innovative and creative strategies that encourage all students to be engaged learners (Durian & Butler, 2004). The specific needs of at-risk students must be met to ensure no child is left behind.

Acquisition of Fluency and Reading Comprehension

When educators and state department officials were surveyed to determine what teachers should know to be able to run effective school reading programs, they emphasized content-specific pedagogy (Reynolds, 1995). This reflects the belief that to improve reading, teachers should be experts in strategies pertinent to reading instruction. Teaching reading has never been easy. Noted and respected practitioners and researchers such Halle Yopp, Marilyn Adams, and David Pearson emphasize the importance of systematic and research-based instructional approaches aimed at giving students control as they learn to read (Yopp, 1995; Adams, 1990; Pearson & Dole, 1987). Countless opportunities open up to children when they become good readers early in life. Research shows that children who read well in the early grades are far more successful in the later years.

Too many children struggle with learning to read. While there are no easy answers or quick solutions for optimizing reading achievement, an extensive base now exists to show us the skills children must learn in order to read well (Armbruster & Osborne, 2001). Improving reading skills of children is a top national and state priority. Research has identified the most essential components of reading instruction; among these components are fluency and comprehension (Allington & Walmsley 1995; Cunningham, 2003; Taylor, Peterson, Pearson, & Rodriguez, 2005). Fluency is the ability to read text accurately and quickly. Fluency is important because it provides a bridge between word recognition and comprehension. Fluent readers read silently, recognize words automatically, and group words quickly to help them gain meaning from what they read. Fluent readers read aloud effortlessly and with expression. Their reading sounds as natural as if they were speaking (Armbruster & Osborne, 2001). When less fluent readers read aloud, their reading is choppy; they read slowly and word-by-word. Fluent readers read smoothly; because they recognize words automatically, they don't have to concentrate on decoding the words and thus can focus their attention on making sense of what they are reading. Fluent readers can make connections with the text, between texts and to their own background knowledge as they read.

For some students, fluency develops gradually over considerable time and through much practice. At the early stages of reading development, oral reading is slow and labored; early readers are just learning to break the code of letter sound correspondence and blending letter sound into words. Fluency is not a stage of development at which readers can read all words quickly and easily; it changes, depending on what readers are reading and their familiarity with the words and the amount of practice they have had with the text they are reading. Even skilled readers may experience difficulty reading text on an unfamiliar topic; their reading may appear labored or slow. Instructional approaches that have been most successful in building fluency involve students reading text at their *instructional level* (containing mostly words that students know or that they can decode easily) or even at the *frustration level* (text read with less than 90% success) if there is strong guidance and feedback (Kuhn & Stahl, 2003).

A recent large-scale study by the National Assessment of Educational Progress (2005) found that 44% of a representative sample of the nation's fourth graders were low in fluency. The study also found a close relationship between fluency and reading comprehension. Students who scored lower on measures of fluency also scored lower on measures of comprehension.

Grouping for Reading Instruction

According to Barr's historical overview (1975), the launch of Sputnik prompted an increase in the use of homogeneous grouping for reading and math instruction in elementary education. This resulted in the development of numerous homogeneous grouping models, the majority of which were within class grouping models. Within class, small grouping models emphasize diversity rather than uniformity of the instruction (Abrami, Chambers, Poulsen, De Simone, d'Apollonia, & Howden, 1995). The teacher has control over the delivery of instruction, modifying and tailoring instruction to meet the needs of the student groups. The use of small group instruction can have some advantages; with an emphasis on peer interaction and independent follow-up activities, the teacher has more time to provide remedial assistance to students experiencing difficulty or enrichment activities for students in need of more challenging materials (Abrami et al., 1995).

When Title I programs were established, *pull-out* services were used as a model for delivery of additional instruction for struggling students. Pull-out services for poor readers included homogeneous grouping for reading instruction (Harris & Sipay, 1980).

Inflexible, static homogeneous grouping has been criticized because grouping students by ability lowers self-esteem and motivation among children with learning difficulties and creates an even larger gap between high and low achieving students (Calfee & Brown, 1979; Good & Stipek, 1993; Hiebert, 1983). However, guided reading groups that are fluid, changing in make-up based on needs, would alleviate the concern for the effect that tracking would have on students self-esteem and motivation to read. Research suggests that educators should consider the use of flexible and fluid, like- needs (homogeneous) grouping when making decisions about how to group students for reading instruction (Baker, 2003; Bloom, 1984; Flood, Lapp, Flood, & Nagel, 1992; Pikulski, 1991; Tomlinson, 2000).

In the article "Redesigning Reading Instruction," Ivey (2000) states that children differ as readers. Classrooms are more diverse than ever and teachers need to meet the needs of all learners. Allington and Walmsley in their book "No Quick Fix: Rethinking Literacy Programs in America's Elementary Schools" (1995) would have us consider that teachers may be less able to rely on programs for students that they feel least prepared to teach. Walmsley and Allington also determined that differentiated reading instruction should no longer be considered as an intervention or remedial measure but rather as a way to teach all students. They contend that one size fits all reading instruction never fit anyone, and that it is time to discard old paradigms and redesign reading instruction with the diversity of the students in mind (Lou, Abrami, & Spence, 2002). Empirical studies by Anderson, Wilson and Fielding (1998), Stanovich (1986), Nell (1988) and Csikszentmihalyi (1990) found that reading instruction differed in the amount of time

students spent in actual reading time and that students need time to sit in the driver's seat, to navigate, and to make choices about their reading.

Students need opportunities to read; the amount of time spent reading separates successful from non-successful readers. Reading instruction that causes struggling readers to spend less time engaged in the actual process of reading can be more harmful than helpful to their reading achievement. We know from the research of Anderson, Wilson, and Fielding (1998) and Stanovich (1996) that the amount of time spent reading separates the successful from the unsuccessful readers.

According to Allington and Johnson (1991), the quality of reading instruction for struggling readers is typically fragmented, low-level skill instruction with limited time to actually read and write. Teachers who do not have an adequate model for differentiating reading instruction for their students may vary instruction in ways that could hinder rather than help their struggling students. Without grouping for instruction and differentiating the reading skill and strategy taught based on student needs, schools may actually widen and increase reading differences among students (Allington, 1994).

Lou, Abrami, and Spence (2002) say that class size and the diversity of the students who populate today's classrooms mean teachers face difficult pedagogical decisions if students are to learn effectively and enjoyably. One such decision is how to group their students for instruction within their classrooms and how to provide effective instruction within the groups. Small group instruction allows a class of students to be taught in several groupings where the emphasis of instruction is on diversity rather than uniformity. There are several reasons for using a model of small group instruction; Lou, Abrami, and Spence further contend that small group instruction allows the teacher to

have greater flexibility in adjusting the learning objectives and the pace of the instruction to meet the needs of the learners in the group. Small group instruction also provides students with opportunities to interact with their peers on a common level. As readers, students may orally rehearse their reading, explain their thinking to others, and have a cooperative environment that promotes risk-taking rather than a competitive incentive based structure to work within. With small group instruction, students have opportunities to build social and communication skills that can boost their self-esteem as they work with others to learn (Lou, Abrami, & Spence, 2002; Kulik & Kulik, 1987). Small group instructional methods that include ability grouping, such as the guided reading in the intermediate grades model, are used primarily in elementary classrooms, especially for reading instruction. The prominent rationale for using homogeneous ability grouping is to achieve a compatible grouping of students so they can move together at a similar pace (Durso & Coggins, 1991; Pinnell & Lyons, 1995; Kulik & Kulik, 1987).

One of the advantages of grouping students by ability for reading instruction is that the teacher is able to provide adaptive instruction for students of different relative abilities (Kulik & Kulik, 1991). Reading instruction in the form of guided reading groups are homogeneous small groupings in which the students read at or about the same level, demonstrate similar reading behavior, and share similar instructional needs. The groups are temporary and dynamic, an important difference from traditional grouping practices of static heterogeneous grouping (Slavin, 1989).

In a meta-analysis of research on within class grouping, Lou, Abrami, & Spence (2002) explain that the educational research on within class grouping reflects mostly positive mean effects for within class grouping on student achievement, yet the magnitude of the effects seemed to appear inconsistent across and within the research reviewed. Effects were more positive at the lower grade levels than at the higher grade levels (Kulik & Kulik, 1987, 1991; Slavin, 1987, 1990). Several reasons were offered to explain the less positive effect of small group instruction at higher grade levels. One explanation suggested in the reviewed studies is that more training of teachers on small group instructional strategies takes place in the elementary setting than in the high school and college setting. Another explanation offered for the less positive effects of small group instruction at the higher levels is that students may be more familiar with whole class instruction and have a less positive attitude towards learning and working in small groups. A final suggestion offered for the explanation of the negative correlation in the higher grade levels refers to the possible unequal division of work put forth by members of the group in unstructured group learning situations due to either social loafers or overachievers (Shepperd, 1993).

In cooperative learning studies that directly compared homogeneous ability grouping and heterogeneous ability grouping, Lou, Abrami, Spence, Poulsen, Chambers and d'Apollonia (1996) found that on average, small groups formed of homogenous ability students showed higher achievement than those in heterogeneous ability groupings. They did, however, conclude that the benefits of homogeneous ability grouping were not consistent for all students of the relative ability levels. Lou et al. reported that medium ability students benefited more in homogeneous ability groups, low ability students benefited more in heterogeneous ability groups, and high-ability students benefited equally in either type of grouping. The results of this quantitative review of the research on the effects of within class grouping on student achievement indicate that not all within class grouping models are equally effective on student achievement. The results suggest the effect of small group instruction on student achievement is dependent on teacher training. Lou et al. (1996) contend that the effects of small group instruction on student achievement may be optimized when teachers are provided appropriate training, when students are grouped for instruction based on ability as well as compatibility as learners, and when cooperative learning strategies are used to further student learning in an interactive format of small grouping. Lou et al., as a result of this meta-analysis, believe the most important educational predictors of the effects of small group instruction. These findings have educational implications for classroom practice and support the proposed use of an intermediate guided reading routine as an instructional model in the upper elementary grades.

The implementation of within class small grouping for reading instruction in the intermediate elementary grades acknowledges the importance of teacher training. Lou et al. (1996) state that teachers need to change and become learning facilitators rather than knowledge dispensers. The intermediate guided reading routine uses appropriate instructional materials and employs effective group-learning strategies. Dynamic intermediate guided reading groups avoid the traditional problems of grouping because teachers change the composition of these small groups regularly to accommodate the different learning paths of readers. Through small group guided reading, students are given opportunities that support their need for social interaction. The interaction involved in forming and reforming groups helps create a sense of community in the classroom.

This type of grouping for reading instruction helps students to talk, read, and think more purposefully about the reading work they are doing.

Guided Reading in the Intermediate Grades

Since learning to read is a complex process, it is logical to assume that students require ongoing instruction even after they understand the underlying principles of reading. Young readers are asked to adjust their reading strategies as they read for different purposes or when they encounter new genre (Fountas & Pinnell, 2001). They must develop reading behaviors that foster reading comprehension. Readers must learn how to organize their knowledge so that they are able to draw inferences and summarize the increasingly difficult texts they encounter in the intermediate elementary grades. Fountas and Pinnell further state that explicit instruction is essential for most students and makes reading more powerful for all students.

The purpose of guided reading instruction is to meet the varying instructional needs of all students in a classroom. Guided reading involves small groups of students (three to eight students) who are at a similar place in their reading development. These students demonstrate similar learning needs and process text at about the same level. The role of the teacher in guided reading is to scaffold literacy learning in a way that engages students in making meaning from what they have read. This practice is different from simple checking or testing comprehension after the student has read the text. Dowhower (1999) states there is evidence that many teachers inadvertently take on the role of interrogators because they tend to confuse *checking* for comprehension with direct teaching of comprehension. Guided reading is an approach to literacy instruction that can help teachers refocus on the importance of the role the teacher plays in reading

instruction. The interactive process of reading allows the student to actively engage with the text and build his or her own understanding of the author's message.

Making meaning from what has been read is the core of the reading process (Braunger & Lewis, 1998; Clay, 1991, 1998; Learning Media, 1997; Pressley, 1998). The teaching of strategies that foster comprehension is not evident in many classrooms. Dowhower (1999) expressed concerns that discussions of text content and teaching of strategies to enhance comprehension have been rare in classrooms. Pressley points out that although the development of comprehension is widely agreed upon as the goal of literacy instruction, it is rarely offered systematically in the elementary grades. In an empirical study primarily concerning time spent reading, Fielding and Pearson (1994) articulate that frequent and systematic opportunities to read and discuss whole text with a teacher and peers allows students to more readily make reading comprehension strategies their own.

Teachers need to provide frequent opportunities for students to read connected text and to interact with others as they use comprehension strategies; this interaction facilitates the development of effective strategies for comprehending both narrative and expository texts of many kinds (Braunger & Lewis, 1998; Caswell & Duke, 1998; Flippo, 1998).

In Grades 3 - 5, guided reading is an approach that is concerned with the development of comprehension. It enables comprehension strategies to be taught systematically using a wide range of texts. During guided reading sessions the students read silently because it is more authentic and relevant to real life than oral reading. According to Dowhower (1999), guided reading is also more effective for learning than

oral round robin reading, which has been shown to decrease comprehension. Ongoing analysis of individual student needs is a critical part of the guided reading routine. Teachers work closely with small groups during guided reading which allows them to monitor carefully each student's ability to handle the text; they then may modify further instruction and text selection based on the student responses. To be effective, it is important that teachers develop an awareness of the range of background knowledge that students bring to school and to the reading task, including their overall background knowledge specific to the text to be read. Guided reading enables teachers to develop this awareness and to more effectively meet the student needs (Fountas and Pinnell, 2001).

In the empirical research of Braunger and Lewis (1998), Anderson and Pearson, (1998) and Caswell and Duke, (1998), the necessity of building schema and accessing prior knowledge is addressed. According to Braunger and Lewis, if students have some prior knowledge about the new information they are going to encounter in the reading, they are more likely to make meaningful connections with the text. The role of prior knowledge in reading is widely recognized (Anderson & Pearson, 1984; Caswell & Duke, 1998). In order for guided reading sessions to be effective, teachers are encouraged to take into account the extent to which their students' existing schemata match the ideas embedded in the text (Pressley, 1998).

Literacy develops best through social interactions and dialogue with others (Dowhower, 1999). According to Fountas and Pinnell (1996), guided reading is essentially a carefully managed "social occurrence" during which the teacher works to extend the student's literacy development by responding sensitively to efforts and providing appropriate ongoing support as they read. Dugan (1997) advises teachers to

scaffold or support students' learning by collaborative means to help them make sense of literature. In 1978, Vygotsky expressed the view of learning as a social occurrence that can be fostered when teaching is focused in the learner's "zone of proximal development." Vygotsky describes this zone as the area between the student's current achievement and the level the student can achieve with support from a more knowledgeable other. Guided reading groups may supply the students with the support they may need to be successful readers. During guided reading lessons, students read silently. There is discussion of the text before, after, and sometimes during the reading. Discussion is basic to the approach since the main focus is to enhance each student's understanding of what they are reading (Braunger & Lewis, 1998; Learning Media, 1997; Pressley, 1998).

Motivation can play a large role in reading achievement. When students want to read, have authentic purposes for reading texts that are relevant and meaningful to them, and are supported in their reading, their motivation is usually high (Au, 1997; Johnston, 1997; Spiegel, 1998). Under these conditions, students are likely to engage more readily and successfully in the task of reading (Cambourne, 1988, 1998; Flippo, 1998). The design of guided reading sessions creates conditions that ensure the reading experiences of students are meaningful, purposeful, scaffolded and non-threatening.

Guided reading groups are small and allow each student to participate fully in the act of reading and interacting with the text and a knowledgeable other. The nature and extent of student's engagement in literacy learning is crucial because students who are actively engaged and who enjoy the learning experiences are more likely to become skilled readers and writer (Smith & Elley, 1997). The underlying strength of guided

reading is its ability to challenge and scaffold students by providing each student the opportunity to be a self-reliant reader who is able to self-evaluate and interact with the text and their peers. Guided reading sessions are designed to ensure that students will internalize reading strategies as they experience success and enjoyment thus contributing to their continued engagement as readers, gradually developing greater independence and competence. Au (1991), and Dugan (1997) argue that supportive patterns of interaction that challenge and support students are particularly beneficial to literacy learning. Guided reading instruction is designed to ensure that readers experience success so that they will continue to be engaged as readers, gradually developing greater independence and competence.

Students can gradually internalize and apply strategies at increasingly higher levels across a range of texts when given systematic support. Students develop competencies that enhance their chances of becoming proficient critical readers (Fountas & Pinnell, 2001). In a longitudinal study by Allington (2002), the dynamics of reading instruction by what he considered exemplary first and fourth grade teachers were studied. Allington used data collected from a decade of studying first and fourth grade classroom teachers in six states; he concluded that enhanced reading proficiency rests largely on the capacity of the classroom teachers to provide expert, exemplary reading instruction that cannot be packaged or regurgitated from a common script because it is responsive to the children's needs (Allington, 2002). Guided reading is a teaching approach designed to help individual students learn how to process a variety of increasingly challenging texts with understanding and fluency. Teachers that use the guided reading model of instruction make critical decisions that respond to student needs on a regular basis. (See Chapter 3 for a description of the guided reading routine.)

Conclusion

The design, development, and use of the Intermediate Extended Literacy Routine (IELR) are supported in research literature (Allington & Walmsley, 1995; Cunningham & Allington, 2003; Farstrup & Samuels, 2002; Taylor, Peterson, Pearson, & Rodriguez, 2005). The viability of the project is grounded in the success of early intervention programs that hold high expectations for student achievement in the area of reading. The IELR is clearly designed to foster the development of reading strategies that increase reading fluency in emergent readers through a consistently delivered alternative model for reading instruction for third grade at-risk readers. Clarity of goals is critical for helping young readers and writers who struggle to acquire literacy. Supplementary programs designed to support students' classroom literacy and acquisition are often in conflict with those of the regular education classroom, or their goals are so underspecified that there is a lack of consistency within the program as well (Winfield, 1995). The IELR is not a supplement to the instruction already taking place in the regular classroom.

