

Closing the Literacy Gap: A Study of Read 180 and Differentiated Reading

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Abstract

The purpose of the study was to compare the effect of two remedial reading programs on closing the literacy gap. This study was set in a suburban school district (District X) in the Midwest outside of Kansas City. The population consisted of 8th grade students enrolled in the Read 180 program during the 2009-2011 school years, and students enrolled in Differentiated Reading during the 2011-2012 school year. During the course of this study the district aligned the English curriculum across the district, and the Differentiated Reading program was developed to assist students who were performing below grade level. This study was designed to determine which program was most effective in increasing student achievement as measured by the Scholastic Reading Inventory (SRI) assessment and the Communication Arts portion of the Missouri Assessment Program (MAP) assessment. Academic Achievement as measured by the SRI assessment was the first dependent variable. The independent variables included the reading program (Read 180 or Differentiated Reading), socioeconomic status (Free/Reduced or Full Pay), gender, and ethnicity (Minority or Non-minority) of the students enrolled. Analyses used to address the research questions revealed a significant difference between students enrolled in Differentiated Reading and students enrolled in Read 180 as measured by the SRI scores. Specifically a significant difference was found between male students enrolled in Differentiated Reading and male students enrolled in Read 180. However, most of the analyses revealed no significant difference in achievement as measured by SRI scores or CA MAP scores between students enrolled in Read 180 or Differentiated Reading. Recommendations for future research include a cohort study to determine student growth over multiple years in the Differentiated

Reading program. Additionally, it is recommended that the study be expanded to include a qualitative component that analyzes the student and teacher perceptions of the effectiveness of the Differentiated Reading program compared to the effectiveness of the Read 180 program.

Dedication

This process has been one of the greatest challenges of my educational career. I would not have had the strength to make it through to the end were it not for my Faith, Family, and amazing Friends. While it took much longer than I ever anticipated to complete this dissertation, my family stood by me, encouraged me, and never lost hope that I would accomplish this life goal. I would like to dedicate this work to my son. You are my inspiration and motivation for completing this journey! I love you to the moon and back.

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To my parents and siblings, thank you for understanding and helping take care of my little guy when we would come home for visits. I also want to thank you for your prayers and encouragement along the way. Even when I was unsure, you believed in me and pushed me to do what I did not think would be possible.

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Chapter One

Introduction

In an executive summary from the National Association of State Boards of Education (NASBE) a new precedent for literacy among Americans was set forth. The summary stated that, “Reading is a basic human right. An inability to read in today’s world is to be consigned to educational, social, and economic failure – an existence entirely devoid of meaningful life, liberty, or the pursuit of happiness” (National Association of State Boards of Education 4). Unfortunately, far too many of America’s youth have been unable to exercise this basic human right. One could read numerous articles on adolescent literacy, and the statistics are all the same, “approximately 70 percent of adolescents struggle to read” (National Association of State Boards of Education 4). According to the National Assessment of Educational Progress, “most students read at only a basic level of understanding, less than half of the student population can read at an intermediate level, and Black and Hispanic students have the lowest reading levels of all” (Godina 549). As early as 1983 when the “A Nation at Risk” report was published, a need for adolescent literacy programs was apparent. According to the report, “about 13 percent of all 17-year-olds in the United States can be considered functionally illiterate. Functional illiteracy among minority youth may run as high as 40 percent” (U.S. Department of Education). The statistics have declined since the A Nation at Risk report was released to the American public. The disparity appeared to be growing among minority and at-risk populations as compared to non-minority students. In light of the reauthorization of No Child Left Behind (now the Elementary and Secondary Education Act-ESEA) the question of whether intensive literacy

remediation will influence academic achievement is a heavy one. With all of the negative publicity and opinions related to the ESEA, there also comes guidance in the area of addressing adolescent literacy.

Author John Ogbu was quoted in a study conducted by Nancy Baron that focused specifically on the difficulty minority students have faced in an academic environment that does not understand how to work with diversity (Baron 4). According to Ogbu,

School success does not depend only on what schools do, but also on the cultural knowledge and strategies students bring to school. In the case of minority students, their cultural knowledge or cultural models and educational strategies are influenced both by wider American societal norms and by their group's pattern of adaptation to minority status. (qtd. in Baron 1)

In recent years there has been a great deal of emphasis placed on the underachievement of minority and at-risk students. This emphasis has had a significant impact specifically on a district in the suburban Kansas City, Missouri area that is identified as District X for the purposes of this study. The student population in District X has experienced a socioeconomic and cultural shift over the past twenty-five years that has dramatically impacted literacy and the academic achievement throughout the district as determined through state and local assessment scores. With this changing population, new challenges have been presented in order to ensure that all students are achieving at a Proficient level as mandated through the federal legislation of No Child Left Behind. Table 1 shows the demographic shift in the district as reported in the 1990 and 2000 Census Reports. As shown below there was a significant increase in the minority population throughout the city between 1990 and 2000, and this demographic continued

to grow as the surrounding urban areas declined. When the information presented below is compared to the Census report of 1980, one can determine that there was not only an increase in the minority population, but that the city – which exists within a metroplex - as a whole experienced growth in population from 31,759 in 1980 to 60,053 in 1990. The provision of quality education has presented its own unique challenges with population growth alone; when coupled with a cultural shift in population, there have been entirely different challenges presented in ensuring the academic achievement of all students.

Table 1 *Census Report – Demographic Shift*

Race	Year		
	1990	2000	Change
	<i>N</i>	<i>N</i>	<i>N</i>
	(%)	(%)	(%)
White	53,013 (88.3)	46,274 (78.0)	-6,739 (-10.2)
Black	5,729 (9.5)	9,999 (16.9)	4,271 (7.3)
American Indian Alaskan	470 (0.8)	201 (0.3)	-269 (-0.4)
Asian	363 (0.6)	570 (1.0)	207 (0.4)
Hawaiian Pacific Islander	4 (0.0)	71 (0.1)	68 (0.1)
Hispanic	1,059 (1.8)	1,788 (3.0)	729 (1.3)
Minority	7,641 (12.7)	13,846 (23.3)	6,205 (10.6)

Source: Missouri Department of Elementary and Secondary Education *Annual Report of School Data*. Jefferson City: DESE, 2005. 2008. <www.mcids.dese.mo.gov>.

