

ABSTRACT

Vernita Williams, THE IMPACT OF LITERACY INTERVENTION ON ACADEMIC PERFORMANCE OF THIRD GRADE AT-RISK STUDENTS (Under the direction of Dr. William Rouse, Jr.). Department of Educational Leadership, November 2015.

Third grade at-risk students in Wilson County Schools, Wilson, NC continuously perform below the state average on the North Carolina Third Grade Reading End-of-Grade test. Leaders in the Wilson County Schools school district implemented a literacy pull-out intervention program for third grade at-risk students as a strategy to improve reading proficiency for third grade at-risk students. This evaluation determined the impact of the literacy pull-out intervention program on academic performance of third grade at-risk students. Data results from both qualitative and quantitative sources were analyzed to determine the impact of the program.

This study revealed that the literacy pull-out intervention program did not impact student proficiency on the North Carolina Third Grade Reading End-of-Grade test, but the program did impact student growth in reading for the at-risk students.

THE IMPACT OF LITERACY INTERVENTION ON ACADEMIC PERFORMANCE
OF THIRD GRADE AT-RISK STUDENTS

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education in Educational Leadership

by

Vernita Williams

November, 2015

©Copyright 2015
Vernita Williams

THE IMPACT OF LITERACY INTERVENTION ON ACADEMIC PERFORMANCE
OF THIRD GRADE AT-RISK STUDENTS

by

Vernita Williams

APPROVED BY:

DIRECTOR OF DISSERTATION: _____
William Rouse, Jr., EdD

COMMITTEE MEMBER: _____
James McDowelle, EdD

COMMITTEE MEMBER: _____
William Grobe, EdD

CHAIR OF THE DEPARTMENT OF EDUCATIONAL LEADERSHIP:

William Rouse, Jr., EdD

DEAN OF THE GRADUATE SCHOOL:

Paul Gemperline, PhD

DEDICATION

I dedicate my dissertation work to my family and my department chair, Dr. William Rouse, Jr. My family and Dr. Rouse supported me throughout the process and were very patient with me throughout the process. I will always appreciate all they have done for me. To my husband, Carl, who has been a constant source of support and encouragement during the challenges of graduate school and life, I say thank you and I love you.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my advisor, Dr. William Rouse, Jr., for his excellent guidance, patience, and support for my research. I would also like to thank my committee members, Dr. James McDowelle and Dr. William Grobe.

TABLE OF CONTENTS

	Page
TITLE.....	i
COPYRIGHT.....	ii
SIGNATURE.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xii
CHAPTER ONE: INTRODUCTION.....	1
Introduction.....	1
Importance of Reading.....	4
Teacher Expectations.....	7
Home-School Disconnect.....	8
Lack of Teacher Preparedness.....	9
Inadequate Funding for Poor Schools.....	9
Common Core Standards.....	10
Literacy Interventions.....	11
Inclusion as an Intervention Strategy.....	12
Pull-Out as an Intervention Strategy.....	13
Problem Statement.....	15
Problem of Practice.....	15
Logic Model.....	20

Study Questions.....	23
Research Plan.....	23
Definition of Terms.....	24
CHAPTER TWO: LITERATURE REVIEW.....	27
Minority Students.....	29
African American Males.....	29
African American Females.....	33
Hispanic Males.....	35
Hispanic Females.....	37
Hispanic Students.....	39
Legislative Accountability.....	40
North Carolina End-of-Grade Tests.....	42
Effective Instruction.....	46
Intervention Strategies.....	51
Reading Recovery Intervention Strategy.....	51
Reading Mastery Intervention Strategy.....	52
Corrective Reading Intervention Strategy.....	54
Early Literacy.....	55
CHAPTER THREE: METHODOLOGY.....	60
Data Collection.....	61
Study Questions.....	61
Participants.....	62
Student Test Sample.....	62

Principals.....	63
Teachers.....	64
Interview Questions.....	64
Confidentiality.....	65
Students.....	65
Principals.....	65
Teachers.....	65
Security of Data.....	66
Data Analysis.....	66
CHAPTER FOUR: DATA ANALYSIS.....	67
Introduction.....	67
Study Findings.....	68
All Students Developmental Scale Scores.....	69
All Students Proficiency Scores in Reading.....	69
Study Question 1 Findings.....	69
Study Question 2 Findings.....	72
Study Question 3 Findings.....	73
Study Question 4 Findings.....	74
Qualitative Data.....	75
Student Selection Process.....	76
Intervention Strategies.....	76
Benefits of Literacy Pull-Out Intervention Programs.....	78
Results of Interviews.....	79

Summary.....	80
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS....	81
Summary.....	81
Historical Perspective.....	82
The Literature.....	83
Importance of Reading.....	84
African American Males.....	84
African American Females.....	85
Hispanic Males.....	85
Hispanic Females.....	85
Legislative Accountability.....	86
Literacy Interventions.....	87
Problem Statement.....	89
Problem of Practice.....	89
Study Design.....	89
Design.....	89
Processes.....	90
Data Collection and Analysis.....	90
Participant Demographics.....	91
Student Proficiency.....	91
Study Questions.....	93
Study Question One.....	93
Study Question Two.....	95

Study Question Three.....	95
Study Question Four.....	95
Conclusions.....	96
Recommendations.....	99
REFERENCES.....	104
APPENDIX A: PRINCIPAL INTERVIEW QUESTIONS.....	121
APPENDIX B: TEACHER INTERVIEW QUESTIONS.....	122
APPENDIX C: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER.....	123

LIST OF TABLES

1. Proficiency & College-and-Career Ready.....	45
2. Developmental Scale Score Range.....	47
3. Hughes and Dexter Response to Intervention: A Research-Based Summary.....	50
4. BOG & EOG Test Results 2013-2014.....	70
5. 2014 Student Proficiency Percentage.....	71
6. 2014 NC EOG Achievement Level Results.....	94

LIST OF FIGURES

1. 3rd grade reading proficiency as measured by NC EOG.....	17
2. Grades 3 - 8 reading proficiency as measured by NC EOG.....	18
3. Literacy Pull-Out Logic Model.....	22
4. 3 rd Grade reading proficiency 2009-2014 as measured by NC EOG.....	92

CHAPTER ONE: INTRODUCTION

Introduction

The United States is failing to create highly literate, college and career ready adults with literacy skills that will make them great candidates to compete and fill jobs in the new global knowledge economy (Carnegie Corporation of New York, 2010). Literacy is important to the economic growth of a nation and to the individual success of people (Reardon, 2012), but United States schools are not graduating students who are proficient in literacy (Goldman, 2012). Public school educators experience this phenomenon daily as they are challenged with the task of educating the youth of the United States. An illiterate society creates many obstacles for the United States whereas a literate society has many benefits. A literate society “contributes to a nation’s productivity and competitiveness, builds community capacity to effect and manage change, supports healthy lifestyles, and assists in maintaining cultural values” (Foster & Beddie, 2005, p. 2). A society that is literate also has many economic benefits in the workplace (Foster & Beddie, 2005). Some of the economic benefits in the workplace are:

- Increased output of products and services
- Reduced error rate
- Reduced waste in production and services
- Increased employee retention
- Better performance of workers
- Improved quality and life of the workers
- Improved capacity of workers to cope with change in the workplace (Foster & Beddie, 2005).

An individual's level of education is essential to the business industry and the individual's lifestyle. The labor force is contingent upon moderate to high literacy skills of workers for the company to be profitable (Black, 2002). According to Boeriswati (2012), literacy is defined as "the ability to use, understand, and create the discourse which is read and communicated flexibly in different situations" (p. 650). The lack of literacy among citizens costs the United States' business industry billions of dollars in productivity, and restricts the workers from having the ability to adapt to new technology and practices in the workplace (Black, 2002). This additional cost is passed down to consumers which indirectly costs citizens more than \$10 billion per year (Brown, 2012; Fagan, 1990). These additional costs have a greater impact on citizens with college degrees than citizens who do not have a college degree. Thus, citizens with a college degree pay more federal individual income taxes, support members of the penal system and assist citizens who live in poverty (Mingle, Chalous, & Birkes, 2005; Kirsh, 1993). As the educational level of an individual increases, the earnings of that individual increases as well (Comings, Reader, & Sum, 2001). An individual must have increased levels of education and a high level of literacy to obtain adequate income to support a family (Comings et al., 2001). Individuals with lower levels of education are likely to earn lower wages, be unemployed, and have health problems that impact their longevity and economic well-being (Foster, 2012). Low literacy skills of workers also impact profits, productivity and employee turnover and safety of a business (Hartley & Horne, 2005).

Economists predict that by the year 2018, 63% of jobs will require postsecondary education (Foster, 2012). The United States must increase the education level of workers to meet the demands of a higher-skilled workforce (Foster, 2012). If the education level of workers does

not increase, the labor force will face a shortage of at least three million workers because low-skilled level jobs are disappearing (Comings et al., 2001; Foster, 2012).

Literacy in a nation is important for the economic growth and development of that nation (Black, 2002). Lack of literacy costs the United States billions of dollars each year in productivity and has negative implications for the nation (Black, 2002). Workers must be able to solve problems and have the willingness and ability to continually learn new skills (Weiner, 2011). Lack of literacy also costs the United States taxpayer billions of dollars each year (Brown, 2012; Fagan, 1990). Forty-three percent of American people with the lowest literacy skills live in poverty; 17% receive food assistance, and 70% have no job or have a part-time job (Kirsch, 1993). Taxpaying citizens absorb some of the cost for assisting those citizens who live in poverty and/or the citizens who require assistance with purchasing food by paying more money in federal individual income taxes (Kirsch, 1993). Additionally, more than 60% of all prison inmates are illiterate and cost taxpayers about \$25,000 per inmate each year and about \$50,000 per juvenile in the penal system each year (Kirsch, 1993).

To help alleviate this problem, it is essential for the United States K-12 school system to ensure all students can read and comprehend what they read. Reading is a fundamental skill needed in the workforce because employers need a workforce that has the ability and willingness to continually learn new skills (Goldman, 2012; Weiner, 2011). However, the United States educational system is challenged to improve the reading and writing skills of its young children (Goldman, 2012). United States schools are graduating students who are not prepared for the literacy demands of the 21st century (Goldman, 2012). These students are at a disadvantage because the workforce requires advanced skills and the ability to apply knowledge in a variety of circumstances (Ott, 2001). Even entry-level jobs require workers who can read at a ninth-grade

level or higher; analyze problems, determine the cause, and solve the problem; work well with a diverse group; communicate effectively in writing and speaking; and use computers proficiently (Ott, 2001). This creates a problem for United States businesses because almost 10% of seventeen-year-old students read on the level of a nine-year-old student (Reardon, 2012).

High literacy skills are required for citizens to manage everyday life (Comings et al., 2001). To build capacity in the community, citizens must be able to make educated decisions about their health care, finances, and retirement (Comings et al., 2001). Education increases income, supports healthy lifestyles, increases problem-solving abilities, and changes values that support good health (Comings et al., 2001). Literacy helps individuals understand and access information about health and specific treatments to manage and control chronic diseases, understand how the nation's economic system works, understand choices and monitor the performance of their investments (Comings et al., 2001). These skills are all beneficial to the economic growth of the nation.

Importance of Reading

Students who do not learn to read fluently and with comprehension will have difficulty with academic success, financial stability, the ability to find satisfying work, personal autonomy, and self-esteem (McPike, 2007). Children first learn to recognize words, pronounce them correctly, and read with fluency, and then they transition to reading to learn content (Goldman, 2012). Many children need specific instructions to learn the skill of reading and do not transition from learning to read to reading to learn until the fourth grade (Goldman, 2012). Students are then expected to read for learning using the content areas to understand text (Goldman, 2012). In the primary grades (K-2), students read texts that contain words they know and the content is about topics that interest them. The students are only expected to retell the story and recite what

they have read. Comprehension is not based on what the students understand about the story or topic, it is only based on whether the student can regurgitate what they have read. Once students reach third grade, they are expected to learn new words, summarize, critique and interpret what they have read (Carnegie Corporation of New York, 2010). According to the Education Commission of the States (2011), students not reaching proficiency in reading at the end of third grade are more at-risk of being high school dropouts compared to students who are at grade level in third grade (McPike, 2011).

Additionally, students from low socio-economic backgrounds tend to perform significantly lower in reading than students from higher socio-economic backgrounds (Teale & Gambrell, 2007). There is a strong relationship between literacy and socio-economic status of students and adults in education and employment (Arnbak, 2004). Individuals from a low socioeconomic status are likely to earn lower wages, be unemployed, and have health problems that impact their longevity and economic well-being (Foster, 2012). Individuals from a high socioeconomic status earn more in wages and have adequate income to support a family (Comings et al., 2001). Socioeconomic status can be defined as “the relative position of individuals or families within a hierarchical social structure, based on access to, or control over, wealth, prestige, and power” (Caro, 2009, p. 559). Academic failure of students from low socio-economic backgrounds tend to worsen as students get older because these students are more prone to drop out of school due to academic failure during their early school years of education (Caro, 2009). As adults, these students are less likely to be successful in the labor market and are less likely to pursue a post-secondary education (Caro, 2009).

The impact of inadequate education of poor students dates back to 1965 when the federal government made an effort to improve the education of poor children (Schugurensky, 2001).

President Lyndon Johnson advocated for the passage of a bill to improve education for poor students in 1965 (Teale & Gambrell, 2007). President Johnson said that the Elementary and Secondary School Act would help “poor families overcome their greatest barrier to progress: poverty” (Teale & Gambrell, 2007, p. 1). The federal government continues to revamp, overhaul or create education bills in an effort to improve literacy skills of students from low socio-economic backgrounds (Groen, 2012). There was the War on Poverty in the 1960s, which made dramatic and lasting changes in education and is continuing to make an impact on American educational institutions today in terms of curriculum and assessment practices (Groen, 2012). The publication of *A Nation at Risk* in 1983 to the development of the National Educational Goals report, *Building a Nation of Learners* in 1993, to *America 2000*, and the passage of Goals 2000 are a series of events that kept the government involved in improving the education of students from low socio-economic backgrounds (Groen, 2012). In 1994, President Bill Clinton signed the Educate America Act which contained standards-based reforms but lacked the sanctions of No Child Left Behind (Groen, 2012). The No Child Left Behind Act of 2001 is the historic reauthorization of the Elementary and Secondary School Act (ESEA), and was signed into law by President George W. Bush. The No Child Left Behind Act of 2001 provided the structure to institutionalize and solidify permanent changes in curriculum and accountability (Groen, 2012). With all the education reforms implemented by the federal government to improve the educational needs of students with low socioeconomic status, there has not been a significant increase in academic achievement of these students (Guisbond, Neill, & Shaeffer, 2012).

The United States has implemented laws and reforms to increase literacy of students from low socioeconomic backgrounds, but these students continue to perform poorly in reading

(Guisbond et al., 2012). The federal government gives money to schools and school districts to provide professional development to improve teacher effectiveness, purchase needed resources, and boost parental involvement in an effort to improve student achievement for at-risk students (Esch, Koppich, & Seder, 2011). However, students from the higher socioeconomic class continue to outperform the students in the lower socioeconomic class (Teale & Gambrell, 2007).

There has been so much focus on improving the reading skills of students with low socioeconomic backgrounds; however, these students continue to perform poorly in reading (Guisbond et al., 2012). There are many speculations why these students continue to struggle with reading. Some of these speculations are as follows:

1. Teachers do not have high expectations of at-risk students (Timperley & Phillips, 2003).
2. Home-school disconnect (Teale & Gambrell, 2007).
3. Lack of adequate teacher preparation (Teale & Gambrell, 2007).
4. Inadequate funding for poor elementary schools (Teale & Gambrell, 2007).

Teacher Expectations

Teacher expectation is considered to be an important factor in student success (Hinnant, O'Brien, & Ghazarian, 2009). Academically, students perform as good or as bad as the teacher expects them to perform (Sorhagen, 2013). Teacher expectations effect students from low-income families, minority students, and students who are low achievers more than students who have a high socioeconomic status (Sorhagen, 2013). Teachers may base their expectation of a student's academic ability on the student's racial or ethnic appearance without realizing they have stereotyped the student (DeCastro-Ambrosetti & Cho, 2011). Teachers may have low expectations of minority students and students from low socioeconomic backgrounds because of

the teacher's personality, socializing experiences, prejudices, and cultural deficit theories (DeCastro-Ambrosetti & Cho, 2011).

In a study conducted by Hinnant et al. (2009), it was found that at-risk students and minority boys tend to have low performance in reading when the teacher underestimates the student's ability to learn (Hinnant et al., 2009). Interactions between teachers and low performing students are usually not as positive as interactions between teachers and high performing students (Archambault, Janosz, & Chouinard, 2012). Teachers do not expect as much from low performing students and do not believe the students can learn. The students become less interested and less engaged in school which causes them to continue to have low performance or maybe even drop out of school (Archambault et al., 2012).

Home-School Disconnect

Parental support is the most important factor in student success (Collin-Hansen, 2012). Reglin, Cameron, and Losike-Sedimo conducted a research study during the years of 2006-2010, in which they chose 60 at-risk students who did not pass the End-of-Grade test in reading. All 60 students were administered a released version of the End-of-Grade reading test. The researchers chose 30 of the 60 students to be the experimental group and the other 30 students served as the comparison group. The parents of the experimental group were also administered the released form of the End-of-Grade reading test. The students in the experimental group scored better on the released form of the End-of-Grade reading test due to parent participation (Reglin & Losike-Sedimo, 2012). "The purpose of this study was to determine the effectiveness of a parent support reading (PSR), intervention on increasing the reading comprehension scores of ...students". (Reglin, Cameron, & Losike-Sedimo, 2012, p. 18).

Lack of Teacher Preparedness

Teacher preparation has a greater impact on student achievement than class size or school spending (Beare, Marshall, Torgerson, Tracz, & Chiero, 2012). Colleges and departments of education must do a better job of preparing our teachers for teaching in the 21st century (Beare et al., 2012). Teacher education programs do not teach teachers how to teach literacy but rather focus on theories of education (Bainbridge & Macy, 2008). Colleges and universities should provide student teachers with opportunities to be engaged in intensive direct teaching of basic literacy skills (Bainbridge & Macy, 2008). Many teachers do not understand how to teach the basics of reading, phonological awareness and phonics, well enough to provide interventions to students who perform poorly in reading or provide explicit instruction to meet the needs of students (Al Otaiba & Lake, 2007).

Teachers need professional development in understanding phonological awareness, phonics, fluency, vocabulary and higher order comprehension skills to teach reading effectively (Al Otaiba & Lake, 2007). Learning to teach reading is a long process that requires effective professional development, but it can be learned (Al Otaiba & Lake, 2007). The professional development should demonstrate a clear rationale for implementing the new practice, provide evidence-based curricular materials, and ensure feedback and support for the new practice (Al Otaiba & Lake, 2007).

Inadequate Funding for Poor Schools

The Elementary and Secondary Education Act (ESEA) provides extra funds to schools that have poor, high-minority populations in an effort to improve student achievement, but pockets of these poor, high-minority schools continue to fail (Lachlan-Hache, Naik & Casserly, 2012). The allocation of more money to schools does not necessarily mean student achievement

will improve (Maglakelidze, Giorgobiani & Shukakidze, 2013). Unless there is “sufficient school funding, fairly distributed to districts to address concentrated poverty”, improved student achievement cannot be achieved (Baker, Sciarra, Farrie & Education Law, 2012, p. 1). To meet the needs of the at-risk student population, states must “provide a sufficient level of funding, fairly distributed in relation to student and school needs” (Baker et al., 2012, p. 1). Student-based allocation is an equitable method of distributing funds based on student and school needs rather than staff needs (Roza & Simburg, 2013). Per student funding is based on student poverty level which allows more funds for students from lower socioeconomic families (Roza & Simburg, 2013).

Common Core Standards

In an effort to continue increasing student learning and student achievement in the K-12 education system, many states are pursuing education reforms (Wat, 2012). Most states have gravitated toward the Common Core State Standards in an effort to ensure that all students are prepared with the knowledge and skills that are necessary for them to compete with their peers as well as students in other countries (Common Core State Standards Initiative: Preparing America's Students For College & Career, 2012). Forty-five states and the District of Columbia have adopted the Common Core State Standards which focuses on building comprehension skills as students are promoted to the next grade (Wat, 2012). The Common Core State Standards is an ambitious effort to improve teaching and learning in the K-12 field of education (Brown & Kappes, 2012). Common Core State Standards allow teachers to teach students to solve complex problems, construct sound arguments, and communicate ideas and analyses through speaking and writing (Brown & Kappes, 2012). With the adoption of the Common Core Standards, North Carolina educators and leaders believe that North Carolina is on the “right track” to creating

effective schools and improving schools performance (Common Core State Standards Initiative: Preparing America's Students For College & Career, 2012). The English Language Arts standards build on literacy skills that students need for college, career, and life (Common Core State Standards Initiative: Preparing America's Students For College & Career, 2012). The standards “include critical-thinking skills and the ability to closely and attentively read texts in a way that will help students understand and enjoy complex works of literature. Students will learn to use cogent reasoning and evidence collection skills that are essential for success in college, career, and life” (Common Core State Standards Initiative: Preparing America's Students For College & Career, 2012). The English Language Arts standards promote critical-thinking, problem-solving, and analytical skills so students will be prepared for life in the 21st century (Common Core State Standards Initiative: Preparing America's Students For College & Career, 2012).