Goals are clear and expectations are high in high poverty schools in which children learn to read and write (Hoffman 1991; Purkey & Smith, 1983). There are many approaches to teaching essential components of reading instruction. The approaches may differ in the amount of guidance and/or direction teachers give their students as they are learning new skills/strategies. The scientific research reviewed by the National Reading Panel (2000) revealed that different approaches to teaching the essential components of reading are not equally effective (National Institute of Child Health and Human Development, 2000). According to the National Reading Panel report, the most reliably effective approach is called *systematic and explicit instruction*. With systematic instruction, skills and concepts are taught in a planned and sequenced manner. Lessons focus on clearly defined objectives (teaching points) and are stated in terms of what students will do. Guided practice activities are included to actively engage students in the reading work. Students are given an opportunity to take part in tasks that give them a chance to apply what they have been taught. Explicit instruction means the teacher states clearly what is being taught and effectively models how a skilled reader uses it. The purpose of explicit instruction is to focus the student's attention on what is important in the demonstration.

The development of the Intermediate Extended Literacy Routine (IELR) as a model for delivery of instruction is based on the belief that systematic and explicit instruction is a reliable and effective approach for teaching reading skills and strategies to struggling readings. The IELR component used in this study were developed by the researcher and designed to support the process of accelerating the learning of the lower achieving third grader readers who part of the general education classroom through a systematic and explicit delivery model. (See Chapter 3, *Independent Variable*.)

The routine consists of focused mini-lessons that are explicit in both content and delivery of instruction. The delivery of the IELR instruction consists of an explicit emphasis on fluency or comprehension teaching points, a teacher demonstration of a fluency or comprehension skill/strategy, active engagement in the reading behavior by

the students as they are scaffolded by the teacher, and finally, application of the skill or strategy independently by the students.

The component parts of Intermediate Extended Literacy Routine (IELR) play a role in preparing students to be successful readers by having teachers spend time engaging students in skill and strategy work that promotes fluency and comprehension. Research suggests that such activities can lead to successful readers and perhaps cut down on the number of students who fail to learn to read. (Allington & Cunningham, 2002; Farstrup & Samuels, 2002; Taylor, Peterson, Pearson, & Rodriguez, 2005).

Small differentiated reading groups are particularly important for students who have difficulty learning to read. Struggling readers are frequently lost during whole group instruction and therefore become passive and disengaged from the reading process. Focused teaching in small groups, using leveled text, makes it possible to provide appropriate instruction for a varying leveled class of learners. Guided reading groups that are small, flexible, and varied allow students to support one another as readers and to feel like they are part of a community of learners.

The results of the Taylor and Pearson (2002) study on effective reading instruction suggest that children in the elementary grades make the greatest growth when a high proportion of their reading instruction is delivered through small achievement groups; their progress is monitored regularly and they have ample time to read and to learn needed skills and strategies. The use of instructional strategies and programs that reflect scientifically based reading research are the underpinnings of the Intermediate Extended Literacy Routine (IELR).

64

Chapter 3

Method

This chapter presents the method and procedures for the study. The chapter is divided into the following sections: (a) purpose, (b) research questions, (c) setting and sample, (d) research design, (e) independent variable, (f) procedure, (g) dependent variables, (h) baseline/comparison condition, (i) experimental control and measures, and (j) visual analysis.

Introduction

Teachers are under great pressure to find effective strategies for reading instruction for all their students in general education classrooms. Only some students succeed in becoming literate; others continue to struggle and fall further behind (Allington, 2001). Many teachers lack the training to work effectively with struggling readers. They need a manageable, predictable routine for reading instruction geared to meet the needs of struggling readers (Pearson & Dole, 1987).

In this study, a repeatable, predictable, and manageable in-class routine for reading instruction was developed for use in the intermediate grades.

This chapter describes the participants, measures, and procedures used for data analysis of this study.

Purpose

The purpose of this study is to evaluate a structured classroom model for delivery of small group reading instruction called the Intermediate Extended Literacy Routine (IELR). The IELR is used to deliver explicit reading instruction that incorporates fluency instruction to provide a bridge between word recognition and comprehension and provides text comprehension instruction. This study examined the effects of an intermediate guided reading routine on the achievement of third graders who are struggling in reading, as evidenced by weak reading skills and strategies and lack of reading proficiency. Students who are designated as at risk for failure to become literate in the intermediate grades often exhibit problems with fluency, comprehension and metacognitive processes that good readers employ. The IELR includes components intended to enhance fluency and comprehension. The following specific research questions were addressed through comparison of each participant and his or her growth in reading over an 8 week period.

Research Questions

- What are the effects of the Intermediate Extended Literacy Routine (IELR) on reading fluency of third graders identified as struggling in reading as measured by Timed Readings and Running Records?
- 2. What are the effects of the IELR on reading comprehension of third graders identified as struggling in reading as measured by narrative retellings at increasing levels of difficulty?
- 3. What are the effects of the IELR on reading comprehension of third graders identified as struggling in reading as measured by the reading comprehension

common assessment from the Pinellas Classroom Assessment System (PCAS)?

4. What are the effects of the IELR on comprehension of third graders identified as struggling in reading as measured by the Gray Oral Reading Test-Fourth Edition (GORT-3) comprehension subtest?

Setting and Sample

Participants for this study were Grade 3 students from general education classrooms attending an elementary school in the large urban school district of Pinellas County on the west coast of Florida. The total school population is 696. The school is an identified Title 1 school with a free and reduced lunch rate of 54%. The minority student population, including Hispanic, African American, Asian, Native American and Multiracial, is approximately 30% of the school population. (See Table 6.)

Table 6

Demographics of the School

Programs	Number
Pre-K (VE)	10
Pre-K (CD)	15
SLD Self Contained	27
General Education	644
Total Population	696
Minority Ethnicities	Percentage
African American	16
Hispanic	8
Multiracial	2
Other	Percentage
Free and Reduced Lunch	54
Mobility Rate	63

The school is a writing demonstration school for the school district. In August of 2008, 24% of the Grade 3 students at the school were identified as struggling students based on the Diagnostic Inventory of Basic Skills (DIBELS) oral reading fluency assessment.

The participants for this study were drawn from two Grade 3 classrooms in the school and include only those students identified as struggling with fluency in reading based on results of the DIBELS Assessment. DIBELS is a set of standardized, individually administered measures of early literacy development. They are designed to

be short (1 minute) fluency measures used to regularly monitor the development of prereading and early reading skills. The students in the study were drawn from intact classrooms in one school; this is a convenience sample. The researcher sent 16 parent consent forms home with students and followed up with a phone call to each parent explaining the study and asking for them to sign and return the consent forms. Thirteen signed consent forms were returned.

Each participant was assigned to a small group for reading instruction using the IELR in his or her homeroom class. The unit of analysis in this study is the student. A multiple baseline design (Richard, Taylor, Ramasamy, & Richards, 1999) was used. Thirteen students were identified to receive the treatment, seven students in one classroom and six students in the other classroom participated in the study. The researcher, the school's Learning Specialist and the Title 1 teacher administered the assessments. Pre- and post-tests, three informal measures (running record, timed reading, and narrative retellings) and one diagnostic measure (DIBELS) and the Pinellas County Assessment Series (PCAS) were administered; the running record, timed reading and narrative retelling provide performance-based assessment results (see Table 7).

Table 7

Assessment	Chart

Measure	Purpose	Reading Behavior	Assessment Administrator
GORT	Pre & Post Test	Fluency Comprehension	Researcher School Learning Specialist
DIBELS	Identify students for the study	Fluency	School Assessment Team (Title 1 Teachers & Reading Coach)
Pinellas County Assessment PCAS	Common assessment	Comprehension	Classroom teacher
Timed Readings	Repeated Measure	Fluency	Title 1 Teacher Researcher (bi-weekly)
Running Records	Repeated Measure	Fluency	Title 1 Teacher Researcher (bi-weekly)
Narrative Retelling	Repeated Measure	Comprehension	School Learning Special Title 1 Teacher Researcher (bi-weekly)

Research Design

The research is a single subject research design based on the work of behaviorists such as B.F Skinner and J. B. Watson (Richard et al., 1999). The research was conducted using a multiple baseline design across sets of students. The single subject design has continued to gain in popularity over the years as a tool in educational and clinical research. Single subject research focuses on socially important behaviors and may be applied, behavioral, and analytic (Baer, Wolf, & Risley, 1968). Single subject designs have been used to look at and document behaviors in students since the beginning of the 20th century. This design was widely used during the 1950s and 1960s and continues to be used as a research design in educational and clinical settings.

In applied research, there is a societal interest in the problem being studied and determining the possible outcome is seen as a valid endeavor. Behavioral research refers to a design that studies what participants can do and, if the behavior is quantifiable, through systematic observation. For the purpose of reliability, this design requires an explicit measurement of the observations. Analytic refers to the believability of the study (Richard et al., 1999).

The event that the researcher controls (in this study, the IELR) must account for the change in the behavior of the participants. The results must be replicable and the events must be generalized and demonstrate the robustness of the behavior change. In this research design, as with other types of research, the terms independent and dependent variables are used to describe elements in the study.

The independent variable is the IELR and the dependent variables of comprehension and fluency are used to measure changes that demonstrate the desired outcome of the study. The changes in the targeted behaviors of reading comprehension and fluency levels determine whether the intervention had the desired effect.

Richards et al. (1999) refer to a two stage or phase design that includes a baseline phase and the intervention phase. Each phase in the study is labeled with a letter, usually starting with the upper case letter A. An example would be an A-B design that would represent the baseline phase and intervention phase. For the purpose of this study the A-B design was used. In this study, during the baseline (A) phase, the researcher collected data and the IELR was not yet introduced. The researcher observed behaviors during this phase to gain an understanding of the current performance of the participants. In the intervention (B) phase, the classroom teacher applied the IELR for 8 weeks and data were collected to determine the effectiveness of the treatment.

Direct and systematic replications are important for maintaining external validity in the single subject design (Richard et al., 1999). Direct replication is duplication of the procedure used as closely as possible in the same study. This is achieved by using multiple subjects in one study (inter-subject replication) and the conditions are replicated across several similar subjects and compared. In systematic replication, conditions from an earlier study are varied slightly but the results obtained are similar. Along with replication, educational significance is an important factor. Educational significance is the idea that the results should translate to real world implications with results that are meaningful to practitioners and the lives of the participants (Richard et al., 1999). In this study, a single subject, A-B, multiple baseline design across subjects was used.

In this study, 14 participants were identified from the student populations of teachers who agreed to be part of the study. Fourteen participants with the same target behavior in the same setting were identified. The participants were similar enough to expect that each would respond in a similar manner to the same treatment, and yet were sufficiently independent enough of each other to avoid covariance. Covariance occurs when participants learn vicariously from the experiences of each other (Richard et al., 1999).

72

Independent Variable

The independent variable in single subject research is the practice, intervention, or behavioral mechanism under investigation. Independent variables in single subject research are operationally defined to allow valid interpretation of results and accurate replication of the procedures (Horner, Carr, Halle, McGee, Odom, & Wolery, 2005).

The independent variable in this study was the IELR. The IELR consisted of a 20 minute guided reading lesson four days a week that incorporated explicit strategy instruction through the use of focused lessons. The focused lessons were designed to explicitly teach reading strategies such as visualization, using context to confirm meaning, determining word meaning, using word structures to construct meaning, repeated readings, making and confirming predictions, identifying narrative elements, summarizing, and making inferences and drawing conclusions. (See Table 8 for a sample lesson.) The delivery of the reading instruction in the IELR was based on Lucy Calkin's Reading Workshop Model (Calkins, 2001). The classroom teacher used IELR lessons to instruct participants in each group.

The focused skills and strategy lessons in the IELR were patterned after the minilesson architecture used in the Reading Workshop Model. The architecture of a minilesson identifies a specific teaching point and consists of four component parts: the connection, demonstration, active engagement, and the link (Calkins, 2001). The teachers in the study received IELR implementation training from the researcher; the researcher met with the participating teachers twice after school for the training before instruction

73

began. The teachers received scripted lessons and an explanation of the component parts

as presented in Table 8.

Table 8

Component	Explanation
Teaching Point	• State what you are going to teach (the objective)
The	 Set the lesson up by reviewing what the students already have been doing or what they already know. (Review and set up for the learning) Start with a compliment that connects to what they have been doing Ex: "Readers, I am so proud of the way you've been using what you know about a character to help you predict what will happen next in
The	your story."
Connection	• Contextualize the work. Ex: "Remember how yesterday Kayla shared her prediction about her story with us and told us that she thought this would happen because her character was curious?"
	• State the teaching point. Ex.: "Today I am going to teach you how
	to"Directly tell them how you do it. Ex.:" Let me show you what I mean"
Teach	 Demonstrate what you want them to do.
	 Read or reread – refer to the text (could be a read aloud)
	 Use consistent language; restate the teaching point at least 5 times during your lesson
	 Demonstrate how to do the reading or writing work. Ex: "Watch me as I do this work " or "Watch me as I show you how to (state the teaching point)"
Active	 Students do the work while you scaffold the learning (guided
Engagement	practice).
	 Needs to match the teaching point Students must be too bing point
	Students practice the teaching point on the rug in front of youStudents should know exactly what to do before you dismiss them to
	go off and do it on their own
	 You listen to the students as they try and do the work and guide them.
Link	 Link the reading or writing work to what good readers and writers do. Clearly set up what you want them to do in workshop.

Students were placed in an IELR group to determine whether the IELR had an effect on reading fluency and reading comprehension. All participants received daily classroom instruction in a whole group reading workshop using the district's adopted reading program. In addition, study participants received four 20 minute small group IELR reading sessions a week. In this study, there was a staggered introduction of the intervention within a repeated single subject design that allowed for stability and demonstration of the experimental effect within each data series as well as across data series at staggered times of intervention (Hersen & Barlow, 1976; Kazdin, 1988; 1998; Kratochwill & Levin, 1992; Tawney & Gast, 1984).

The routine was modeled after the research described in Chapter 2. Descriptions of the IELR lessons are presented in Tables 8 and 9.

Procedure

The IELR was designed for use 4 days per week for 8 weeks and incorporated explicit strategy instruction through the use of focused mini-lessons. The lessons were 20 minutes long and designed to explicitly teach fluency and reading comprehension strategies and skills. Books chosen for the IELR were both narrative and informational and selected for high interest, low level text.

Each lesson used in the IELR contained a mini lesson that explicitly taught a reading strategy and provided for teacher demonstration of think aloud, modeling and student-guided practice in application of the reading strategy to his or her reading and rereading of material. There were 32 lessons delivered in an 8 week period. To evaluate and verify that the treatment was being delivered in a systematic manner, the researcher

made unannounced weekly classroom visits to observe the teacher's delivery of the mini lessons. The researcher observed each teacher twice a week during the eight weeks of the study and found that the teachers were delivering the mini-lessons with fidelity, consistency in delivery of the scripted lessons was noted. A sample focus lesson is presented in Table 9.

Table 9

Component	Explanation
Skill to be taught (What?)	Fluency
Strategy (How?)	"We're going to pay attention to punctuation marks."
Reading Work (Why?)	"Paying attention to punctuation marks as you read helps you know how the author intended the text to be read. It helps you to read smoothly and with expression."
Demonstration (Where?)	"Readers, today I am going to teach you how to use punctuation marks to help make your reading more understandable." Explicitly model the reading behavior using punctuation marks to read smoothly and with expression: read a selection from the text without pausing or using the punctuation marks, then reread with punctuation marks.
Guided Practice (How?)	Students try the strategy on a teacher-selected practice passage: "Readers, I want you to turn to your partner and read the passage I have given you. First, read it once to yourself, checking where you would pause and how the punctuation marks should be used to help you read with expression, then read the passage to your partner. Each of you try it."
Independent Reading (How?)	Students read in their selected just right books and practice reading using the punctuation marks as teacher monitors.

The IELR was developed to address the needs of struggling third grade readers. The routine addresses the lack of reading fluency and reading comprehension. The IELR routine allows the teacher to interact with the struggling reader through a series of reading strategy lessons. The IELR allows the teacher to provide extended time on task reading to students who need it the most. The focused lessons were selected from a variety of best practices to target specific reading strategies that the researcher observed

were lacking in the struggling readers in the study (See Table 10).

Table 10

Area Addressed	IELR Procedure for Intermediate Guided Reading
Fluency	 Teacher reading aloud to model expression and phrasing Strategies for decoding words Repeated reading of text Peer reading
Comprehension	 Introduction to text Chunking of reading material Setting purpose for reading Teacher "Think Aloud" and demonstrations Before, during, and after reading questioning Discussions, visualization, and story retelling

Specific Strategies Used to Address Needs

The IELR is a manageable and cost effective model for delivery of small group reading instruction. The focus lessons were developed for use with the adopted reading series and to be easily adapted for use with additional leveled reading materials available at the site school. Reading materials used in this study were high interest low level books and trade books.

Dependent Variable

Single subject research employs one or more dependent variables that are defined and measured. In most cases, the dependent variable in single subject educational research is a form of observable behavior. Dependent variables are operationally defined to allow valid and consistent assessment of the variable and replication of the assessment process (e.g., words read correctly per minute). Dependent variables are measured repeatedly within and across controlled conditions to allow identification of performance patterns prior to the intervention and comparison of performance patterns across conditions (Horner et al, 2003).