Table 2 depicts data from the student population of District X as compared to the student demographics in the state of Missouri as a whole for the years of 2001-2005. In addition to showing the increased student enrollment of minority students in the district, the table offers a comparison to the overall student enrollment by demographic for public schools in the state of Missouri. This shows that while the percentage of minority populations across the state remained consistent over the course of the five year time period, the suburban area selected for this study, District X, experienced substantial growth in the minority population thus causing a cultural shift in the educational environment as a whole.

Table 2 *School District Demographic Data*

	Year	Asian	Black	Hispanic	Indian	White
		N (%)	N (%)	N (%)	N (%)	N (%)
District	2001	114 (1.4)	2,309 (27.5)	255 (3.0)	42 (0.5)	5,673 (67.6)
	2002	117 (1.4)	2,465 (29.3)	268 (3.2)	37 (0.4)	5,539 (65.7)
	2003	117 (1.4)	2,699 (31.6)	335 (3.9)	38 (0.4)	5,359 (62.7)
	2004	112 (1.3)	2,943 (34.3)	368 (4.3)	33 (0.4)	5,114 (59.7)
	2005	125 (1.4)	3,196 (36.9)	411 (4.7)	46 (0.5)	4,886 (56.4)
Missouri	2001	10,385 (1.2)	155,627 (17.4)	16,256 (1.8)	2,802 (0.3)	708,863 (79.3)
	2002	10,867	155,825	17,845	2,870	703,781

	(1.2)	(17.5)	(2.0)	(0.3)	(79.0)
2003	11,522	158,245	20,265	2,936	701,502
	(1.3)	(17.7)	(2.3)	(0.3)	(78.4)
2004	12,108	160,505	22,738	3,194	697,420
	(1.4)	(17.9)	(2.5)	(0.4)	(77.8)
2005	13,005	158,382	25,079	3,430	691,951
	(1.5)	(17.8)	(2.8)	(0.4)	(77.6)

Source: Missouri Department of Elementary and Secondary Education *Demographic Profile 3*

Trend Report. Trend Report. Jefferson City: DESE, 1990-2000. 2008. www.dese.mo.gov.

As the cultural shift occurred within the community, a decline in student achievement began to occur as well. This cultural shift in school populations lead to declining student achievement when we fail to realize that all students are not raised with the same cultural values as it relates to educating students in a diverse population. This concept is reinforced in a book *Developing Engaged Readers in School and Home Communities*, when the authors stated “Hilliard contends that the school failure of minority children is due primarily to the systematic inequities in the delivery of instruction, whereby minority students are treated less favorably than their European American, middle-class, high achieving counterparts” (Thompson, Mixon and Serpell 47). When the local school district fails to recognize these disparities, there is likely to follow the development of a literacy gap. This issue of closing the literacy gap is not specific to District X or to the education of students in the state of Missouri; this is an area of concern that continues to draw national attention. It is for this reason that this study is devoted to addressing the widening literacy gap of adolescent readers. Specifically this study looked at the Read 180 reading improvement program along with the Reader’s Workshop model, known as Differentiated Reading, for the impact on closing the literacy gap among at-risk 8th grade students in District X. District X consists

of three middle schools – identified as Middle School A, B, and C for the purposes of this study. Both programs offered intensive remedial support for students identified as two or more years below grade level in their reading abilities, and was designed to assist students in achieving at or above grade level upon completion of the program.

BACKGROUND

Studies have been conducted previously regarding the achievement gap of minority students and those in poverty stricken areas as compared to non-minority student populations. Hypotheses have been made that assert minority underachievement is attributable to a variety of reasons that include but are not limited to: a lower IQ than white counterparts, socioeconomic differences, or cultural differences in the way that minority and children in poverty are raised. A book titled *The School Achievement of Minority Students: New Perspectives*, compiled by Ulric Neisser, addresses each of these areas through the lens of various authors including John Ogbu, A. Wade Boykin and Herbert P. Ginsburg. While this work was published in the early 1980s, many of their assertions as to the origin of low achievement and illiteracy among the minority populations and at-risk students continue to be applicable in the educational system as it exists today.

According to Neisser, environmentalists “...assign greater weight to the postnatal environmental factors than to genes or prenatal factors. They usually consider the socioeconomic status of a child’s parents as the most important environmental factor” (22). While arguments existed for a genetic difference that causes minority students to have a lower IQ than their white counterparts, those have failed to be substantiated through research. A much stronger and more credible argument has been made for the

academic achievement of minority and at-risk students to be lower due to the socioeconomic and cultural differences as established by Neisser through the work of John Ogbu. Ogbu went on to state that "...poor development during early years of life seems very difficult to overcome, and they are convinced after 20 years of research that 'much that shapes the final human product takes place (in the home) during the first years of life'" (qtd. in Neisser 23).

STATEMENT OF PROBLEM

What was once a concern primarily for underperforming schools and urban schools, the literacy gap is now creeping its way into the suburban and higher performing school districts as they become more diverse. For the purposes of this research study suburban is defined as "a smaller community adjacent to or within commuting distance of a city" (Merriam Webster online). Ogbu raised a relevant point when he stated that "each minority group experiences school very differently because they experience their societal minority status differently" (qtd. in Baron 4). This statement addresses the fact that while there may be areas that are lacking in the education of minority (a part of a population differing from others in some characteristics and often subjected to differential treatment) students, there are also factors outside the educational environment that can have an impact on a student's ability to find academic success. This is not a factor unique to minority students, however. A study conducted by Elizabeth Rose has indicated that societal factors are more significant for this portion of the student body. Ogbu presented "the phenomenon of low African-American academic achievement due to social rather than ability factors is termed 'academic disidentification'" as quoted by Rose in a study looking at the underachievement of gifted African-American students (5). Rose went on

to say that “Ogbu (1988) suggests that successfully achieving, and therefore, identifying with academics, may be viewed as a means of ‘acting white’ by African-American males in particular” (5).