Literacy Interventions

School districts across the nation have implemented interventions in an effort to increase literacy skills of their students (Cohen & Bhatt, 2011). Most of those interventions focus on students who are at-risk of not being proficient in literacy (Cohen & Bhatt, 2011). To be effective, interventions should be specific and explicit to meet the individual needs of the student (Metcalf, 2014). As a method to ensure specific student needs are being met, a universal screener should be administered to determine which interventions are needed to improve the students' literacy skills (Hughes & Dexter, 2011). A universal screener is an assessment tool that targets students who are at risk of failure even when they are provided a research-based general education (Hughes & Dexter, 2011). Once data is collected from the universal screener, research-based interventions should be administered to improve the literacy skills of at-risk students

(Hughes & Dexter, 2011). There are many types of research based interventions, such as Reading Recovery, Reading Mastery, and Corrective Reading that are used to increase the literary skills of students. Within those programs, strategies such as pull-out or inclusion are used as a means of increasing the literacy skills of students. Reading interventions are defined as “a program, supplementary to an existing literacy curriculum that is provided to students for the primary purpose of increasing reading levels. Such programs can be administered both in and out of the traditional classroom environment” (Abari, 2014, p. 1). Reading interventions must be intensive, focused on the skills in which the student has not mastered, and the interventions must be administered efficiently so the student can catch up to his or her peers academically (Metcalf, 2014). Interventions must be explicit, focused on critical content that is highly organized, and provide frequent opportunities for student response and practice (Metcalf, 2014).

Inclusion as an Intervention Strategy

Inclusion may be defined as “belonging, participating, and reaching one’s full potential in a diverse society” (Odom, Buysse, & Soukakow, 2011, p. 347). School districts and educators often misunderstand or abuse inclusion (Costley, 2013). Many educators know very little about the philosophy and goals of inclusion, nor do they know how to implement and maintain the practice of inclusion (Costley, 2013). In the K-12 educational setting, inclusion is a joint venture between two teachers who coordinate and deliver substantive instruction, and both play an active role in delivery of that instruction to students (Costley, 2013). Inclusion implements instructional strategies that engage all students in ways that are not possible when only one teacher is present (Costley, 2013). Classroom teachers in inclusion classrooms must look at each student as a unique individual (Chidindi, 2012). Inclusion can be successful if school leaders and teachers

deliberately seek a shared commitment to develop and strengthen an inclusion environment (McMaster, 2013). Schools that have a culture of inclusion have the following criteria:

- An uncompromising commitment and belief in inclusion;
- differences among students and staff perceived as a resource;
- teaming and a collaborative interaction style among staff and children;
- willingness of staff to struggle to sustain practice;
- inclusion understood as a social/political issue; and
- a commitment to inclusive ideals communicated across the school and into the community (McMaster, 2013, p. 5).

Pull-Out as an Intervention Strategy

Literacy pull-out intervention may be defined as, when a student receives help in a subject outside of his or her regular classroom (Hedrick & Pearish, 1999). Some educators are not fond of pull-out programs because many have not produced promising results, but there are some pull-out programs that have had some success with improving the reading skills of at-risk students (Hedrick & Pearish, 1999). Other educators are concerned about pull-out programs because students miss instruction with their peers, and the interventions are not an extension of what is being taught in the classroom (Hedrick & Pearish, 1999). Furthermore, there are intervention programs that exist within the pull-out strategy. For example, Reading Recovery, Corrective Reading, and Reading Mastery are pull-out intervention programs that are used to improve reading skills of at-risk students.

Reading Recovery is a pull-out program that has proven success for at-risk first grade students (Hedrick & Pearish, 1999). The goals of Reading Recovery are “to promote literacy skills, reduce the number of first-grade students who are struggling to read, and prevent long-

term reading difficulties” (Clearinghouse, 2008, p. 1). Reading Recovery is an intervention that is delivered one-on-one or in small groups of no more than six students. The Reading Recovery program is designed to serve those first grade students who score within the bottom 20% on the universal screener, the Observation Survey (Clearinghouse, 2008). The program is designed to last 15-20 weeks for each student. Students should be on grade level in reading once they have completed the program. What Works Clearinghouse conducted research to determine the effectiveness of Reading Recovery. The results revealed that students who were served in Reading Recovery had positive effects in alphabetic and general reading and potentially positive effects in fluency and comprehension (Clearinghouse, 2008).

Corrective Reading and Reading Mastery are also pull-out programs that are designed to help improve reading skills of struggling readers. Corrective Reading is an intervention program that targets decoding skills and reading fluency for students in grades 4-12 (Clearinghouse, Corrective Reading. What Works Clearinghouse Intervention Report, 2010). What Works Clearinghouse found that Corrective Reading had little effect on improving alphabetic, reading fluency and comprehension skills of students (Clearinghouse, Corrective Reading. What Works Clearinghouse Intervention Report, 2007a; Clearinghouse, Corrective Reading. What Works Clearinghouse Intervention Report, 2010). In 2006, What Works Clearinghouse reported that Reading Mastery was effective for all K-6 students who were not at their expected reading level for their grade but in 2013, What Works Clearinghouse could not determine the effectiveness or ineffectiveness of Reading Mastery because there were not enough research based studies about Reading Mastery that met What Works Clearinghouse evidence standards (Clearinghouse, Reading Mastery/SRA/McGraw-Hill, 2006a; Clearinghouse, What Works Clearinghouse. Reading Mastery. Revised. What Works Clearinghouse Intervention Report, 2013b).

Pull-out interventions have had some success with improving literacy skills of at-risk students. Although pull-out interventions have had some success, some educators do not approve of pull-out interventions because students miss classroom instruction and the interventions are not an extension of what is being taught in the classroom. Reading Recovery is a pull-out intervention that has had proven results for at-risk students, but Corrective Reading and Reading Mastery have not had similar results.

Problem Statement

Third grade at-risk students in Wilson County are not reading at or above grade level at the end of their respective third grade academic year on the North Carolina Third Grade Reading End-of-Grade test.

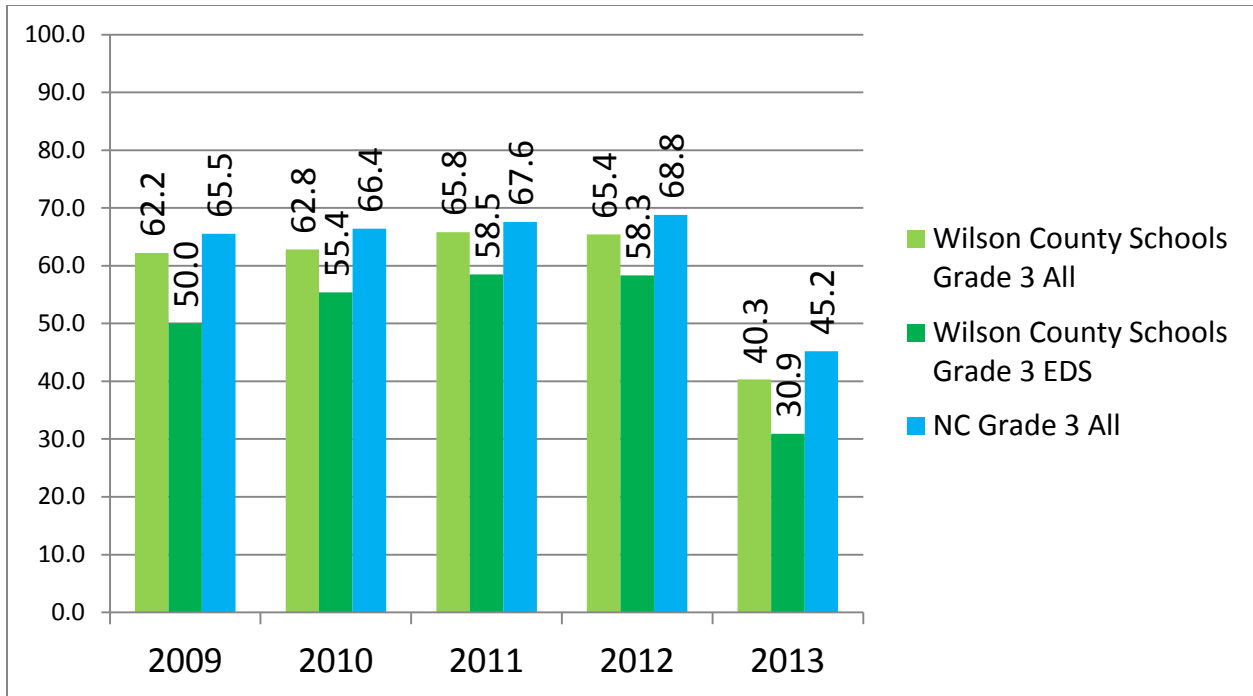
Problem of Practice

Year after year, the third grade at-risk students in Wilson County perform below the state average on the NC End-of-Grade Reading test. In an effort to increase state assessment proficiency scores in reading, the Wilson County school district implemented a literacy pull-out intervention for 3rd grade students who are at risk of not being proficient in reading on the North Carolina Reading End-of-Grade test. The Education Commission of the States report that if students are not proficient in reading by the end of third grade, those students are more at-risk of becoming high school dropouts, are at greater risk of having lower academic success, will have financial instability and low self-esteem (McPike, 2007). The Wilson County school district strives to produce productive, citizens who are able to compete in a global society. However, that goal can only be accomplished if the students have the ability to read and comprehend what is read, and apply that knowledge to real world applications. More precisely, Wilson County Schools must produce students who are literate.

Wilson County is a small rural county located in eastern North Carolina. Wilson County has fourteen elementary schools (nine participated in the literacy pull-out intervention program), six middle schools, three high schools, one early college and one alternative school. All of the elementary schools except one are Title I schools, two of the middle schools are Title I and none of the high schools are labeled as Title I. There are approximately 12,500 students in the school district. Of the 12,500 students, 63.37% of the students are labeled as economically disadvantaged. The economically disadvantaged students continue to have lower proficiency scores in reading on North Carolina state assessments than other students in the district.

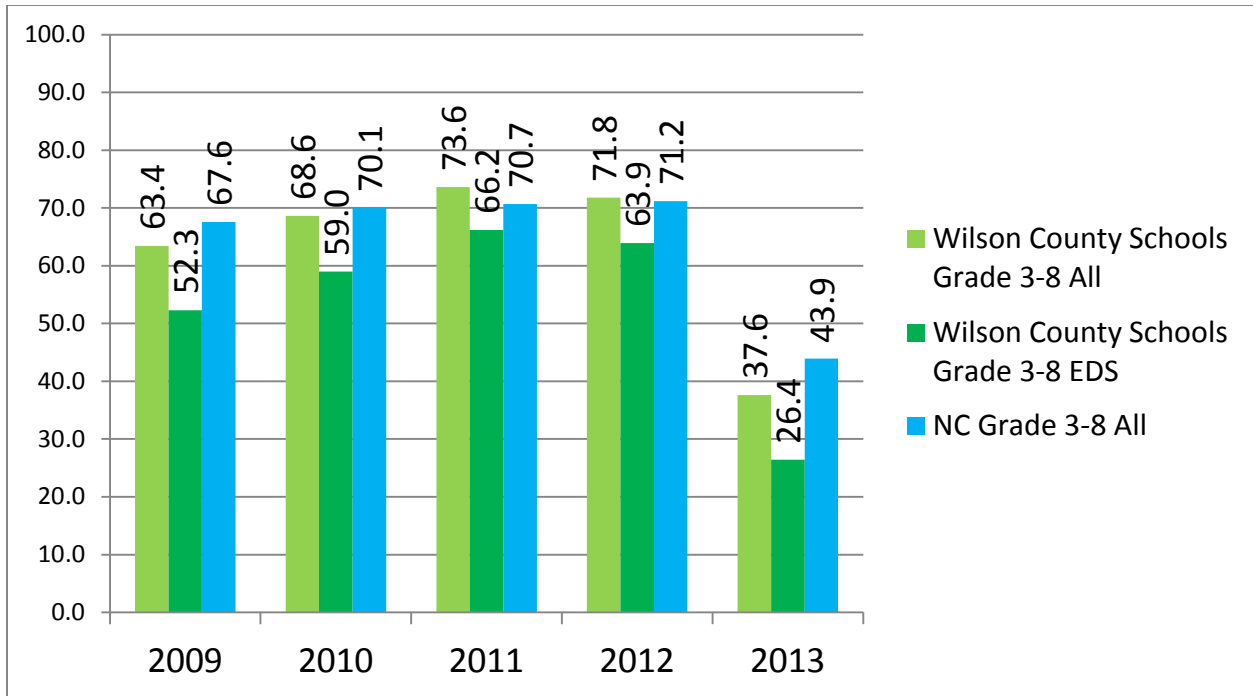
The Wilson County School district continues to use literacy pull-out as an intervention to improve reading proficiency for at-risk 3rd grade students, but those students continue to perform poorly on state end-of- grade assessments. The students are pulled from the regular classroom to receive small-group instruction with the intention of improving fluency and comprehension which will hopefully, improve literacy for the students. Results of Wilson County state assessment data for the 2009 – 2014 academic school years are presented in Figure 1.

The data from Figure 1 and Figure 2 show that for the past 5 years, less than 60% of 3rd grade disadvantaged students in Wilson County Schools are proficient in reading according to North Carolina state standards. The data also reveal that disadvantaged students in Wilson County continuously score below the state average in reading (see Figures 1 and Figure 2). Wilson County revamped the literacy pull-out program that was implemented years ago to increase the literacy skills of 1st grade students. The pull-out program now includes 3rd grade at-risk students who are in danger of failing the North Carolina End-of-Grade reading test. Reading 3D is the assessment tool that is used to determine which students will be in the literacy pull-out program. Although Reading 3D is used to determine which students will participate in the



- Proficiency scores include re-test results
- 2012-13 began a new assessment with new cut-scores

Figure 1. 3rd grade reading proficiency as measured by NC EOG.



- Proficiency scores include re-test results
- 2012-13 began a new assessment with new cut-scores

Figure 2. Grades 3 - 8 reading proficiency as measured by NC EOG.

literacy pull-out intervention program, the researcher will not use data or any results from Reading 3D in the study. The results of the Reading 3D program are not essential to determine the impact of the literacy pull-out intervention program in Wilson County because the Reading 3D program is not used as a reading strategy in the literacy pull-out program in Wilson County. The literacy teachers use the students' text reading and comprehension level (TRC) to determine which students will be serviced in the literacy pull-out program. Literacy teachers pull students who are identified as at-risk of not being proficient in reading and provide literacy interventions to the students. Teachers also provide literacy interventions in the classroom to improve literacy skills of students who are in danger of failing reading.

Reading Mastery and Corrective Reading are also pull-out intervention strategies Wilson County schools use to improve literacy skills of students. These programs are used to improve the literacy skills of students who have a learning disability. The exceptional children's teacher pulls the students out of the regular classroom to deliver the intervention.

Hence, the purpose of this study is to determine the impact of the literacy pull-out program for 3rd grade students who are at-risk of not being proficient in reading on the North Carolina End-of-Grade reading assessment.

The researcher will investigate to determine if the intervention strategy implemented by Wilson County Schools is the most effective strategy to improve literacy skills of at-risk students, and determine if pull-out is the best method to deliver those interventions. Pull-out, inclusion, and interventions delivered by the classroom teacher are strategies that are implemented in an effort to increase reading skills of students who struggle with reading. Wilson County has implemented the literacy pull-out model to provide interventions for the at-risk students. The purpose of the literacy pull-out program is to build a strong foundation in reading

for students in grades K-3 who are at-risk of failing. It is believed that if students have a strong foundation in reading, they will be proficient readers and therefore, be successful, productive citizens. All teachers are responsible for teaching students to read comprehensively and critically no matter what subject area they teach (Goldman, 2012). If all teachers have the capacity and opportunity to teach subject-area comprehension skills, students in the United States will be able to meet the demands of the twenty-first century which will make the United States a more literate and profitable nation (Goldman, 2012).

Logic Model

Based on the researcher's professional experience in being a participant of the literacy pull-out intervention program, the researcher created the logic model to conceptualize the process of the literacy pull-out intervention program. The literacy pull-out logic model displays the resources, activities and outcomes (impact) of the literacy pull-out program in Wilson County Schools. The classroom principal, teacher, and literacy teachers are a needed resource for the literacy pull-out program to be successful. They collaborate weekly to plan together, disaggregate student data, group students according to their needs, schedule small group meeting times and share resources to ensure that the students receive the interventions needed to improve reading achievement. The literacy teachers pull students out of the regular classroom four days a week in 30 minute sessions to provide small group instruction to the students. Scheduling is important and can create the greatest obstacle because the students cannot be pulled out of the classroom during whole group reading instruction. To help alleviate the problem, the literacy teacher pulls the students during the same block of instruction that the teacher pulls small reading groups in the classroom. The classroom teacher is also responsible for pulling the students who are pulled for literacy interventions in small reading groups although the students

will be pulled in small reading groups by the literacy teacher. The classroom teacher provides the students with their whole group instruction and the literacy teacher provides the students with literacy interventions. The literacy teachers must coordinate their literacy pull-out time to coincide with the classroom teacher's pull-out time.

The desired outcomes of the literacy pull-out program are improved reading scores for third grade at-risk students on the North Carolina End-of-Grade reading assessment, positive effect on reading achievement, and an improved quality of life for the students once they become adults. The desire is for the students to become productive citizens who will help improve the educational and economical society for themselves and their peers. Hopefully, the students will be able to improve their quality of life (see Figure 3).

The results of this study may help Wilson County Schools implement cost effective interventions in grades kindergarten through third grade that will help increase literacy for the at-risk students in the county. The results could also help Wilson County focus on providing better professional development for teachers in literacy and focus on teaching all teachers how to teach literacy effectively rather than spending money on thirty-eight literacy teachers in the district. Wilson County spends at least 1.9 million dollars for literacy teachers each year. Literacy teachers provide reading interventions for the most at-risk students in each elementary school in the district. The literacy teachers focus on the first grade students, third grade students, second grade students and kindergarten students. Beginning with the 2013-2014 school year, literacy teachers have included third grade students to help reduce the number of students who will be affected by the new Read to Achieve Law. Wilson County has had literacy teachers in the elementary schools for the past 20 years but reading scores on state assessments continue to remain below the state average.

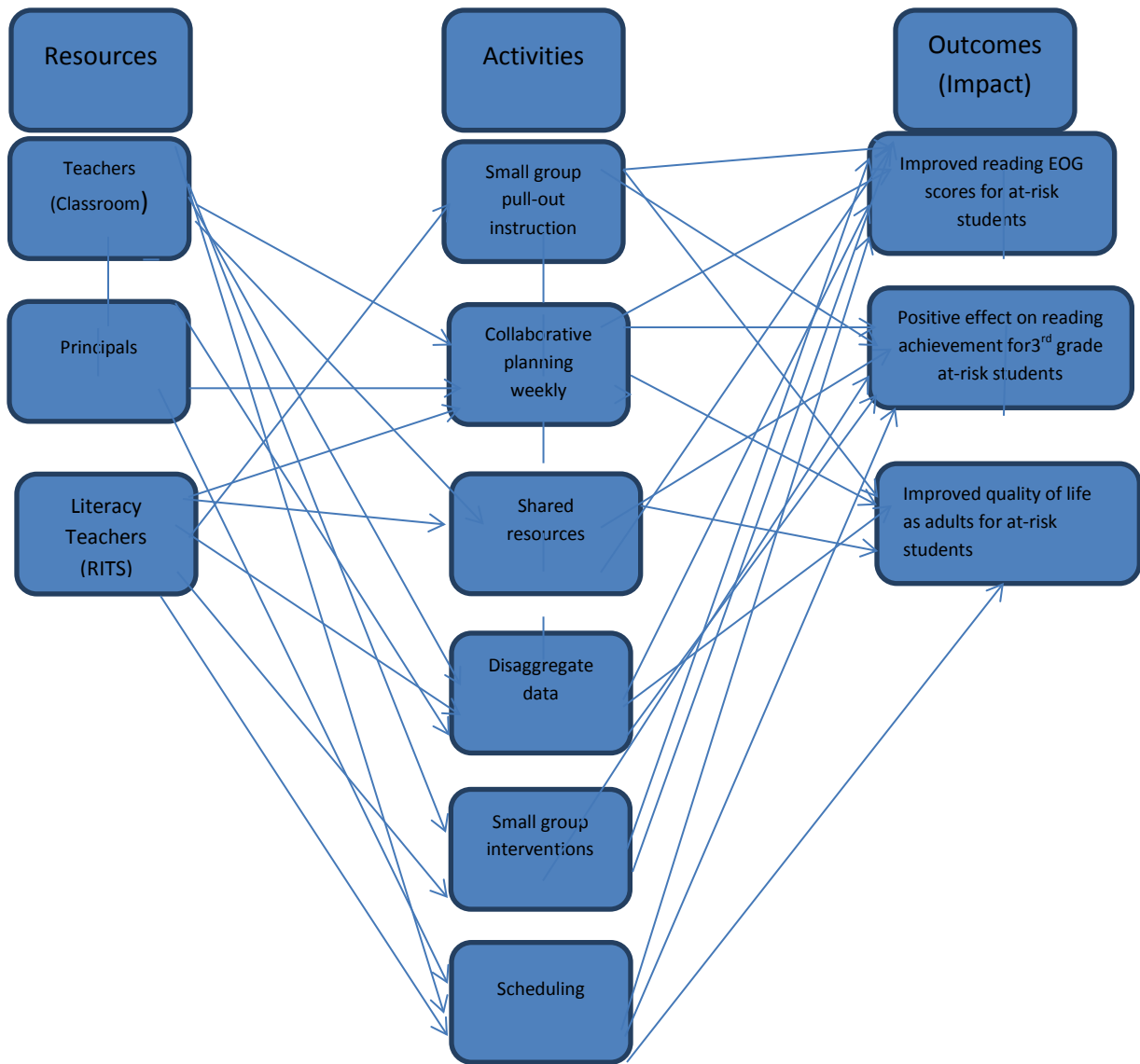


Figure 3. Literacy Pull-Out Logic Model.

Study Questions

1. To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American male third grade at-risk students?
2. To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American female third grade at-risk students?
3. To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic male third grade at-risk students?
4. To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic female third grade at-risk students?