Repeated measurement of individuals is required to compare the performance of each participant with his or her own prior performance. Dependent variable recording is assessed for consistency throughout the experiment by frequent monitoring of interobserver agreement. The measurement of inter-observer agreement allows assessment for each variable across each participant in each condition of the study (Horner et al., 2005).

The study's dependent variables or target behaviors are fluency as measured by timed readings and running records, accuracy as measured by running record, and reading comprehension as measured by narrative story retelling. The narrative retelling, timed readings and running record assessments were administered by the teacher bi weekly as repeated measures during the study. The Gray Oral Reading Test- Fourth Edition subtests for comprehension and reading rate and accuracy was used for pre- and post-tests.

Baseline/Comparison Condition

Single subject research designs compare the effects of an intervention with the performance during a baseline or comparison condition (Horner et al., 2003). Measurement of the dependent variable during a baseline should occur until the observed pattern of responding is sufficiently consistent to allow prediction of future responses. Documentation of a predictable pattern during baseline requires multiple data points.

Experimental Control

Single subject research designs provide experimental control for most threats to internal validity and allow confirmation of a functional relationship between manipulation of the independent variable and the change in the dependent variable (Homer et al., 2003). Documentation of experimental control can be achieved through: (a) the introduction and withdrawal of the independent variable, (b) the staggered introduction of the independent variable at different points in time such as a multiple baseline, and (c) the manipulation of the independent variable across observation periods such as alternating treatment designs.

A repeated single subject design was used in this study. The staggered introduction of the intervention within a repeated single subject design allows demonstration of the experimental effect within each data series as well as across data series at staggered times of intervention (Hersen & Barlow, 1976; Kazdin, 1988, 1998; Kratochwill & Levin, 1992; Tawney & Gast, 1984).

Measures

In this study the Gray Oral Reading Test, Third Edition (GORT-3) was administered as a pre- and post-test. The GORT-3 (Wiederholt & Bryant, 1992) is a series of standardized oral reading passages for assessing comprehension. The GORT-3 provides an efficient and objective measure of oral reading and aids in the diagnosis of oral reading difficulties. The five scores derived from the assessment give information on a student's oral reading skills in terms of: (a) rate -- the amount of the time taken by a student to read a story; (b) accuracy -- the student's rate and accuracy scores combined; (c) comprehension -- the appropriateness of the student's responses to questions about the content of each story read; and (d) overall reading ability -- a combination of a student's fluency and comprehension scores

In this study the GORT subtest for comprehension was administered as a pre- and post-test. The test consists of 14 developmentally sequenced reading passages with comprehension questions following the reading of the passages. This assessment was used to provide documentation of student reading growth as a result of the reading intervention. The GORT- 3 was normed on a sample of more than 1,600 students aged 6 through 18. The norm group was stratified to correspond to key demographics variables including race, gender, ethnicity, and region.

Reliability and Validity

The reliability of GORT-3 is high; all average internal consistency reliabilities are .90 or above. The test-retest study was conducted with all ages for which the test can be administered and illustrates the stability and reliability of the measure. The validity is extensive and includes studies that illustrate that GORT-3 can be used with confidence to measure change in oral reading over time (Wiederholt & Bryant, 1992).

Repeated Measures

Reading fluency was measured with timed readings and running records administered as repeated measures bi-weekly during the study. Fluency timed readings (which measure words read per minute) were administered by the researcher and Title 1 teacher as measures of fluency. Pinellas County Assessment Series (PCAS) common assessment information was gathered after each school assessment cycle as additional information on student reading comprehension. The running records were administered bi-weekly by the Title 1 teacher and the researcher and were used to assess reading fluency and accuracy; they are already used in the school district as part of an extant district-wide assessment plan. The running record is a tool for coding and analyzing reading behavior (Calkins, 2001). The Running Record of Text was developed by Marie Clay (1972) and tested for reliability. During the running record assessment, students were asked to read a leveled book aloud and the Title 1 teacher and the researcher recorded errors and miscues made. The books for the assessment were leveled based on the Fountas and Pinnell scale. To address consistency in administration and scoring of the assessments, an inter-observer reliability coefficient was calculated; 95% agreement between scorers was the criterion applied.

Reliability of the running record assessment was evaluated through the researcher's random observations of the administering Title 1 teacher. Each Title 1 teacher was observed administering the running records to each student at least once during the 8 weeks of this study. The researcher completed a running record at the same time as the Title 1 teacher. This provided a dual scoring of the running record and provided a check on the Title 1 teacher's accuracy at marking and scoring the running record and analyzing the results.

A school site-based team that included the school's Reading Coach, Title 1 Facilitator, and two Title 1 Para-professional teachers who were trained as the school's assessment team by the State of Florida's trainers under the Reading First Grant administered the DIBELS fluency assessment. The data from the DIBELS assessment cycle were used to identify the students for inclusion in this study. Narrative Retelling was the repeated measure for reading comprehension.

Narrative Retelling assesses the student's ability to capture the five story elements of comprehension. It requires the reader to organize text information to provide a personal rendition of the story (Koskins et al., 1991). The retellings were recorded and dual scored to assess the completeness of the student's retelling using a rubric developed for each story based on Glazer and Brown (1993). Retellings required the student to read a story and complete an oral retelling of the story. Assessment was based on the student's inclusion of five elements (setting, problem, characters, events, and resolution) of the story. The stories used were of increasing text difficulty. The researcher and the Title 1 teacher administered the retellings.

Visual Analysis

Single subject methodologies employ visual analysis for plotting data as a main tool to evaluate effects on a particular behavior (Alberto & Troutman, 2003). Analysis of single subject research data involves systematic visual comparison of responses within and across conditions of a study (Parsonson & Baer, 1978). Visual analysis involves interpretation of level, trend, and variability of performance during baseline and intervention conditions. Level refers to the mean performance during a condition (i.e., phase) of the study. Trend refers to the rate of increase or decrease of the best-fit straight line (i.e., slope) for the dependent variable within a condition. Variability refers to the degree to which performance fluctuates around a mean or slope during a phase (Horner et al., 2003). See Figure 4.

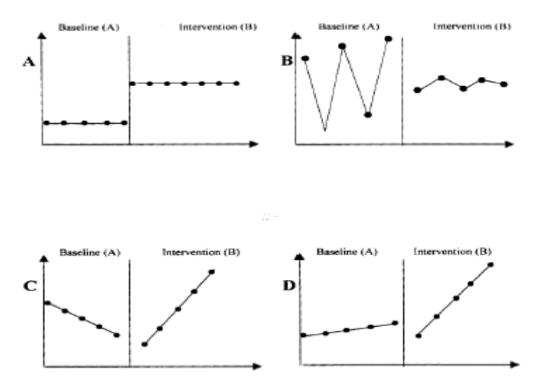


Figure 4. Line graphs illustrating common response patterns. Graph A shows a change in level; Graph B shows a change in variability, Graph C shows a change in trend, and Graph D shows a change in slope (from Zhan & Ottenbacher, 2001).

In visual analysis, the reader can judge the immediacy of effects following the onset and/or withdrawal of the intervention, the magnitude of changes in the dependent variable, and the consistency of data patterns across multiple presentations of the intervention condition (see Figure 5). The integration of information from these multiple assessments and comparisons is used to determine if a functional relationship exists between the independent and dependent variable (Horner et al., 2003; Parsonson & Baer, 1978).

Single subject research provides a practical methodology for testing educational and behavioral interventions. Single subject methods allow unequivocal analysis of the relationship between individualized interventions and change in valued outcomes. (Homer et al., 2003). Figure 5 provides a visual representation for how the data in this study is reported.

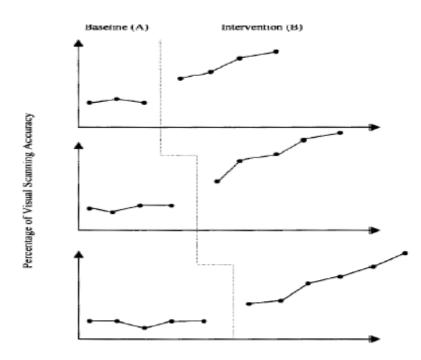


Figure 5. Diagram of multiple-baseline design demonstrating staggered introduction of intervention over three AB units (from Zhan & Ottenbacher, 2001).

Figure 6 is a visual representation of a hypothetical data set and illustrates baseline and intervention data similar to that collected in this study.

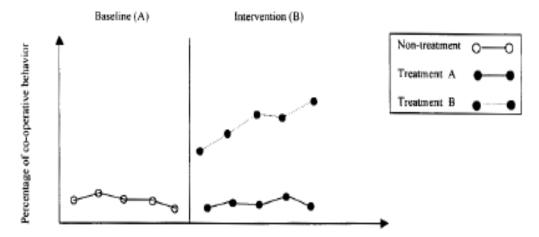


Figure 6. Data from a hypothetical example of an alternating treatment design. After a baseline phase, two treatments (A and B) are introduced and the measurement throughout the intervention phase. The dependent variable in this case is the percentage of co-operative behavior (from Zhan & Ottenbacher, 2001).

Chapter 4

Results

This chapter is divided into two sections. The first section describes the context of the study. It details when the study took place, the location and classrooms involved, and the characteristics of the school. This section also provides demographic properties of the sample and baseline data. The second section reports the results of each question/hypothesis for each participant. The analysis of each hypothesis is described and a statement is made about whether or not the Intermediate Extended Literacy Routine was successful. The hypotheses are discussed in numerical order.

The Context of the Study

The Time Line: Table 11 details the timeline of the study. The study took place in one school over an 8 week period. Data were collected in January, February, March, April and the beginning of May 2008.

Table 11

Timeline of the Study

Date	Events
November 2007	 Identified participating teachers
January 2008	 Collected District Screening Assessments (baseline data.) Trained the two participating teachers on the Intermediate Extended Literacy Routine (IELR)
January 2008	 Obtained USF Institutional Review Board (IRB) permission to conduct study. Selected study participants and obtained Informed Consent from participants and their parents.
February 2008	 Administered GORT-3 (pre-test) Began study: data collected on Running Record, Timed Reading, and Narrative Retelling
March 2008	Data collection
April 2008	Data collection
May 2008	 Administered GORT-3 (post-test)

Sample

The study took place in an elementary school in the large urban school district of Pinellas County on the west-central coast of Florida. The total school population was 696. The school was a Title 1 school with a free and reduced lunch rate of 54%. The minority student population, including Hispanic, African American, Asian, Native American and Multiracial, was approximately 30% of the school population. This school is a writing demonstration school for the school district. In August of 2008, 24% of the third grade students at the school were identified as struggling students based on the Diagnostic Inventory of Basic Skills (DIBELS) oral reading fluency assessment. In November 2007, the researcher met with several third grade teachers at the school to explained the study; two teachers agreed to participate. The study took place in the two general education classes of the participating teachers. Mrs. A. has been teaching 6 years and holds a B.A. degree in Elementary Education. Mrs. R. has been teaching 11 years and holds a B.S. degree in Elementary Education. Although their years of experience were different, both teachers used similar instructional practices for reading instruction based on a scientifically researched core reading program. The core reading program used in the classrooms in this study was Harcourt Trophies. Harcourt Trophies was in its last year of adoption in the Pinellas County schools.

For the purposes of the study, each teacher taught the Intermediate Extended Literacy Routine (IELR) to a small group of students in their classroom.

Study Participants

A convenience sample of students (n=13) from two classrooms participated in the study. Seven students from Class A and six students from Class R participated. The students were chosen to participate in the study bases on DIBLES scores. Each student within a classroom was assigned a number and letter as an identifier: the first student in Mrs. A's class was designated A1, the second A2, and so forth to A7. The six participants in Mrs. R's class were similarly identified as R1 through R6. The participants' ethnicity (W = White; B = Black) and gender (M = male; F = Female) are included in Table 13.

Baseline Data

The DIBLES was administered in October 2007 as part of the school district's assessment timeline. The DIBLES Oral Reading Fluency (ORF) score (number of words

read correctly in 1 minute) was used to identify participants for the study and served as baseline data. Reading comprehension assessments were administered in August 2007 (Cycle 1) and November 2007 (Cycle 2); the instrument used was the Pinellas Classroom Assessment System (PCAS). Participant scores from each of these two cycles of the PCAS administration were also used as baseline data (see Table 13); Table 12 presents the criteria used in the PCAS for the complete three cycle administration.

Table 12.

Cycle	Assessment						
	High Performing	Meets Expectations	Below Expectations				
1	27 - 30	15 - 26	0 - 14				
2	27 - 30	18 - 26	0 - 17				
3	27 - 30	21 - 26	0 - 20				

Pinellas Classroom Assessment System (PCAS) Reading Criteria

Table 13

Dusenne Dui	a jor sinay	у і апісір	unis			
Student	Gender	Ethnicity	DIBLES ORF Score	Risk Level	Cycle 1 Common Assessment Score	Cycle 2 Common Assessment Score
A1	F	W	51	High	17	20
A2	F	W	43	High	18	18
A3	F	W	70	Moderate	14	15
A4	F	W	54	High	13	16
A5	М	W	63	Moderate	13	15
A6	М	W	68	Moderate	21	21
A7	М	W	55	Moderate	16	17
R1	М	W	41	High	8	5
R2	М	W	74	Moderate	17	15
R3	F	W	73	Moderate	17	15
R4	М	W	55	Moderate	14	18
R5	F	В	58	Moderate	16	18
R6	F	W	68	Moderate	18	16

Baseline Data for Study Participants

Analysis of Research Questions

Prior to a discussion of the results of this study, a restatement of the research questions posed is appropriate:

Research Question 1: What are the effects of the Intermediate Extended Literacy Routine (IELR) on reading fluency of third graders identified as struggling in reading as measured by Timed Readings and Running Records?

Research Question 2: What are the effects of the Intermediate Extended Literacy Routine (IELR) on reading comprehension of third graders identified as struggling in reading as measured by narrative retellings at increasing levels of difficulty?

Research Question 3: What are the effects of the Intermediate Extended Literacy Routine (IELR) on reading comprehension of third graders identified as struggling in reading as measured by the reading comprehension common assessment from the Pinellas Classroom Assessment System (PCAS)?

Research Question 4: What are the effects of the Intermediate Extended Literacy Routine (IELR) on comprehension of third graders identified as struggling in reading as measured by the *Gray Oral Reading Test-Fourth Edition* (GORT-3) comprehension subtest?

The expectation for Research Question 1 was that students who received the IELR treatment for eight weeks would improve their fluency rate by increasing the number of words read correctly in a minute and increase their instructional level as measured by a running record. According to Rasinski (2003), students at the end of Grade 3 should be able to meet the target criterion of 100 words correct per minute. Each participant was assessed bi-weekly using timed reading passages and running records. The results were mixed; six participants did increase their fluency rate while seven participants either maintained or decreased their fluency rate. In Mrs. R's class, two students increased the number of words read in a minute, three students' performance did not change, and one

student decreased in words read in a minute. In Mrs. A's class, three students increased in words read per minute while two remained at the same level and two decreased words read in a minute on the timed readings. The performance on the timed reading was similar in both classrooms.

The expectations for Questions 2 and 3 were that the participants in IELR groups would show an improvement in their comprehension of stories they read. Comprehension was measured using written narrative retellings and Common Assessments. Rubrics were developed for each story used as retelling assessments.

Table 14 presents a summary of the Pinellas Classroom Assessment System (PCAS), Timed Reading and Narrative Retelling scores for each participant across the timeline of the study. Cycle 1 assessments were made in August of 2007; Cycle 2 assessments in November 2007, and Cycle 3 assessments were made in May 2008 at the end of the study. A discussion of the data on reading accuracy, fluency and comprehension for each participant follows, and graphs for visual analysis of each participant's results are presented in figures immediately following the discussion.

Table 14

	PCAS			Tin	Timed Reading			Narrative Retelling		
Student					Cycle			Cycle		
Stu	Sep	Nov	Apr	1	2	3	1	2	3	
A1	17	20	23	86	95	104	6	5	10	
A2	18	18	24	75	73	77	5	3	10	
A3	14	15	19	82	86	74	3	7	6	
A4	13	16	24	88	79	89	5	6	4	
A5	13	15	23	97	85	92	2	0	2	
A6	21	21	28	82	99	98	8	11	8	
A7	16	17	11	66	96	85	8	6	11	
R 1	8	5	12	70	60	60	6	4	2	
R2	17	15	25	114	112	113	4	6	2	
R3	17	15	25	100	85	109	2	2	2	
R4	14	18	24	73	72	73	0	4	2	
R5	16	18	15	83	78	83	4	5	4	
R6	18	16	26	65	53	85	2	6	4	

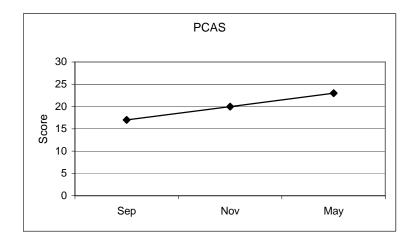
Summary of Individual Student PCAS, Timed Reading and Narrative Retelling Scores

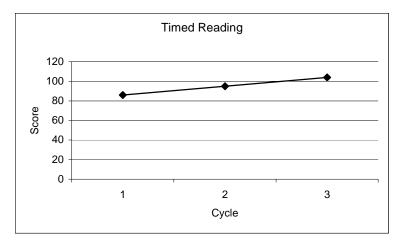
Note. PCAS reading criteria are presented in Table 12; Timed Reading scores are words read correctly in 1 minute; Narrative Retellings score interpretation categories are: Struggling (0-4); Delayed (5); Instructional (6-10); Instructional + (11-12); Independent (13-14); Independent + (15)

Individual Student Assessment Discussion

Student A1 was a Caucasian female in Mrs. A's classroom. She was placed in the IELR group based on her DIBLES Oral Reading Fluency (ORF) score designation of high risk. She exhibited minimal growth on the District Common Assessments of reading for August, November and May. Student A1 showed an increase in words read correctly in a minute on the timed readings and there was also an increase in how accurately she was able to retell stories over the eight weeks of the study. She went from low instructional level to high instructional level with a slight dip in the second cycle on the narrative retelling assessments. This student stayed at the Grade 3 instructional level on the running record assessment for all three assessment cycles.