PURPOSE OF STUDY

This study was designed to compare the educational impact of two different remedial reading programs, Read 180 and Differentiated Reading, in a suburban school district. The purpose of this study was to determine if the Read 180 program was more effective than the Differentiated Reading program at closing the literacy gap.

Additionally, a second purpose of this study was to determine if gender, socioeconomic status, or minority status had an impact on student performance when enrolled in either Read 180 or Differentiated Reading. While providing a quality educational environment under the direction of quality educators is important for the success of all students, it was an assertion of this study that when presented with the same educational opportunities minority and at-risk students continue to underachieve and widen the gap.

SIGNIFICANCE OF THE STUDY

Student achievement and literacy have long been identified as areas of concern in the field of education. In the latter half of the 20th Century, as well as the first part of the 21st Century, programs such as “Goals 2000” and “No Child Left Behind” (NCLB) have been presented as plans that will end the crisis of underachievement that plagues America’s educational system. The reauthorization of NCLB in 2002 and the proposals for reauthorization by the Obama administration in 2010 have continued to increase obligations for school districts nationwide, yet these programs have yet to find a *one-size-fits-all* approach to a system that is committed to the education of all students

regardless of ability, gender, socioeconomic status, or ethnicity. Each new political initiative, however, sets forth the same goal for the public education system – to provide students with a free and appropriate public education. Unfortunately, the question remains the same – whether or not that is truly happening for all students regardless of ethnicity or socioeconomic status. According to Mark Conley and Kathleen Hinchman in an article [in 2012] outlining what NCLB and ESEA have meant for adolescents, “Recent work suggests that individual teenagers can recognize the sources of their difficulties and, from this recognition, can learn to strategize and move forward to the reading of increasingly complex texts” (44).

DELIMITATIONS

This study was limited in the fact that only one core subject area was considered for study in addressing the literacy gap. Delimitations for this study are presented in that the sample of the study consisted of 8th grade at-risk students enrolled in three middle schools in the Kansas City Suburban Conference.

ASSUMPTIONS

This study was conducted over the course of a three year time period consisting of identified 8th grade at-risk students enrolled in a remedial reading program. It is an assumption of this study that the students were enrolled in the program for a minimum of one semester. Additionally, it is an assumption of this study that the independent variables of gender, ethnicity and socioeconomic status were represented within the sample population. This study also assumed that the instructors assigned to teach the respective remedial courses all received similar training allowing the instruction to be similar within the three identified middle schools.

RESEARCH QUESTIONS

The following research questions were presented to provide direction for this study.

Research Question one: To what extent is there a difference in achievement as measured by the Scholastic Reading Inventory (SRI) between students enrolled in Read 180 and students enrolled in Differentiated Reading?

Research question two: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research question three: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research question four: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

Research question five: To what extent is there a difference in achievement as measured by the Communication Arts MAP (CA MAP) test between students enrolled in Read 180 and Differentiated Reading?

Research question six: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research question seven: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research question eight: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

DEFINITION OF TERMS

The following definitions are presented for clarification of terms used throughout this study:

Adolescent Literacy: Refers to the set of skills and abilities that students need in grades four through twelve to read, write, and think about the text materials they encounter (National Governor's Association 6).

At-Risk: For the purpose of this study this term is used to identify students that are a year or more behind their cohort group in academic credits and enrolled in a remedial program.

DESE: Acronym for the Missouri Department of Elementary and Secondary Education (DESE).

Differentiated Reading: A way to structure class time that chunks learning for students into three different components known as a workshop model – mini lesson, work time, and debrief. The mini lesson sets the purpose for what students will need to know and how to do the task during work time. The work time is devoted to students reading, writing and talking about the information to create meaning and understanding. The debrief is devoted to students sharing

their understanding, thinking, and/or task accomplished during their work time (Bennett 8-9).

MAP: Missouri Assessment Program. This is the State level assessment for students in Missouri schools (DESE).

Minority: For the purpose of this study this term is used to identify any student that is not classified as White/Caucasian in the school district's student information system.

Read 180: This is a reading program designed for students with low reading lexile scores. This program is conducted over a 2 hour block and includes teacher instruction combined with independent practice. The elements of Read 180 include: a combination of direct instruction and guided practice, in which teachers engage in direct instruction with individuals, small groups, and the whole class; modeled and independent reading of high interest materials from various genres; good reading models – teacher read-aloud, books on tape and shared reading; and a supportive environment for readers to develop a sense of belonging and success (Scholastic, *Read 180: A Heritage of Research* 10).

OVERVIEW OF METHODOLOGY

This study initially considered the rising problem of adolescent illiteracy throughout the United States, and narrowed the focus to a suburban district identified as District X. Specifically, the areas addressed included the influence of two remedial reading programs on closing the literacy gap and increasing student achievement for at-risk students at the 8th grade level. A comparative study of two different remediation programs was conducted to determine which had a greater impact in closing the literacy

gap and increasing student achievement using data collected from the Scholastic Reading Inventory (SRI) assessment and the Communication Arts portion of the Missouri Assessment Program (MAP) results for 8th grade students from 2009-2012. Additionally, the impact of socioeconomic status, gender and ethnicity on differences in a student's ability to be academically successful between those enrolled in the remedial programs was considered.