Research Plan

This Problem of Practice investigates the impact of literacy intervention strategies on 3rd grade African American male, African American female, Hispanic male and Hispanic female at-risk students. The study focuses on student achievement of 3rd grade African American male, 3rd grade African American female, 3rd grade Hispanic male and 3rd grade Hispanic female students who were served in the literacy pull-out program in Wilson County Schools, Wilson, NC during the 2013 – 2014 academic school year. Student data will be collected using the North Carolina Third Grade Beginning-of-Grade (NC BOG) reading test and North Carolina End-of-Grade (NC EOG) reading test developmental scale scores and achievement levels.

The researcher will use a program evaluation model to evaluate the literacy pull-out intervention program using qualitative and quantitative techniques to analyze the data. The data will be analyzed to determine if the literacy pull-out interventions had an impact on African American and Hispanic students' proficiency on the third grade North Carolina End-of-Grade reading test. The sample used in the study include third grade African American and Hispanic at-

risk students who are served by the literacy pull-out intervention program. North Carolina Beginning-of-Grade and North Carolina End-of-Grade reading scores will be analyzed to determine if the pull-out intervention strategy impacted student achievement.

Interviews will be conducted to collect qualitative data. The researcher will interview ten third grade teachers in the district who teach the students who are served in the literacy program. The researcher will also interview three principals in the district who use the literacy program as an intervention to increase reading proficiency of the third grade at-risk students. The qualitative and quantitative data will be analyzed to answer the study questions.

Definition of Terms

Alphabetic phase – Making connections between letters in a word, pronunciation and meaning, and oral vocabulary (Learning Point, 2004).

At-risk student – African American or Hispanic student who receives free or reduced lunch; does not include those students who are diagnosed with a learning disability.

Common Core – “a set of high-quality academic standards in mathematics and English language arts” (Common Core State Standards Initiative: Preparing America's Students for College & Career, n.d.).

Consolidated alphabetic phase – Having the ability to understand that a cluster of letters can be used in different words to represent the same sound (Learning Point, 2004).

Decoding – “the ability to translate print into language” (Grossen, n.d., p. 1).

DORF –Dibels Oral Reading Fluency – Measures a child’s advanced phonics and word attack skills, accurate and fluent reading, and reading comprehension.

EOG – End of grade assessments for students in grade 3-8 in North Carolina.

Full alphabetic phase – Making connections between the sequence of letters in a word, its meaning, and its pronunciation (Learning Point, 2004).

Knowledge-based literacy – “vocabulary knowledge, background knowledge related to the words included in the text, and the ability to integrated these two features with contextual information to make sense of a given text” (Reardon, 2012, p. 18).

Literacy – “the ability to use, understand and create the discourse which is read and communicated flexibly in different situations” (Boeriswati, 2012, p. 650).

No Child Left Behind –A law which was passed by President George W. Bush and his administration which requires all public schools to have highly qualified teachers; each state must develop assessments to measure student achievement, set academic standards, and develop challenging academic standards that are the same for every student (Public Schools of North Carolina).

Oral language – “Ability to produce, comprehend, or both aspects of spoken language, including semantics, syntax, or both. Often measured by a standardized test” (National Institute for Literacy, 2008).

Overestimate – Teachers’ positive expectations of students (Sorhagen, 2013).

Prealphabetic phase –Forming connections between visual features of print and pronunciation and the meaning of the word (Learning Point, 2004).

Progress monitoring – A method used to “assess student progress or performance in at-risk areas” used by “teachers or other school personnel to determine if students are benefitting appropriately from the typical instructional program, identify students who are not making adequate progress, and help guide the construction of effective intervention programs for students who are not profiting from typical instruction” (Fuchs, 2004).

Self-fulfilling Prophecy – “A situation in which beliefs lead to their fulfillment; a person becomes or exemplifies what it is he or she was believed to be” (Hinnant, O’Brian & Ghazarian, p. 662).

Title 1 –A federal program which provides financial assistance to public schools in which at least 40% of the student population receive free or reduced lunch (Public Schools of North Carolina, n.d.).

TRC – Text reading comprehension; measures a child’s accurate and fluent reading of connected text and their comprehension and usage of vocabulary skills.

Underestimate –Teachers’ negative expectations of students (Sorhagen, 2013).

Universal screening – assessments focused on assessing reading skills that “are highly predictive of future outcomes” (Hughes, 2011, p. 6).

CHAPTER TWO: LITERATURE REVIEW

This review of literature explores several areas related to literacy and its impact on specific races of people. The literature review consists of the following: the importance of reading, the impact of lack of literacy on African American males, the impact of lack of literacy on African American females, the impact of lack of literacy on Hispanic males, the impact of lack of literacy on Hispanic females, legislative accountability, and literacy intervention strategies.

Individual states within the United States have focused on literacy for many decades, but the result of that focus continues to be a nation of non-proficient readers (States, 2011). The United States must ensure that every student is proficient in reading by the end of third grade before any other educational goal set by the United States can be met (McPike, 2007). Reardon, Valentino and Shores (2012) believe that most American students can read by the end of third grade if reading is only defined as “proficiency in basic procedural word-reading skills” (p. 17), but reading proficiency is much more than just reading words (Reardon, 2012). Reading proficiency is having the ability to comprehend text that is read (Reardon, 2012). If American students want to have a successful life as an adult, they must learn to read with comprehension, across all content areas (McPike, 2007). The students must be able to apply the knowledge they gain from reading and process that knowledge for “relevance, reliability, and completeness” (Goldman, 2012, p. 89). Literacy of a nation is one indicator of quality of life in that nation (Boeriswati, 2012). A literate society is important for the economic growth and development of a nation (Black, 2002). A literate society is essential to a nation’s productivity and ability to compete with other nations (Foster & Beddie, 2005).

Lack of literacy has a profound effect on the United States economy. Lack of literacy costs the United States business industry and taxpaying citizens billions of dollars each year to support and provide the basic needs for those citizens who are illiterate or have low literacy skills. Literacy or lack of literacy is a determining factor in an individual's socioeconomic status and has an effect on individual's ability to provide for themselves and their family. The United States has focused on improving literacy in the nation by making an effort to ensure that each individual is literate by the end of third grade but the nation continues to be a nation of nonproficient readers.

There is a strong connection between literacy skills of an individual and the socioeconomic status of that individual (Arnbak, 2004; Ng, Bartlett, & Chester, 2013). Students from low socioeconomic status families are prone to have poor literacy skills which continues into adulthood (Caro, 2009). As adults, these individuals have less opportunities in the educational and labour market which results in low wages and potentially remaining in the low socioeconomic category which may impact their quality of life (Caro, 2009).

Educators often recognize students from low socioeconomic backgrounds as deficient or lacking in literacy skills, but they do not recognize that these students have literacy strengths, values and practices that support literacy development (Billings, 2009). Students from low socioeconomic backgrounds may perform poorly in reading because teachers have low expectations of the student, lack of parental support, lack of teacher preparation, or inadequate funding to provide resources that are needed to meet the needs of the students (Timperley & Phillips, 2003; Teale & Gambrell, 2007). These students must master phonemic awareness, phonics and decoding to become proficient readers so that they are able to concentrate on the meaning of written text, which helps them with comprehension of text (McPike, 2007). Students

from low socioeconomic backgrounds can be successful if instruction is organized to meet the needs of the students (Carnegie Corporation of New York, 2010).

Minority Students

In general, students of color (African Americans, Hispanics) perform lower academically than white students (Matthews, Kizzie, Rowley, & Cortina, 2010). Socioeconomic status, stereotypes, oppositional identity and loss of cultural identity are among the most common reasons African American students underperform academically (Matthews et al., 2010). Socioeconomic status, discontinuities between home and school cultures, and expectations that teachers hold for Hispanic students are the most common reasons Hispanic students underperform academically (Chun & Dickson, 2011). Additionally, African American females and Hispanic females perform better on standardized assessments than African American males and Hispanic males (Saenz & Ponjuan, 2011). Females, in general, perform better than males because males are educated in a system that does not support their learning style (Saenz & Ponjuan, 2011).

African American Males

Quality of life for “African American males continues to be a national disgrace” (Rashid, 2009, p. 347). African American males are more likely to become a member of our nation’s penal system but are less likely to participate in our nation’s labor force (Rashid, 2009). Hines and Holcomb-McCoy (data) state that African American males “are more chronically unemployed and underemployed, are less healthy, and have access to fewer health care resources, die much younger, and are many times more likely to be sent to jail for periods significantly longer than males of other racial/ethnic groups” (Hines & Holcomb-McCoy, 2013, p. 68). African American males have higher school drop-out rates, higher out-of-school

suspension rates and higher numbers of referrals for special education services than any other race (Rashid, 2009). Many people have given up on the African American male without paying attention to the needs of the African American male (Wood & Jocius, 2013). African American males do not want to fail in life, but they are faced with many challenges that contribute to their failure (Hodges & Pringle, 2013). They are influenced by “outside media sources, stereotypes, peer pressure, how they see themselves, and how they think others see them” (Hodges & Pringle, 2009, p. 14).

One reason African American males are not performing well in school, and life in general, is due to their poor literacy skills. African American males are not performing well on literacy standardized tests, according to National reading achievement data (Tatum, 2006). Dr. Jawanza Kunjufu reported that only 12% of African American males in the United States are proficient in reading (Hodges & Pringle, 2013). African American males must be more engaged in school and the curriculum to become proficient in literacy (Wood & Jocius, 2013). These males must be provided with books that interest them or capture their attention by choosing texts that are relevant to their lives (Wood & Jocius, 2013). The texts should be enabling and move beyond a sole cognitive focus to include social, cultural, political, spiritual, or economic focus (Tatum, 2006). According to Tatum (2006), text is very important in literacy development (p. 45).

Wilson-Jones conducted a qualitative study of 25 African American male students in grades three through six. The purpose of the study was to discover factors that promote or inhibit academic achievement of African American males (Wilson-Jones, 2003). Wilson-Jones chose to use the qualitative method because this approach “brings critical ideas into reality and allows for grounded theory” (Wilson-Jones & Caston, 2004, p. 8). Qualitative research allows the

researcher to “see” through the words and actions of the participants (Wilson-Jones, 2003). The researcher interviewed the students individually six times over a 3-month period. The researcher asked the students to describe their feelings about school, teachers, parents and themselves. (Wilson-Jones, 2003). The researcher found that classroom distractions, study habits, problems at school, and concerns about school safety inhibit the academic achievement of African American males (Wilson-Jones, 2003). The research revealed that academic assistance (home and school) and parental involvement are the primary factors that promote academic achievement of African American males (Wilson-Jones, 2003). The research also revealed that the academic achievement of African American males is increased when they study at home and school, listen to their teachers during instructional time, and when they are taught the way they prefer to learn (Wilson-Jones, 2003). African American males prefer and are more successful academically when the teacher uses cooperative learning as the primary teaching style (Wilson-Jones & Caston, 2004).

The teacher’s teaching style is an important factor to increasing literacy proficiency for African American males (Wilson-Jones & Caston, 2004). African American males engage in people-oriented learning styles and prefer working collaborately in groups with others (Wilson-Jones & Caston, 2004). Wilson-Jones and Caston conducted a study to determine how cooperative learning promoted the academic success of elementary African American males. The study included 16 African American males in grades 3 through 6. The students were interviewed six times over a 3-month period. The research revealed that the students preferred to work in groups. Cooperative learning is the most conducive teaching style for academic achievement of African American males (Wilson-Jones & Caston, 2004). Cooperative learning is defined as “a successful teaching strategy that team students in small groups with different levels of ability,

using a variety of learning activities to improve their understanding of a subject” (Wilson-Jones & Caston, 2004, p. 280).

Academic achievement of African American males may be increased if their educational opportunities are increased (Casserly et al., 2012). School leaders should focus their attention on selecting African American males to participate in gifted and talented programs (Casserly et al., 2012). To accomplish this task, educators need to be “adequately trained to assess African American male students’ academic potential for gifted education” (Casserly et al., 2012, p. 63).

High-quality early childhood education is another successful strategy that improves the educational and developmental challenges of African American males (Casserly et al., 2012). These types of programs have had great success with long term developmental and educational support for African American males (Casserly et al., 2012). A high-quality early childhood program is successful if it has the following characteristics:

- Small class size and teacher-child ratios (2:17 for example)
- Carefully developed and age-appropriate curriculum
- Well-trained teachers with child-development knowledge
- Parent involvement and/or education component
- A combination of services intended to meet multiple needs of young children and families in poverty including education, health, and nutrition (Casserly et al., 2012, p. 123).

African American males have the highest out-school-suspension rates and higher special education referrals than any other group of students in the education system. African American males underperform academically but they can be successful in school if educators make connections with them and be committed to reaching out to the students’ parents, adapting

instruction to meet the needs of the students, and use innovative instructional practices to increase literacy skills of the African American male (Jenkins, 2009). Academic assistance and parental support are factors that promote academic success of African American males. Teaching style, relevant texts, more educational opportunities, and high-quality education are a few strategies educators should use to improve the academic achievement of African American males.

African American Females

Although African American females underperform academically, they tend to outperform the African American and Hispanic males (Matthews, Kizzie, Rowley, & Cortina, 2010; Ross et al., 2012; Saenz & Ponjuan, 2011). African American females build stronger relationships with teachers, receive higher grades in coursework, obtain higher class rank and honors, progress toward higher levels of education, and are less likely than their African American male counterparts to be referred for special education services (Matthews et al., 2010).

In comparison to Hispanic and Caucasian females, African American females are more likely to be suspended from school (Blake, Butler, Lewis, & Darensbourg, 2011). African American females are stereotyped to be loud, hostile and hypersexual although they are not perceived to be dangerous (Blake et al., 2011). Educators are more likely to respond harshly to behaviors of African American females based on stereotypes of this group of students (Blake et al., 2011). The disproportionate discipline referrals of African American females is due to low teacher expectations of this subgroup of students (Blake et al., 2011).

According to Gibson (2010), African American females have been labeled as remedial learners and are challenged to demonstrate literacy achievement. African American females perform slightly higher in literacy than African American males and Hispanic students on

national reading assessments but they continue to perform below Asian and Caucasian students (Gibson, 2010). According to national standardized reading tests, African American females have poor reading achievement but they possess strong out-of-school literacy skills (Gibson, 2010). Teachers should consider providing African American females with texts that include their own cultural understandings, popular music or magazines to motivate them to read more of the traditional literatures (Gibson, 2010). To improve literacy skills of African American females, it is important for African American females to construct meanings of themselves through literature (Muhammad, 2012).

Muhammad (2012) conducted a study for adolescent African American females to examine the benefit of writing to improve literacy skills of the females. The study included 16 African American females between the ages of 11 and 17 (Muhammad, 2012). The study was a five-week writing institute that encouraged the participants to write to “define self, to nurture resilience, to engage others, and to build capacity for themselves” (Muhammad, 2012, p. 203). The students were allowed to write freely and express themselves (Muhammad, 2012). Muhammad found that if teachers allow African American females to write freely and connect literature to their lives, the students will be enabled to read across texts and increase their comprehension of text; therefore increasing the literacy skills of the African American female (Muhammad, 2012).

Academically, African American females outperform African American males and Hispanic students but they perform below Asian and Caucasian students. African American females have poor reading achievement but they possess strong out-of-school literacy skills. To improve the academic achievement of African American females, teachers should provide the students with texts that relate to their culture and allow them to write freely and define

themselves. African American females need to be able to construct meanings of themselves through literature to improve their literacy skills.

Hispanic Males

Hispanic males have the highest participation rate in the United States labor force, but the occupations they tend to work “pay low wages, provide low economic mobility, provide little or no health insurance, are less stable, and are more hazardous to their health and well-being” (Saenz & Ponjuan, 2011, p.11). Lack of education or low educational attainment is most often the reason Hispanic males employ these type of jobs (Saenz & Ponjuan, 2011).

Hispanic males have a significant presence in the United States penal system (Saenz & Ponjuan, 2011). Hispanic males are not as likely to enter the penal system when compared to African American males but they are more likely to enter the penal system when compared to White males (Saenz & Ponjuan, 2011).

The Hispanic male’s responsibility to “provide for, protect, and defend his family” is a barrier to the educational success of the Hispanic male (Saenz & Ponjuan, 2009). Hispanic males are reared to be family oriented, strong, brave, hardworking, and family contributors; not attend college (Saenz & Ponjuan, 2009). The Hispanic male values his family and his role in the family as the patriarch.

Hispanic students do not perform well in school, have a high number of students who drop out of school and a low number of students who attend college (Ladner & Lips, 2010). Poor performance of Hispanic students in early school years is a predictor of how the students will perform in their later school years (Gonzalez, Szecsy, & University, 2002). Hispanic students usually enter school with smaller vocabulary knowledge than their peers and the gap increases over time (Filippini, Gerber & Leafstedt, 2012). Many Hispanic students enter high school

performing below their peers academically and require interventions in basic academic skills to be successful (Gonzalez et al., 2002). The National Assessment of Education Progress indicates that by age 9, Hispanic students are behind in reading (Billings, 2009). Hispanic males perform lower on national assessments than any other male population within any given age group (Saenz & Ponjuan, 2011).

The United States public school system could be a barrier that discourages the academic success of Hispanic males (Saenz & Ponjuan, 2009). The culture and structure of United States schools can be detrimental to the academic progress of Hispanic males (Saenz & Ponjuan, 2009). The traditional United States public school does not acknowledge the Hispanic heritage nor the distinctive ways Hispanic students know about the world, which devalues the Hispanic male's appreciation of education (Saenz & Ponjuan, 2009). There is also a lack of Hispanic males in the field of education who would be better equipped to meet the learning needs of the Hispanic male (Saenz & Ponjuan, 2009). The lack of Hispanic male teachers who would serve as role models for the Hispanic male is another obstacle to the low academic success of Hispanic males in the educational system (Saenz & Ponjuan, 2009).

Although there are many barriers to the educational attainment of the Hispanic male, there are strategies that can help improve the educational attainment of Hispanic males. Early support in vocabulary can increase vocabulary knowledge and reading skills for Hispanic students (Filippini, Gerber, & Leafstedt, 2012). Interventions in phonemic awareness and decoding can also help increase literacy skills of Hispanic students (Filippini et al., 2012). A focus on literacy and student accountability can help improve literacy skills of Hispanic students and close the achievement gap (Ladner & Lips, 2010).

Hispanic males have the highest participation rate in the United States labor force. They also have a significant presence in the United States penal system. Hispanic males have a strong belief in their culture. They have the responsibility of protecting and providing for their families. The Hispanic male values his family and his role as the family's patriarch; education is not valued as much.

Hispanic males underperform academically, have a high drop-out rate, and a low number of students who attend college. Hispanic males usually enter the K-12 education system behind their peers academically. These students need early interventions in basic reading skills to be successful in school. The United States public school system could be a barrier to the academic performance of Hispanic males. The culture and structure of United States public schools do not support the academic needs of Hispanic males. Early interventions in vocabulary, phonemic awareness, and decoding can help increase the literacy skills of Hispanic males.

Hispanic Females

The media stereotypes Hispanic females as maids, housekeepers and nannies, and often portrays them as being submissive, obedient women who will do anything for their families and jobs (Lopez, 2013). In the workplace, Hispanic women are stereotyped as having the willingness to work for lower wages, do not mind working dead end jobs, and will not complain about the job (Lopez, 2013). These stereotypes can effect the perception Hispanic women have about themselves and can effect the way they identify as a capable professional (Lopez, 2013).

Hispanic females have a strong belief in the Hispanic culture which is a challenge for them educationally (Schwartz, 2001). Their belief in providing for the welfare of the family may cause them to drop out of school to provide for the family (Schwartz, 2001). Many times the

Hispanic female assumes the adult role in the home because they are expected to do housework, take care of their siblings or elders or serve as interpreters for their parents (Schwartz, 2001).

With all the responsibilities and pressures the Hispanic females are faced with, they are more likely to attend college than Hispanic males (Riegle-Crumb, 2010). Almost 16% of Hispanic female students have a bachelor's degree compared to about 13% of Hispanic males who have a bachelor's degree (Saenz & Ponjuan, 2011). Hispanic females are able to exhibit higher levels of academic preparation and articulate the importance of education when compared to Hispanic males (Riegle-Crumb, 2010). Hispanic females outperform their male counterparts in all critical education transition points and the gap between the educational attainment of Hispanic females and Hispanic males continues to grow (Saenz & Ponjuan, 2011).

Hispanic females can be successful academically if educators provide them with the educational services that meet the needs and provide them with a multicultural curriculum (Schwartz, 2001). Educators should use cooperative learning as an instructional strategy, place them in classes that teach higher order job skills, and help them to master the English language (Schwartz, 2001).

Stereotypes that society has about Hispanic females can affect the perception Hispanic females have about themselves. Society and the media stereotype Hispanic females as being submissive, obedient servants. They are also stereotyped as employees who will work for lower wages without complaining about the job.

Hispanic beliefs may be a reason Hispanic females underperform academically in school. Many times Hispanic females drop out of school because they need to take on the responsibility caring for their siblings, caring for their elders or being interpreters for their parents. Although

Hispanic females underperform academically in school, they out perform Hispanic males in all critical education transition points.

Hispanic Students

Hispanics are the fastest growing population in the United States (Hansen, 2005). Although the Hispanic population is growing, progress in academic achievement of Hispanic students has stopped (Hansen, 2005). Parental support, school readiness, health care, and socio-economic factors are factors that affect the academic achievement of Hispanic students (Hansen, 2005). These are factors that educators cannot control. Educators must focus on providing high quality teachers, rigorous and challenging curricula, communication with parents and the community, and institutional support to increase the academic achievement of Hispanic students (Hansen, 2005).

Hernandez-Gantes (1995) conducted a study to determine the extent of the direct and indirect influence of academic achievement of Hispanic students in previous grades, quality of instruction, motivation, quantity of instruction, and homework. The study included 2,721 eighth grade Hispanic students. The study revealed that academic achievement in previous grades had the strongest influence on academic achievement of eighth grade Hispanic students (Hernandez-Gantes, 1995). Student motivation and quantity of instruction had a moderate influence on academic achievement (Hernandez-Gantes, 1995). Quality of instruction had little influence on academic achievement. One explanation could be that the influence of quality of instruction on academic achievement is not important for Hispanic students (Hernandez-Gantes, 1995). The findings suggest that Hispanic students should receive interventions early in their educational careers to improve their chances of being successful in school (Hernandez-Gantes, 1995).