Graphs representing Student A1's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 7.





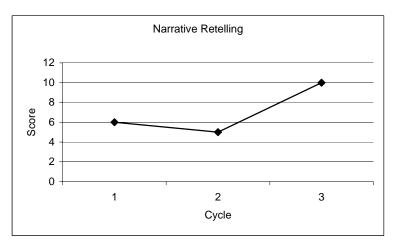
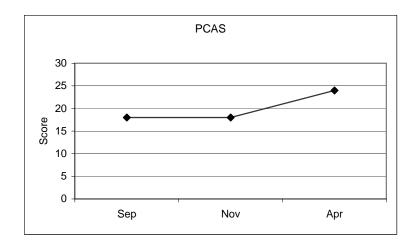
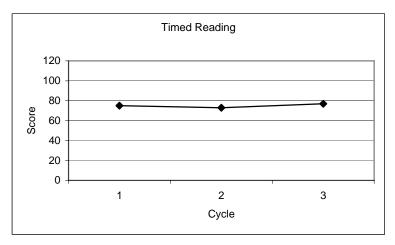


Figure 7. Student A1 PCAS, timed reading and narrative retelling scores

Student A2 was a Caucasian female in Mrs. A's classroom. She was placed in the IELR group based on her DIBLES (ORF) score designation of high risk. She had some growth on the District Common Assessments of reading for August, November and May, moving from a score of 18 on the August assessment to a 24 on the May assessment. This student showed a minimal increase in words read correctly in 1 minute on the timed readings over the three cycles. There was also an increase in how accurately she was able to retell stories over the eight weeks of the study. She went from a delayed level to high instructional level with a dip in the second cycle on the narrative retelling assessments. This student went from instructional at the Grade 3 level on the running record assessment to instructional at a Grade 4 level for the last assessment cycle

Graphs representing Student A2's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 8.





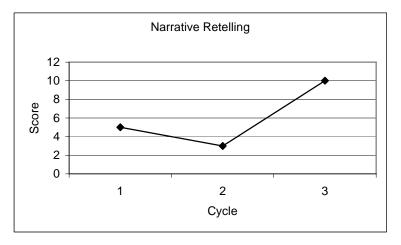
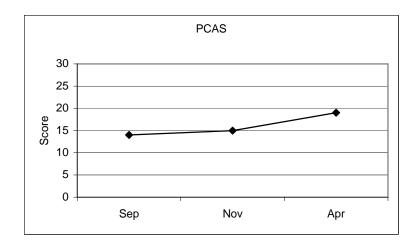
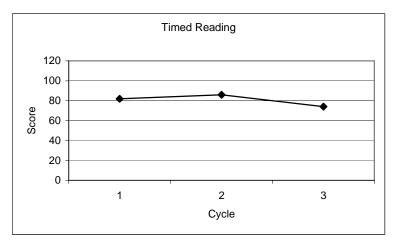


Figure 8. Student A2 PCAS, timed reading and narrative retelling scores

Student A3 was a Caucasian female in Mrs. A's classroom. She was placed in the IELR group based on her DIBLES (ORF) score designation of moderate risk. She showed growth on the District Common Assessments of reading for August, November and May moving from a score of 14 (Below Grade Level) on the August assessment to meeting the grade level criteria with a 19 on the May assessment. Student A3 did not experience growth in words read correctly in a minute on the timed readings. She had a decrease in words read correctly in a minute on the last assessment cycle going from 86 words the pervious cycle to only 74 words read correctly in 1 minute on the last assessment cycle. There was an increase in how accurately she was able to retell stories over the eight weeks of the study. She went from delayed to instructional level on the narrative retelling assessments. This student stayed at a Grade 3 instructional level on the running record assessment for all three assessment cycles.

Graphs representing Student A3's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 9.





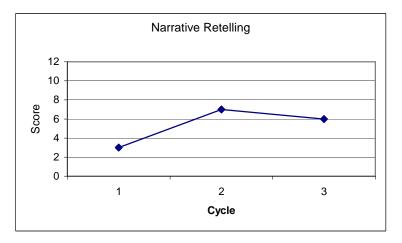
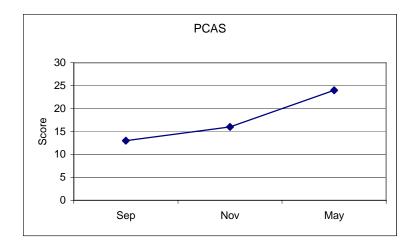
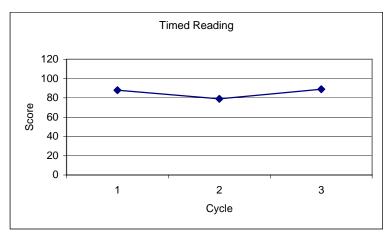


Figure 9. Student A3 PCAS, timed reading and narrative retelling scores

Student A4 was a Caucasian female in Mrs. A's classroom. She was placed in the IELR group based on her DIBLES (ORF) score designation of moderate risk. She showed steady growth on the District Common Assessments of reading for August, November and May moving from a score of 13 (Below Grade Level) on the August assessment to meeting the grade level criteria with a 24 on the May assessment. Student A4 did not experience growth in words read correctly in a minute on the timed readings. Her rate for words read correctly went from 88 words the first cycle to only 89 words read correctly in a minute on the last assessment cycle. The same pattern was found for accuracy on narrative retelling of stories she read. She went from delayed to instructional level and back to a delayed level on the narrative retelling assessment over the 8 weeks of the study. This student went from a Grade 3 instructional level on the first running record assessment to a Grade 4 instructional level on the last assessment cycle.

Graphs representing Student A4's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 10.





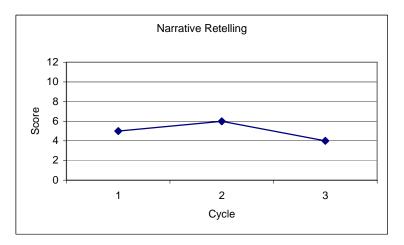
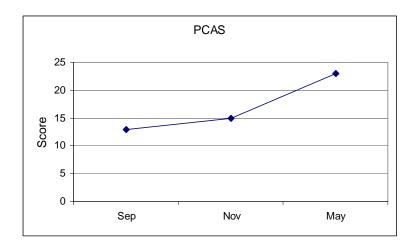
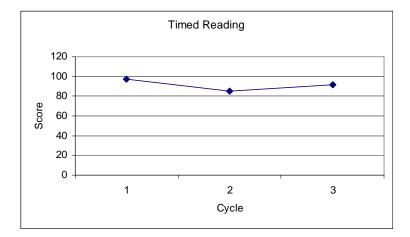


Figure 10. Student A4 PCAS, timed reading and narrative retelling scores

Student A5 was a Caucasian male. He was designated as moderate risk on the DIBELS (ORF). His scores on the District Common Assessments of reading showed growth from August to the May assessment. He moved from a score of 13 on the August assessment, which placed him below level, to meeting the grade level criteria on the May assessment with a score of 23. Student A5 did not experience growth in words read correctly in a minute on the timed readings. In fact, his rate for words read correctly went down over the eight weeks of the study. His rate for words read correctly went from 97 words the first cycle down to 85 for cycle 2 and back up to only 92 words read correctly in a minute on the last assessment cycle, which reflects no improvement in his fluency. The same pattern was found for accuracy on narrative retelling of stories he read. Student A5 assessed at the struggling level for all three assessment cycles on the narrative retelling assessment over the eight weeks of the study. This student assessed at a Grade 2 instructional level on the first running record cycle and increased to Grade 3 instructional level for Cycles 2 and 3

Graphs representing Student A5's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 11.





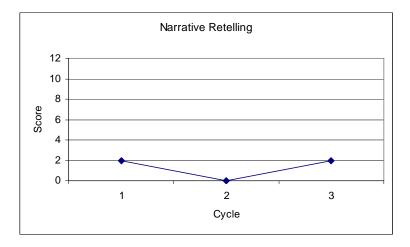
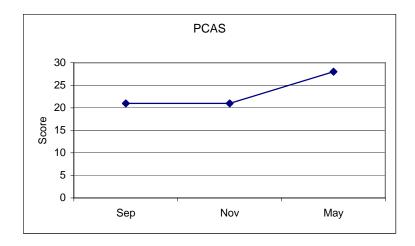
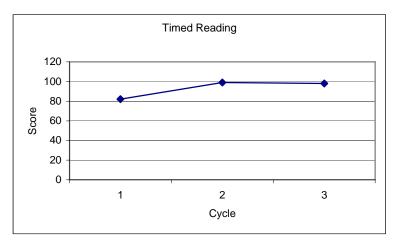


Figure 11. Student A5 PCAS, timed reading and narrative retelling scores

Student A6 was a Caucasian male in Mrs. A's classroom. He was placed in the IELR group based on his DIBLES (ORF) score designation of moderate risk. He showed growth on the District Common Assessments of reading from August to May, moving from a score of 21on the August assessment to maintaining grade level expectations with a 28 on the May assessment. Student A6 did experience growth in words read correctly in a minute on the timed readings. There was no increase in how accurately he was able to retell stories over the eight weeks of the study. He stayed at the instructional level on the narrative retelling assessments. This student did, however, go from a Grade 2 instructional level on the running record assessment in Cycle 1 to a Grade 4 instructional level for Cycle 3.

Graphs representing Student A6's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 12.





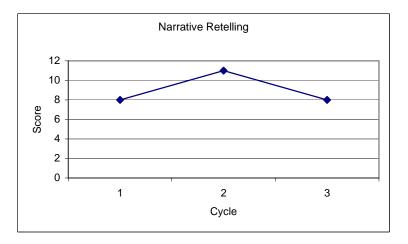
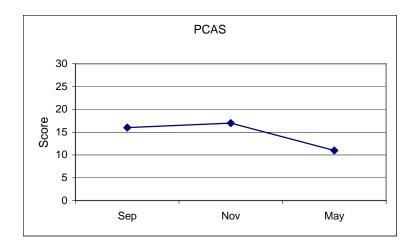
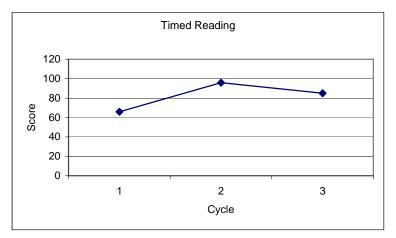


Figure 12. Student A6 PCAS, timed reading and narrative retelling scores

Student A7 was a Caucasian male. He was designated as moderate risk on the DIBELS (ORF). His scores on the District Common Assessments of reading showed a decline from the August to the May assessment. He moved from a score of 16 on the August assessment, which placed him at meeting grade level expectations, to below expectations on the May assessment with a score of 11. Student A7 did experience growth in words read correctly in a minute on the timed readings. His rate for words read correctly went from 66 words the first cycle up to 96 the second cycle and back down to only 85 words read correctly in 1 minute on the last assessment cycle. The passages for the timed reading assessment were all at the same reading level, though there was an increase in his reading rate; it did fluctuate over the course of the three assessment cycles. There was an increase in how accurately Student A7 was able to retell stories over the eight weeks of the study. He went from delayed to an instructional + level on the narrative retelling assessments. This student assessed at a Grade 2 instructional level on the first running record cycle and increased to Grade 3 level for Cycle 2 and a Grade 4 level for Cycle 3. He went up a level for each assessment cycle over the eight weeks of the study.

Graphs representing Student A7's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 13.





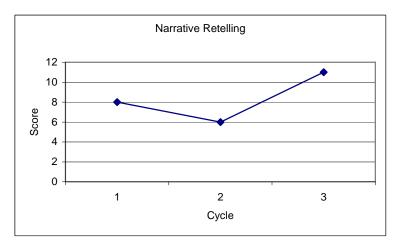
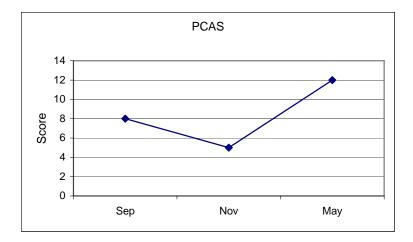
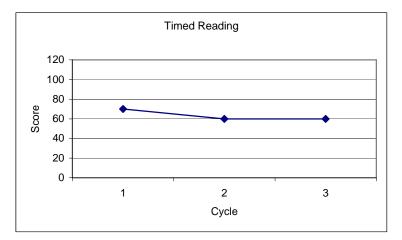


Figure 13. Student A7 PCAS, timed reading and narrative retelling scores

Student R1 was a Caucasian male in Mrs. R's classroom. He was placed in the IELR group based on his DIBLES (ORF) score designation of high risk. He showed growth on the District Common Assessments of reading from August to May moving from a score of 8 on the August assessment to a 12 on the May assessment, but remained below level in meeting grade level expectations for Grade 3. His words read correctly in 1 minute on the timed readings went down over the 8 weeks of the study even though the passage read was at the same level each time. There was also a decrease in how accurately he was able to retell stories over the 8 weeks of the study. He went from an instructional level on Cycle 1 to a struggling level for Cycles 2 and 3 on the narrative retelling assessments; the passages remained at the same level. This student's accuracy rate on the running records did increase over the course of the study. He went from a Grade 3 instructional level on the first running record assessment to a Grade 4 instructional level for the last assessment cycle.

Graphs representing Student R1's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 14.





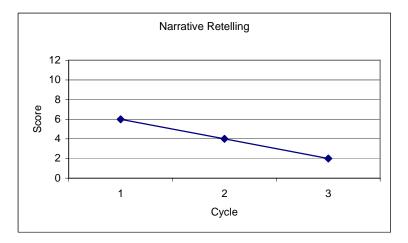
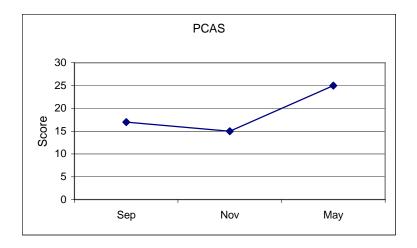
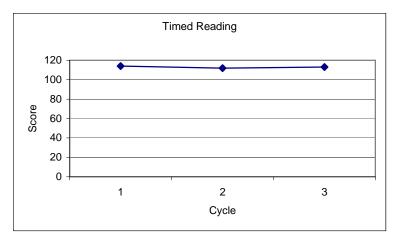


Figure 14. Student R1 PCAS, timed reading and narrative retelling scores

Student R2 was a Caucasian male in Mrs. R's classroom. This student was placed in the IELR group based on his DIBLES (ORF) score designation of moderate risk. He exhibited growth on the District Common Assessments of reading for August and May, increasing his score from 17 on the August assessment to meeting the grade level criteria with a 25 on the May assessment. Student R2 did not experience growth in words read correctly in 1 minute on the timed readings. His scores stayed consistent across all three assessment cycles. This student's performance on the narrative retelling assessments went down over the 8 weeks of the study. He increased in his ability to accurately retell a story from Cycle 1 to Cycle 2 but decreased his score on the Cycle 3 retelling assessment. He went from struggling to instructional level and then back to delayed level on the narrative retelling assessments over the 8 weeks of the study. This student did however, move from a Grade 3 instructional level on the running record assessment to a Grade 4 instructional level for Cycle 2 and Cycle 3 of the assessment.

Graphs representing Student R2's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 15.





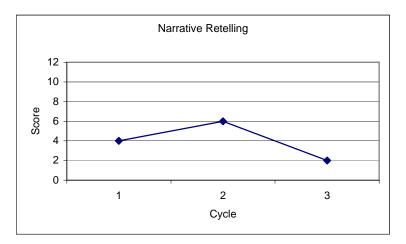
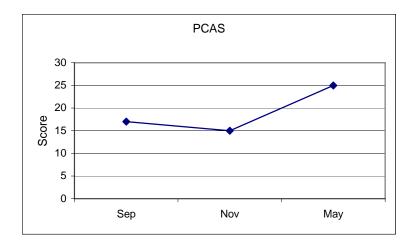
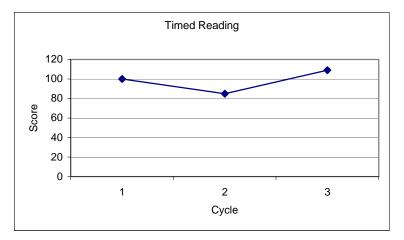


Figure 15. Student R2 PCAS, timed reading and narrative retelling scores

Student R3 was a Caucasian female in Mrs. R's classroom. She was placed in the IELR group based on her DIBLES (ORF) score designation of moderate risk. She showed growth on the District Common Assessments of reading for August and May. The August score of 17 met grade level expectations; in November her scored slipped to a 15 placing her below grade level expectations. Her Common Assessment score for May was 25 that again put her in the meeting grade level expectation range. Student R3's performance on the timed reading assessment was inconsistent; she did not show growth in words read correctly in 1 minute on the timed readings from Cycle 1 to Cycle 2, but did show an increase in Cycle 3. She increased her reading rate by 24 words per minute from Cycle 2 to Cycle 3. Her scores on the narrative retelling assessment showed no increase in how accurately she was able to retell stories over the 8 weeks of the study. She stayed at a struggling level on the narrative retelling assessments for all three cycles. She did move from Grade 3 instructional level on the first cycle running record.

Graphs representing Student R3's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 16.