The Read 180 program was initially implemented in District X in the 2004-2005 school year at the 6th, 7th and 8th grade levels for middle school students, as well as, at the 9th and 10th grade levels for high school students. Data were collected annually for students enrolled in the program on a minimum of three occasions throughout the course of a school year. Students took a pre-test at the start of the school year to determine their entry level SRI score, as well as, eligibility for a remedial program. Students scoring two or more years below grade level were eligible to be placed in the Read 180 course, and subsequently into the Differentiated Reading Course when it began in the fall of 2011 at the Middle School level. At the conclusion of first semester students took another SRI exam to determine progress in reading ability and comprehension. If students were at or above grade level at the semester exam, they were dismissed from the program and returned to the general English course. Students not demonstrating proficiency remained enrolled in Read 180 (and subsequently Differentiated Reading) and took a final SRI exam at the completion of 2nd semester to determine progress over the course of the school year. This study used collective SRI data, as well as data from the Missouri Assessment Program (MAP) to determine student achievement in the areas of reading and comprehension. A quantitative research design was used analyzing two dependent

variables along with four independent variables. The dependent variables utilized for this study include the academic achievement as measured by the SRI assessment and the academic achievement as measured by the CA MAP assessment. The independent variables included in the research design included the reading program (Read 180 or Differentiated Reading), socioeconomic status (Free/Reduced or Full Pay), gender (Male or Female), and ethnicity (Minority Status or Non-minority). Multiple two-way factorial ANOVAs were conducted to determine which reading program was associated with the greatest academic impact in literacy proficiency. Additionally, ANOVAs were conducted to determine to what extent the demographics influenced the academic achievement of students enrolled in either reading program.

ORGANIZATION OF STUDY

Chapter one provides an overview of the study as a whole. Background information was provided to establish a need for a study such as this one. Historical data provided a review of the cultural shift for a specific population over the course of a twenty-five year time span which significantly impacted the educational system within the community of District X. Chapter two is a review of the literature as it relates to literacy and the achievement gap that exists between minority and at-risk students, and school-based interventions such as the Read 180 program and the Reader's Workshop Model. Specifically this chapter looked at the literature that addresses the various components to the achievement gap on a national level. Chapter three is a review of the overall design of the study, data collection and statistical analysis. This chapter includes a review of the Hypotheses for the study, as well as, the demographic information of the sample population. Chapter four provides the results of the analysis of the data collected

through the study. This includes comparisons of student performance between those who were enrolled in the Read 180 program and those who were enrolled in the Differentiated Reading course. Chapter five summarizes the findings in this study and offers recommendations for application within the school district. In addition, implications for further study are presented.

Chapter Two

Review of the Literature

In this review of the literature the researcher reviewed several definitions of literacy that have been used throughout education in order to create a foundation for understanding as it relates to the literacy gap that continues to exist in our culture. In addition, the reader will find an overview of the learning progression as it relates to literacy development both before a child enters school and throughout their growth and development in the educational system. One could find a variety of programs and assessment tools that have been attempted as a means to close the literacy gap over the past 20 plus years in education. This review of the literature also provides the reader with brief overviews of a variety of programs that have been, or are currently, used throughout education – Kindergarten through Middle School – in an attempt to close the literacy gap that exists. Additionally, the researcher considered the demographic information that has impacted the literacy gap, specifically students that are classified as minority and/or considered to be in the at-risk population, and the long term impact that the literacy gap can have on students with one or more of these characteristics. Finally, the reader will be provided with a review of two remediation programs that have been utilized in a suburban school district (at the time this study was conducted) at the middle and high school level in an attempt to close the literacy gap for students enrolled in the district.

OVERVIEW

No one definition for the term *literacy* exists that comprises all of the various components that have been identified over the years of what constitutes one to be

considered literate. According to Wasik, “to be literate requires knowledge of letter-word correspondence as well as word recognition, and includes knowledge of one’s environment, which is necessary to comprehend what is read” (3). On the other hand, the National Literacy Act of 1991 defined literacy as “an individual’s ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals and develop one’s knowledge and potential” (Wasik 4). In fact, “America 2000 (1991) stipulated that by the year 2000, ‘every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the right and responsibilities of citizenship’” (Ntiri 19). While as a nation we saw a brief period of time that the data appeared to show the literacy gap closing in the late 1980s and early 1990s, unfortunately, we have far from met the goal set in 1991 to have “every adult American” be literate in our nation. This failure to meet such a goal leads one to question why every American is not considered to be literate by the definitions provided above, and if there is in actuality a cultural gap that exists that can be connected to the ever-increasing literacy gap.

According to the work of Jerome Bruner in 1996, as cited by Bertha Perez, “the learner uses cultural tools, the symbols, texts, and ways of thinking, in an active process of ‘meaning making and reality construction’” (Perez 5). Perez continued to state, “Understanding literacy as the construction of meaning within a sociocultural context attempts to account for aim, purpose, audience, text, and context in which reading and writing occur” (5). Therefore when one looks at literacy in the context that it is achieved within the premise of one’s cultural identity we begin to understand where the gap

originates. “Ferdman (1991) examined the relationship between literacy and culture: Each of us maintains an image of the behaviors, beliefs, values, and norms – in short, of the culture – appropriate to members of the ethnic group(s) to which we belong” (Perez 5). However, one’s diversity is not merely a matter of race or ethnicity. “The term *culturally diverse* refers to students who may be distinguished by ethnicity, social class, and/or language” (Perez 6). Therefore one’s cultural identity plays a role in how that person develops as it relates to becoming literate. When we consider the culture in which students begin to learn how to read and write, and the lack of diversity that exists within the context of the curriculum in the public education system, it can be reasoned that the literacy gap begins with a lack of one’s ability to identify with the context in which material is presented.

Learning Progression

Research indicates that a child’s ability to develop literacy skills begins long before the child enters into the educational community. In fact, it begins in the home and reflects the values and importance relayed from the parent(s).