African American males, African American females, Hispanic males and Hispanic females all underperform academically in school when compared to white students. These groups of students underperform academically because of low socioeconomic status and stereotypes they have of themselves and stereotypes that others have about them.

Legislative Accountability

The federal government acknowledged that our schools are not doing a good job of teaching literacy to our students (Guisbond, Neill, & Shaeffer, 2012). In an effort to improve literacy, President George W. Bush and policy makers developed and enacted the No Child Left Behind Act (NCLB), which reauthorizes the Elementary and Secondary Education Act of 1965 (ESEA) (Guisbond et al., 2012). The No Child Left Behind Act holds states and local educational agencies accountable for ensuring that all students in grades 3-8 are proficient in reading and math within 12 years, with a stronger emphasis on reading proficiency for all students (Ed.gov, 2002). The purpose of the No Child Left Behind (NCLB) is to promote reading and literacy skills by implementing scientific-based programs to encourage reading (Forrest, 2004). No Child Left Behind Act authorizes millions of dollars to promote two reading initiatives, Reading First and Early Reading First, to ensure that all children are proficient in reading by the end of 3rd grade (Kauerz, 2002). Reading First is designed to ensure that all classroom teachers are able to identify children at risk of failure and provide effective literacy instruction (Kauerz, 2002). Early Reading First is designed to increase reading readiness in preschool-age children before they enter public schools (Kauerz, 2002). For the past four decades, the federal government and states have put much money and effort in improving literacy in the nation, consequently there has only been slight improvement in literacy in the United States (States, 2011).

Another purpose of the No Child Left Behind Act was to hold schools accountable for student achievement and improve student achievement across the nation (Randolph & Wilson-Younger, 2012). The intention of No Child Left Behind was “to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education” (Schmidt, 2008, p. 15). Reading First and Early Reading First are two initiatives of No Child Left Behind (NCLB) that are aimed at ensuring all children receive a high-quality education and are proficient in reading by the end of 3rd grade (Kauerz, 2002). These two reading initiatives require public schools to adopt research-based reading programs for all students, identify students who are at-risk of reading failure, and provide effective interventions to improve reading skills for students who are at-risk of reading failure (McIntyre et al., 2005).

The No Child Left Behind Act holds states and schools accountable for improving student achievement by requiring states to implement a statewide accountability system which should include all public schools and students (Ed.gov, 2002). The accountability system must “be based on challenging State standards in reading and mathematics, annual testing for all students in grades 3-8, and annual statewide progress objectives ensuring that all groups of students reach proficiency within 12 years” (Ed.gov, 2002). The state of North Carolina restructured its accountability system to meet the requirements of NCLB (Instruction, The ABCs of Public Education 2012 Accountability Report Background Packet b). North Carolina administered multiple choice end-of-grade tests to students in grades 3-8 in reading and math, and an end of grade science test to students in 5th and 7th grades. The purpose of these tests was to measure the achievement levels of students (Instruction, Assessment Brief: North Carolina End-of-Grade Tests, 2007).

Reading First and Early Reading First are two reading initiatives of No Child Left Behind that are focused on improving reading achievement of all students. Reading First and Early Reading require teachers to provide research-based instruction to all students, identify students who are at-risk of reading failure, and provide effective interventions to students who are at-risk of reading failure (McIntyre et al., 2005). No Child Left Behind implemented an accountability model to ensure that states and schools provide all students with a fair and equal opportunity “to obtain a high-quality education” (Schmidt, 2008, p. 15).

North Carolina End-of-Grade Tests

North Carolina End-of-Grade tests in reading and math for grades 3 – 8 were developed “to provide accurate measurement of individual student skills and knowledge specified in the North Carolina Standard Course of Study, and to provide accurate measurement of the knowledge and skills attained by groups of students for school, school system, and state accountability” (Public Schools of North Carolina, n.d.). North Carolina End-of-Grade raw data, number of questions answered correctly, is converted into developmental scale scores to allow different forms of the test to be equated (Public Schools of North Carolina, n.d.). Developmental scale scores were developed to determine individual student growth from grade level to grade level within a subject. The developmental scale scores were constructed by administering two forms of the North Carolina End-of-Grade test for one grade at the next, higher grade. Individual test items on each form of the test were analyzed using a computerized program (BIMAIN), which is designed to detect changes in test item difficulty over time. Item characteristic curves were developed for each test item based on Item Response Theory (IRT) parameters, and then the individual curves were aggregated across the test forms to develop the test characteristic curves. Item Response Theory (IRT) is a template for the design, analysis, and scoring of tests.

The test characteristic curves of the tests were compared from one grade to the next. The computerized program, BIMAIN, was used again to determine the marginal maximum likelihood estimates of the proficiency distribution parameters. Next, the proficiency distributions were inferred based on the differences in item difficulties (Public Schools of North Carolina, n.d.).

Student proficiency is measured by achievement levels, which are used to group student “performance to standards based on what is expected in each subject at each grade level” (Public Schools of North Carolina, n.d.). There are four achievement levels that correspond to a range of scale scores for each tested subject (reading, math, science) and grade level. The achievement levels are:

- Level I – Students do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.
- Level II – Students demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.
- Level III – Students consistently demonstrated mastery of grade level subject matter and skills and are well prepared for the next grade level.
- Level IV – Students consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Third grade students were administered a beginning-of-grade (BOG) test within three weeks of the beginning of school. The BOG and the EOG have the same developmental scale score scale and achievement levels. The purpose the third grade BOG was to allow schools to measure growth in reading and math achievement at the third grade level. Results from the 3rd grade BOG were compared to the 3rd grade EOG results to measure student growth for the year (Carolina P. S., n.d.). This assessment was eliminated effective with the 2009 – 2010 school year

but was reintroduced at the beginning of the 2013-2014 school year (Assessment Brief: North Carolina READY Beginning-of-Grade 3 English Language Arts/Reading Test, 2014). Third grade students are only assessed in reading for the BOG test. The BOG test serves as a pretest for 3rd grade students and provides teachers with each student's reading level at the beginning of the school year so that teachers are able to provide appropriate instruction and interventions for the students throughout the year (Assessment Brief: North Carolina READY Beginning-of-Grade 3 English Language Arts/Reading Test, 2014). In 2011, President Obama granted states waivers of some significant requirements of NCLB (Wayne, 2012). The waivers were granted to those states that met the requirements of "adopting college and career ready standards and assessments, developing differentiated accountability systems, implementing teacher and principal evaluation systems that factor in growth in student achievement, and reducing administrative burden" (Wayne, 2012, p. 2). In 2012, North Carolina was granted waivers from many of NCLB requirements (Instruction, 2007). With the waivers, North Carolina schools do not have to report Adequate Yearly Progress (AYP) to the federal government and the federal government does not impose sanctions for schools that do not make Adequate Yearly Progress (AYP) (Instruction, 2007).

In 2014, the North Carolina State Board of Education (NCSBE) adopted college-and-career readiness Academic Achievement Standards for the End-of-Grade test. North Carolina End-of-Grade tests and the 3rd grade Beginning-of-Grade reading test now have five achievement levels to determine student proficiency. The table below displays the new five achievement levels for NC End-of-Grade tests and 3rd grade Beginning-of-Grade test (see Table 1).

Table 1

Proficiency & College-and-Career Ready

Achievement Level	Meets On-Grade-Level Proficiency Standard	Meets College-and-Career Readiness Standard
Level 5 denotes Superior Command of knowledge and skills	Yes	Yes
Level 4 denotes Solid Command of knowledge and skills	Yes	Yes
Level 3 denotes Sufficient Command of knowledge and skills	Yes	No
Level 2 denotes Partial Command of knowledge and skills	No	No
Level 1 denotes Limited Command of knowledge and skills	No	No

Note. NCDPI/North Carolina Testing Program.

The North Carolina State Board of Education (SBE) created new descriptors for the five achievement levels to include language that includes college and career readiness.

- Level 1 – Student has limited command of the knowledge and skills contained in the Common Core State Standards for literature, limited command of informational text, and limited command of language when determining the meaning of a word.
- Level 2 – Student has partial command of the knowledge and skills contained in the Common Core State Standards for literature, partial command of informational text, and partial command of language when determining the meaning of a word.
- Level 3 – Student has sufficient command of grade-level knowledge and skills contained in the Common Core State Standards for literature; student is ready for the next grade level.
- Level 4 – Student has solid command of the knowledge and skills contained in the Common Core State Standards in literature, has solid command of informational text, has solid command of language when determining the meaning of a word.
- Level 5 – Student has superior command of the knowledge and skills contained in the Common Core State Standards in literature, has superior command of informational text.

Table 2 displays the developmental scale score range for each achievement level.

Effective Instruction

The 2001 President's Commission on Excellence reports that many students receive inappropriate or ineffective instruction (Hughes & Dexter, 2011). To identify the needs of students, schools should implement a scientifically research based core program, conduct a universal screener, progress monitor student's progress, implement specialized interventions for

Table 2

Developmental Scale Score Range

Achievement Level	Development Scale Score Range
Level 1	413-431
Level 2	432-438
Level 3	439-441
Level 4	442-451
Level 5	452-461

students who display weaknesses in one or more of the reading skills and intensive interventions if the specialized interventions do not meet the needs of the student (Hughes & Dexter, 2011). A universal screener should be used to identify skill deficient and predict reading success or failure of children (Cihon, Gardner III, Morrison, & Paul, 2008). A universal screener is an assessment tool that targets students who are at risk of failure even when they are provided a research-based general education (Hughes, 2011). Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Curriculum-Based Measures (CBM) are assessment tools which may be used as universal screeners (Cihon et al., 2008). Dynamic Indicators of Basic Early Literacy Skills (DIBELS) is a set of procedures and measures for assessing a student's acquisition of early literacy skills (Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test, 2015). North Carolina implemented Reading 3D as the universal screener to assess students in grades K-6 predictability for successful or failure in reading. Reading 3D is a universal screener comprised of Dynamic Indicators of Basic Early Literacy Skills and Text Reading and Comprehension (TRC) (Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test, 2015). Text Reading and Comprehension (TRC) is an assessment tool that measures a student's text reading accuracy and comprehension (Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test, 2015). According to a study conducted by mCLASS, Reading 3D is an effective indicator of how a 3rd grade student will perform on the North Carolina End-of-Grade reading assessment (Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test, 2015). Students who were proficient on the Dynamic Indicators of Basic

Early Literacy Skills (DIBELS) and Text Reading and Comprehension (TRC) were proficient on the North Carolina End-of-Grade reading assessment (Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test, 2015). The universal screener is conducted at the beginning of the academic school year.

Once the universal screener has been conducted and students at-risk of reading failure have been identified, teachers should progress monitor the students who do not meet the threshold for children their age, and assess them frequently to determine if the instruction has been effective in meeting the student's needs. Regular classroom teachers can provide effective instruction to at-risk readers if the instruction is differentiated based on the needs of the students (Vernon-Feagans et al., 2010). If the instruction has not been effective, the teacher should identify and continue to progress monitor with additional instructional strategies that will meet the needs of the student (Cihon et al., 2008). The instruction should match the student's skill level to be effective (Vernon-Feagans et al., 2010). Inclusion and pull-out instruction are strategies teachers can use to improve literacy skills of students who are at non-proficient in reading.

The classroom teacher should use Tier I interventions for all students and Tier II interventions for those students who do not benefit from high quality classroom instruction (Vernon-Feagans et al., 2010). Table 3 displays the process of assessing students to determine their risk of reading failure and administering effective interventions to improve the reading skills of students who are at-risk of reading failure.

Table 3

Hughes and Dexter Response to Intervention: A Research-Based Summary

RTI Components	Students Receiving Intervention
Tier Core Instruction	All Students
Tier 1 Universal screening (3 times per year)	All students
Monthly progress monitoring	At-risk students (25%)
Tier 2 Specialized interventions	10–20% of students
Weekly progress monitoring	10–20% of students
Tier 3 More intensive interventions and progress monitoring	5–10% of students
Special education referral	2–7% of students

Intervention Strategies

Pull-out instruction is one strategy that teachers use to improve literacy skills for students who are at-risk for reading failure (Hedrick & Pearish, 1999). Some educators are not fond of pull-out programs because the programs have not produced promising results (Hedrick & Pearish, 1999). Although many literacy pull-out programs have not produced promising results for improving literacy skills for students who are at-risk for reading failure, Reading Recovery and Reading Mastery are literacy pull-out intervention programs that have successful results for improving literacy skills for students who are at-risk of failing reading (Clearinghouse, 2007b; Clearinghouse, 2006b). Corrective Reading is another literacy pull-out program but it has shown little effectiveness in increasing literacy skills for at-risk students (Clearinghouse, 2010).

Reading Recovery Intervention Strategy

Schools and districts use different approaches to improve reading literacy for their at-risk students. Reading Recovery is a reading intervention that is used to improve literacy for many at-risk students. Reading Recovery is usually supported by Title I funding but even those at-risk students supported by Title I programs continue to struggle in reading and mathematics (Bufalina, Wang, Gomez-Bellenge, & Zalud, 2010). Reading Recovery was designed to provide interventions for the lowest achieving first grade students (Clearinghouse, 2007b). Reading Recovery has two goals: promote literacy skills of first grade students who are struggling with reading, and reduce the number of first grade students who are struggling to read (Clearinghouse, 200 b). The program is a supplemental pull-out resource that is administered in one-on-one sessions or in small group sessions of no more than six students (Clearinghouse, 2007b). The pull-out intervention should be administered to the students over 12-20 weeks (Clearinghouse, 2007b). What Works Clearinghouse identified three studies of Reading Recovery that met What

Works Clearinghouse evidence standards (Clearinghouse, 2013a). Reading Recovery had “positive effects on general reading achievement and potentially positive effects in alphabetics, reading fluency, and comprehension for beginning readers” (Clearinghouse, 2013a, p. 1).

Reading Recovery lessons are created to meet the needs of the students, focusing on phonemic awareness, phonics, vocabulary, writing and comprehension depending on what skills the student needs to be successful in reading (Clearinghouse, 2013a). Once the student demonstrates the ability to consistently read on the level for his or her grade, that student is discontinued from the program (Clearinghouse, 2013a). If the student does not reach the reading level for his or her grade level after 20 weeks of interventions in the Reading Recovery program, that student should be referred for further testing for the exceptional children’s program (Clearinghouse, 2013a).

The National Assessment of Educational Progress reported that only 28% of at-risk students are able to read at a minimum level of proficiency in the fourth grade (Vernon-Feagans, Kainz, Hedrick, Ginsberg, & Amendum, 2010).

Reading Mastery Intervention Strategy

Reading Mastery is a reading pull-out intervention designed to provide direct, explicit instruction (Clearinghouse, 2006a). Reading Mastery focuses on phonemic awareness, letter recognition, segmenting words into sounds, blending sounds into words, decoding, and comprehension (Clearinghouse, 2006a; Clearinghouse, 2012). Reading Mastery can be used as a core reading program or as a supplemental reading program (Clearinghouse, 2012). Reading Mastery can be used as an intervention for students with disabilities as well as with students who are not identified with a learning disability (Clearinghouse, 2012). Reading Mastery is a 30-45 minute lesson taught to small groups of students, and is intended to create an environment that

facilitates teacher-student interactions and active student participation (Clearinghouse, 2006a). Students are grouped in the Reading Mastery program by similar reading levels using program placement tests to group the students (Clearinghouse, 2006a). Reading Mastery lessons include short activities that encompass “phonemic awareness, letter-sound correspondence, sounding out words, word recognition, vocabulary, oral reading fluency, and comprehension” (Clearinghouse, 2006a, p. 2). Teachers model new content, provide guided practice, and allow students to practice individually while applying the concept (Clearinghouse, 2006a).

Reading Mastery integrates comprehension and decoding strategies creating a successful reading intervention (Grossen, 2014). Reading Mastery teaches 40 letter-sound correspondences with stories that are interesting and meaningful for beginning readers (Grossen, 2014). According to What Works Clearinghouse (2006a), the Reading Mastery reading program has successful results for all students who are behind their expected reading achievement. In 2013, What Works Clearinghouse updated their review of Reading Mastery and could not determine the effectiveness or ineffectiveness of Reading Mastery on K-3 grade students due to lack of research based studies that meet What Works Clearinghouse evidence standards (Clearinghouse, 2013).

The creators of Reading Mastery incorporated all the features of an effective reading program and vetted the program with ordinary teachers and ordinary students, analyzed the data to identify error patterns and revised the program based on the error patterns to create an effective reading program (Grossen, 2014). No other reading program has been tested and refined to the extent of Reading Mastery, which makes Reading Mastery the most effective reading program for struggling readers (Grossen, 2014).

Reading Mastery is a pull-out intervention strategy that focuses on improving phonemic awareness, letter recognition, word segmentation, blending, decoding, and comprehension.

Reading Mastery integrates comprehension and decoding strategies for students who are behind their expected reading achievement level. The intervention strategy has had successful results for students who are identified as learning disabled as well as for students who are not identified with a learning disability.

Corrective Reading Intervention Strategy

Corrective Reading is another direct instruction pull-out program that focuses on helping students in grades 4-12 who read below their expected grade level (Clearinghouse, 2010).

Corrective Reading is an intervention that promotes reading accuracy (decoding), fluency, and comprehension (Clearinghouse, 2010; Hempenstall, 2008). Corrective Reading is designed to help students with word identification and build reading rate and fluency (Torgesen et al., 2007).

Corrective Reading also helps improve comprehension (McDaniel, Duchaine, Jolivet, & University, 2010). Corrective Reading begins by providing explicit instruction for phonemic awareness and sound-letter recognition (Clearinghouse, 2007a). Corrective Reading then addresses “vocabulary development, comprehension, and building oral reading fluency” (Clearinghouse, 2007a, p. 1). Corrective Reading has ten sequential levels that are designed to meet the needs of the students; four levels that target decoding skills and six levels that target comprehension skills (Clearinghouse, 2010). The lessons can be taught in a small group of five to six students or in a whole class setting for 45-minutes, four or five days a week (Clearinghouse, 2010).

Students are assessed using the Corrective Reading placement test and instruction begins with level in which the student placed according to the placement test (Clearinghouse, 2010).

Students move up a level after completing the level in which they placed. They continue to move up levels until they complete the program (Clearinghouse, 2010). Students only complete one to three levels per academic school year (Clearinghouse, 2010). What Works Clearinghouse found that there is little effectiveness of Corrective Reading in alphabets, reading fluency, and comprehension (Clearinghouse, 2010). What Works Clearinghouse did not review the effectiveness of general reading achievement for Corrective Reading because there were not enough research based studies for Corrective Reading that met evidence standards for What Works Clearinghouse (Clearinghouse, 2007; Clearinghouse, 2010).

Development of phonemic awareness is one method used to predict if a student will have difficulty learning to read (Learning Point, 2004). Phonemic awareness should be learned at an early age to increase student reading achievement later in life (Learning Point, 2004).

Early Literacy

Many at-risk students enter school with weak reading skills, and learning to read is difficult for these students (Bufalina, Wang, Gomez-Bellenge, & Zalud, 2010; Ortiz et al., 2012). Early literacy is very important in helping at-risk students acquire those literacy skills that will enable them to become better readers in the future thus, increasing their potential to be a productive citizen in society (Lonigan & Shanahan, 2009). Early literacy, which includes development of phonemic awareness, is a predictor of a student's literacy achievement in the future (Learning Point, 2004; National Institute for Literacy, 2008). Students in preschool or any young child who is proficient in oral reading skills and book and print awareness perform better in primary school (National Institute for Literacy, 2008). Letter identification, knowing letter sounds, the ability to manipulate sounds of spoken language, ability to rapidly name a sequence of letters, numbers, objects, or colors, ability to write one's name and letters in isolation, ability

to remember spoken language are all strong predictors of a child's growth in literacy (Literacy, 2009). Exposing children to new words early and often increases that child's vocabulary and increases that child's ability to comprehend text (Lonigan & Shanahan, 2009). Children learn new words in four phases (1) prealphabetic phase, (2) partial alphabetic phase, (3) full alphabetic phase, and (4) consolidated alphabetic phase (Learning Point, 2004). Interventions that are most effective for young children to improve their literacy skills are interventions that are designed to help children understand the alphabetic code and book sharing (Lonigan & Shanahan, 2008). Book sharing interventions help to improve print knowledge and oral language skills which in turn, helps to improve and develop essential literacy skills (Lonigan & Shanahan, 2008).

The National Institute of Early Education Research (2010) has evidence that demonstrates that children should begin preschool at age 3 rather than waiting until age 4 (Reid, 2010). Middle class children begin preschool at age 3 (Reid, 2010) and those students perform better than at-risk students; at-risk students should begin preschool at age 3 as well (Reid, 2010).

Interventions designed for students in the upper grades (4-12) should implement strategies that include reading instruction that is embedded within a content area, texts that are interesting, students having the opportunity to make choices and hands-on activities (Ritchey, Silvermann, Montanaro, Speece, & Schatschneider, 2012). The interventions should also include practice with multisyllabic words, vocabulary instruction and fluency (Ritchey et al., 2012). Brady and Thomas (2003) warn that no particular intervention is the best intervention to produce positive results. Brady and Thomas' (2003) research shows that most interventions do not have a success rate higher than 50%.

The National Reading Panel reports that reading instruction should be structured and explicit to "remediate and prevent reading problems" (Goss & Brown-Chidsey, 2012, p. 65). The

National Reading Panel and Preventing Reading Difficulties (Otaiba & Fuchs, 2006) recommend that effective and explicit interventions should be provided early in a child's educational career so that child will be a proficient reader by the end of third grade. Many students complete eighth grade without mastering knowledge-based literacy skills they will need in high school as well as adulthood (Reardon, 2012).