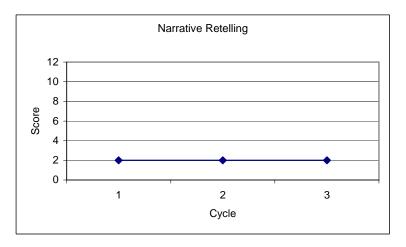
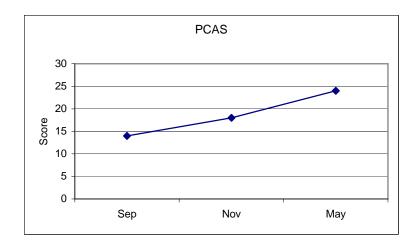
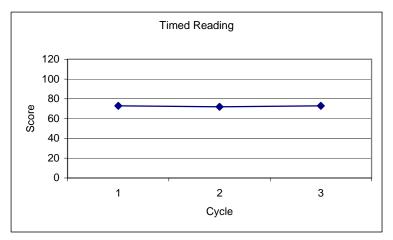


Figure 16. Student R3 PCAS, timed reading and narrative retelling scores

Student R4 was a Caucasian male. He was designated as moderate risk on the DIBELS (ORF). His scores on the District Common Assessments of reading showed steady growth from the August to the May assessment. He moved from a score of 14 on the August assessment, which placed him below level, to meeting the grade level expectations on the May assessment, with a score of 24. Student R4 did not experience growth in words read correctly in a minute on the timed readings. His rate for words read correctly was static over the eight weeks of the study. He went from 73 words read correctly in a minute the first cycle, to 72 words per minute for Cycle 2, and back up to only 73 words read correctly in 1 minute on the last assessment cycle; this reflects no improvement in his fluency. The same pattern was found for accuracy on narrative retelling of stories. Student R3 scored at a struggling level for all three assessment cycles on the narrative retelling assessment over the 8 weeks of the study. This student assessed at an instructional level for Grade 3 on the first and second running record cycles, and increased to an instructional level for Grade 4 for Cycle 3.

Graphs representing Student R4's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 17.





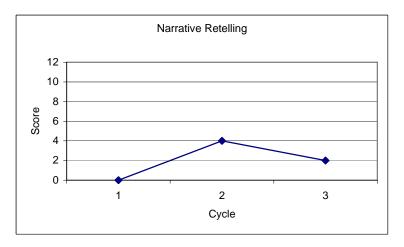
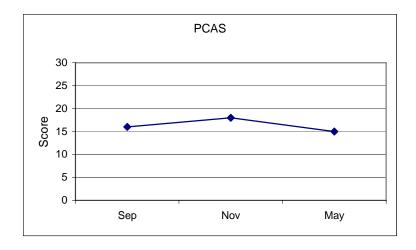
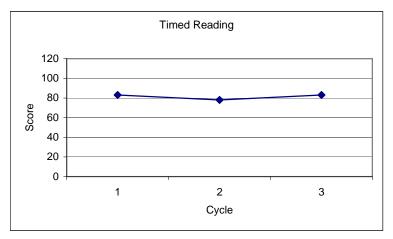


Figure 17. Student R4 PCAS, timed reading and narrative retelling scores

Student R5 was a Caucasian female in Mrs. R's classroom. She was placed in Mrs. R's IELR group based on her DIBLES (ORF) score designation of moderate risk. She showed growth on the District Common Assessments of reading for August, and November. She moved from a score of 16 on the August assessment, meeting the grade level criteria, to a score of 18 on the November assessment that also met grade level criteria. The May assessment showed a decrease in achievement even though she did meet expectations. Student R5 exhibited static growth in words read correctly in 1 minute on the timed readings. She had little fluctuation in words read correctly in a minute, going from 83 words the first cycle to 78 words the second cycle and back to 83 words read correctly the third cycle. The same pattern held true for the narrative retellings; this student did not show an increase in how accurately she was able to retell stories over the 8 weeks of the study. She went from a struggling level to a delayed level and back to a struggling level on the narrative retelling assessments. On the running record assessments, this student went from an instructional Grade 3 level in Cycle 1 to an instructional Grade 4 level for Cycles 2 and 3.

Graphs representing Student R5's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 18.





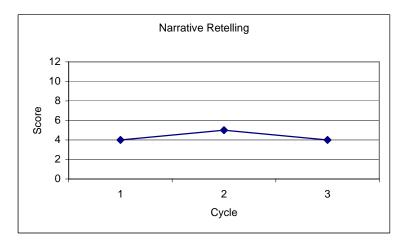
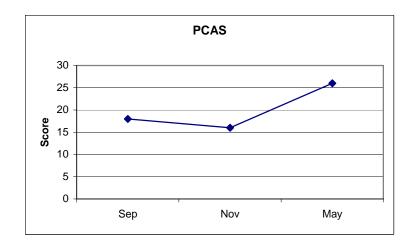
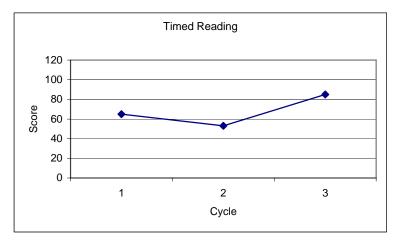


Figure 18. Student R5 PCAS, timed reading and narrative retelling scores

Student R6 was a Caucasian female. She was designated as moderate risk on the DIBELS (ORF). Her scores on the District Common Assessments of reading showed growth from the August to the May assessment. She moved from a score of 18 on the August assessment, to below level on the November assessment and back to meeting grade level criteria on the May assessment with a score of 26. Student R6 experienced growth in words read correctly in 1 minute on the timed readings. Her rate for words read correctly went down on the second cycle but then increased by 32 words per minute on the last cycle. Her rate for words read correctly went from 65 words the first cycle, down to 53 for Cycle 2, and back up to only 85 words read correctly in 1 minute on the last assessment cycle; this demonstrates an improvement in reading rate. There was no increase in how accurately she was able to retell stories over the 8 weeks of the study. Her scores went from a struggling level to an instructional level and then back down to a delayed level on the narrative retelling assessments even though all the passages were at the same reading level. This student stayed at a Grade 3 instructional level on the running record assessment for all three assessment cycles.

Graphs representing Student R6's performance on the PCAS, timed reading and narrative retelling assessments are displayed in Figure 19.





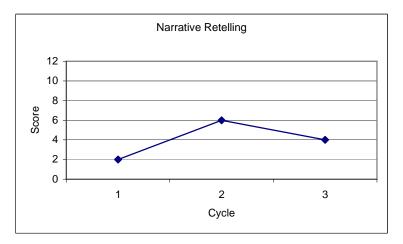


Figure 19. Student R6 PCAS, timed reading and narrative retelling scores

Research Question 4 Discussion

Question 4 examined whether the participants classified as struggling readers demonstrated post-test gains in comprehension on a standardized measure following 8 weeks of the IELR. The Gray Oral Reading Test-3 (GORT-3) was given as a pretest and post-test. The GORT-3 measures reading comprehension following oral reading. Although the GORT-3 assesses three different areas, for purposes of this study, only the comprehension score was used. Guidelines for interpreting standard comprehension scores are shown in Table 15.

Table 15

Standard Score	Rating	
17-21	Very Superior	
15-16	Superior	
13-14	Above Average	
8-12	Average	
6-7	Below Average	
4-5	Poor	
1-3	Very Poor	

Interpretation of GORT-3 Standardized Scores for Comprehension

The standard scores for comprehension collected during the course of this study are presented in Table 16. These scores from the Comprehension Subtest of the GORT-3 represent each student's comprehension level of literal and inferential questions posed immediately prior to and after receiving eight weeks of the IELR.

Table 16

Student	Pretest	Post-test	Gain
A1	11	11	0
A2	9	9	0
A3	5	10	+5
A4	8	6	-2
A5	9	11	+2
A6	9	9	0
A7	8	8	0
R1	6	7	+1
R2	7	6	-1
R3	9	9	0
R4	8	8	0
R5	8	11	+3
R6	8	8	0

Pre/Post Test Standard Scores for Comprehension

The GORT-3 was given to the participants at the beginning of the study and the participants were retested after eight weeks. Figures 20 and 21 show the two classes' preand post-test results on the GORT-3. The results on the GORT-3 pre- and post-test for Mrs. A's class show students A1, A2, A6, and A7 with no growth and students A3 and A5 with an increase in scores. Student 4A showed a decrease in performance from pre- to post-test. Mrs. R's class showed similar results. Students R3, R4, and R6 had no increase; students R1 and R5 scores increased; student R2's scores decreased from the pre- to the post-test.

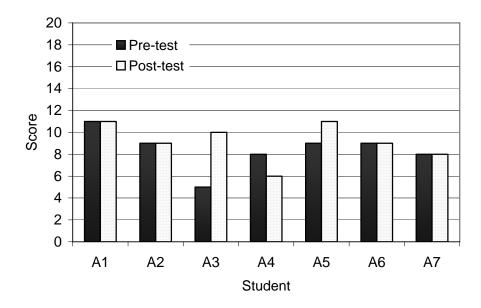


Figure 20. Mrs. A's class GORT-3 pre- & post test scores

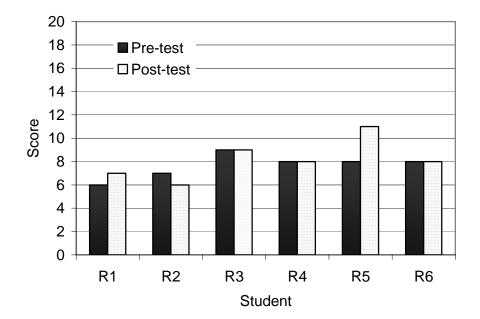


Figure 21. Mrs. R's class GORT-3 pre- & post-test scores

A review of the GORT-3 Pre- and Post-test results indicates that student A3 showed the greatest improvement. This student moved from the below average category and progressed to the average level on the GORT-3. Class A had four students who showed no improvement and stayed at the average level on the pre and post-tests while one student showed improvement from below level to average level. Mrs. R's class also had four students who made no gains and remained at the average level for both test administrations; two students showed no improvement from the pre- to the post-test.

Chapter 5

Discussion

Introduction

This study was developed from a need to find a solution for the increasing number of students struggling to acquire fluency and comprehension as readers in third grade. One of the most important responsibilities of educators in the elementary grades is to make certain that all students become skilled fluent readers. The degree of success in becoming a skilled fluent reader typically is established in the elementary grades (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996; Juel, 1988; Torgesen & Burgess, 1998). Unless effective instructional practices are used in this critical period, the inequities that commonly divide students are likely to continue (Snow, Burns, & Griffin, 1998).

Richard Allington stated that schools are being asked to shift their mission from sorting children into ability groups and then educating the easiest students well to supporting children so that all students achieve levels of academic performance historically attained by only a few (Allington & Cunningham, 2002). Elementary school classroom teachers over time have been increasingly expected to take on the crucial and primary role of accelerating the reading growth of elementary struggling readers (Walmsley & Allington, 1995). Many struggling readers do not qualify for special or compensatory education support services because of the differing criteria used in various school districts to place students into these programs (Spear-Swerling & Sternberg, 1996; Wang, Reynolds, & Walberg, 1988). Therefore, reading growth of struggling readers needs to be supported within the elementary school regular classroom reading programs. Struggling readers need more than effective short-term interventions; they also need effective reading instruction in their regular classroom programs (Hiebert & Taylor, 1994b). Exemplary classroom programs cannot always ensure that all children will become proficient readers (Slavin, 1996), but they can dramatically reduce the number of children who are currently classified as reading disabled or remedial readers. Numerous programs have been implemented to address the needs of struggling readers, but many remedial or support programs have not been proven to be effective in accelerating the reading growth of at-risk students (Duffy & Hester, 1999; Hiebert, 1994b).

Although the need exists for elementary school classroom teachers to support the growth of struggling readers, a national survey of elementary school teachers revealed that many were unsure of how to meet the needs of readers who struggle. Many teachers stated that teaching struggling readers was one of their greatest challenges (Baumann & Duffy, 1996). Use of effective interventions requires skillful teaching. Teachers who are the most effective with interventions are likely to be those teachers with the most training and experience. However, in the absence of well-trained and experienced intervention teachers, the less experienced teacher can deliver effective interventions if they are trained to use a well-developed, explicit, and systematic intervention protocol (Gaskins, 2005).

State legislators are holding classroom teachers responsible for the performance of all students on state mandated tests and therefore teachers are under great pressure to teach students who are struggling with literacy (Duffy-Hester, 1999). Schools in Florida are being graded and sanctions are being placed on Title l schools based on learning gains and school grades.

The purpose of this study was to examine the effectiveness of an enhanced classroom reading instruction in a small group instructional model designed to increase fluency and comprehension of third-grade students at risk for reading difficulties. Small group reading instruction, in the form of the Intermediate Extended Literacy Routine, was provided in addition to the classroom reading program, and hypothesized to be more effective than high quality classroom reading instruction alone for students at risk for reading failure. This hypothesis was based on the work of Rasinski, Padak, Linek, and Sturtevant (1994) who asserted that students who are struggling with fluency and comprehension spend too much time focusing attention primarily on decoding individual words and therefore have little attention left for comprehending the text. Oral-reading fluency is based on phonological awareness, letter-sound correspondence, and automatic word recognition; Wolf and Katzir-Cohen (2001) stress the need to emphasize both accuracy and fluency at each stage of teaching. When students do not achieve fluent performance in these critical skills, new skills are more difficult to learn. The result is stress, inattention, and lack of motivation (Binder, Haughton, & Bateman, 2002).

The Intermediate Extended Literacy Routine was designed to provide explicit intensive skill and strategy lessons that highly engage students in learning critical content. The working hypothesis of this study was that participation in the IELR would result in an increase in reading accuracy, fluency, and comprehension.

126

Study Overview

This study investigated the effects of an intermediate extended literacy routine on the reading fluency and comprehension of third grade students who are struggling in reading. The study used a single subject, A-B single subject design two replications. The independent variable was the Intermediate Extended Literacy Routine (IELR). The study's dependent variables were fluency as measured by timed readings and running records and reading comprehension as measured by narrative story retellings.

The sample (n=13) was drawn from two Grade 3 classrooms in the same school and included those students identified as struggling in reading. The students were identified based on results of DIBLES and the school district reading common assessments (PCAS). The students in the study were drawn from intact classrooms in one school, and therefore this was a convenience sample.

Once the sample was identified and the consent forms were signed, instruction of the Intermediate Extended Literacy Routine began in February 2008 and continued until May 2008. The participants for this study were drawn from two third-grade classrooms in the same school and included those students identified as struggling with fluency in reading based on results of the DIBELS Assessment. All participants in the study received four 20 minute small group IELR reading sessions a week. Instruction using the IELR was provided consistently with each group for eight weeks. There was a staggered introduction of the intervention within a multiple baseline design to allow for stability and demonstration of the experimental effect within each data series as well as across data series at staggered times of intervention (Hersen & Barlow, 1976; Kazdin, 1988; 1998; Kratochwill & Levin, 1992; Tawney & Gast, 1984). The following hypotheses guided this study:

- 1. Participants receiving the IELR would show growth in the running record and the timed reading scores for participants in the study.
- 2. Participants receiving the IELR would show growth in comprehension as measured by narrative retellings at increasing levels of difficulty.
- Participants receiving the IELR would show growth in comprehension as measured by the reading comprehension common assessment from the Pinellas Classroom Assessment System (PCAS).
- Participants receiving the IELR would show growth in comprehension as measured by the Gray Oral Reading Test-Fourth Edition (GORT-3) comprehension subtest.

The results of the study did not support the hypotheses that the use of the IELR would increase fluency and comprehension of third graders identified as struggling in reading. There was, however, some increase in the area of timed reading scores and running record instructional levels over the course of the study. The findings from this study do suggest some direction for future research. In the following paragraphs, implications and conclusions pertaining to the data collected during this study are discussed and the limitations of the work and further recommendations are given. *Implications and Summary*

The intent of this study was to develop an intervention for third grade classroom teachers that would address the needs of students who were identified as struggling in reading. The questions in the study focused on improving reading fluency and comprehension. It was expected that the participants receiving the IELR treatment would show growth in levels of fluency and comprehension over the eight weeks of the study.

The students who received the Intermediate Extended Literacy Routine did not show growth in comprehension, yet there was some evidence of increases in reading rate and accuracy as demonstrated by words read per minute on timed readings and on running record instructional levels over the course of the study (See Figures 22 & 23). Students A1, A6, R3 and R6 showed an increase in number of words read in 1 minute. Students A1, A6 and R6 all increased between 16 to 20 words per minute, yet with other variables affecting the students it is difficult to determine if the IELR treatment was solely responsible. The students did receive whole group reading instruction in a core reading program each day. The introduction of the DIBLES Oral Reading Fluency (ORF) Assessment as a measure of fluency in third grade has led teachers to use fluency drills of words read correctly in a minute as an instructional practice. This practice may have contributed to the increased scores on timed readings. Students A3 and R1 actually showed a decrease in words read in a minute. Students A3 and R1 showed decreases of 8 and 9 respectively in words read in a minute. For the most part, the others students showed an increase in words read in a minute on the timed readings.