Literacy is no longer a narrow concept that includes only one’s ability to read and write, nor is it seen as a skill one develops only after entrance into formal education. Rather, literacy begins during a child’s early years in the informal activities of everyday family life. (Wasik 1)

As children grow and develop in the infant and toddler years they are actually developing early literacy skills that will guide their growth and development to become fluent readers, writers and communicators during their school years. “Emergent literacy encompasses the skills, knowledge, and attitudes believed to be the developmental

precursors to reading and writing” (Wasik 5). Activities such as reading to one’s child, asking questions while reading, or asking the child to predict what might happen next in a story all play a role in that child’s understanding of the world around them, thus developing their ability to become a literate member of society. A child begins to make connections to the world around them through the activities and exposure to reading and writing before they are even able to do so independent of an adult figure. According to Wasik our present understanding of literacy development for children recognizes the importance of home and community as settings for development prior to formal education. “Goodman was one of the first to describe the importance of home environment, calling written language in books, letters, and newspapers the ‘roots of literacy’ for children,” (Wasik 6). As one moves to pre-kindergarten age the importance of early childhood education becomes important to continued growth and development.

Early Childhood Education Impact on Literacy Proficiency

Early childhood education programs such as Head Start and various preschool programs in one’s community play an integral role in a child’s continued growth and development. A child’s enrollment and participation in a preschool program can have long-lasting impacts on literacy progression. Likewise, failure to participate in early childhood education can have lasting negative impacts on a child’s literacy development well into the school age years. Three different studies ranging from the early 1960s through the mid-1980s and cited in the work of Helen Abadiano and Jesse Turner “provide convincing evidence that preschool education has dramatic long-term effects on the literacy development of children in attendance” (Abadiano and Turner). The Perry Preschool Project (1962-1967) and the Abecedarian Early Childhood Intervention

program (1972-1985) are two such studies that both share results indicating higher test scores, more years in school, as well as a lesser likelihood for incarceration (Abadiano and Turner). Another such study, the Title I Chicago Child-Parent Centers study (1983-1986) found that “individuals that attended preschool had 29% higher graduation rates, 42% lower arrests for violent offenses, and 40% lower retention rates than those that did not attend preschool” (Abadiano and Turner). For those that are not able to afford local preschool programming, programs such as Head Start were created to allow children access to early childhood education that might not have otherwise had such an opportunity. Head Start programming studies conducted in 2000 indicated

that participation in Head Start increases the probability of attending college, although white children drove this effect; attending Head Start may increase high school graduation rates among black males; and African Americans who attended Head Start were significantly less likely to have been charged with, or convicted of any crime. (Abadiano and Turner)

In addition, Head Start has been found to “reduce the Latino-white score gap in vocabulary, math and reading between one-quarter and one-third” (Abadiano and Turner). The studies presented above lead to an additional factor in the development of a literacy gap as students progress from early childhood education into the school age years. The concept of a socioeconomic and ethnic divide is introduced as students enter into the educational system with varying levels of ability.

Socioeconomic and Ethnic Divide

A literacy gap is not a concern that exists the moment a child enters the education system; rather, it becomes apparent as a child fails to progress at the same rate as his/her

classmates through each grade level. There are many factors identified as to why students fail to make appropriate progress. Among those factors, socioeconomic status and ethnicity are considered to be the most impactful. According to Wasik, “Poverty is also associated with children’s literacy levels; reading difficulties occur more often among poor, non-white, and non-native English-speaking children. This lower performance in literacy skills occurs at both preschool and the early primary levels” (9). The cultural norms that exist in one’s home do not necessarily align with the middle class norms that are expected in the educational system.

We cannot ignore the early literacy experiences of children from multicultural groups for at least two reasons. First, literacy is more than a simple decoding task. It is a social and cultural experience that begins very early in children’s lives...Second, mismatches between children’s home and school literacy experiences may place children who are not from the mainstream culture at a disadvantage at school. (Hammer 22)

Well known author and educational researcher, Ruby Payne, has written at length about the subjects of poverty and cultural norms and the impact on child development through school. In an article written for the National Association of Elementary School Principals’ Leadership Compass magazine, Payne identified “10 Dynamics of Poverty.” Of those identified vocabulary and exposure to words is high on the list. “Hart and Risely (1995) found that the average 4-year-old in a professional household has heard 45 million words while a 4-year-old in a welfare household has heard 13 million words” (Payne 1). This gross difference in exposure to a wide vocabulary can further be supported through the work of Carol Hammer. She shared a study of two dyads, one

dyad consisted of two low socioeconomic status (SES) African-American mothers and the other dyad consisted of two middle-SES African-American mothers. In this study the researcher observed different styles of how mothers read to and interacted with their children while reading books. These two dyads differed in respect to three behaviors: “middle-SES mothers tended to look at books with their children more frequently,” “middle-SES mothers included more modifiers in their utterances than did the mothers in the low-SES group,” lastly “low-SES mothers produced more directives than their middle-SES counterparts, who used an equal percentage of directives and statements” (Hammer 39). Both of these components of early literacy, vocabulary and interaction with text, are key to a child’s preparedness for learning to read and write as they enter into the school ages.

In addition to the studies conducted that depict a vast difference in how a child is exposed to early literacy development, there is the component of the value of education that is imparted on children from various socioeconomic and cultural backgrounds. The value placed on education at home once the child enters school has a significant impact on the child’s ability to be successful, or maintain success, while in school. Thomas Cook from Northwestern University wrote a section in a book using a study conducted by Alexander and Entwisle regarding “the origins of social class differences in the rate of change in reading and math” (Cook 89).

Analysis of the resulting data prompted Alexander and Entwisle to advance three knowledge claims:

- During elementary and middle school, the gap in achievement between children of higher and lower social class widens.