In 2001, President George W. Bush announced his idea of education reform known as The No Child Left Behind Act of 2001. President Bush was concerned that too many at-risk students were not successful in school and were not showing improvement in reading and math. No Child Left Behind was to be the solution "to improve the performance of America's elementary and secondary schools while at the same time ensuring that no child is trapped in a failing school" (Ed.gov, 2002, p. 4). Because of President Bush's commitment to ensure that every student will be proficient in reading by the end of the third grade, President Bush implemented the Reading First initiative (Ed.gov, 2002). The Reading First initiative was funded to provide research based instructional strategies to those K-3 students who are at-risk of failing reading and provide professional development in essential components of reading for K-3 teachers (Ed.gov, 2002). The No Child Left Behind Act (NCLB) provided grants for schools that have a high percentage of students who receive free/reduced lunch. Title I is a part of the No Child Left Behind Act which provides funds to schools with high poverty rates with the purpose of meeting the educational needs of low-achieving students (Ed.gov, 2004), although Guisbond et al. (2012) make the claim that there has not been a significant increase in student achievement with the implementation of NCLB and Title I funds.

Travers completed an action research project and found that schools with large populations of minority and low income students are at a disadvantage when expected to meet the proficiency requirements of NCLB (Travers, 2009).

Although literacy interventions are a focus in the early grades, not much time or attention has been focused on providing successful literacy interventions for at-risk students in upper elementary grades (Ritchey et al., 2012).

A number of studies found that effective interventions meet the student's individual needs in the regular classroom or in a pull-out setting (Vernon-Feagans et al., 2010). Instruction should be differentiated based on the student's needs (Vernon-Feagans et al., 2010). Foorman and Moats (2004) suggest that instruction is most effective when it is explicit in the alphabetic principal and integrates reading for meaning, early intervention, and "small group/and or one on one intensive instruction" (p. 184). Brady (2003) warns that no particular intervention is the best intervention to produce positive results. Brady's (2003) research shows that most interventions do not have a success rate better than 50%.

The National Reading Panel has identified five components of reading that are needed for students to become successful readers (Hughes & Dexter, 2011). The five components are:

1. Phonics – "a set of rules that specify the relationship between letters in the spelling of words and sounds of spoken language" (Learning Point, 2004, p. 12).
2. Phonemic awareness – "the understanding that spoken words are made up of separate units of sound that are blended together when words are pronounced" (Learning Point, 2004, p. 4). In other words, phonemic awareness is the ability to hear, produce, blend or segment sounds.

3. Fluency – “recognizing the words in a text rapidly and accurately and using phrasing and emphasis in a way that makes what is read sound like spoken language”
(Learning Point, 2004, p. 12).
4. Vocabulary – “words we need to know to communicate with others” (Learning Point, 2004, p. 22).
5. Comprehension – “constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinking about all of this information until it is understood” (Learning Point, 2004, p. 30).

These five components of reading were part of the Reading First Initiative and No Child Left Behind (Learning Point, 2004, p. 1).

Students should receive interventions early in their educational career. The interventions will be most effective for younger students if they are focused on helping the student understand the alphabetic code and book sharing. Interventions focused on practice with multisyllabic words, vocabulary instruction and fluency are most effective for students in grades 4-12.

The Reading First Initiative was implemented by President George W. Bush to ensure that every student is proficient in reading by the end of third grade. Funding was provided for the Reading First Initiative to provide research on research based instructional strategies that are most beneficial for students in grades kindergarten through third grade who are at-risk of failing reading. The Reading First Initiative and No Child identified five components of reading. The five components of reading are phonics, phonemic awareness, fluency, vocabulary, and comprehension.

CHAPTER THREE: METHODOLOGY

The purpose of this study was to determine the effectiveness of literacy interventions on the academic success of third grade at-risk students based on standardized scores.

Based on the data collection and research study, a program evaluation was the best method to determine the effectiveness of the literacy pull-out intervention program. Evaluation is defined as “determining the worth or merit of whatever is being evaluated” (Fitzpatrick, Sanders, & Worthen, 2012, p. 7), and a program is defined as “an ongoing, planned intervention that seeks to achieve some particular outcome(s), in response to some perceived educational, social, or commercial problem (Fitzpatrick et al., 2012, p. 8). Hence, program evaluation is the systematic method for collecting, analyzing, and using information to answer questions about projects, policies, and programs, particularly about their effectiveness and efficiency when evaluating a program (Fitzpatrick et al., 2012). Additionally, this study sought to determine the impact and worth of the literacy pull-out intervention program on third grade at-risk students based on their results on the North Carolina End-of-Grade Reading test. Furthermore, there are a number of different approaches to program evaluation, such as consumer-oriented evaluation, expertise-oriented evaluation, decision-oriented evaluation, and participant-oriented evaluation (Fitzpatrick et al., 2012). For this study, the objectives-oriented evaluation approach was identified as being the most appropriate to answer the study questions. The objectives-oriented approach has been used to determine success or failure of a program and to serve as a foundation for improvements, maintenance, or termination of the program (Fitzpatrick et al., 2012). Some benefits of the program-oriented approach are (1) the approach is easily understood, (2) is easy to follow and implement, and (3) produces information that is relevant to the mission of the program (Fitzpatrick et al., 2012). Although the program-oriented approach has many benefits, the

program also has some limitations. An identified limitation of the program-oriented approach is there is a single focus on objectives and their measurements (Fitzpatrick et al., 2012). The focus on objectives may cause the evaluator to ignore other important outcomes of the program (Fitzpatrick et al., 2012). For this study, it has been determined that if 75% of students who participated in the study are proficient on the North Carolina End-of-Grade Reading test, the literacy intervention program made an impact on the academic performance of third grade at-risk students.

Data Collection

The data were collected from the third grade North Carolina End-of-Grade Reading test, student developmental scale scores, third grade Beginning-of-Grade Reading test scores, which were received from the testing coordinator in Wilson County Schools, and in-depth interviews of principals and teachers. The quantitative data was compared to development scale scores from the third grade North Carolina Beginning-of-Grade Reading test to student developmental scale scores from the third grade North Carolina End-of-Grade Reading test for the students in the study. The comparison of the developmental scale scores helped determine if the literacy pull-out intervention made an impact on the proficiency of the third grade students who participated in the study. The qualitative data helped to determine if administrators and teachers believe that the literacy pull-out program made an impact on student proficiency, and support or reject the quantitative data.

Study Questions

1. To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American male third grade at-risk students?

2. To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American female third grade at-risk students?
3. To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic male third grade at-risk students?
4. To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic female third grade at-risk students?

Participants

Student Test Sample

The sample used for the study was African American male student test scores, African American female student test scores, Hispanic male student test scores, and Hispanic female student test scores of third grade at-risk students who were served in the literacy program during the 2013-2014 school year. The sample included at-risk students from nine of the fourteen elementary schools in Wilson County, North Carolina that used the literacy pull-out program as an intervention for at-risk third grade students. All but one of the elementary schools in the county are considered as Title 1 schools although the schools have different levels of poverty. The students included in the study receive free or reduced lunch and are not in the exceptional children's program. The students were considered to be at-risk based on their economic status and ethnicity. Third grade students placed in the literacy pull-out program were students who were considered to need intense or strategic interventions in reading. Reading 3D Beginning-of-Year assessments were used to determine which students need intense or strategic interventions in reading

The students in the literacy pull-out groups were grouped based on their Text Reading and Comprehension level (TRC). Students with Text Reading and Comprehension (TRC) levels

that were the same or close were grouped together. The groups range from 4 students to 6 students depending on the number of students who have Text Reading and Comprehension (TRC) levels that are the same or close. In some instances there were many students who had the same Text Reading and Comprehension (TRC) level or levels that were close, so the students were divided into two or three groups because the groups could have no more than six students at a time.

The literacy teachers focused on building fluency and comprehension in their small group sessions. Reading 3D data was used to determine text levels but was not used to determine individual needs of the students, although poor readers benefit more when instruction is differentiated to meet the needs of the individual student (Vernon-Feagans et al., 2010). Hedrick and Pearish (1995) state that when students receive instruction designed to meet the individual needs of the student, they will more than likely grow academically and close the achievement gap. The teachers did not plan their lessons to focus on phoneme segmentation, blends, phonics, or phonemic awareness, which are skills Reading 3D data revealed many of the students lacked. The National Reading Panel also reports that phonemic awareness, phonics, fluency, vocabulary and (Brady, 2003) comprehension are essential components of effective reading instruction. Students were pulled by the literacy teacher in small groups four days a week for 30 minutes.

Principals

Interviews of the principals from three of the elementary schools who participated in the literacy pull-out program were conducted. The principals were chosen randomly by listing the principals' names and assigning them numbers one through nine. The numbers one through nine were put into a box and three numbers were selected. The numbers that were selected from the box determined which principals participated in the study (see Appendix A).

Teachers

The teachers selected to participate in the study were literacy teachers and classroom teachers from schools that participated in the literacy pull-out intervention. Five literacy teachers were randomly selected to participate in the study and five classroom teachers were randomly selected to participate in the study. The researcher received a list of literacy teachers and third grade teachers from each of the nine schools. The literacy teachers' names were listed alphabetically and chosen randomly, and the third grade classroom teachers' names were listed alphabetically and chosen randomly as well. The literacy teachers were assigned a number one through twenty-four. The numbers one through twenty-four were put into a box and five numbers were chosen. The numbers chosen from the box determined which literacy teachers participated in the study. The same process was used to determine which five classroom teachers would participate in the study. The classroom teachers' names were listed alphabetically and chosen randomly. The classroom teachers were assigned a number one through twenty. The numbers one through twenty were put into a box and five numbers were chosen. The numbers chosen from the box determined which classroom teachers participated in the study. The principals granted the researcher permission to interview the teachers during their planning time. The researcher interviewed the teachers one-on-one (see Appendix B).

Interview Questions

The interview questions were developed by the researcher. The researcher sent the interview questions to a panel of experts who determined if the interview questions were appropriate for the study to establish construct validity.

Confidentiality

Students

Students who participated in the study were students who were serviced by the literacy pull-out intervention and receive free or reduced lunch. The students' identities were kept confidential throughout the process. The principal of each school sent the names of the students who were in the literacy pull-out program to the Wilson County schools Director of Child Nutrition. The principals also included the students' reading Beginning-of-Grade (BOG) test scores as well as their reading End-of-Grade (EOG) test scores. Once the Child Nutrition Director received the students' names, she attached the students' lunch status to their name. The Child Nutrition Director assigned each child a number and deleted the child's name. The researcher received student numbers and reading North Carolina Beginning-Grade (BOG) test scores and reading End-of-Grade (EOG) test scores. The researcher did not know who the students were or what school the child attended.

Principals

Principals who participated in the study did not have his/her name displayed on any of the research documents. The principals were identified as Principal 1, Principal 2 and Principal 3. The researcher did not require any identifying information from the principals. All information obtained from the principals was stored in a locked file cabinet at all times.

Teachers

The teachers who participated in the study did not have their names displayed on any research documents. The teachers were identified as Literacy Teacher 1-5 and Classroom Teacher 1-5. The researcher did not require any identifying information from the teachers. All information obtained from the teachers were stored in a locked file cabinet at all times.

Security of Data

The researcher kept data secure by keeping the data in a locked file cabinet at all times. The researcher was the only person who had a key to the file cabinet. Student data was only used to complete the Problem of Practice and will be destroyed by shredding once the project is complete.

Data Analysis

Developmental scale scores, derived from the North Carolina Testing and Accountability department, were used to determine student proficiency on the North Carolina End-of-Grade Reading test. To be proficient in reading, a developmental scale score of at least 439 must be obtained on the North Carolina Third Grade Reading End-of-Grade test. The researcher used average developmental scale scores for the African American male subgroup, African American female subgroup, Hispanic male subgroup, and Hispanic female subgroup on the North Carolina Beginning-of-Year Reading test and the North Carolina End-of-Grade Reading test to determine if the literacy pull-out intervention program made an impact on proficiency of third grade at-risk students. Additionally, the researcher conducted face-to-face interviews with three principals, five classroom teachers and five literacy teachers. The face-to-face interviews provided the researcher with qualitative data to determine the principals' and teachers' perception of the impact of the literacy pull-out intervention program on third grade at-risk students reading proficiency on the North Carolina Third Grade Reading End-of-Grade test. The qualitative data will support or reject the findings of quantitative data and any other unintended outcomes.

CHAPTER FOUR: DATA ANALYSIS

Introduction

The purpose of this study was to determine the effectiveness of literacy interventions on academic success of third grade at-risk students on standardized tests. The quantitative data determined whether the study group of at-risk students were proficient in reading on the third grade North Carolina End-of-Grade Reading test based on Developmental Scale Scores.

To determine the effectiveness of the literacy pull-out intervention program, program evaluation was used for this study. As noted in Chapter Three, program evaluation is used when stakeholders need to determine the worth or merit of a program. For this study, the objectives-oriented evaluation approach was identified as being the most appropriate to answer the study questions. The objectives-oriented approach has been used to determine success or failure of a program and to serve as a foundation for improvements, maintenance, or termination of the program (Fitzpatrick et al., 2012). Some benefits of the program-oriented approach are (1) the approach is easily understood, (2) is easy to follow and implement, and (3) produces information that is relevant to the mission of the program (Fitzpatrick et al., 2012). Qualitative and quantitative data were used to determine the effectiveness of the literacy pull-out intervention program. Principals, third grade classroom teachers, and literacy teachers were interviewed to gain insight on their perception of the effectiveness of the literacy pull-out intervention program on third grade at-risk students to support or reject the quantitative data. Face-to-face recorded interviews with principals, literacy teachers and third grade teachers were a source of data collected by the researcher. Five literacy teachers and five third grade classroom teachers were randomly chosen to participate in the face-to-face interviews. The principals and teachers who participated in the study were randomly chosen from schools in Wilson County that participated

in the literacy pull-out intervention program. The purpose of the quantitative data was to support or reject the findings of the quantitative data. Third grade North Carolina Beginning-of-Grade Reading test scores and third grade End-of-Grade Reading test scores were provided to the researcher from the testing coordinator of Wilson County.

The individual student data were comprised of the developmental scale scores from the 2013 fall administration of the third grade North Carolina Beginning-of-Grade Reading test and the 2014 spring administration of the third grade North Carolina End-of-Grade Reading test. The developmental scale scores for the beginning-of-grade test and the end-of-grade test were converted into achievement levels using the criteria set forth by the North Carolina Department of Public Instruction. Developmental scale scores from the third grade North Carolina End-of-Grade Reading test in reading were used to determine if students were proficient in reading. Developmental scale scores for 156 students were use in the study.

Study Findings

This chapter presents the analysis of the data based on the four study questions stated in Chapter One. Question One, asked if the literacy pull-out intervention strategy had an impact on NC EOG test results for African-American male third grade at-risk students; Question Two, asked if the literacy pull-out intervention strategy had an impact on NC EOG Reading test results for African –American female third grade at-risk students; Question Three, asked if the literacy pull-out intervention strategy had an impact on NC EOG test results for Hispanic male third grade at-risk students and Question Four, asked if the literacy pull-out intervention strategy had an impact on North Carolina End-of-Grade Reading test results for Hispanic female third grade at-risk students. Further, the results of the data are presented.

All Students Developmental Scale Scores

Third grade at-risk students' North Carolina End-of-Grade Reading developmental scale score was 434 (Level 2). Those same students averaged a 425 (Level 1) developmental scale score on the North Carolina Beginning-of-Grade Reading test. The students averaged 9 points growth from the North Carolina Beginning-of-Grade Reading test to the North Carolina End-of-Grade Reading test. Although the students made growth on the standardized assessments, the students, on average, were not proficient on the third grade North Carolina End-of-Grade Reading test. Students need to score a 439 (Level 3) developmental scale score on the North Carolina Beginning-of-Grade and the North Carolina End-of-Grade Reading tests to be considered proficient in reading according to North Carolina state standards (see Table 4).

All Students Proficiency Scores in Reading

On the North Carolina Beginning-of-Grade Reading test, none of the Hispanic males or Hispanic females were proficient; one African American male scored a level 3 (proficient) and one African American female scored a level 4 (proficient). On the North Carolina End-of-Grade Reading test, two Hispanic males scored a level 3 (proficient) and two Hispanic males scored a level 4 (proficient); three Hispanic females scored a level 3 (proficient) and five Hispanic females scored a level 4 (proficient); twelve African American males scored a level 3 (proficient) and nine African American males scored a level 4 (proficient); five African American females scored a level 3 (proficient) and five African American females scored a level 4 (proficient) (see Table 5).

Study Question 1 Findings

Study Question 1: *To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American male third grade at-risk students?*

Table 4

BOG & EOG Test Results 2013-2014

Focus Group	Developmental Scale Score (BOG) 2013	Achievement Level 2012-2013	Developmental Scale Score (EOG) 2014	Achievement Level 2014	Growth (Points)
African American Male	425	1	434	2	9
African American Female	425	1	434	2	9
Hispanic Male	424	1	433	2	9
Hispanic Female	425	1	436	2	11
Average	425	1	434	2	10

Table 5

2014 Student Proficiency Percentages

Race/Gender	N (Proficient)	N (Not Proficient)	Percent Proficient
African American Males	21	41	$21/62 = 34\%$
African American Females	10	40	$10/50 = 20\%$
Hispanic Males	4	16	$4/20 = 20\%$
Hispanic Females	8	16	$8/24 = 33\%$
All Students	43	113	$43/156 = 28\%$

There were 62 African American males who participated in the literacy pull-out intervention program for the 2013-2014 academic school year. They averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading test for the 2013-2014 school year. Those same students averaged a 434 developmental scale score on the North Carolina End-of-Grade Reading test at the end of the 2013-2014 school year. African American males averaged 9 points growth from the beginning of the school year to the end of the school year. The African American at-risk males, on average, scored a Level 1 and were not proficient as a group on the North Carolina Beginning-of-Grade Reading test. The student's average achievement level on the North Carolina End-of-Grade Reading test was a Level 2 (see Table 4). Thirty-four percent of African American males were proficient on the North Carolina End-of-Grade Reading test (see Table 5). However, principals and teachers who participated in the study perceive the literacy pull-out intervention program to be effective. The principals and teachers based their perception of the literacy pull-out intervention on student growth, not student proficiency. Thus, the literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for African American male third grade at-risk students.

Study Question 2 Findings

Study Question 2: To what extent, if any, did the literacy pull-out intervention strategy impact NC EOG test results for African-American female third grade at-risk students?

There were 50 African American female third grade at-risk students who participated in the literacy intervention pull-out program for the 2013-2014 academic school year. They averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading test and a 434 developmental scale score on the North Carolina End-of-Grade Reading test for the 2013-2014 school year. The students averaged 9 points growth from the beginning of the

year assessment and the end of year assessment. The students averaged a Level 1 on the third Beginning-of-Grade Reading test and averaged a Level 2 on the third grade End-of-Grade Reading test. The students were not considered proficient according to North Carolina state standards on the North Carolina Beginning-of-Grade reading assessment nor were they proficient on the North Carolina End-of-Grade assessment (see Table 4). Twenty percent of African American females were proficient on the North Carolina Reading End-of-Grade Reading test (see Table 5). However, principals and teachers who participated in the study perceive the literacy pull-out intervention program to be effective. The principals and teachers based their perception of the literacy pull-out intervention on student growth, not student proficiency. Thus, the literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for African American female third grade at-risk students.

Study Question 3 Findings

Study Question 3: To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic male third grade at-risk students?

Twenty Hispanic male at-risk students participated in the literacy pull-out intervention program for the 2013-2014 academic school year. They averaged a 424 developmental scale score on the North Carolina Beginning-of-Grade Reading assessment and a 433 developmental scale score on the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year. The Hispanic male at-risk population averaged 9 points growth from the beginning of the year assessment to the end of year assessment. The students averaged a Level 1 development scale score on the North Carolina Beginning-of-Grade Reading assessment and a Level 2 on the North Carolina End-of-Grade Reading assessment (see Table 4). Although the students made academic growth for the year, the students did not reach proficiency by the end of the 2013-2014

school year. Only 20% of Hispanic males were proficient on the North Carolina End-of-Grade Reading test (see Table 5). However, principals and teachers who participated in the study perceive the literacy pull-out intervention program to be effective. The principals and teachers based their perception of the literacy pull-out intervention on student growth, not student proficiency. Thus, the literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for Hispanic male third grade at-risk students.

Study Question 4 Findings

Study Question 4: *To what extent, if any, did the literacy pull-out intervention impact NC EOG test results for Hispanic female third grade at-risk students?*

Twenty-four at-risk Hispanic females participated in the literacy pull-out intervention program for the 2013-2014 academic school year. The students averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading assessment and averaged a 436 developmental scale score on the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year. The average developmental scale score growth for the Hispanic female at-risk student population was 10 points growth for the 2013-2014 school year. The Hispanic female at-risk population made the most growth out of the four groups that participated in the study. The Hispanic females also had the highest developmental scale score on the North Carolina End-of-Grade Reading assessment. The Hispanic females averaged a Level 1 proficiency score on the North Carolina Beginning-of-Grade Reading assessment and Level 2 proficiency score the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year (see Table 4). Thirty-three percent of Hispanic females were proficient on the North Carolina End-of-Grade Reading test (see Table 5). On average, the Hispanic female population who participated in the study did not meet proficiency in reading for the 2013-2014 school the

literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for third grade at-risk Hispanic female students.

Overall, Hispanic females made the most growth in reading for the 2013-2014 school year according to the data. The Hispanic female study group averaged 11 points growth in reading for the school year. The Hispanic males, African American females, and African American males averaged 9 points growth in reading for the year. The Hispanic male study group began the school year with the lowest developmental scale score (424) average on the North Carolina Beginning-of-Grade Reading assessment. This same group of Hispanic males had the lowest developmental scale score average (433) on the North Carolina End-of-Grade Reading assessment as well. The African American male, African American female and Hispanic female study groups averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading assessment for the 2013-2014 school year (see Table 4).