129

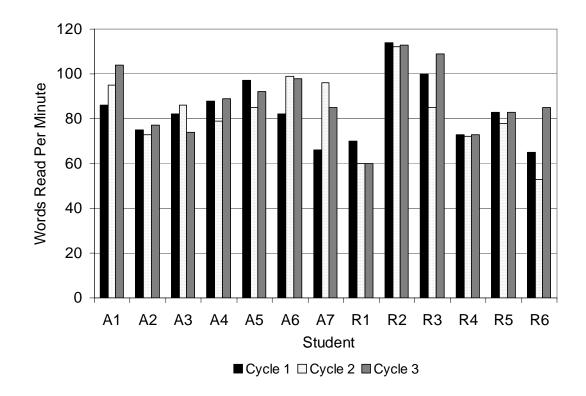
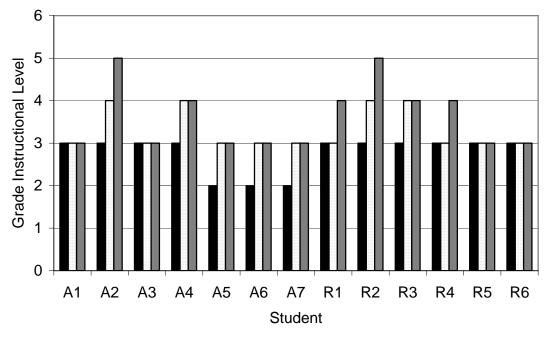


Figure 22. Timed readings: classes combined

It was expected that the participants receiving the IELR treatment would increase their instructional level as measured by a running record. All students in the study either maintained or increased their running record levels. IELR treatment seemed to have an impact on reading accuracy. At the end of the 8 weeks, all students had an instructional level at grade level or above (see Figure 23). Students A5, A6 and A7 all went from a Grade 2 instructional level to instructional at the Grade 3 level; four students maintained an instructional level at Grade 3. Two students went from instructional at a Grade 2 level to instructional at a Grade 3 level and two students made an impressive jump from instructional at Grade 3 level to instructional at a Grade 5 level. Increases in student instructional levels could be attributed to the fact that the running record used to measure instructional level was not timed. The students were able to decode and use strategies they were taught during the IELR and the core instruction to determine words that they experienced difficulty with during their reading. Time was not a factor and therefore allowed students to pause, think and react with a strategy they acquired during instruction.

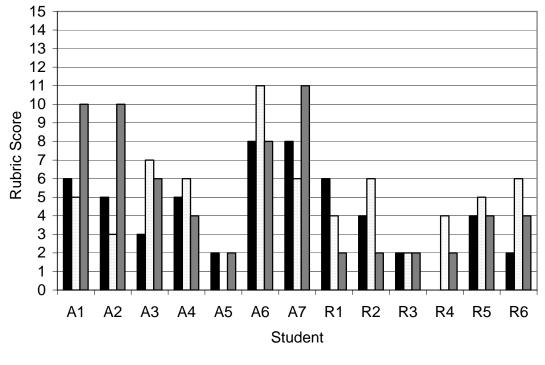
The mixed results of the student's performance on the timed readings may have been a result of the pressure of being timed as they read. Further, the classroom teachers did not use timed reading in their classrooms and therefore the students were not as familiar with this process as they were with running records.



■ Cycle 1 □ Cycle 2 ■ Cycle 3

Figure 23. Running record: classes combined.

The effects of the IELR on comprehension as measured by narrative retellings showed mixed results.



■ Cycle 1 □ Cycle 2 ■ Cycle 3

Figure 24. Narrative retellings: classes combined.

Note. Score interpretation categories are: Struggling (1-4); Delayed (5); Instructional (6-10); Instructional + (11-12); Independent (13-14); Independent + (15)

For narrative retellings, the task was to read a Grade 3 level passage and to retell the story in writing. In many cases, the participant's lack of writing skills may have adversely affected their ability to write a coherent retelling after reading a passage (see Figure 24).

Four students (A1, A2, A3, A7) did show an increase in their instructional level on narrative retellings. These students increased their ability to retell the story to a Grade 3 instructional level over the 8 weeks of the study. All four students were in Mrs. A's class; their results could be a reflection of other teaching practices in that classroom and not attributed solely to the IELR. Eight of the participants in the study had narrative retelling scores that either stayed the same or went down.

A comparison of comprehension assessment results suggests a relationship in the performance of the participants on the GORT and the PCAS Common Assessment. Students A1, A2, A3, A6, R1, R3, R5, and R6 all assessed at the same level on both the GORT and the Common assessment (see Figure 25).

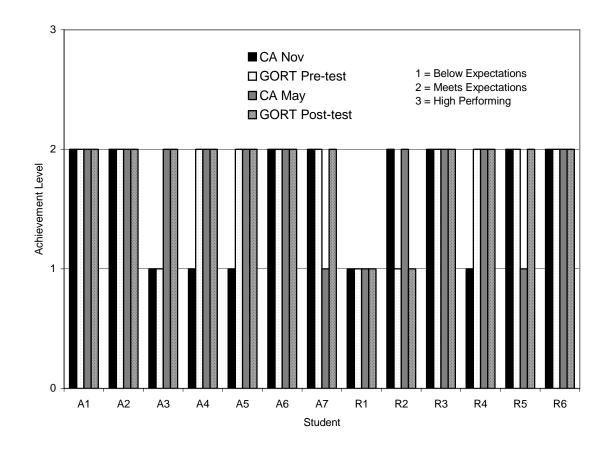


Figure 25. Comparison of comprehension scores for the GORT and Common

Assessments

Conclusions

- 1. Participants in the study either maintained or increased their instructional level on running record.
- Participants receiving the IELR showed evidence of increases in reading rate demonstrated by words read per minute on timed readings.
- 3. The majority of participants receiving the IELR did not show growth in comprehension as measured by narrative retellings. Eight participants had narrative retelling scores that either stayed the same or went down.

Limitations

Several features of the study limit the findings. First, the size and nature of the sample limit generalization of the findings. The sample size in single subject design research is typically small, and it is difficult to generalize these results. Second, the 8 week length of the study may have limited the impact of the intervention. Although the data reflects that the majority of participants receiving the IELR did not show growth in comprehension as measured by narrative retellings, the poor quality of the writing may have negatively impacted the rubric scores for comprehension. At best, this suggests that a longer period of intervention and the use of oral retellings may have resulted in group differences if trends had continued. The researcher did provide feedback to the school's leadership team based on the finding of this study and encouraged them to work with teachers to promote writing across the curriculum.

Finally, the participants in the study were receiving additional instruction in the core reading program and the impact of the core instruction could not be isolated

Recommendations for Future Study

This study provided mixed results. Although the use of the IELR did have a positive impact on reading rate, accuracy and reading instructional level for the majority of the participants in the study, the routine did not prove to be successful in stimulating more growth in reading comprehension. Systematic replication of this study with a larger sample (to improve internal and external validity) and further investigation of which specific aspects of the IELR stimulated growth in reading accuracy and rate is recommended. A broader review of the research on reading comprehension, higher order thinking and use of metacognitive processes is also recommended.

This research study might have implications for ways to design future instruction. It is suggested that the duration of the study be expanded to provide longer student exposure to the IELR. The use of a control group would permit comparison of the effectiveness of the IELR to core classroom instruction. Finally, in future iterations of studies like this, it is recommended that oral retellings be used instead of written narrative retelling as an indicator of reading comprehension; the writing ability of the student can impact the quality of the retelling.

References

- Abram, D. (1995). *The spell of the sensuous: Perception and language in a more-than human world*, New York: Random House.
- Abrami, P., Chambers, B., Poulsen, C., De Simone, C., d'Apollonia, S. & Howden, J.
 (1995). *Classroom connections: Understanding and using cooperative learning*.
 Toronto, Ontario: Harcourt Brace.
- Ackerman, P. T., & Dykman, R. A. (1996). The speed factor and learning disabilities: The toll of slowness in adolescents. *Dyslexia*, 2, 1-21.
- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: Massachusetts Institute of Technology.
- Airasian, P. W. (1988). Measurement driven instruction: A closer look. *Educational Measurement: Issues and Practice*, 7(4): 6-11.
- Alberto, P., & Troutman, A. C. (2003). Applied behavior analysis for teachers (5th ed.).Upper Saddle River, N.J.: Merrill.
- Allington, R. L. (1994). What's special about special programs for children who find learning to read difficult? *Journal of Reading Behavior*, *26*, 95–115.
- Allington, R. L. (2001). What really matters for struggling readers: Designing researchbased programs. New York: Addison-Wesley Educational Publisher Inc.

- Allington, R. L., & Cunningham, P. M. (1999). *Schools that work*. New York: Harper Collins.
- Allington, R. L., & Cunningham, P. M. (2002). *Schools that work*. Boston: Allyn and Bacon.
- Allington, R. L., & Johnson, P. (1991). Coordination, collaboration, and curricular coherence. In R. Slavin, N. Madden, & N. Karweit, (Eds.), *Effective educational* programs for at-risk children. Boston: Allyn & Bacon.
- Allington, R. L., & Walmsley, S. A. (Eds.), (1995). *No quick fix: Rethinking literacy* programs in America's elementary schools. New York: Teachers College Press.
- Anderson, E. (1998). Motivational and cognitive influences on conceptual knowledge acquisition: The combination of science observation and interesting texts.
 Unpublished doctoral dissertation, University of Maryland, College Park.
- Anderson, R. C. (1985). Becoming a nation of readers: The report of the commission on reading. Champaign, IL: University of Illinois.
- Anderson, R. C. & Pearson, P. D. (1984). A shema-theortic view of basic processes in reading comprehension. In P. D. Pearson, K. Barr, M. I. Kamil, & R. Mosenthal (Eds.) *Handbook of Reading Research Vol. 1* (pp. 255-297). White Plains, NY; Longman.
- Anderson, R. C., & Pearson, P. D. (1998). A teacher development project in transactional strategy instruction for teachers of severely reading-disabled adolescents. *Teaching & Teacher Education*, 8, 391-403.
- Anderson, R. C., Hiebert, J. A., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers*. Washington DC: National Institute of Education.

- Anderson, R. C., Wilson, P. T., & Fielding, L. G. (1998). Growth in reading and how children spend their time outside of school. (Tech. Rep. No. 389). Champaign: University of Illinois at Urbana-Champaign, Center for the Study of Reading.
- Alvermann, D. (2000). Modes of inquiry into studying engaged reading. In J. Guthrie &
 D. Alvermann (Eds.), *Engaged reading: Processes, practices, and policy implications* (pp. 134-149). New York: Teachers College Press.
- Alvermann, D. (2002). Effective literacy instruction for adolescents. *Journal of Literacy Research*, 34(2), 189-208. Retrieved April 1, 2005 from http://www.coe.uga.edu/reading/faculty/alvermann/effective2.pdf
- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). Put reading first: The research building blocks for teaching children to read. Washington, DC: National Institute of Child Health and Human Development and U.S. Department of Education.
- Amrein-Beardsley, A. (2008, March). Methodological concerns about the education value-added assessment system. *Educational Researcher*, *37* (2), 65-75.
- Armbruster, B., Anderson, T., & Ostertag, J. (1987, November). Teaching text structure to improve reading and writing. *The Reading Teacher*, 130-137.
- Au, K. H. (1997). Schooling, literacy, and cultural diversity in research and personal experience. In A. Neumann & P.L. Peterson (Eds.), *Learning from our lives:* Women, research, and autobiography in education (pp. 71-90). New York: Teachers College Press.
- Baer, D. M, Wolf, M., & Risley, T. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1, 91-97.

- Baker, L. (2003). The role of parents in motivating struggling readers. *Reading and Writing Quarterly, 19*, 87-106.
- Baker, S., Gersten, R., & Keating, T. (2000). When less may be more: A 2-year longitudinal evaluation of a volunteer tutoring program requiring minimal training. *Reading Research Quarterly*, 35, 494-519.
- Barr, R. (1975). The effect of instruction on pupil reading strategies. *Reading Research Quarterly*, *4*, 555-582.
- Barr, R. (1995). Research on the teaching of reading. In V. Richardson (Ed.). Handbook of Research on Teaching, 4th edition. Washington DC: American Educational Research Foundation.
- Baumann, J. F., & Duffy, A. M. (1996, December). Elementary teachers' descriptions and evaluations of classroom and school reading programs. Paper presented at the annual meeting of the National Reading Conference, Charleston, SC.
- Bennett, W. J. (1986). First lessons: A Report on elementary education in America.Washington, D. C.: U.S. Department of Education
- Binder, C., Haughton, E., & Bateman, B. (2002). Fluency: Achieving true mastery in the learning process. *Professional Papers in Special Education*. University of Virginia Curry School of Special Education.
 http://curry.edschool.virginia.edu/go/specialed/papers

Binder, C., Haughton, E., & Van Eyk, D. (1990). Increasing endurance by building fluency: Precision teaching attention span. *Teaching Exceptional Children*, 22 (3), 24–27.

- Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*, *13*, 4-16.
- Bracey, G. W. (1987). Measurement-driven instruction: Catchy phrase, dangerous practice. *Phi Delta Kappan, 68*, 683-686.
- Braunger, J., and Lewis, J. P. (1997). *Building a knowledge base in reading*. Northwest Regional Educational Laboratory: Portland, OR
- Braunger, J., & Lewis, J. (1998). Building a knowledge base in reading (2nd ed.). Newark, NJ: International Reading Association.
- Brophy, J. (1973). Stability of teacher effectiveness. *American Educational Research Journal*, 10, 245-252.
- Brown, K. J., Morris, D., & Fields, M. K. (2005). Intervention after grade one: Serving increased numbers of struggling readers effectively. *Journal of Literacy Research*, 37, 61.
- Bryk, A. S., & Raudenbush, S. W. (1989). Toward a more appropriate conceptualization of research on school effects: A three-level hierarchical linear model. In R. D.
 Bock (Ed.), *Multilevel analysis of educational data*. (pp. 136-138). San Diego: Academic Press.
- Calfee, R., & Brown, R. (1979). Grouping students for instruction. In D. L. Duke (Ed.), Classroom management: Seventy-eighth yearbook of the National Society for the Study of Education (pp. 144-182). Chicago: University of Chicago Press.

Calkins, L. (2001). The art of teaching reading. New York, NY: Longman.

Cambourne, B. (1988). *The whole story: Natural learning and the acquisition of literacy in the classroom.* (pp. 86-87). New Zealand: Scholastic, Inc.

- Cambourne, B. (1998). Retelling: a whole-language, natural learning activity for helping learner-writers. In R. D. Walshe, P. March, & D. Jenson, (Eds.), *Writing and learning in Australia*. Melbourne, Australia: Dellasta Books in association with Oxford University Press.
- Campbell, J. R., Voelkl, K. E., & Donahue, P. L. (1997). *Report in brief: NAEP 1996 trends in academic progress*. Washington DC: US Department of Education, Office of Educational Research.
- Caswell, L. J., & Duke, N. K. (1998). Non-narratives as a catalyst for literacy development. *Language Arts*, 75, 108-117.
- Chall, J. S., Jacob, V. A., & Baldwin, L. E. (1990). *The reading crisis: Why poor children fall behind*. Cambridge MA: Harvard University Press.
- Charles A. Dana Center, University of Texas at Austin. (1999). Hope for urban education: A study of nine high-performing, high-poverty urban elementary schools. Washington, DC: U.S. Department of Education, Planning and Evaluation Service.
- Clay, M. (1972). *Reading: The patterning of complex behavior*, Auckland NZ: Heinemann.
- Clay, M., (1991). *Becoming literate: The construction of inner control*. Westport, CT: Heinemann.
- Clay, M. (1998). International perspectives on the reading recovery program. In J. Flood,
 S. B. Heath, & D. Lapp (Eds.), *Handbook of research on teaching literacy through the communicative and visual arts* (pp. 665-667). New York: Macmillan Library reference USA (a project of the International Reading Association).

- Combs, M. (2006). Modeling the reading process with enlarged texts. *The Reading Teacher*, 40(4), 442-426.
- Cotton, K. (1995). *Effective schooling practices: A research synthesis/1995 update*. Portland, OR: Northwest Regional Educational Laboratory.

Creemers, B. P. M. (1994). The effective classroom. London: Cassell.

Csikszentmihalyi, M. (1991). *Literacy and intrinsic motivation*. In S.R. Graubard (Ed.), *Literacy* (pp. 115-140). New York: Noonday.

Csikszentmihalyi, M. (1997). Finding flow. New York: Harper Collins.

- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, *33*, 934-945.
- Cunningham, P. M. (2003). *Phonics they use: Words for reading and writing* (3rd ed.). New York: Longman.

Cunningham, P., & Allington, R. (1999). Schools that work. Boston: Allyn and Bacon.

- Cunningham, P. M., & Allington, R. L. (2003). *Classrooms that work* (3rd ed.). Boston: Allyn & Bacon.
- Cunningham, P. M., & Allington, S. R. (1994). *Classrooms that work*. New York: Harper Collins Publishers.
- Dowhower, S. L. (1999). Supporting a strategic stance in the classroom: A comprehension framework for helping teachers help students to be strategic. *The Reading Teacher*, *52* (7), 672-688.
- Duffy, G. (2003). *Explaining Reading: A resource for teaching concepts, skills, and strategies.* New York: Guilford Press.

- Duffy, G. G., & Hoffman, J. V. (1999). In pursuit of an illusion: The search for a perfect method. *The Reading Teacher*, *53*, 10-16.
- Duffy-Hester, A. M. (1999). Teaching struggling readers in elementary school classrooms: A review of classroom reading programs and principles for instruction. *The Reading Teacher*, 52, 480-495.
- Dugan, J. (1997). Transactional literature discussions: Engaging students in the appreciation and understanding of literature. *Reading Teacher*, *51*(2), 86-97.
- Duian, A., & Butler, B. (2004, May). Teaching and Teacher Education. *Teaching and Teacher Education*, Vol. 24(4), 1083-1097.
- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 481-533.

Durkin, D. (1993). Teaching them to read (6th ed.). Boston: Allyn & Bacon.

- Dunkin, M., & Biddle, B. (1974). *The study of teaching*. New York: Holt, Rinehart, & Winston.
- Durso, F. T., & Coggins, K. A. (1991). Organized instruction for the improvement of word knowledge skills. *Journal of Educational Psychology*, 83, 109-112.
- Edmonds, R. R. (1979). Effective schools for the urban poor. *Educational Leadership*, *37*, 15-24.
- Farr, R., Tulley, M., & Rayford, L. (1998). Local district adoption practices in non-adoption states. Unpublished manuscript. Bloomington, IN: School of Education, University of Indiana.
- Farstrup, A., & Samuels, S. J. (Eds.). (2002). What research has to say about reading instruction. Newark, DE: International Reading Association.