- This growth in inequality is due to class differences in summer learning.
 - It is not due to differential learning during the academic year, for then knowledge gains are independent of socioeconomic standing.
- (Cook 89)

These claims along with the works of Lonigan reiterate that the impact of early literacy practices in the home play a significant role in determining a child's ability to stay on grade level throughout their educational career.

There is strong continuity between the skills with which children enter school and their later academic performance. Children with limited reading-related skills rarely catch up to their peers and many continue to experience difficulties throughout their school years and into adulthood. Juel (1980), for instance, reported that the probability that children would remain poor readers at the end of the fourth grade if they were poor readers at the end of the first grade was .88.

(Lonigan 58)

HISTORICAL PERSPECTIVE

A wide variety of research based literacy programs and practices have been attempted over the years ranging from the 1970s to present. In this section the reader will be introduced to some of the most popular programs implemented as a means to address the literacy gap that continues to exist. While each program identified below has its own unique approaches to increasing student achievement and literacy, there is most definitely not a one-size-fits-all program that exists.

Phonics

One of the first methods utilized to teach beginner and early readers was the phonics method. This method of literacy instruction in its purest form teaches students to read by identifying the letter-sound relationship. While many other literacy strategies have come and gone over the course of time, phonics continues to hold fast as a key element to early literacy instruction. A report published by the National Reading Panel (NRP) in April of 2000 found an overwhelming amount of evidence to support the use of phonics as at least a component of a strong early literacy curriculum. “The NRP findings are consistent with the general view that phonics instruction is most important in the early grades. Because phonics instruction is focused on teaching decoding, it is no surprise that effects are greatest on measures of reading words and smaller on reading comprehension” (Ehri and Stahl). It is important to note that much of the research presented about the use of phonics as a means of literacy instruction, reiterates that it is most effective when used with beginning and early readers. Use of phonics much past the 1st or 2nd grade begins to decline in effectiveness. The NRP report supports this premise as their study found that “Systematic phonics instruction improved reading achievement in normally developing readers, in at-risk readers, and in learning-disabled (LD) readers – but not in older low-achieving readers” (Ehri and Stahl).

Whole Language

The whole language approach to literacy education was a popular method of teaching reading to beginning readers and was utilized throughout the mid-1980s into the 1990s. There continues to be a great debate as to which method is most effective in teaching reading— whole language or phonics. The premise of whole language is to instill

within students “a love of literature, problem-solving and critical thinking, collaboration, authenticity, personalized learning, and much more” (Krashen). Whereas, phonics methods taught beginning readers how to sound out letters and words; whole language taught students to memorize the words. Defined as a method of “providing students with interesting, comprehensible texts, and the job of the teacher is to help children read these texts, that is, help make them comprehensible.” “The direct teaching of ‘skills’ is helpful only when it makes texts more comprehensible” (Krashen). In the mid-1990s a group of Teachers Applying Whole Language out of Australia created a series of 10 core beliefs to define the teaching of Whole Language. The conclusion of their submissions can be summarized in the following 10 core beliefs.

Whole Language:

- is a dynamic, continually growing and evolving framework for thinking about language, learning, and literacy.
- is based on the belief that the teaching of language must occur in contexts that are meaningful for, and make sense to, every learner.
- values the language, culture and lives of students to empower them to take control of their lives and be critical members of their society.
- we learn language, we learn through language, and we learn about language simultaneously as we use it.
- views listening, speaking, reading and writing as integrated, not separate domains.
- recognizes that an individual learner’s knowledge is socially constructed through collaboration with others.

- acknowledges and recognizes the relationships between text, context, and linguistic choice.
- recognizes that students are active participants in their learning.
- recognizes that students learn the subsystems of language as they engage in whole language use.
- recognizes that teachers are professionals who are life-long learners.

(Krashen 118)

Ultimately the author contended that the more we learn about language and learning, and societal changes, even this group of teachers will likely change their overall beliefs and thus their definition of what is whole language (118).

Success for All

In 1997 the Comprehensive School Reform Demonstration Program was passed. As a result of this bill, sponsored by Representatives Obey and Porter, schools gained the flexibility to utilize Title I funds on a broader scale to include whole school reform. One such program that has had widespread implementation since this legislation is the Success for All (SFA) reading program. This program was founded by Robert Slavin, Nancy Madden, and a team from Johns Hopkins University in 1986. “SFA prescribes specific curricula and instructional strategies for teaching reading including shared story reading, listening comprehension, vocabulary building, sound blending exercises, and writing” (Greenlee and Bruner). When one includes the cost to train the staff along with the program itself, it can be quite costly to implement in an entire building. However, studies show that it produces results, “Results indicate that SFA significantly improves reading performance, especially for student in the lowest 25% of their class” (Greenlee

and Bruner). However, a study conducted by Greenlee and Bruner found that there is not a significant difference in achievement gains in a Title I school that implements SFA as opposed to a school district that develops their own literacy reform model.

Writing to Read

Writing to Read was another program utilized to teach literacy to beginning and young readers developed by Dr. John H. Martin (retired educator) who has claimed that “children learn best to read by being taught to write” (Parshall 39). The Writing to Read program is a “computer-based instructional system for developing writing and reading skills of kindergarten and first grade students” comprised of five learning stations: the Computer Station, the Work Journal Station, the Writing/Typing Station, the Listening Library Station, and the Make Words Station (Parshall 40). The creators of the program recommended that students stay at any one station for fifteen minutes, and for students to utilize the Computer, Work Journal and Writing/Typing station each day (Parshall 41).

ASSESSMENT PRACTICES

Standardized assessment practices in the state of Missouri became a required practice in the public education sector as a response to the Excellence in Education Act of 1985. Prior to the publication of the “A Nation at Risk” report, standardized assessment was primarily conducted at the national level, and was not required as a component of the school’s accreditation process. With the release of “A Nation at Risk,” gaping discrepancies in public education nationwide, as well as, internationally became common knowledge. Politicians began to take notice and introduce legislation to mandate changes to the public education sector.