Hispanic females had the highest average developmental scale score on the North Carolina End-of-Grade reading assessment and showed the most growth in reading for the 2013-2014 school year. All four study groups made growth on the North Carolina standardized reading assessment, but neither group was proficient on the North Carolina End-of-Grade Reading assessment. Twenty-eight percent of all students who participated in the study were proficient on the North Carolina End-of-Grade Reading test (see Table 5).

Qualitative Data

The purpose of the qualitative data was to gather information from principals and teachers about their perception of the effectiveness of the literacy pull-out intervention program. According to the data, the principals and teachers based their perception of the effectiveness of

the literacy pull-out intervention program on student growth in reading. All interview participants believed the literacy pull-out intervention program was effective.

Student Selection Process

The criteria for selecting students to participate in the literacy pull-out intervention program were the same in the schools, according to the principals and teachers who participated in the interviews. Text Reading Comprehension (TRC) levels from the Reading 3D beginning of year data were used to determine which students would participate in the literacy pull-out intervention program. The students who did not meet the reading level for third grade were selected first to participate in the program. After the students were placed in the program, students who scored in the red (need intensive interventions) in DIBELS were selected to participate in the literacy pull-out intervention program. Most of the students who did not meet the beginning of year reading level for third grade did not meet the beginning of the year goal in DIBELS as well. DIBELS assesses students in phonics, phonemic awareness, and fluency.

Intervention Strategies

Once students were placed in the literacy pull-out intervention program, literacy teachers used different strategies to increase literacy skills of the African American males, African American females, Hispanic males, and Hispanic females. The literacy teachers determined the individual needs of the students using the Reading 3D data as a resource. The literacy teachers implemented research-based strategies that met the individual needs of the students. Most of the literacy teachers used modeling as a strategy to improve literacy skills of the students. Using this strategy, the teacher reads the text correctly and the student models reading the text after the teacher. The purpose of modeling for the students is to allow students to hear how they should sound when they read. The students model reading to practice reading fluently and practice using

reading strategies to help them recognize and understand unknown words. This also allows the teacher to listen to the student and provide guidance to the student to improve his or her literacy skills. The literacy teachers know that language is a barrier for most of the Hispanic students, so the teachers use questioning as a strategy to determine if the Hispanic students understand what is being asked of them. In an effort to increase the literacy skills of African American males, African American females, Hispanic males, and Hispanic females, the literacy teachers implement literature that is interesting to the students.

Classroom teachers and literacy teachers assess the students often to ensure the students are making progress in reading. Classroom teachers provide literacy interventions daily for the students who did not meet the TRC level or DIBELS level on the Reading 3D assessment. The intervention needed is determined by the assessment. Students may require interventions for phonics, phonemic awareness, fluency or comprehension. Many students require interventions in more than one area, in that case, the teacher must determine which skill should be addressed first. Literacy teachers also provide interventions based on the Reading 3D assessment. The literacy teachers focus more on increasing the text reading level than improving DIBELS although the literacy teachers provide interventions for DIBELS also. Students are assessed daily in the literacy pull-out intervention program. The literacy teachers listen to the students read, take anecdotal notes on the reading strategies the student may or may not use, and analyze the running record to determine if the student keeps the meaning of the literature, if the student is reading the words correctly or if the student is reading fluently. The assessment allows the teacher to provide more individualized interventions for the students.

Benefits of Literacy Pull-Out Intervention Program

The classroom teachers, literacy teachers and principals believe the literacy pull-out intervention program is a great resource for students who are not proficient in reading. Some of the major assets of the literacy pull-out intervention program are:

- literacy teachers can give their full attention to the students because there are less classroom disruptions,
- students receive interventions twice a day,
- the small groups build confidence for the students who may be afraid to read,
- students learn better in small groups,
- the literacy teacher is able to diagnose the needs of the students because of the small group instruction.

The interview participants perceive the literacy pull-out intervention program to have more assets than weaknesses. The weaknesses of the program were that sometimes there are too many students in a group, the small group instruction should last for a longer period of time, and all students who need the intervention cannot be selected to participate in the literacy pull-out intervention program.

In the literature review, the researcher found that many educators are not fond of pull-out interventions because the instruction is not an extension of classroom instruction (Hedrick & Pearish, 1999). The classroom teachers and literacy teachers collaborate weekly to share resources and discuss student needs. During literacy pull-out interventions, the literacy teachers reinforce what is being taught in the classroom. The collaboration between the classroom teachers and literacy teachers allows the teachers to focus on the same literacy skill. Students read to the literacy teacher everyday which allows the literacy teacher to implement interventions

on phonics, phonemic awareness, or fluency as the students read. One of the principals who was interviewed required the literacy teachers to submit lesson plans to explain how what they are teaching in the pull-out intervention increased student achievement. If the intervention is effective, the principal allows the literacy teacher to continue with the format. If the intervention is not effective, the principal and the teacher collaborate to determine the best intervention to get the best results for the student.

Results of Interviews

The principals, classroom teachers, and literacy teachers would like to continue using the literacy pull-out intervention program as a resource to improve student achievement in reading. The literacy pull-out intervention program is considered to be effective in improving student achievement in reading if the students show growth in reading. Reading 3D beginning-of-year data, middle-of-year data, end-of-year data, North Carolina Beginning-of-Grade Reading assessment data and North Carolina End-of-Grade Reading assessment data were analyzed to determine if students made growth in reading. The principals and teachers report that the majority of the students made growth in reading during the 2013-2014 school year; therefore, the program was effective. The focus group perceives the literacy pull-out intervention program to be effective but reports that changes need to be implemented to improve the effectiveness of the literacy pull-out intervention program for African American males, African American females, Hispanic males and Hispanic females. The teachers (classroom and literacy) need professional development on the best strategies to improve literacy skills of African American and Hispanic students. The literacy teachers believe that the students should be allowed to choose what they read during the intervention and the community needs to be more involved in improving the academic achievement of at-risk students.

The principals and teachers who participated in the study perceived the literacy pull-out intervention program to be effective because the students made growth on the North Carolina End-of-Grade Reading assessment. The principals and teachers believe that the literacy pull-out intervention program has many assets that help to improve academic achievement in reading for the African American males, African American females, Hispanic males and Hispanic females. The participants believe that the literacy pull-out intervention is a great investment for the school system because the students made growth although they were not proficient on the North Carolina End-of-Grade Reading assessment. The principals and teachers do not believe that the literacy pull-out intervention program was more beneficial to any particular group, they believe that the literacy pull-out intervention program was beneficial to all four groups of students.

Summary

The quantitative data revealed that the literacy pull-out intervention program was effective in providing the necessary interventions for students to show growth in reading, but was not effective in helping student proficiency on the North Carolina End-of-Grade Reading assessment. Overall, the third grade at-risk students who participated in the literacy pull-out intervention program grew by nine developmental scale score points but only scored, on average, a level II on the North Carolina End-of-Grade Reading assessment.

The qualitative data revealed that principals and teachers perceive the literacy pull-out intervention program to be effective in improving literacy skills of African American males, African American females, Hispanic males and Hispanic females.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine the effectiveness of the literacy pull-out intervention program on academic success of third grade at-risk students in Wilson County Schools based on the North Carolina End-of-Grade Reading test. North Carolina End-of-Grade Reading test data (developmental scale scores and achievement levels) was used to determine if students were proficient in reading for the 2013-2014 academic school year. A review of the literature revealed that if students are not proficient in reading by the end of third grade, they are at risk of becoming high school dropouts, having lower academic success, having financial instability as adults, and having low self-esteem (McPike, 2007). These outcomes may have a great impact on the workforce both locally and statewide. For this reason, it is essential for school systems to ensure that all students can read and comprehend by the end of their third grade academic school year.

Summary

The focus of this chapter included two sources of data. First, the study analyzed assessment data (North Carolina Beginning-of-Grade Reading scores and North Carolina End-of-Grade Reading test scores) from the group of third grade at-risk students who participated in the literacy pull-out intervention program in Wilson County for the 2013-2014 academic school year. Second, information was provided by principals and teachers through participation in one-on-one interviews regarding their perception of the impact of the literacy pull-out intervention program on the academic performance of third grade at-risk students, specifically African American male, African American female, Hispanic male and Hispanic female students. The student assessment data included both beginning-of-grade reading test scores and end-of-grade reading test scores from the 2013-2104 academic school year. Data included overall reading

achievement as measured by the North Carolina Beginning-of-Grade Reading assessment developmental scale scores and achievement levels and the North Carolina End-of-Grade Reading assessment developmental scale scores and achievement levels. In addition, interviews were used to collect qualitative data from principals and teachers who had implemented the literacy pull-out intervention program. The purpose of the interviews was to collect professional opinions and perceptions regarding the impact of the literacy pull-out intervention program on the academic performance of third grade at-risk students in reading, as viewed by those who participated in the literacy pull-out intervention program.

Historical Perspective

Literacy is an important factor in determining the economic growth and development of a nation, but the United States educational system is challenged to improve literacy skills of the students. Students who are graduating from the United States school system are not prepared for the workforce or higher education in the 21st century. The students are at a disadvantage because the workforce requires advanced skills and the ability to apply knowledge in a variety of circumstances. Because the students have not acquired the literacy skills, they are more at-risk to have financial instability, have difficulty with financial success, and have difficulty finding satisfying work. All of these factors have an impact on the economic growth and development of the United States.

Students from low socioeconomic backgrounds are the majority of students who lack the necessary literacy skills to be successful in their educational career and as adults. The impact of inadequate education of poor students dates back to 1965 when the federal government made an effort to improve the education of poor students. The publication of “A Nation At Risk” to the development of the National Educational Goals Report, Building a Nation of Learners, to

America 2000, and the passage of Goals 2000 are a series of events that kept the federal government involved in improving education for poor students (Groen, 2012). Although the federal government has invested millions of dollars into the education system to improve the literacy skills of students from low socioeconomic backgrounds, the students continue to perform below students from higher socioeconomic backgrounds (Teale & Gambrell, 2007). With all the money invested and education reforms implemented by the federal government to improve the educational needs of students with low socioeconomic status, there has not been a significant increase in academic achievement of these students (Guisbond, Neill, & Shafer).

It is important for all students to become proficient in reading by the end of third grade. According to the Education Commission (2011), students not reaching proficiency in reading by the end of third grade are more at-risk of becoming high school dropouts, which is a major factor in determining their socioeconomic status as adults (McPike, 2011). These students are less likely to be successful in the labor market and are less likely to pursue a post-secondary education.

The Literature

The review of literature focused on literacy and its impact on specific races of people. The literature focused on the impact of literacy on African American males, African American females, Hispanic males and Hispanic females. The research focused on seven major sections: (a) the importance of reading, (b) the impact of lack of literacy on African American males, (c) the impact of lack of literacy on African American females, (d) the impact of lack of literacy on Hispanic males, (e) the impact of lack of literacy on Hispanic females, (f) legislative accountability, and (g) literacy intervention strategies.

Importance of Reading

Literacy is important for the economic growth and development of nations (Black, 2012). A literate society is essential to a nation's productivity and ability to compete with other nations (Foster & Beddie, 2005).

There is a strong correlation between literacy skills of an individual and the socioeconomic status of that individual (Arnbak, 2004; Ng, Bartlett, & Chester, 2013). Students from low socioeconomic backgrounds are prone to have poor literacy skills, which continues into adulthood and has an impact on their quality of life (Caro, 2009). An individual's socioeconomic status has an effect on that individual's ability to provide for themselves and their family.

African American Males

African American males do not perform well in school, and life due to their poor literacy skills. Only 12% of African American males in the United States are proficient in literacy (Hodges & Pringle, 2013). To improve the literacy skills of African American males, educators must provide them with books that interest them or choose texts that are relevant to their lives (Wood & Jocius, 2013). The texts should enable African American males to move beyond a sole cognitive focus to include social, cultural, political, spiritual or an economic focus which is very important in literacy development (Tatum, 2006).

African American males learn when they are taught using people-oriented learning styles, such as cooperative learning (Wilson-Jones & Caston, 2004). Cooperative learning is defined as "a successful teaching strategy that team students in small groups, with different levels of ability, using a variety of learning activities to improve their understanding of a subject" (Wilson-Jones & Caston, 2004, p. 280). African American males are more successful academically when cooperative learning is used as the primary teaching style (Wilson-Jones & Caston, 2004).

African American Females

African American females have poor reading skills but they possess strong out-of-school literacy skills (Gibson, 2010). They are challenged to demonstrate literacy achievement but perform slightly higher than African American males and Hispanic males on national assessments. To improve literacy skills of African American females, teachers should provide them with texts that include their own cultural understandings and popular music or magazines to motivate them to read more of traditional literatures (Gibson, 2010). African American females need to construct meanings of themselves through literature (Muhammad, 2012).

Hispanic Males

Traditional United States public schools could be a barrier that discourages the academic success of Hispanic males (Saenz & Ponjuan, 2009). The culture and structure of United States schools can be detrimental to the academic progress of Hispanic males (Saenz & Ponjuan, 2009). Literacy skills of Hispanic males can be improved if there is an increase in vocabulary knowledge and reading skills (Filippini, Gerber, & Leafstedt, 2012). Teachers should also provide Hispanic males with interventions in phonemic awareness and decoding skills early in the student's educational career (Filippini et al., 2012). These students need early interventions in basic reading skills to be successful in school.

Hispanic Females

Hispanic females are more likely to attend college than Hispanic males (Riegle-Crumb, 2010). They are able to exhibit higher levels of academic preparation and articulate the importance of education when compared to Hispanic males (Riegle-Crumb, 2010). Hispanic females could be successful in school academically if educators provide them with educational services that meet their needs and provide them with a multicultural curriculum (Schwartz,

2001). The teacher should use cooperative learning as an instructional strategy to improve literacy skills of Hispanic females.

Legislative Accountability

The No Child Left Behind Act was developed and enacted in 2001 in an effort to improve literacy in the United States (Guisbond et al., 2012). The No Child Left Behind Act holds states and local educational agencies accountable for ensuring that all students in grades 3-8 are proficient in reading and math (Ed.gov, 2002). One purpose of the No Child Left Behind Act is to promote reading and literacy skills by implementing scientific-based programs to encourage reading (Forrest, 2004). Another purpose of the No Child Left Behind Act is to hold schools accountable for student achievement and improve student achievement across the nation (Randolph & Wilson-Younger, 2012).

To be in compliance with the No Child Left Behind Act, the state of North Carolina implemented multiple choice end-of-grade tests that are administered to students in grades 3-8 in reading, math, and a science end-of-grade assessment for students in 5th and 7th grades. The reading, math, and science end-of-grade tests measure the achievement levels of students (Instruction, Assessment Brief: North Carolina End-of-Grade Tests, 2007). Developmental scale scores were constructed to determine individual student growth from grade level to grade level within a subject. Student proficiency is measured by achievement levels, which are used to group student “performance to standards based on what is expected in each subject at each grade level” (Public Schools of North Carolina, n.d.). Four achievement levels were developed to determine if students were proficient in reading, math and science. In 2014, the North Carolina State Board of Education adopted college-and-career readiness Academic Achievement Standards for the End-

of-Grade test. There are now five achievement levels rather than four. The descriptors for the five achievement levels include language that includes college and career readiness.

- Level 1 – Student has limited command of the knowledge and skills contained in the Common Core State Standards for literature, limited command of informational text, and limited command of language when determining the meaning of a word.
- Level 2 – Student has partial command of the knowledge and skills contained in the Common Core State Standards for literature, partial command of informational text, and partial command of language when determining the meaning of a word.
- Level 3 – Student has sufficient command of grade-level knowledge and skills contained in the Common Core State Standards for literature; student is ready for the next grade level.
- Level 4 – Student has solid command of the knowledge and skills contained in the Common Core State Standards in literature, has solid command of informational text, has solid command of language when determining the meaning of a word.
- Level 5 – Student has superior command of the knowledge and skills contained in the Common Core State Standards in literature, has superior command of informational text.

Literacy Interventions

To improve the literacy skills of students who are not proficient in reading, educators should implement intervention instruction. The intervention should be specialized to meet the needs of the individual student. One strategy educators use to improve literacy skills for students who are deficient in reading is pull-out intervention. Reading Recovery, Reading Mastery, and Corrective Reading are three literacy pull-out intervention programs that are implemented by

educators to improve literacy skills of students who are at-risk of reading failure. Reading Mastery is a supplemental pull-out resource that is administered in one-on-one sessions or in small group sessions of no more than six students (Clearinghouse, 2007). Reading Recovery lessons are created to meet the needs of the students, focusing on phonemic awareness, phonics, vocabulary, writing and comprehension depending on the skills the student needs to be successful in reading (Clearinghouse, 2013). Reading Mastery is a pull-out intervention program that is designed to provide direct, explicit instruction to improve students' literacy skills in phonemic awareness, letter recognition, segmenting words into sounds, blending sounds into words, decoding, and comprehension (Clearinghouse, 2006; Clearinghouse, 2012). Reading Mastery integrates comprehension and decoding strategies creating a successful reading intervention (Grossen, 2014). The creators of the program incorporated all the features of an effective reading program which makes Reading Mastery the most effective reading program for struggling readers (Grossen, 2014). Corrective Reading is a literacy pull-out intervention program that promotes reading accuracy, fluency, and comprehension (Clearinghouse, 2010; Hempenstall, 2008). Corrective Reading is designed to help students with word identification, build reading rate and fluency, and improve comprehension (McDaniel, Duchaine, Jolivette, & University, 2010). What Works Clearinghouse was not able to determine the effectiveness of Corrective Reading because there were not enough research based studies for Corrective Reading that met evidence standards for What Works Clearinghouse (Clearinghouse, 2007; Clearinghouse, 2010).

Problem Statement

Third grade at-risk students in Wilson County are not reading at or above grade level at the end of their respective third grade academic year on the third grade North Carolina End-of-Grade Reading test.

Problem of Practice

Third grade at-risk students in Wilson County Schools continuously perform below the state average on the North Carolina End-of-Grade Reading test. In an effort to increase proficiency scores for third grade at-risk students in reading, the Wilson County school district implemented a literacy pull-out intervention program for third grade students who are at-risk of not being proficient on the North Carolina End-of-Grade Reading assessment. The students who participated in the literacy pull-out intervention program continue to perform below the state average on the North Carolina End-of-Grade reading assessment. The researcher sought to determine if the literacy pull-out intervention program made an impact on academic performance of third grade at-risk students.

Study Design

Design

Program evaluation was determined to be the most appropriate design and included both qualitative and quantitative data. Program evaluation is the systematic method for collecting, analyzing, and using information to answer questions about projects, policies, and programs, particularly about their effectiveness and efficiency when evaluating a program (Fitzpatrick et al., 2012). For this study, the objectives-oriented evaluation approach was identified as being the most appropriate to answer the study questions. The objectives-oriented approach has been used to determine success or failure of a program and to serve as a foundation for improvements,

maintenance, or termination of the program (Fitzpatrick et al., 2012). The purpose of the objectives-oriented approach is to determine if the goals of the program were achieved.

The study used both quantitative and qualitative data tools to best organize the data collection process. Student participants were third grade at-risk students who participated in the literacy pull-out intervention program for the 2013-2014 academic school year. Principal and teacher participants were randomly chosen to participate in the study. Principals and teachers who participated in the study were stakeholders from elementary schools in Wilson County that implemented the literacy pull-out intervention program.

Processes

It was determined, to use Wilson County Public Schools as the LEA to conduct the problem of practice. Permission for participating in the study was granted by the superintendent of the LEA. The researcher collected and organized the principal participant data, teacher participant data, and the student test score data. The student participant's socioeconomic status data was sent to the researcher without student names to ensure student confidentiality.

Data Collection and Analysis

The student data, were third grade Beginning-of-Grade Reading developmental scale scores and third grade End-of-Grade Reading developmental scale scores for the 2013-2014 academic school year. The student developmental scale scores were converted to achievement level scores using criteria set forth by the North Carolina Department of Public Instruction.

The purpose of the implementation of the literacy pull-out intervention program to include third grade at-risk students was to improve reading proficiency of these students on the the North Carolina End-of-Grade Reading assessment. With the implementation of the program, the third grade at-risk students who participated in the literacy pull-out intervention program

continue to perform below the state proficiency level on the North Carolina End-of-Grade reading assessment for the 2013-2014 academic school year (see Figure 4). Only 41.1% of the third grade at-risk students in Wilson County Schools were proficient in reading on the North Carolina End-of-Grade reading test at the end of the 2013-2014 academic school year. A little more than 60% of third grade students in North Carolina were proficient in reading at the end of the 2013-2014 academic school year. Academic achievement in reading for third grade at-risk students in Wilson County Schools improved from the 2012-2013 to the 2013-2104 academic school year, but decreased from the 2011-2012 academic school year.

Participant Demographics

The total number of student participants in the literacy pull-out intervention program for the 2013-2014 academic school year was 156. Of the 156 student participants, 62 were African American males, 50 were African American females, 24 were Hispanic males and 24 were Hispanic females. The students selected to participate in the literacy pull-out intervention program based on their Reading 3D TRC (text reading comprehension) level and their DIBELS score.

The total number of teacher participants in the study was ten, which included five third grade classroom teachers and five literacy teachers. Three elementary school principals also participated in the study.