- Feuer, M. J., Holland, P. W., Green, B. F., Bertenthal, M. W., and Hemphill, F. C. (Eds.).(1999). Uncommon measures: Equivalence and linkage among educational tests.Washington, DC: National Academy Press.
- Fielding, L., & Pearson, P. D. (1994). Reading comprehension: What works. *Educational Leadership*, *51*(*5*), 62.
- Flippo, R. F. (1998). Points of agreement: A display of professional inquiry in our field. *The Reading Teacher*, 52, 30-40.
- Flippo, R. F. (1999). What do the experts say? Helping children learn to read. Portsmouth, NH: Heineman.
- Flood, J., Lapp, D., Flood, S., & Nagel, G. (1992). Am I allowed to group? Using flexible patterns for effective instruction. *Reading Teacher*, 45, 608-615.
- Florida Education Association. (2006, January). *Teachers' pets: Wall street journal review and outlook*. Wall Street Journal Review and Outlook.
- Fountas, I. C., & Pinnell, G. S. (1996). Guided reading: Good first teaching for all children. Portsmouth, NH: Heinemann.
- Fountas, I. C., & Pinnell, G. S. (1999). *Matching books to readers: Using leveled books in guided reading, K-3*. Westport, CT: Heinemann.
- Fountas, I., & Pinnell, G. (2001). *Guiding readers and writers grades 3-6: Teaching comprehension, genre, and content literacy.* Portsmouth, NH: Heinemann.
- France, D. J. Shaywitz, S. E., Stuebing, K. K., Shaywitz, B. A., & Fletcher, J. M. (1996)
 Developmental lag versus deficit models of reading disability: A longitudinal individual growth curves analysis. *Journal of Educational Psychology*, 88, 3–17.

- Fraser, B. J., & Walberg, H. J. (Eds.). (1991). Educational environments: Evaluation, consequences, and antecedents. Oxford, England: Oxford Pergamon Press.
- Fraser, B. J., Walberg, H. J., Welch, W. W., & Hattie, J. A. (1987). Synthesis of educational productivity research. (Special Issue). *International Journal of Educational Research*, 11 (2), 145-252.
- Fullan, M. G. (2000). Change forces: Probing the depths of educational reform. Levittown, PA: The Falmer Press.
- Fullan, M. G. (2003). Change forces with a vengeance. New York: Routledge Falmer.
- Gaskins, I. W. (2005). *Success with struggling readers: The benchmark school approach*. New York: Guilford Press.
- Glazer, S. M., & Brown, C. (1993). Portfolios and beyond: Collaborative assessment in reading and writing. Norwood, MA: Christopher-Gordon.
- Goodlad, J. I., & Keating, P. (1984). *A place called school: Prospects for the future*. New York: McGraw Hill.
- Goodlad, J.I., & Keating, P. (Eds.). (1990). Access to knowledge: An agenda for our *nation's schools*. New York: The College Entrance Examination Board.
- Good, T. L., & Stipek, D. J. (1983). Individual differences in the classroom: A psychological perspective. In G. D. Fenstermacher & J. I. Goodlad (Eds.), *Individual differences and the common curriculum. Eighty-second yearbook of the National Society for the Study of Education Pan I* (pp. 9-43). Chicago: University of Chicago Press.

- Grossen, B., & Coulter, G. *Reading recovery: An evaluation of benefits and costs.* Retrieved January 15, 2008, from <u>www.uoregon.edu/~bgrossen.rr.htm</u>
- Haberman, M. (1995). Selecting 'star' teachers for children and youth in urban poverty. *Phi Delta Kappan, 76 (10),* 777-781
- Harris, A. J., & Sipay, E. R. (1980). How to increase reading ability: A guide to developmental and remedial methods. New York: Longman.
- Hiebert, B. (1994). *Moving to the future: Outcome-based comprehensive guidance and counseling in Alberta schools*. Edmonton, AB: Alberta Education
- Hiebert, E. H. (1983). An examination of ability grouping for reading instruction. *Reading Research Quarterly*, *18*, 231-255.
- Hiebert, E. H. (1994). Reading recovery in the United States: What difference does it make to an age cohort? *Educational Researcher*, *23*(*9*), 15-25.
- Hiebert, J., (Ed.). (1986) Conceptual and procedural knowledge: The case of mathematics. Hillsdale, NJ: Lawrence Erlbaum.
- Hersen, M., & Barlow, D. H. (1976). *Single case experimental designs: Strategies for studying behavior change*. New York: Pergamon Press.
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, 71 (2), pp.165-180.
- Hixson, J., & Tinzmann, M. (1990). Who are the "at risk" students of the 1990s? Retrieved April 24, 2004, from http://www.ncrel.org/sdrs/areas/rpl_esys/equity.htm

- Hoffman, J. V. (1991). Teacher and school effects in learning to read. In R. Barr, M. L.Kamil, P. B. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research*, *Vol. II* (pp. 911-950). New York: Longman.
- Hodgkinson, H. L. (1985). *All one system*. Washington DC: Institute for Educational Leadership.
- Ivey, G. (2000). Redesigning reading instruction. *Educational Leadership*, 58(1), 42-45.
- Ivey, G. (2000). A multi-case study in the middle school: Complexities among young adolescent readers. *Reading Research Quarterly*, *34*, 172-192.
- Ivey, G., & Broaddus, K. (2001). Just plain reading: a survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, 36(4), 350-377.
- Johnson, D. (1999, June 6). Chicago Schools Are Setting A Standard. *New York Times*, p. 1.
- Johnston, P. (1997). Commentary on a critique. Reading Teacher, 51, 282-285.
- Juel, C. (1988). Learning to read and write: A longitudinal study of children in first and second grade. *Journal of Educational Psychology*, 80, 437–447.
- Kazdin, A. E. (1998). *Research design in clinical psychology* (3rd ed.). Boston: Allyn & Bacon.
- Knapp, C. A. (1995). An investigation into the organizational and technological factors that contribute to the successful implementation of CASE technology.
 Unpublished doctoral dissertation, City University of New York Graduate Center.
- Knapp, M. S., & Associates. (1995). Teaching for meaning in high-poverty classrooms. New York: Teachers College Press.

- Koretz, D., Linn, R. L., Dunbar, S. B., & Shepard, L. A. (1991). The effects of highstakes testing on achievement. Posted by D. Koretz. Retrieved October 27, 2008, from www.colorado.edu/education/faculty/lorrieshepard/testing.html.
- Kratochwill, T. R., & Levin, J. R. (1992). Single-case research design and analysis: New directions for psychology and education. Mahwah, NJ: Lawrence Erlbaum.
- Kuhn, M. R. & Stahl, S. A. (2003). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology*, 95, 3-21.
- Kulik, J. A., & Kulik, C. C. (1987). Review of recent research literature on computerbased instruction. *Contemporary Educational Psychology*, 12, 222-230.
- Kulik, J. A., & Kulik, C. L. C. (1991). Research on ability grouping: Historical and contemporary perspectives. University of Connecticut, National Research Center on the Gifted and Talented. (ERIC Document Reproduction Service No. ED 350 777)
- Legters, N., McDill, E., & McPartland, J. (1993). Section II: Rising to the challenge:
 Emerging strategies for educating students at risk. In *Educational reforms and students at risk: A review of the current state of the art* (pp. 47-92). Washington,
 DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Levin, H. M. (1986). Educational reform for disadvantaged students: An emerging crisis. West Haven, CT: NEA Professional Library.
- Levin, H. (1989). Costs and cost-effectiveness of computer-assisted instruction. Stanford,CA: Stanford University, California Institute for Research on Educational Finance and Governance.

- Levin, H. (1988). Accelerated schools for disadvantaged students. *Educational Leadership*, 44(6), 19-21.
- Lou, Y., Abrami, P. C., Spence, J. C. (2002). Effects of within-class grouping on student achievement: An exploratory model. *Journal of Educational Research*, 94(2), 101–112.
- Lou, Y., Abrami, P. C., Spence, J. C., Poulsen, C., Chambers, B., & d'Apollonia, S.
 (1996). Within-class grouping: A meta-analysis. *Review of Educational Research*, 66(4), 423-458.
- McDill, E. L.; Natriello, G., & Pallas; A. M. (1986, February). A population at risk:
 Potential consequences of tougher school standards for student dropouts. *American Journal of Education*, 94:2, 135-181.
- Mann, V. A. (1986). Phonological awareness: The role of reading experience. *Cognition*, 24, 65-92.
- Marzano, R. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: ASCD.
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Moats, L. C. (2000). Whole language lives on: The illusion of "balanced" reading *instruction*. Washington, D.C.: The Thomas B. Fordham Foundation Report.

- National Institute of Child Health and Human Development. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (Report of the National Reading Panel, NIH Publication No. 00-4754).
 Washington, DC: U.S. Government Printing Office.
- National Reading Panel (2000). *Teaching children to read: reports of the subgroups*.
 Bethesda, MD: National Institute of Child Health and Human Development.
 Retrieved April 13, 2000, from www.nichd.nih.gov/publications/nrp/report.htm.
- National Reading Panel. (2000, April). *Report of the National Reading Panel: Teaching children to read*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health, U.S. Department of Health and Human Services
- Natriello, G., McDill, E., & Pallas, A. (1990). *Schooling disadvantaged children: Racing against catastrophe*. New York: Teachers College Press.
- Nell, V. (1988). Lost in a book: The psychology of reading for pleasure. New Haven, CT:Yale University Press.
- Neuman, S. (2001). The role of knowledge in early literacy. *Reading Research Quarterly*, 22(2), 173-191.
- Neuman, S. B., & Dickinson, D. K. (Eds.). *Handbook of early literacy research*. New York: The Guilford Press.
- No Child Left Behind Act. (2001). U.S. Department of Education. Retrieved April 22, 2005, from http://www.ed.gov/nclb/landing.jhtml

- Oakes, J., Gamoran, A., & Page, R. N. (1991). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 570-608). Washington, DC: American Educational Research Association.
- O'Sullivan, C. Y., Reese, C. M., & Mazzeo, J. (1997, May). *NAEP 1996 science report card for the nation and the states*. Washington, DC: Department of Education.
- Parsonson, B. S., & Baer, D. M. (1978). The analysis and presentation of graphic data. In T. R. Kratochwill (Ed.), *Single-subject research: Strategies for evaluating change* (pp. 101-165). New York: Academic Press.
- Pearson, P. D., & Dole, J. A. (1987). Explicit comprehension instruction: A review of research and a new conceptualization of instruction. *The Elementary School Journal*, 88, 151–165.
- Pikulski, J. J. (1991). Preventing reading failure: A review of five effective programs. *The Reading Teacher*, 48, 30-39.
- Pinnell, G. S., DeFord, D. E., & Lyons, C. A. (1988). *Reading recovery: Early intervention for at-risk first graders* (Educational Research Service Monograph). Arlington, VA: Educational Research Service.
- Pinnell, G. S., & Lyons, C. (1995). *Response to Hiebert: What difference does reading recovery make?* Unpublished manuscript.
- Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*, New York: Guilford Press

- Puma, M. J., Karweit, N., Price, C., Ricuitti, A., Thompson, W., & Vaden-Keirnan, M. (1997). *Prospects: Final report on student outcomes*. Washington, DC: U.S. Department of Education.
- Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. *Elementary School Journal*, 83, 427–452.
- Rasinski, T. V. (2003). *The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension*. New York: Scholastic.
- Rasinski, T. V., Padak, N., Linek, W., & Sturtevant, B. (1994). Effects of fluency development on urban second-grade readers. *Journal of Educational Research*, 87, 158–165.
- Reynolds, A. J. (1995). One year of preschool intervention or two: Does it matter? *Early Childhood Research Quarterly*, *10*, 1–31.
- Richard, S. B., Taylor, R., Ramasamy, R., & Richards, R. Y. (1999). Single-subject research: Applications in educational and clinical settings. Belmont, CA: Wadsworth.
- Richardson, V., & Colfer, P. (1990). Being at-risk in school. In J. Goodlad & P. Keating (Eds.), Access to knowledge: An agenda for our nation's schools. (pp.107-124).
 New York: College Entrance Examination Board.

Roehler, L. R. & Duffy, G. G. (1984). Direct explanation of comprehension processes. In
G. G. Duffy, L. R. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (pp. 265–280). NY: Longman.

- Rosenshime, B. & Furst, N. (1973). The use of direct observation to study teaching. In.R. M. W. Travers (Ed.), *Second handbook of research on teaching* (pp. 122-183).Chicago: Rand McNaIIy.
- Scanlon, D. M., & Gelzheiser, L. M. (1992). Study center observation system. Unpublished manuscript, University of Albany, State University of New York, Child Research and Study Center.
- Shepard, M, (1988). *Evaluation of the educational curriculum- power and control: Tactics of men who batter*. Duluth, MN: Domestic Intervention Project.
- Shepard, M., & Airasian, P. W. (1988). Language arts and disciplines. In R. Barr, M.
 Kamil, P. Mosenthal, & P. Pearson, (Eds.), (1991), *Handbook of Reading Volume*2. New York: Longman.
- Shepperd, K. (1993) Two feedback types: do they make a difference?, *RELC Journal*, *Vol. 23, No. 1*, 103-110.
- Slavin, R. E. (1987). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. *Review of Educational Research*, 57(3), 293-336.
- Slavin, R. E., (1989). What works for students at risk: A research synthesis. *Educational Leadership*, 46(5), 4-13.
- Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research*, 60, 3, 471-499.
- Slavin, R. E. (1996). Neverstreaming: Preventing learning disabilities. *Educational Leadership*, 53, 4-7.
- Smith, J. &, Elley, W. (1997). How children learn to write. Katonah, NY: Richard C. Owen Publishers.

- Snow, C. E., Burns, M. S., & Griffen, P. (Eds.). (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.
- Spear-Swerling, L., & Sternberg, R. (1996). *Off track: When poor readers become "learning disabled"*. New York: Westview.
- Spiegel, D. (1998). Silver bullets, babies, and bath water: Literature response groups in a balanced literacy program. *The Reading Teacher*, *52*, 114-124.
- Stallings, J., & Kaskowitz, D. (1974). *Follow through classroom observation evaluation* 1972–73 (SRI Project URU-7370). Stanford, CA: Stanford Research Institute.
- Stanovich, K. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.
- Stringfield, S., Millsap, M. A., & Herman, R. (1997). Urban and suburban/rural special strategies for educating disadvantaged children: Findings and policy implications of a longitudinal study. Washington, DC: U.S. Department of Education.
- Swartz, S. L., Shook, R. E., & Hoffman, B. M. (1993). *Reading Recovery in California*. *1992-93 site report*. San Bernardino: California State University.
- Tapscott, D. (1999, February). Educating the net generation. *Educational Leadership*, 56(5), 7-9.
- Tawney, J. W., & Gast, D. L. (1984). Single-subject research in special education. Columbus, OH: Merrill.

- Taylor, B. M., & Pearson, P. D. (2001). The CIERA school change project: Translating research on effective reading instruction and school reform into practice in highpoverty elementary schools. In C. Roller (Ed.), *Learning to teach reading: Setting the research agenda* (pp. 180-189). Newark, DE: International Reading Association.
- Taylor, B. M., Pearson, P. D., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in lowincome schools. *Elementary School Journal*, 101(2), 121-165.
- Taylor, B. M., Peterson, D. P., Pearson, P. D., & Rodriguez, M. C. (2001). The CIERA school change framework: An evidenced-based approach to professional development and school reading improvement. *Reading Research Quarterly*, 40(1), 40-69.
- Taylor, B. M., Pressley, M., & Pearson, P. D. (2002). Research-supported characteristics of teachers and schools that promote reading achievement. In B. M. Taylor & P. D. Pearson (Eds.), *Teaching reading: Effective schools, accomplished teachers* (pp. 361-374). Mahwah, NJ: Erlbaum.
- Taylor, B., Short, R., Shearer, B., & Frye, B. (1999). First grade teachers provide early reading intervention in the classroom. In R. L. Allington & S. A. Walmsley (Eds.), *No quick fix: Rethinking literacy in America's elementary schools* (pp. 159-176). New York: Teachers College.
- Tomlinson, C. A. (2000). The differentiated classroom: Responding to the needs of all learners. Alexandria, VA: Association for Supervision and Curriculum Development.

- Torgesen, J. K., & Burgess, S. R. (1998). Consistency of reading-related phonological processes throughout early childhood: Evidence from longitudinal-correlational and instructional studies. In J. Metsala & L. Ehri (Eds.), *Word Recognition in beginning reading*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Torgesen, J. K., Wagner, R. K., Rashotte, C. A., Alexander, A. W., & Conway, T. (1997). Preventive and remedial interventions for children with severe reading disabilities. *Learning Disabilities: A Multidisciplinary Journal*, 8, 51-61.
- Tovani, C., & Keene, E. (2000). I read it but I don't get it: Comprehension strategies for adolescent readers. Portland, ME: Stenhouse.
- US Department of Health and Human Services. (2000). *Report of the National Reading Panel*. (NIH Publication No. 00-4769). Washington, DC: Public Health Service National Institutes of Health National Institute of Child Health and Human Development.
- Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Wang, M. C., Reynolds, M. C., and Walberg, H. J. (1988). Serving students at the margins. *Educational Leadership*, 12-17.
- Walmsley, S. A., & Allington, R. L. (1995). Redefining and reforming instructional support programs for at-risk students. In R. L. Allington and S. A. Walmsley (Eds.), *No quick fix: Rethinking literacy programs in America's elementary schools* (pp. 19-44). New York: Teachers College Press.