Shift from MMAT to MAP Assessments

One such piece of legislation was the Excellence in Education Act of 1985. With that, Missouri developed a set of core competencies and key skills in order to support teachers in the implementation of mastery learning. “In an unprecedented piece of legislation, the state made obligatory a testing program which would provide data on the performance of students throughout the state by requiring both the use of criterion-referenced tests (CRT) to assess academic status and progress, and district disclosure of student performance trends” (Deering 21). As a result the Missouri Department of Elementary and Secondary Education (MODESE) released criterion by which school districts would be held accountable for assessing students. This released criterion allowed districts the ability to create their own CRTs or utilize the assessments that would be developed and released from DESE. Beginning in September of 1985 “DESE contracted with the Center for Educational Assessment (CEA) of the University of Missouri (at the time the Center was called Missouri Testing and Evaluation Service) to develop a series of CRTs which would measure student performance on the state’s core competencies and key skills” (Deering 21). With the new standards for assessment and implementation, DESE required achievement tests to be administered at least once a year for grades 2-6, and twice a year for grades 7-10. The new testing guidelines further stipulated that “a CRT must be administered in two non-sequential grade levels for grades 2-6 and twice in non-sequential grade levels for grades 7-10” (Deering 21). The purpose of these CRT assessments was twofold. First, this format of assessment, for the first time, enabled schools to revise curriculum or adjust instruction to assure mastery of identified key skills. Secondly, it enables school districts to be accountable for student

performance on a set of predetermined criteria (Deering 22). In addition to the new format for assessment and accountability for reporting of student academic progress, the DESE developed the assessments with a new perspective. Previous assessments were nationally normed, and created by a testing service. With the development of the Missouri Mastery Achievement Tests (MMAT), DESE invited current classroom teachers to participate in the development of the assessments. This was the first time teachers were asked to participate in the development of a standardized test. Over the course of two different workshops, teams of teachers developed approximately “12-16 questions for each of the 350 key skills” (Deering 23). Those items were then reviewed by a different committee of teachers for “cultural, racial, and sexual bias” (Deering 23). This entire process took place over the course of approximately two years. From the time that the key skills were identified, questions were developed to test those key skills, pilot tests were administered, and the assessments were revised following the pilot tests, formal MMAT tests were not administered until the spring of 1987 in grades 3, 6, 8, and 10. In the spring of 1988 testing of all grades 2-10 was conducted statewide in 540 of the 545 districts in Missouri. Five school districts chose “to develop their own assessments or use CRT from another source” (Deering 23). Although the method in which the MMAT was developed was groundbreaking for that era, and the level of accountability for student academic growth was drastically increased, the educational system continued to show deficiencies in student growth. Part of the concern for students in the state of Missouri and the use of the MMAT assessment lies in that the MMAT assessed multiple key skills using approximately 4-5 questions per identified skill. When one considers the standard error of measurement (SEM), the MMAT assessment did not provide adequate

data to teachers and administrators due to the few questions assessing the large number of identified skills. Leo Harvill's instructional model states that, "Lord (1959) determined empirically that the SEM was directly proportional to the square root of the number of items on the test" (35).

Academic achievement and the public reports indicating children in the United States fail to compete internationally continued to draw national and political attention. No Child Left Behind brought about higher levels of accountability and assessment. The Missouri Assessment Program (MAP) "is one of several educational reforms mandated by the Outstanding Schools Act of 1993" (CTB/McGraw-Hill 1). Just as DESE responded to the Excellence in Education Act in 1985, they formed a committee of educators to identify the knowledge, skills, and competencies that Missouri students should have acquired by the completion of a grade level. As a result Missouri shifted from core competencies and key skills to what then became known as the Show-Me Standards or Grade Level Expectations (GLEs). This shift in identified standards required the assessment practices to shift as well. The MAP assessments are now required in grades 3-8 annually in the content areas of Communication Arts and Mathematics and in grades 5 and 8 in Science. Whereas the MMAT assessment was an entirely multiple choice/selected response exam, the MAP assessment was divided into three types of test items: "selected-response items, constructed response items, and performance events (including writing prompts)" (CTB/McGraw-Hill 1). Constructed response items and performance events were an entirely different method of assessing students on a standardized level. "Constructed response items require students to supply (rather than select) an appropriate response." "Performance events...require students to

work through more complicated items. Performance events often allow for more than one approach to get a correct answer” (CTB/McGraw-Hill 1).

No Child Left Behind

Prior to the authorization of No Child Left Behind in 2001, which was introduced by then President George W. Bush, public educators were held accountable for student academic growth and progress through the Elementary and Secondary Education Act (ESEA). While there have been many implications felt across the education community with the onset of No Child Left Behind (NCLB), this review of the literature is mostly concerned with the provisions to improve adolescent literacy accountability towards closing the gap that continues to exist. The reauthorized ESEA, now referred to as NCLB,

...redefines the federal role in K-12 education and will help close the achievement gap between disadvantaged and minority students and their peers. It is based on four basic principles: stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work. (Conley and Hinchman 43)

According to an article published by the International Reading Association, the implications to improve adolescent literacy outlined in NCLB can be summarized in three areas of emphasis. First and foremost teachers must incorporate, “**Continuous reading instruction with an emphasis on developing strategic knowledge for dealing with unknown words and comprehension** (*emphasis not added*)” (Conley and Hinchman 44). This would require all content area teachers to understand how students read in order to guide them to understanding of new vocabulary terms and comprehension of

more complex texts. The second area of emphasis includes “**Individually appropriate reading instruction, anchored in assessment of individuals and programs** (*emphasis not added*)” (Conley and Hinchman 44). Successful literacy programs in schools must have an on-going assessment component to monitor student outcomes and growth. The final area of emphasis found in NCLB on adolescent literacy allows students “**Multiple opportunities to use a variety of texts within a context of comprehensive schoolwide reform** (*emphasis not added*)” (Conley and Hinchman 45). Unfortunately, the funding allocated through NCLB primarily addresses early literacy programming. Funding allocated for adolescent literacy “are earmarked for developing accountability systems, for supporting reform for schools that fail to make adequate yearly progress...” (Conley and Hinchman 45). While the research on adolescent literacy has explored many factors that include student ethnicity and socioeconomic status, according to Conley and Hinchman NCLB focuses on “increasing accountability through expanded assessment, greater school choice, increased parental involvement, early intervention to promote reading success, and the promotion of greater English proficiency” (48).