Student Proficiency

Developmental scale scores were collected by the researcher using the 2013-2014 North Carolina End-of-Grade Reading assessment results. The developmental scale scores were converted into achievement levels, which were used to group student “performance to standards based on what is expected in each subject at each grade level” (Public Schools of North Carolina,

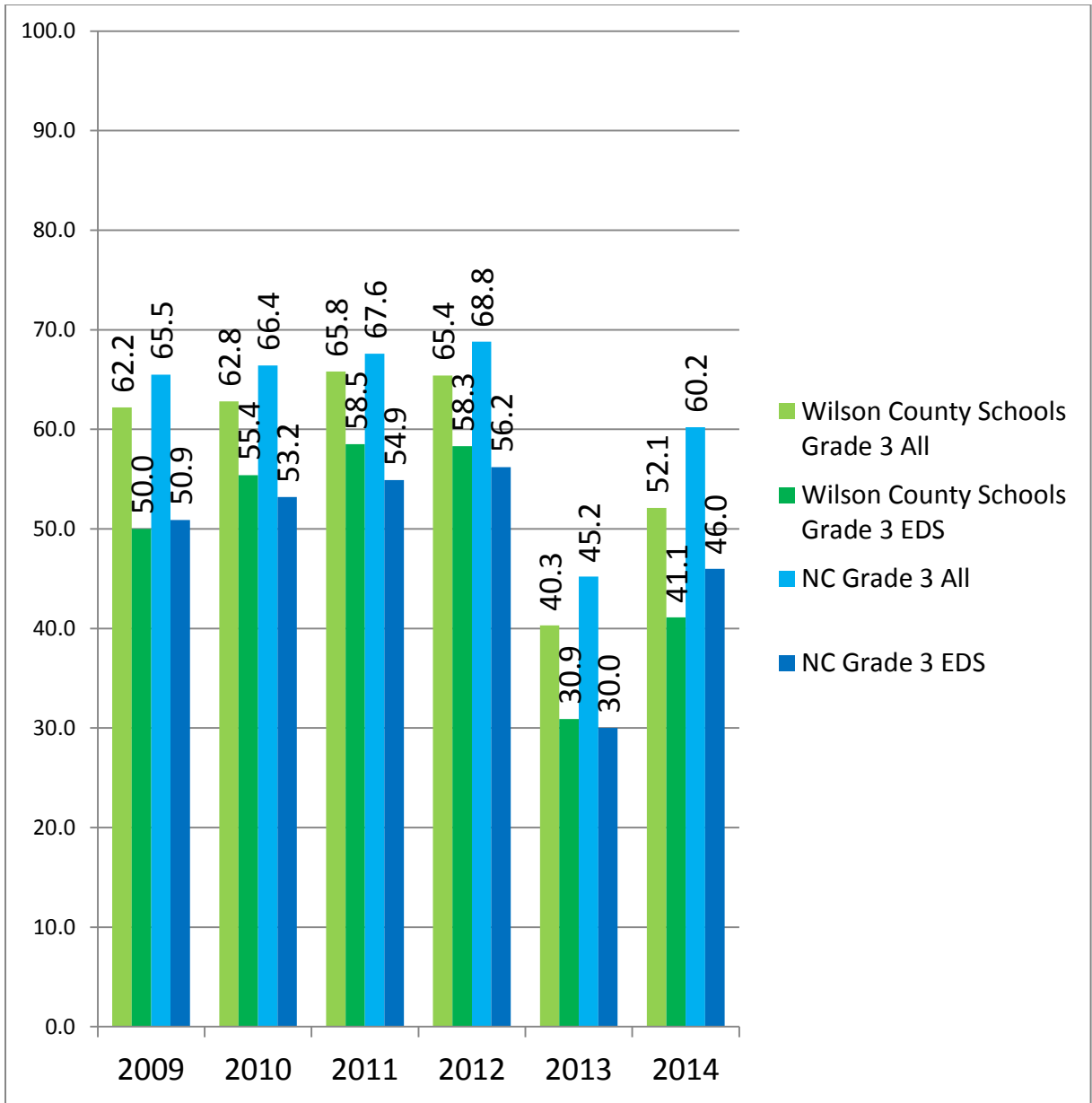


Figure 4. 3rd Grade reading proficiency 2009-2014 as measured by NC EOG.

n.d.). Students who score a level 1 or 2 on the end-of-grade assessments are considered not having sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level or are minimally prepared to be successful at the next grade level. Students who score a level 3 or 4 on the North Carolina End-of-Grade Reading assessment are considered to be prepared for the next grade level.

There were 156 students who participated in the literacy pull-out intervention program for the 2013-2014 academic school year. According to the data, 43 of the student participants scored a level 3 or 4 on the North Carolina End-of-Grade Reading assessment for the 2013-2014 academic school (see Table 6). In essence only, 28% of the students who participated in the study were considered to be prepared for the next grade level. The remaining 72% of students who participated in the study were considered not be prepared for the next grade level.

Study Questions

Four study questions were addressed in this study. The study questions were identified in four categories: (a) African American males, (b) African American females, (c) Hispanic males, and (d) Hispanic females.

Study Question One

Student developmental scale scores and achievement levels were examined to determine if African-American male third grade at-risk students were proficient in reading for the 2013-2014 academic school year. Thus, did the literacy pull-out intervention impact North Carolina End-of-Grade Reading test scores for African-American male third grade at-risk students?

The literacy pull-out intervention did not impact North Carolina End-of-Grade Reading test scores for African-American male third grade at-risk students. African-American male third

Table 6

2014 NC EOG Achievement Level Results

Achievement Level	African American Male	African American Female	Hispanic Male	Hispanic Female	Total
Level 1	24	16	6	5	51
Level 2	17	24	10	11	62
Level 3	12	5	2	3	22
Level 4	9	5	2	5	21
Level 5	0	0	0	0	0

grade at-risk students scored a Level 2 and were not proficient on the North Carolina End-of-Grade Reading test.

Study Question Two

Student developmental scale scores and achievement levels were examined to determine if African-American female third grade at-risk students were proficient in reading for the 2013-2014 academic school year. Thus, did the literacy pull-out intervention impact North Carolina End-of-Grade Reading test scores for African-American female third grade at-risk student?

The literacy pull-out intervention did not impact North Carolina End-of-Grade Reading test scores for African-American female third grade at-risk students. African-American female third grade at-risk students scored a Level 2 and were not proficient on the North Carolina End-of-Grade Reading test.

Study Question Three

Student developmental scale scores and achievement levels were examined to determine if Hispanic male third grade at-risk students were proficient in reading for the 2013-2014 academic school year. Thus, did the literacy pull-out intervention impact North Carolina End-of-Grade Reading test scores for Hispanic male third grade at-risk students?

The literacy pull-out intervention did not impact North Carolina End-of-Grade Reading test scores for Hispanic male third grade at-risk students. Hispanic male third grade at-risk students scored a Level 2 and were not proficient on the North Carolina End-of-Grade Reading test.

Study Question Four

Student developmental scale scores and achievement levels were examined to determine if Hispanic female third grade at-risk students were proficient in reading for the 2013-2014

academic school year. Thus, did the literacy pull-out intervention impact North Carolina End-of-Grade Reading test scores for Hispanic female third grade at-risk students?

The literacy pull-out intervention did not impact North Carolina End-of-Grade Reading test scores for Hispanic female third grade at-risk students. Hispanic female third grade at-risk students scored a Level 2 and were not proficient on the North Carolina End-of-Grade Reading test.

Conclusions

Conclusions derived from this study were based on the data analyzed from the proficiency scores of the 2013-2014 Fall administration of the third grade North Carolina Beginning-of-Grade Reading test and the proficiency scores of the 2014-Spring administration of the third grade North Carolina End-of-Grade Reading test. The following four conclusions were drawn:

1. The literacy pull-out intervention strategy did not impact proficiency of third grade African-American male at-risk students who participated in the program.

There were 62 African American males who participated in the literacy pull-out intervention program for the 2013-2014 academic school year. Of the 62 African-American male students who participated in the literacy pull-out intervention program, 24 scored a Level 1, 17 scored a Level 2, 12 scored a Level 3, and 9 scored a Level 4 on the North Carolina Third Grade End-of-Grade Reading test. They averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading test for the 2013-2014 school year. Those same students averaged a 434 developmental scale score on the North Carolina End-of-Grade Reading test at the end of the 2013-2014 school year. African American males averaged 9 points growth from the beginning of the school year to the end of the school year. The African American at-risk

males, on average, scored a Level 1 and were not proficient as a group on the North Carolina Beginning-of-Grade Reading test. The student's average achievement level on the North Carolina End-of-Grade Reading test was a Level 2.

2. The literacy pull-out intervention strategy did not impact proficiency of third grade African-American female at-risk students who participated in the program.

There were 50 African-American female third grade at-risk students who participated in the literacy intervention pull-out program for the 2013-2014 academic school year. Of the 50 African-American female students who participated in literacy pull-out intervention program, 16 scored a Level 1, 24 scored a Level 2, 5 scored a Level 3, and 5 scored a Level 4 on the North Carolina Third Grade Reading End-of-Grade test. They averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade reading test and a 434 developmental scale score on the North Carolina End-of-Grade reading test for the 2013-2014 school year. The students averaged 9 points growth from the beginning of the year assessment and the end of year assessment. The students averaged a Level 1 on the third Beginning-of-Grade reading test and averaged a Level 2 on the third grade End-of-Grade reading test. The students were not considered proficient according to North Carolina state standards on the North Carolina Beginning-of-Grade Reading assessment nor were they proficient on the North Carolina End-of-Grade assessment (see Table 4). The literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for African American female third grade at-risk students.

3. The literacy pull-out intervention strategy did not impact proficiency of third grade Hispanic male at-risk students who participated in the program.

Twenty Hispanic male at-risk students participated in the literacy pull-out intervention program for the 2013-2014 academic school year. Of the 20 Hispanic males who participated in the literacy pull-out intervention program, 6 scored a Level 1, 10 scored a Level 2, 2 scored a Level 3, and 2 scored a Level 4 on the third grade North Carolina End-of-Grade Reading test. They averaged a 424 developmental scale score on the North Carolina Beginning-of-Grade Reading assessment and a 433 developmental scale score on the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year. The Hispanic male at-risk population averaged 9 points growth from the beginning of the year assessment to the end of year assessment. The students averaged a Level 1 development scale score on the North Carolina Beginning-of-Grade Reading assessment and a Level 2 on the North Carolina End-of-Grade Reading assessment (see Table 4). Although the students made academic growth for the year, the students did not reach proficiency by the end of the 2013-2014 school year, therefore the literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for Hispanic male third grade at-risk students.

4. The literacy pull-out intervention strategy did not impact proficiency of third grade Hispanic female at-risk students who participated in the program.

Twenty-four at-risk Hispanic females participated in the literacy pull-out intervention program for the 2013-2014 academic school year. Of the 24 Hispanic female at-risk students who participated in the literacy pull-out intervention program, 5 scored a Level 1, 11 scored a Level 2, 3 scored a Level 3, and 5 scored a Level 4 on the North Carolina End-of-Grade Reading test. The students averaged a 425 developmental scale score on the North Carolina Beginning-of-Grade Reading assessment and averaged a 436 developmental scale score on the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year. The average

developmental scale score growth for the Hispanic female at-risk student population was 10 points growth for the 2013-2014 school year. The Hispanic female at-risk population made the most growth out of the four groups that participated in the study. The Hispanic females also had the highest developmental scale score on the North Carolina End-of-Grade Reading assessment. The Hispanic females averaged a Level 1 proficiency score on the North Carolina Beginning-of-Grade Reading assessment and a Level 2 proficiency score the North Carolina End-of-Grade Reading assessment for the 2013-2014 school year (see Table 4). On average, the Hispanic female population who participated in the study did not meet proficiency in reading for the 2013-2014 school year. The literacy pull-out intervention strategy did not impact North Carolina End-of-Grade Reading test results for third grade at-risk Hispanic female students.

Although principals' and teachers' perception of the literacy pull-out intervention program is that the program is effective, student proficiency of the third grade at-risk students on the North Carolina End-of-Grade Reading test did not meet the state proficiency average for third grade at-risk students. Therefore, the literacy pull-out intervention program did not impact proficiency of third grade at-risk students on the third grade North Carolina End-of-Grade Reading test.

Recommendations

The researcher has reason to believe that the literacy pull-out intervention program could have made an impact on student proficiency on the North Carolina Third Grade End-of-Grade Reading assessment if the teachers had knowledge of how to administer effective interventions and if the teachers had knowledge of how to analyze the intervention data. The teachers in Wilson County Schools were not trained to administer Tier 1, Tier 2 or Tier 3 interventions to improve student achievement. The district does not provide professional development on

providing effective interventions for students who are at-risk of failing. The district does expect teachers to provide interventions, but has not provided any guidance on how to implement interventions during pull-out or in the regular classroom. Teacher education programs do not train student teachers how to administer effective interventions or how to recognize what interventions are needed for a student who is failing reading.

There is also the possibility that teachers do not know how to teach reading effectively. Educators spend a majority of their time discussing effective instruction, but have not devised a plan to ensure that teachers have the knowledge needed to provide students with effective instruction.

Based upon the findings and conclusions of this study, the following nine recommendations were made.

1. A universal screener should be given at the beginning of the school year to determine student strengths and weaknesses.

It is important for teachers to know the academic strengths and weaknesses of students at the beginning of the academic school year. Individual interventions to address student weaknesses should begin early in the academic school year to “fill” the gaps the student has in literacy to ensure academic success for the student.

2. Student data from the previous year should be used to select students to participate in the literacy pull-out intervention program at the beginning of the school year.

The students should not be placed into the program three weeks after the school year begins because instructional time has been lost. That lost time should have been used to implement individualized interventions for the students to improve academic achievement of the students. The data collected from the universal screener administered at the beginning of the

academic school year should be used to make adjustments to the student intervention group once the data is analyzed.

3. Interventions should be implemented based on student weaknesses. The interventions should be differentiated to meet the individual needs of the students.

The interventions should be individualized and tailored to meet the individual needs of the student. If the interventions address the weaknesses of individual students, the students are more apt to be successful in school.

4. Students in the literacy pull-out intervention program should remain in the program for at least 20 weeks.

The students need to have consistency in the literacy pull-out intervention program to be successful. Once the students are making progress and their individual needs are being met, the students will begin to be successful in the classroom. The students should remain in the program to build a strong, solid foundation in reading.

5. Interventions should include a combination of phonics, phonemic awareness, comprehension, and reading levels.

The interventions should focus on the individual needs of the students. Phonics, phonemic awareness, comprehension, and reading levels are all important to the success of students. The literacy teacher should not isolate the interventions because the student is expected to be able to read and comprehend grade level text and be proficient on the North Carolina Third Grade Reading End-of-Grade test.

6. Provide professional development to teach teachers how to provide effective interventions to students who are at-risk of failing reading.

Classroom teachers do not know which interventions to implement to improve literacy skills of students who are not on grade level. The school and school district should provide professional development to provide teachers with strategies and effective interventions that will meet the academic needs of at-risk students. The teachers will be more confident and knowledgeable about how to help and improve literacy skills of at-risk students.

7. Provide professional development to teach teachers how to teach reading effectively to improve student achievement.

Many teachers do not know how to teach reading to at-risk students. The school and school district should provide professional development to teachers to teach them how to teach reading effectively. The students and teachers will benefit.

8. Classroom teachers and literacy teachers should focus on the same basic reading skills.

Interventions should be an extension of classroom instruction. Classroom teachers and literacy teachers should collaborate weekly to create lessons that are an extension of skills that are taught in the classroom. Students who are in the literacy pull-out intervention program lack the basic reading skills that the students need to be successful academically therefore, it is important for the classroom teacher and literacy teacher to collaborate and focus on the same literacy skill so the student has every opportunity to have academic successful,

9. Determine a threshold to determine effectiveness of the program.

District leaders should set a threshold (75% of students proficient on the North Carolina Third Grade End-of-Grade Reading test) to determine if the literacy intervention program made an impact on student proficiency. There must be a baseline to determine the effectiveness of the literacy intervention program and to determine if the program is worth keeping, should the

program be revamped to provide better results for students, or should the district do away with the literacy intervention program altogether.

REFERENCES

- Abari, T. (2014). *eHow*. Retrieved from http://www.ehow.com/facts_6166835_definition-reading-intervention.html
- Al Otaiba, S., & Fuchs, D. (2006). Who are the young children for whom best practices in reading are ineffective? *Journal of Learning Disabilities, 39*(5), 414-431.
- Al Otaiba, S., & Lake, V. E. (2007). Preparing special educators to teach reading and use curriculum-based assessments. *Reading and Writing: An Interdisciplinary Journal, 20*(6), 591-617.
- Apel, K., Brimo, D., Diehm, E., & Apel, L. (2013). Morphological awareness intervention with kindergarteners and first- and second-grade students from low socioeconomic status homes: A feasibility study. *Language, Speech, and Hearing Services in Schools, 44*(2), 161-173.
- Archambault, I., Janosz, M., & Chouinard, R. (2012). Teacher beliefs as predictors of adolescents' cognitive engagement and achievement in mathematics. *Journal of Educational Research, 105*, 319-328.
- Arnbak, E. (2004). When are poor reading skills a threat to educational achievement? *Reading and Writing: An Interdisciplinary Journal, 17*, 459-482.
- Assessment Brief: North Carolina READY Beginning-of-Grade 3 English Language Arts/Reading Test*. (2014). Retrieved from <http://ncpublicschools.org/accountability/testing>
- Associates, L. P. (2004a). A closer look at the five essential components of effective reading instruction: A review of scientifically based reading research for teachers. *Effective Reading Instruction, 1-44*.

- Associates, L. P. (2004b). A closer look at the five essential components of reading instruction: A review of scientifically based reading research for teachers. *Learning Point Associates*, 1-44.
- Bainbridge, J. M., & Macy, L. (2008). Voices: Student teacher link teacher education to perceptions of preparedness for literacy teaching. *Teacher Education Quarterly*, 35(2), 65-83.
- Baker, B., Sciarra, D., & Farrie, D. (2012). *Is school funding fair? A national report card*. (2nd ed.). Education Law Center.
- Beare, P., Marshall, J., Torgerson, C., Tracz, S., & Chiero, R. (2012). Toward a culture of evidence: Factors affecting survey assessment of teacher preparation. *Teacher Education Quarterly*, 159-171.
- Billings, E. S. (2009). "El Alfabetismo Y Las Familias Latinas": A critical perspective on the literacy values and practices of Latino families with young children. *Journal of Latinos And Education*, 252-269.
- Black, S. (2002). Whose economic wellbeing? A challenge to dominant discourses on the relationship between literacy and numeracy skills and (un)employment. 1-13.
- Blake, J. J., Butler, B. R., Lewis, C. W., & Darensbourg, A. (2011). Unmasking the inequitable discipline experiences of urban Black girls: Implications for urban educational stakeholders. *Urban Review: Issues and Ideas in Public Education*, 90-106.
- Boeriswati, E. (2012). The implementing model of empowering eight for information literacy. *US-China Education Review*, A7, 650-661.
- Brady, R. C. (2003). *Can failing schools be fixed?* Washington, DC: Thomas B. Fordham Foundation.

- Brand, S. T., & Dalton, E. M. (2012). Universal design for learning: Cognitive Theory into practice for facilitating comprehension into early literacy. *Forum on Public Policy Online*.
- Briefing: K-3 Reading*. (2013, March 13). Retrieved from North Carolina Department of Public Instruction: <http://legislative.ncpublicschools.gov/background-inf>
- Brown, K. (2012, March 6). *The impact of illiteracy*. Retrieved from Literacy Council of West Alabama: <http://literacywa.org/the-impact-of-illiteracy/>
- Brown, S., & Kappes, L. (2012). *Implementing the common core state standards: A primer on "close reading of text"*. Washington, DC: Aspen Institute.
- Buchanan, R., Holmes, K., Preston, G., & Shaw, K. (2012). Basic literacy or new literacies? Examining the contradictions of Australia's education revolution. *Australian Journal of Teacher Education*, 37(6), 96-110.
- Bufalina, J., Wang, C., Gomez-Bellenge, F. X., & Zalud, G. (2010). What's possible for first-grade at-risk literacy learners receiving early intervention services. *Literacy Teaching and Learning*, 15(1& 2), 1-15.
- Carnegie Corporation of New York. (2010). *Time to act: An agenda for advancing adolescent literacy for college and career success. Final report from Carnegie Corporation of New York's Council on Advancing Adolescent Literacy*. New York: Carnegie Corporation of New York.
- Caro, D. H. (2009). Socio-economic status and academic achievement trajectories from childhood to adolescence. *Canadian Journal of Education*, 32(3), 558-590.
- Carolina, P. S. (n.d.). *North Carolina pretest- grade 3* . Retrieved from North Carolina Public Schools: <http://www.ncpublicschools.org>

- Casserly, M., Lewis, S., Simon, C., Uzzell, R., Palacios, M., & Schools, C. O. (2012). *A call for change: Providing solutions for Black male achievement*. Washington, DC: Council of the Great City Schools.
- Chidindi, J. (2012). Creating enabling environment for inclusion of students with developmental disabilities. Online Submission.
- Chun, H., & Dickson, G. (2011). A psychoecological model of academic performance among Hispanic adolescents. *Journal Youth Adolescence*, 1581-1594.
- Cihon, T. M., Gardner III, R., Morrison, D., & Paul, P. V. (2008). Using visual phonics as a strategic intervention to increase literacy behaviors for kindergarten participants at-risk for reading failure. *Journal of Early and Intensive Behavior Intervention*, 5(3), 138-266.
- Clearinghouse, W. W. (2006a). *Reading Mastery/SRA/McGraw-Hill*. What Works Clearinghouse.
- Clearinghouse, W. W. (2006b). Reading recovery. *What Works Clearinghouse*.
- Clearinghouse, W. W. (2007a). *Corrective reading*. *What Works Clearinghouse Intervention Report*. What Works Clearinghouse.
- Clearinghouse, W. W. (2007b). *Reading recovery*. What Works Clearinghouse.
- Clearinghouse, W. W. (2008). *Reading recovery*. Rockville: What Works Clearinghouse.
- Clearinghouse, W. W. (2010). *Corrective reading*. *What Works Clearinghouse Intervention Report*. What Works Clearinghouse.
- Clearinghouse, W. W. (2012). Reading mastery. *Institute of Education Sciences*, 1-19.
- Clearinghouse, W. W. (2013a). *Reading recovery [R]*. *What Works Clearinghouse. Updated*. What Works Clearinghouse.