- Whitener, E. M. (1999). A meta-analytic review of the effect on learning of the interaction between prior achievement and instructional support. *Review of Educational Research*, 59(1), 65–86.
- Wiederholt, J. L., & Bryant, B. R. (1987). Assessing the reading abilities and instructional needs of students. *Learning Disability Quarterly*, *1*, 11-23.
- Wiederholt, J. L., & Bryant, B. R. (1991). *The Gray oral reading test* (3rd ed.). Austin, TX: PRO-ED.
- Wiederholt, J. L., & Bryant, B. R. (1992). *Gray oral reading test: Examiner's manual*. (3rd ed.). Austin, TX: PRO-ED.
- Winfield, L. F. (1995). Resilience, schooling, and development in African American youth: A conceptual framework. *Education and Urban Society* 24, No. 1, 5-14.
- Wolf, M., & Katzir-Cohen, T. (2001). Reading fluency and its intervention. Scientific Studies of Reading, 5(3), 211-239.
- Wright, S., Horn, S., & Sanders, W. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, 11(1), 57-67.
- Yen, W. M., & Ferrara, S. (1997). The Maryland school performance assessment program: Performance assessments with psychometric quality suitable for high stakes usage. *Educational and Psychological Measurement*, 57 (1), 60-84..
- Yopp, H. K. (1995). A test for assessing phonemic awareness in young children. *Reading Teacher*, *49*(1), 20-29.
- Zhan, Su, & Ottenbacher, K. J. (2001) Single-subject research design for disability research. *Disability and Rehabilitation 23, 1*, 1-8.

Appendices

Appendix A

Human Participant Protection Completion Certificate

 Human Participant Protections Education for Research Teams
 Page 1 of 1

 Note of Mattional Cancer Institutes of Health
 Image: Clinical Trials

 Note Home
 Cancer Topics
 Clinical Trials
 Cancer Statistics
 Research & Funding
 News

 Model
 Clinical Trials
 Cancer Statistics
 Research & Funding
 News

 Model
 Clinical Trials
 Cancer Statistics
 Research & Funding
 News

 Completion Certificate
 Completion Certificate
 Completion Certificate

This is to certify that

Jeani Fullard

has completed the Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 10/05/2005.

This course included the following:

- key historical events and current issues that impact guidelines and legislation on human participant protection in research.
- ethical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.
- the use of key ethical principles and federal regulations to protect human participants at various stages in the research process.
- a description of guidelines for the protection of special populations in research.
- a definition of informed consent and components necessary for a valid consent.
- a description of the role of the IRB in the research process.
- the roles, responsibilities, and interactions of federal agencies, institutions, and researchers in conducting research with human participants.

National Institutes of Health http://www.nih.gov

Home | Contact Us | Policies | Accessibility | Site Help | Site Map A Service of the National Cancer Institute



Appendix B

IRB Approval Letter



January 11, 2008

Jeani Fullard, ABD College of Education 6019 17th Ave. South Gulfport, FL 33707

RE: Expedited Approval for Initial Review

IRB#: 106327 G Title: An Intermediate Extended Literacy Routine to Support Struggling Third Grade Readers Study Approval Period: 01/09/2008 to 01/07/2009

Dear Ms. Fullard:

On January 9, 2007, Institutional Review Board (IRB) reviewed and **APPROVED** the above protocol **for the period indicated above.** It was the determination of the IRB that your study qualified for expedited review based on the federal expedited category number seven (7): Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt. Also approved is the Adult Minimal Risk Informed Consent form for in-person participants and Waiver of Informed Consent documentation for telephone interviews. Waiver of Written Documentation of Informed Consent has been approved having met the following 4 criteria: the research will not involve greater than "minimal risk" to the subject; it is not practicable to conduct research without a waiver; waiving will not adversely affect subject's rights; and if appropriate, information will be provided to subject later.

Also approved were the Informed Consent forms and Assent forms.

Please note, if applicable, the enclosed informed consent/assent documents are valid during the period indicated by the official, IRB-Approval stamp located on page one of the form. Valid consent must be documented on a copy of the most recently IRB-approved consent form. Make copies from the enclosed original.

Please reference the above IRB protocol number in all correspondence regarding this protocol with the IRB or the Division of Research Integrity and Compliance. In addition, we have enclosed an <u>Institutional</u> <u>Review Board (IRB) Quick Reference Guide</u> providing guidelines and resources to assist you in meeting your responsibilities in the conduction of human participant research. Please read this guide carefully. It is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB.

DIVISION OF RESEARCH INTEGRITY & COMPLIANCE University of South Florida • 3702 Spectrum Blvd., Suite 155 • Tampa, FL 33612-9445 (813) 974-5638 • Fax (813) 974-7091

Appendix B (Continued)

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-9343.

Sincerely,

the Taul

Paul G. Stiles, J.D., Ph.D., Chairperson USF Institutional Review Board

Enclosures: (If applicable) IRB-Approved, Stamped Informed Consent/Assent Documents(s) IRB Quick Reference Guide

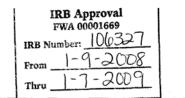
Cc: cd/Norma Epley, USF IRB Professional Staff

SB-IRB-Approved-EXPEDITED-0601

Appendix C

IRB Parent Consent Form





Parental Permission to Participate in Research

Social and Behavioral Research

Information for parents to consider who are being asked to allow their child to take part in a research study

IRB# 106 327G

The following information is being presented to help you/your child decide whether or not your child wants to be a part of a research study. Please read carefully. Anything you do not understand, ask the investigator.

We are asking you to allow your child to take part in a research study that is called:

An Intermediate Extended Literacy Routine to Support Struggling Third Grade Readers

The person who is in charge of this research study is **Jeani Z. Fullard**. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. The person explaining the research to you may be someone other than the Principal Investigator

Other research personnel who you may be involved with include: John Henson, Learning Specialist

The research will be done at Rawlings Elementary

Should your child take part in this study?

This form tells you about this research study. You can decide if you want your child to take part in it. This form explains:

- Why this study is being done.
- What will happen during this study and what your child will need to do.
- Whether there is any chance your child might experience potential benefits from being in the study.
- The risks of having problems because your child is in this study.

Before you decide:

- Read this form.
- Have a friend or family member read it.
- Talk about this study with the person in charge of the study or the person explaining the study. You can have someone with you when you talk about the study.

IRB Consent Rev. Date:_____ Informed Consent Rev #:_____ Page 1 of 4

162

IRB Number:_____ IRB SBR Parental Consent: 2007-03-12

Appendix C (Continued)

- Talk it over with someone you trust.
- Find out what the study is about.
- You may have questions this form does not answer. You do not have to guess at things you don't understand. If you have questions, ask the person in charge of the study or study staff as you go along. Ask them to explain things in a way you can understand.
- Take your time to think about it.

It is up to you. If you choose to let your child be in the study, then you should sign the form. If you do not want your child to take part in this study, you should not sign the form.

Why is this research being done?

The purpose of this study is evaluate a structured classroom routine for delivering reading instruction called an <u>Intermediate Extended Literacy Routine</u> *(IELR)*. The IELR is a model for delivery of clear and focused reading instruction in small group setting with the classroom teacher. This study will examine the effects of a 20 minute guided reading routine on the achievement of struggling third grade readers.

Why is your child being asked to take part?

We are asking your child to take part in this research study because your child has been identified as a struggling reader based on classroom fluency assessments. We want to find out if the Intermediate Extended Literacy Routine will have an effect on your child's fluency rate and comprehension.

What will happen during this study?

Your child will be asked to spend about eight weeks in this study. Your child will take part in the Intermediate Extended Literacy Routine for small group reading instruction with 6 other students for 20 minutes, four times a week for eight weeks. This would be in addition to (not in place of) regular classroom reading instruction. Your child will receive small group reading instruction by his/her classroom teacher using the Intermediate Extended Literacy Routine it which the teacher demonstrates a reading behavior that is being taught and models for the student how to use the reading behavior when he/she reads. The student then immediately has the opportunity to demonstrate for the teacher how the reading behavior will be used in his/her independent reading.

A study visit is one your child will have with the person in charge of the study or study staff. Your child will not need to come for study visits. All contact with your child will be made in the child's classroom at your child's school.

Your child will be in the study for eight weeks during which time they will participate in small group instruction with the teacher four times a week.

Bi-weekly the student's progress will be monitored by administering informal measures which include running records for fluency and timed reading & retellings for comprehension.

Your child will be given a pre and post test to measure improvement with fluency and comprehension

How many other people will take part?

About Fourteen students and two teachers will take part in this study at USF.

What other choices do you have if you decide not to let your child to take part?

-	APPROVED	
IRB Number: IRB SBR Parental Consent: 2007-03-12		IRB Consent Rev. Date: Informed Consent Rev #:
	USF INSTITUTIONAL REVIEW BOARD FWA00001669	Page 2 of 4

Appendix C (Continued)

If you decide not to let your child take part in this study, that is okay.

Will your child be paid for taking part in this study?

We will not pay your child for the time he/she volunteers while being in this study

What will it cost you to let your child take part in this study?

It will not cost you anything to let your child take part in the study.

The study will pay the costs of tests/supplies used to gather the data for the study.

What are the potential benefits to your child if you let him / her take part in this study?

The potential benefits to your child are:

 Your child may increase his/her fluency rate (the rate at which your child reads with speed and accuracy).

What are the risks if your child takes part in this study?

There are no known risks to those who take part in this study.

What will we do to keep your child's study records private?

There are federal laws that say we must keep your child's study records private. We will keep the records of this study private by The primary researcher will maintain all records and students will only be identified by a number Your child's name will not be connected to the data collected.

We will keep the records of this study confidential by keeping records locked in a file cabinet and data on computers disks will password secured.

However, certain people may need to see your child's study records. By law, anyone who looks at your child's records must keep them completely confidential. The only people who will be allowed to see these records are:

- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your child's records. These include the University of South Florida Institutional Review Board (IRB) and the staff that work for the IRB. Individuals who work for USF that provide other kinds of oversight to research studies may also need to look at your child's records.
- Other individuals who may look at your child's records include: agencies of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research We may publish what we learn from this study. If we do, we will not let anyone know your child's name. We will not publish anything else that would let people know who your child is.

What happens if you decide not to let your child take part in this study?

You should only let your child take part in this study if both of you want to. You or child should not feel that there is any pressure to take part in the study to please the study investigator or the research staff.



Appendix C (Continued)

If you decide not to let your child take part:

- Your child will not be in trouble or lose any rights he/she would normally have .
- You child will still get the same services he/she would normally have.
- Your child can still get their regular daily classroom reading instruction

You can decide after signing this informed consent document that you no longer want your child to take part in this study. We will keep you informed of any new developments which might affect your willingness to allow your child to continue to participate in the study. However, you can decide you want your child to stop taking part in the study for any reason at any time. If you decide you want your child to stop taking part in the study, tell the study staff as soon as you can.

If you decide to stop, your child can go on getting his/her regular daily reading instruction

Even if you want your child to stay in the study, there may be reasons we will need to take him/her out of it. Your child may be taken out of this study if:

 Your child is missing 6 or more small group reading lessons You can get the answers to your questions, concerns, or complaints.

If you have any questions, concerns or complaints about this study, call Jeani Z. Fullard at (727) 347-4417.

If you have questions about your child's rights, general questions, complaints, or issues as a person taking part in this study, call the Division of Research Integrity and Compliance of the University of South Florida at (813) 974-9343.

Signature Of Parent(s) of His/Her Consent for Child to Participate in this Research Study

It is up to you to decide whether you want your child to take part in this study. If you want your child to take part, please read the statements below and sign the form if the statements are true.

I freely give my consent to let my child take part in this study. I understand that by signing this form I am agreeing to let my child take part in research. I have received a copy of this form to take with me.

Signature of Parent of Child Taking Part in Study

Printed Name of Parent of Child Taking Part in Study

Signature of Parent of Child Taking Part in Study

Printed Name of Parent of Child Taking Part in Study

	APPROVED	
IRB Number: IRB SBR Parental Consent: 2007-03-12	USF INSTITUTIONAL REVIEW BOARD FWA00001663	IRB Consent Rev. Date: Informed Consent Rev #: Page 4 of 4

Date

Date

Appendix D

IRB Student Consent Form



IRB Approval FWA 00001669 IRB Number: 106327 From 1-9-2008 Thru 1-7-2009

Assent to Participate in Research University of South Florida Information for Individuals under the Age of 18 Who Are Being Asked To Take Part in Research Studies

Intermediate Extended Literacy Routine

WHY AM I BEING ASKED TO TAKE PART IN THIS RESEARCH?

You are being asked to take part in a research study about reading. You are being asked to take part in this research study because you have been identified as a struggling reading. If you take part in this study, you will be one of about 14 people in this study.

WHO IS DOING THE STUDY?

The person in charge of this study is Jeani Z, Fullard(PI) of Reading Supervisor for the Pinellas County School District. I am being guided in this research by Susan Homan,PhD. Other people who you may see while you are on the study are: Mr. Henson.

WHAT IS THE PURPOSE OF THIS STUDY?

By doing this study, we hope to learn if a reading routine can increase reading fluency.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The study will be take place at your school, Rawlings Elementary, in your classroom with your teacher. You will be asked to come to meet with your teacher for eight weeks, four times a week for 20 minutes for a small group reading lesson

WHAT WILL I BE ASKED TO DO?

You will be asked to participate in a small group guide reading lesson with classmates. I will ask you to do repeated readings, running records and retellings several times during the eight weeks.

DO I HAVE TO TAKE PART IN THE STUDY?

You should talk with your parents or anyone else that you trust about taking part in this study. If you do not want to take part in the study, that is your decision. You should take part in this study because you really want to volunteer.

If you do not want to be in the study, nothing else will happen.

WILL I RECEIVE ANY REWARDS FOR TAKING PART IN THE STUDY?

You will not receive any reward for taking part in this study.

WHO WILL SEE THE INFORMATION I GIVE?

Your information will be added to the information from other people taking part in the study so no one will know who you are.

CAN I CHANGE MY MIND AND QUIT?

If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to quit. Also, the people who are running this study may need for you to stop. If this happens, they will tell you why.

WHAT IF I HAVE QUESTIONS?

You can ask questions about this study at any time. You can talk with your parents or other adults that you trust about this study. You can talk with the person who is asking you to volunteer. If you think of other questions later, you can ask them.

Assent to Participate

I understand what the person running this study is asking me to do. I have thought about this and agree to take part in this study.

Name of person agreeing to take part in the study

Name of person providing information to subject

<u>||3||08</u> Date 1/31/08

Date

APPROVED
USF INSTITUTIONAL REVIEW BOARD FWA00001663

2

Appendix E

Study Timeline

January 24, 2008	Trained Participating Classroom teachers
February 1, 2008	Pre Test GORT Mrs. A's Class
February 4, 2008	Mrs. A's Class Begins IELR Routine
February 14, 2008	Pre Test GORT Mrs. R's Class
February 18, 2008	Mrs. R's Class Begins IELR Routine
April 7, 2008	Mrs. A's Class Discontinues IELR
April 10, 2008	Post Test GORT Mrs. R's Class
May 5, 2008	Mrs. R's Class Discontinues IELR
May 12, 2008	Post Test GORT Mrs. R's Class

Appendix F

Sample Lesson

Teaching Point : Using Context to Confirm Meaning of Multiple-Meaning Words (Homographs)

Introduction:

Say: "Today we will focus on word relationships and discuss words that have multiple meaning. These words look the same or sound the same, but they mean different things. Homophones and homographs are examples of multiple-meaning words. One way to understand the meaning of words is to think about the other words in the passage. The other words provide clues and help us figure out what a word means."

Teach/Model

- Display chart with homographs and homophones
- Say: "Homographs are words that are spelled the same, but have different meanings. Follow along while I read these sentences and think about the underlined words in each sentence"
- Teacher reads aloud the first two sentences as students watch. Please put the suntan lotion on my <u>back</u>. Mom tried to back her car into the parking space.
- Say: "In the first sentence, back means the rear part of the body from the neck to the waist. In the second sentence, back means to move in reverse. The word back is a homograph. It is spelled the same, but means something different in each sentence."

Student Engagement:

- Teacher reads aloud the next two sentences as students watch.
 - We kicked the can into the yard.
 - Dad said that we <u>can</u> play outside until dark.
- Say: "Turn to your partner and discuss what the word can in each sentence.
- Circulate and share out what you heard students saying
- Say: "These are homographs, homographs are words that are spelled the same but meaning is determined by the way the word is used in a sentence. Did you notice that these two words are pronounced differently, too? We now know that words can be pronounced differently even when they are spelled the same. Using the words in context of the sentence helps us confirm the words meaning and helps us know the correct way to pronounce the words.

Practice /Apply:

Say: "Today as you read in independent reading, look for words that may have multiple meanings. Be sure to read the other words in the passage to better understand the meaning of these words. Be prepared to share with me during our individual conference how you did this work.

Appendix G

Strategy Lessons

- Adjusting Reading Rate
- Author's Purpose
 - o Reread to Clarify
 - Use text structure and format
- Word relationships
 - Using phonics to decode
 - o Self-questioning
 - o Homophones
 - o Homographs
- Decoding Long Words
- Use context to confirm meaning
- Monitoring reading for meaning
- Narrative Elements/ Summarizing

About the Author

Jeani Z. Fullard has been an educator for over 20 years. She was an elementary classroom teacher for 11 years and taught undergraduate courses at the college level for 12 years. She received a B. A. in Elementary Education from the University of South Florida in Tampa, FL in 1985. She earned an M.A. in Reading from the University of South Florida in 1989. While pursuing a Ph. D. at the University of South Florida, Jeani taught undergraduate courses at both St. Petersburg College and the University of South Florida.