- Clearinghouse, W. W. (2013b). *What Works Clearinghouse. Reading Mastery. Revised. What Works Clearinghouse Intervention Report*. What Works Clearinghouse.
- Cohen, D. K., & Bhatt, M. P. (2012). The importance of infrastructure development to high-quality literacy instruction. *Future of Children*, 22(2), 117-138.
- Collin-Hansen. (2012). Education at risk-educational care as part of the parental responsibilities for the child. *US- China Education Review, B 1*, 124-129.
- Comings, J., Reader, S., & Sum, A. (2001). *Building a level playing field: The need to expand and improve the national and state adult education and literacy systems*. Boston: National Center for the Study of Adult Learning and Literacy.
- CommonCoreState Standards Initiative: Preparing America's Students for College & Career*. (n.d.). Retrieved from <http://www.corestandards.org/about-the-standards/>
- CommonCoreState Standards Initiative: Preparing America's Students For College & Career*. (2012). Retrieved from Common Core State Standards Initiative: <http://www.corestandards.org/>
- Corrin, W., Lindsay, J., & Somers, M.A. (2012). *Evaluation of the content literacy continuum: Report on program impacts, program fidelity, and contrast*. . Washington, DC: National Center for Education Evaluation and Regional Assistance.
- Costley, K. C. (2013). *Ongoing professional development: The prerequisite for and continuation of successful inclusion meeting the academic needs of special students in public schools*. Online Submission.
- DeCastro-Ambrosetti, D., & Cho, G. (2011). A look at "lookism". A critical analysis of teachers' expectations based on students appearance. *Multicultural Education*, 18(2), 51-54.

- Drakeford, W. (2012). The effects of cooperative learning on the classroom participation of students placed at risk for societal failure. *Psychology Research*, 2(4), 239-246.
- Drew, S. V. (2012). Open up the ceiling on the common core state standards: Preparing students for 21st-century literacy--Now. *Journal of Adolescent & Adult Literacy*, 56(4), 321-330.
- Dunn, M. (2010). Response to intervention and reading difficulties: A conceptual model that includes reading recovery. *Learning Disabilities: A Contemporary Journal*, 8(1), 21-40.
- Ed.gov. (2002, January 07). Retrieved from U.S. Department of Education:
<http://www2.ed.gov/nclb/overview/intro/execsumm.html>
- Ed.gov. (2004, September 15). Retrieved from U.S. Department of Education:
<http://www2.ed.gov/policy/elsec/leg/esea02/pg1.html#sec101>
- Esch, C., Koppich, J., & Seder, R. (2011). Meaningful credential renewal: A policy proposal to strengthen teaching quality in California. *New America Foundation*, 1-20.
- Fagan, W. T. (1990). *Literacy for participation in the economy*.
- Filippini, Alexis L., Gerber, Michael M., Leafstedt, J. M. (2012). A Vocabulary-Added Reading Intervention for English Learners At-Risk of Reading Difficulties. *International Journal of Special Education*, 27(3), 14-26.
- Fitzpatrick, J., Sanders, J., & Worthen, B. (2012). *Program evaluation: Alternative approaches and practical guidelines*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Forrest, S. N. (2004). Implications of No Child Left Behind on family literacy in a multicultural community. *Clearinghouse*, 41-45.
- Foster, M. (2012). *The Adult Education and Economic Growth Act: Toward a modern adult education system and a more educated workforce*. Washington, DC: Center for Law and Social Policy, Inc.

- Foster, S., & Beddie, F. (2005). *Adult literacy and numeracy. At a glance*. Adelaide: National Centre for Vocational Research (NCVER).
- Fuchs, L. S. (2004). Identifying reading disabilities by responsiveness-to-instruction: Specifying measures and criteria. *Learning Disability Quarterly*, 216-227.
- Gibson, S. (2010). Critical readings: African American girls and urban fiction. *Journal of Adolescent & Adult Literacy*, 53(7), 565-574.
- Goldman, S. R. (2012). Adolescent literacy: Learning and understanding content. *The Future of Children*, 22(2), 89-106.
- Gonzalez, J. M., Szecsy, E. M., & University, A. S. (2002). *The condition of Hispanic Education in Arizona, 2002*.
- Goodrich, J. M., & Lonigan, C. J. (2013). Do early literacy skills in children's first language promote development of skills in their second language? An experimental evaluation of transfer. *Journal of Educational Psychology*, 105(2), 414-426.
- Goss, C. L., & Brown-Chidsey, R. (2012). Tier 2 Reading Interventions: Comparison of reading mastery and foundations double dose. *Preventing School Failure*, 56(1), 65-74.
- Groen, M. (2012). NCLB - The Educational Accountability Paradigm in historical perspective. *American Educational History Journal*, 39(1), 1-14.
- Grossen, B. (n.d.). *The research base for reading mastery, SRA*. Retrieved from University of Oregon: <http://darkwing.uoregon.edu/~adiiep/rdgtxt.htm>
- Guisbond, L., Neill, M., & Schaeffer, B. (2012). *NCLB's lost decade for educational progress: What can we learn from this policy failure?* Jamaica Plain: Fair Test National Center for Fair & Open Testing.
- Hansen, A. L. (2005). *Hispanic student achievement*. Education Partnerships, Inc.

- Hartley, R., & Horne, J. (2005). *Social and economic benefits of improved adult literacy: Towards a better understanding: Support document*. Adelaide: National Centre for Vocational Education Research.
- Hedrick, W. B., & Pearish, A. B. (1999). Good reading instruction is more important than who provides the instruction or where it takes place. *Reading Teacher, 52*(7), 716-726.
- Hempenstall, K. (2008). Corrective reading: An evidence-based remedial reading intervention. *Australasian Journal of Special Education, 32*(1), 23-54.
- Hernandez-Gantes, V. M. (1995). *What influences eighth-grade Hispanic students' academic achievement? A structural equation analysis*. National Center of Education Statistics.
- Hill, H. C., Umland, K., Litke, E., & Kapitula, L. R. (2012). Teacher quality and quality teaching: Examining the relationship of a teacher assessment to practice. *American Journal of Education, 118*(4), 489-519.
- Hill, U. O. (2010). *Enhancing teaching practices to improve language and literacy skills for Latino dual-language learners. FPG Snapshot #62*. FPG Child Development Institute.
- Hines, E. M., & Holcomb-McCoy, C. (2013). Parental characteristics, ecological factors, and the academic achievement of African American males. *Journal of Counseling & Development, 9*(1), 68-77.
- Hinnant, J. B., O'Brien, M., & Ghazarian, S. R. (2009). The longitudinal relations of teacher expectations to achievement in the early school years. *Journal of Educational Psychology, 101*(3), 662-670.
- Hodges, J., & Pringle, L. S. (2013). Meeting the learning needs of African American youth in the library. *School Library Monthly, 29*(6), 14-16.

- Hodgman, M. R. (2012). Boundaries and applications: The teacher quality debate in America. *Journal of College Teaching & Learning*, 9(3), 223-228.
- Hughes, C. A. (2011). Response to intervention: A research-based summary. *Theory Into Practice*, 50, 4-11.
- Instruction, N. C. (2007). *Assessment brief: North Carolina end-of-grade tests*. North Carolina Department of Public Instruction.
- Instruction, N. C. (n.d.a.). *North Carolina Department of Public Instruction*. Retrieved from <http://www.ncpublicschools.org/program-monitoring/esea>
- Instruction, N. C. (n.d.b.). *The ABCs of Public Education 2012 Accountability Report Background Packet*. Retrieved from Public Schools of North Carolina: <http://ncpublicschools.org/docs/home/2012-abc-packet.pdf>
- Jacob, A. (2012). Examining the relationship between student achievement and observable teacher characteristics: Implications for school leaders. *International Journal of Educational Leadership Preparation*, 7(3), 1-13.
- Jenkins, S. (2009). How to maintain reading success: Five recommendations from a struggling male reader. *The Reading Teacher*, 63(2), 159-162.
- Kauerz, K. (2002). *Literacy, No Child Left Behind Policy Brief*. Denver: Education Commission of the States.
- Kirsch, I. S. (1993). *Adult literacy in America: A first look at the results of the National Adult Literacy Survey*. Educational Testing Service.
- Klingner, J. D., & Vaughn, S. J. (1998). Inclusion or pull-out: Which do students prefer? *Journal of Learning Disabilities*, 31(2), 148-158.

- Ladner, M., & Lips, D. (2010). Demography as destiny? Hispanic Student success in Florida. *Education Digest: Essential Readings Condensed for Quick Review*, 58-64.
- Lee, J. (2010). Gender and outcomes. Data Notes. Volume 5, Number5, Number 4. *Achieving the Dream*, 1-5.
- Literacy, N. I. (2009). *Early beginnings: Early literacy knowledge and instruction*. National Institute for Literacy.
- Lonigan, C. J. (2009). *Developing early literacy: Report of the National Early Literacy Panel. Executive Summary. A Scientific Synthesis of Early Literacy Development and Implications for Intervention*. National Institute for Literacy.
- Lopez, J. P. (2013). Speaking with them or speaking for them: A conversation about the effect of stereotypes in the Latina/Hispanic women's experiences in the United States. *New Horizons in Adult Education & Human Resource Development*, 25(2), 99-106.
- Luschei, T. F., & Chudgar, A. (2011, November 12). Teachers, student achievement and national income: A cross-national examination of relationships and interactions. *Prospects: Quarterly Review of Comparative Education*, 41(4), 507-533.
- Maglakelidze, S., Giorgobiani, Z., & Shukakidze, B. (2013). *Schools funding in Georgia: Changes, problems and analysis*. Online Submission.
- Matthews, J., Kizzie, K. T., Rowley, S. J., & Cortina, K. (2010). *African Americans and boys: Understanding the literacy gap, tracing academic trajectories, and evaluating the role of learning-related skills*. Michigan: Journal of Educational Psychology.
- McDaniel, S. C., Duchaine, E. L., Jolivet, K., & University, G. S. (2010). Struggling readers with emotional and behavioral disorders and their teachers: Perceptions of corrective reading. *Education And Treatment of Children*, 33(4), 585-599.

- McIntyre, E., Powell, R., Coots, K. B., Jones, D., Powers, S., Deeters, F., & Petrosko, J. (2005). Reading instruction in the NCLB era: Teachers' implementation fidelity of early reading models. *Journal of Educational Research & Policy Studies*, 5(2), 66-102.
- McLean, C., & Rowsell, J. (March 2013). (Re)Designing literacy Teacher Education: A call for change. *Teaching Education*, 24(1), 1-26.
- McMaster, C. (2013). Building inclusion from the ground up: A review of whole school re-culturing programmes for sustaining inclusion change. *International Journal of Whole Schooling*, 9(2), 1-24.
- McPike, L. (2007). Where we stand: K-12 Literacy. *American Federation of Teachers*, 1-36.
- McPike, L. (2011). *Pre-K-12 Literacy: State of the Nation. The Progress of Education Reform*. Washington, DC: Education Commission of the States.
- Metcalf, T. (2014). *What's your plan? Accurate decision making within a multi-tier system of supports: Critical areas in Tier 2*. Retrieved from RTI Action Network: A Program of the National Center for Learning Disabilities:
<http://www.rtinetwork.org/essential/tieredinstruction/tier2/whats-your-plan-accurate-decision-making-within-a-multi-tier-system-of-supports-critical-areas-in-tier>
- Mingle, J., Chalous, B., & Birkes, A. (2005). *Investing wisely in adult learning is key to state prosperity*. Washington, DC: Southern Regional Education Board.
- Mirci, P., Loomis, C., & Hensley, P. (2011). Social justice, self-systems, and engagement in learning: What students labeled as "at-risk" can teach us. *Educational Leadership and Administration: Teaching and Program Development*, 23, 57-74.
- Muhammad, G. E. (2012). Creating spaces for Black adolescent girls to "write it out!". *Journal of Adolescent & Adult Literacy*, 56(3), 203-211.

- National Institute for Literacy, NC. (2008). *Developing early literacy: Report of the National Early Literacy Panel. A scientific synthesis of early development and implications for interventions*. National Institute For Literacy.
- Ng, C.H. C., Bartlett, B., & Chester, I. (2013). Improving reading performance for economically disadvantaged students: Combining strategy instruction and motivational support. *Reading Psychology, 257-300*.
- Odom, S. L., Buysse, V., & Soukakow. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Interventions, 33(4)*, 344-356.
- Ortiz, D. L., & Guss, T. O. (1995). *Counseling implications for male Hispanic dropouts: Forging a prevention program*. Hays: FortHaysStateUniversity.
- Ortiz, M., Folsom, J. S., Otaiba, S. A., Greulich, L., Thomas-Tate, S., & Connor, C. M. (2012). The Componential Model of Reading: Predicting first grade reading performance of culturally diverse students from ecological, psychological, and cognitive factors assessed at Kindergarten entry. *Journal of Learning Disabilities, 45(5)*, 406-417.
- Ott, J. A. (2001). *Improving workforce literacy for 21st century jobs*. ClemsonUniversity.
- Pruisner, P. (2009). Moving beyond No Child Left Behind with the merged model for reading instruction. *TechTrends: Linking Research And Practice To Improve Learning, 53(2)*, 41-47.
- Public Schools of North Carolina. (n.d.). Retrieved from Public Schools of North Carolina: <http://www.ncpublicschools.org/federalprograms/titleI/>
- Randolph, K., & Wilson-Younger, D. (2012). *Is No Child Left Behind effective for all students? Parents don't think so*.

- Reardon, S. F. (2012). Patterns of literacy among U.S. students. *Future of Children*, 22(2), 18-48.
- Reglin, G., & Losike-Sedimo, N. (2012). Effects of a parent support reading intervention on seventh-grade at-risk students' reading comprehension scores. *Reading Improvement*, 49(1), 17-27.
- Reid, E. R. (2010). The history of early literacy research and its effect on the project "Enriching a Child's Literacy Environment (ECLE)". *Forum On Public Policy Online*, 1-31.
- Riegle-Crumb, C. (2010). More girls go to college: Exploring the social and academic factors behind the female postsecondary advantage among Hispanic and White students. *Research in Higher Education*, 573-593.
- Ritchey, K. D., Silvermann, R. D., Montanaro, E. A., Speece, D. L., & Schatschneider, C. (2012). Effects of a Tier 2 Supplemental Reading Intervention for at-risk fourth-grade students. *Exception Children*, 78(3), 318-334.
- Ross, S. G., & Begeny, J. C. (2011). Improving Latino, English language learners' reading fluency: The effects of small-group and one-on-one intervention. *Psychology in the Schools*, 48(6), 604-616.
- Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher education: Gaps in access and persistence study. Statistical Analysis Report*. Jessup: National Center for Education Statistics.
- Roza, M., & Simburg, S. (2013). *Student-based allocation to enable school choice*. Center on Reinventing Public Education.
- Rubie-Davies, C. M., Peterson, E., Irving, E., Widdowson, D., & Dixon, R. (2010). *Expectations of achievement: Student, teacher and parent perceptions*. Research in Education.

- Saenz, V. B., & Ponjuan, L. (2009). The vanishing Latino male in higher education. *Journal of Hispanic Higher Education*, 8(1), 54-89.
- Saenz, V. B., & Ponjuan, L. (2011). *Men of color: Ensuring the academic success of Latino males in higher education*. Institute for Higher Education Policy.
- Schmidt, T. (2008). *Scratching the surface of No Child Left Behind: How No Child Left Behind unfairly affects schools with significant proportions of disadvantaged students*. San Rafael.
- Schugurensky, D. (2001). 1965 Elementary and Secondary School Act, the "war on poverty" and Title 1. *Department of Adult Education, Community Development and Counselling Psychology*.
- Schwartz, R. M., Schmitt, M. C., & Lose, M. K. (2012). Effects of teacher-student ratio in response to intervention approaches. *The Elementary School Journal*, 112(4), 547-567.
- Schwartz, W. (2001). *Strategies for improving the educational outcomes of Latinas*. New York: Clearinghouse on Urban Education Institute for Urban and Minority Education.
- Sorhagen, N. S. (2013). Early teacher expectations disproportionately affect poor children's high school performance. *Journal of Educational Psychology*, 105(2), 465-477.
- States, E. C. (2011). Pre-K-12 Literacy: State of the Nation. The Progress of Education Reform. *Education Commission of the States*, 1-7.
- Swabey, K., Castleton, G., Penney, D., & Tasmania. (2010). Meeting the standards? Exploring preparedness for teaching. *Australian Journal of Teacher Education*, 35(80), 29-46.
- Tatum, A. W. (2006). Engaging African American males in reading. *Educational Leadership*, 63(5), 44-49.

- Teale, W. H., & Gambrell, L. B. (2007). Raising urban students' literacy achievement by engaging in authentic, challenging work. *Reading Teacher, 60*(8), 728-740.
- Thompson, S., Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., & Roey, S. J. (2012). *Highlights from PIRLS 2011: Reading achievement of U.S. fourth-grade students in an international context*. Washington, DC: National Center for Education Statistics.
- Timperley, H. S., & Phillips, G. (2003). Changing and sustaining teachers' expectations through professional development in literacy. *Teaching and Teacher Education, 19*(6), 627-641.
- Torgesen, J., Schirm, A., Castner, L., Vartivarian, S., Mansfield, W., & Myers, D. (2007). National Assessment of Title 1. Final Report Volume II: Closing the Reading Gap-Findings from a Randomized Trial of Four Reading Interventions for Striving Readers. *National Center For Education Evaluation And Regional Assistance*.
- Travers, E. (2009). *Complicated choices: Struggling to meet NCLB requirements and remain faithful to a school's educational vision and practice*. Philadelphia: Research for Action.
- Vadasy, P. F. (2013). Two-year follow-up of a code-oriented intervention for lower-skilled first graders: The influence of language status and word reading skills on third grade literacy outcomes. *Reading and Writing: An Interdisciplinary Journal, 26*, 821-843.
- Validity Evidence for mCLASS: Reading 3D and Student Performance on the 2012-2013 North Carolina End of Grade Reading Comprehension Test*. (2015, February 28). Retrieved from North Carolina Public Schools: www.ncpublicschools.org/docs/addendum-attachment02.pdf

- Vernon-Feagans, L., Gallagher, K., Ginsberg, M. C., Amendum, S., Kainz, K., Rose, J., & Burchinal, M. (2010). A diagnostic teaching intervention for classroom teachers: Helping struggling readers in early elementary school. *Learning Disabilities Research & Practice*, 25(4), 183-193.
- Vernon-Feagans, L., Kainz, K., Hedrick, A., Ginsberg, M., & Amendum, S. (2010). The targeted reading intervention: A classroom teacher professional development program to promote effective teaching for struggling readers in kindergarten and first grade. *Society for Research on Educational Effectiveness*, 1-20.
- Waldfoegel, J. (2012). The role of out-of-school factors in the literacy problem. *Future of Children*, 22(2), 39-56.
- Wat, A. (2012). *Governor's role in aligning early education and K-12 reforms: Challenges, opportunities, and benefits for children*. Washington, DC: National Governor's Association.
- Wayne, R. (2012). *What impact will NCLB waivers have on the consistency, complexity and transparency of state accountability systems?* Center on Education Policy.
- Weiner, S. (2011). Information literacy and the workforce: A review. *Education Libraries*, 34(2), 7-14.
- Williams, D. L. (2010). *Which literacy interventions work for adolescents that continue to struggle with reading in high school and how will they be provided?* Chaminade University.
- Wilson-Jones, L. (2003). Factors that promote and inhibit the academic achievement of rural elementary African American males in Mississippi: A qualitative study.

Wilson-Jones, L., & Caston, M. C. (2004). Cooperative learning on academic achievement in elementary African American males. *Journal of Instructional Psychology*, 31(4), 280-283.

Wood, S., & Jocius, R. (2013). Combating "ihate this stupid book!". *The Reading Teacher*, 66(8), 661-669.

APPENDIX A: PRINCIPAL INTERVIEW QUESTIONS

1. What format do you use to assign students to the literacy pull-out program?
2. What do you believe are the major assets of the literacy pull-out program in Wilson County?
3. What do you believe are the major weaknesses of the literacy pull-out program in Wilson County?
4. How do you assess the effectiveness of the literacy pull-out program?
5. How is the literacy pull-out program an extension of classroom instruction?
6. What are the expected outcomes of the literacy pull-out program?
7. How are literacy teachers evaluated to determine their effectiveness in improving student achievement?
8. What are some changes that need to be implemented to improve the effectiveness of the literacy pullout program?
9. What challenges have you faced with the implementation of the literacy pull-out program?
10. What is your impact on the literacy program in your building?
11. What is your perspective of the external guidance on the literacy program?

APPENIX B: TEACHER INTERVIEW QUESTIONS

1. What criteria are used to select students to participate in the literacy pull-out intervention program?
2. What strategies do you use to increase students' literacy skills?
3. What data is used to provide individualized, effective instruction for students?
4. How do you assess student achievement? How often do you assess student achievement?
5. What do you believe are the major assets of the literacy pull-out program? Major Weaknesses?
6. How is the literacy program an extension of classroom instruction?
7. What are some changes that need to be implemented to improve the effectiveness of the literacy pull-out program?
8. What are the expected outcomes of the literacy pull-out program?
9. What are some essential skills of an effective literacy teacher?
10. How do you know that the literacy pull-out intervention is effective?

APPENDIX C: INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY

University & Medical Center Institutional Review Board Office

4N-70 Brody Medical Sciences Building· Mail Stop 682

600 Moye Boulevard · Greenville, NC 27834

Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB

To: [Vernita Williams](#)

CC:

[Art Rouse](#)

Date: 7/28/2015

Re: [UMCIRB 14-002028](#)

The Impact of Literacy Interventions on Academic Performance of Third Grade At-Risk Students

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 7/27/2015 to 7/26/2016. The research study is eligible for review under expedited category # 5, 6, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Informed Consent to Participate in Research	Consent Forms
Principal & Teacher Interview Questions	Interview/Focus Group Scripts/Questions
Principal & Teacher Interview Questions	Surveys and Questionnaires
Vernita Williams Proposal 5-26-15 pdf	Study Protocol or Grant Application

The Chairperson (or designee) does not have a potential for conflict of interest on this study.