RESEARCH REGARDING SOCIOECONOMIC AND ACADEMIC DISCREPENCIES

As defined previously in this chapter, literacy is much more than one’s ability to read and write. It encompasses one’s ability to communicate within the society in which he/she is living in at an appropriate level. A variety of research has been conducted in the area of literacy development and the impact that societal factors can have on a student’s ability to progress appropriately through school.

Ruby Payne Work

In the mid-1990s the work of Ruby Payne introduced the concept of understanding how poverty and culture impact a student’s ability to be successful and became very well known in the

field of education. She has published several professional development materials that introduce and educate Teachers and Administrators on the impact of poverty and culture on a student's ability to be successful in a traditional [middle class] school environment. Her years as an educator, as well as, living among the wealthy, the middle class, and those in poverty have assisted in developing her expertise in this field. Among her work she shared her knowledge of language and how the various registers of language impact a student's ability to be successful in a mainstream middle class educational system. As quoted by Ruby Payne in her book "A Framework for Understanding Poverty", "Dr. Maria Montano-Herman (1991) found that the majority (of the students in her research) of minority students and poor students do not have access to formal register at home" (28). Formal register, according to Payne, refers to the "standard sentence syntax and word choice of work and school. Has complete sentences and specific word choice" (42). This lack of exposure and use of the formal register has substantial impact on student success and their ability to demonstrate performance on standardized tests. Payne went on to explain that the "use of formal register, on the other hand, allows one to score well on tests and do well in school and higher education" (28). What, then, does this mean for an educational system that is set within the hidden rules of the middle class? First and foremost, "Students need to be taught the hidden rules of middle class – not in denigration of their own but rather as another set of rules that can be used if they so choose" (R. Payne 45). As educators, it would serve us well to more openly seek to understand where our students come from and the culture and beliefs that they, and their parent(s), may bring to the educational setting. As Payne stated, "An understanding of the culture and values of poverty will lessen the anger and frustration that educators may periodically feel when dealing with these students and parents" (45).

Supporting Research

Educational researcher, Robert Marzano, has conducted several meta-analyses that have had significant impacts on educational change. His book, *What Works in Schools: Translating Research Into Action*, offers a collection of educational research that speaks to the academic achievement gap. Marzano's work has been chunked into four sections that address school-level factors, teacher-level factors, student-level factors, and overall implementation which have served to facilitate change in school districts across the nation resulting in academic achievement gains for many districts, including the subject of this study, District X. This section of the literature includes components from each of these four levels that contribute to closing the overall achievement gap when applied appropriately in school districts, which will consequently aid in closing the literacy gap that exists as well.

School-level factors contribute to the overall achievement of each and every student within a district. The most important factor a school provides to a student is a "guaranteed and viable curriculum," which, according to Marzano, is a combination of student's opportunity to learn (OTL) and time (22). This concept of OTL was first introduced following the "First, and then later, the Second International Mathematics Study (FIMS and SIMS, respectively)" and speaks to a student's exposure to the established curriculum in order to demonstrate success on a standardized test (22). What was discovered as a result of the SIMS was three types of curriculum existed: "the *intended curriculum*, the *implemented curriculum*, and the *attained curriculum*" (23). Ultimately, it is believed that a discrepancy exists between the intended curriculum (that which is established by the state/district standards) and the implemented curriculum (that

which is actually taught by the assigned teacher). “The concept of OTL, then, is a simple but powerful one – if students do not have the opportunity to learn the content expected of them, there is little chance that they will” (Marzano 24). The ability to implement a viable curriculum is, however, dependent on teachers being given adequate time necessary to do so. The second school-level factor consists of “challenging goals and effective feedback” (Marzano 35). In his collection of research, Marzano cites multiple studies that reiterate “high expectations for students, particularly those from low SES backgrounds, are a cornerstone of the school effectiveness research” (Marzano 36). Subsequently, the way in which we monitor the effectiveness of goal setting is through effective feedback. John Hattie’s work supports this concept when he states, “The most powerful single modification that enhances achievement is feedback. The simplest prescription for improving education must be dollops of feedback” (Hattie).

Although the school-level factors carry significant importance, we must not diminish the impact that teacher-level factors play on a student’s ability to achieve. The impact of individual teachers on student achievement can oftentimes carry a more significant impact than the school system itself. Marzano offered, “all researchers agree that the impact of decisions made by individual teachers is far greater than the impact of decisions made at the school level” (Marzano 71). He went on to present three different scenarios all based on the effectiveness of the teacher. Assuming that a student enters school performing at the 50th percentile; based on the effectiveness of the teacher that student is assigned over a two year time frame; the student will grow, stay the same or possibly decline in achievement. He supported this scenario with the following,

...I started my calculations with the assumption gathered from my review of research – that schooling accounts for about 20 percent of the variance in student achievement. However, in my synthesis of the research, I also found that about 67 percent of this effect is due to the effect of individual teachers. That is, about 13 percent of the variance in student achievement in a given subject area is due to what the teacher does and about 7 percent is due to what the school does.

(Marzano 73-74)

Student-level factors must be considered as a piece of this puzzle, as well.

Marzano presented three student-level factors that influence student achievement and can be mediated through the actions of the educational system. The three factors identified include: home environment, learned intelligence and background knowledge, and motivation. A look at home environment presents an interesting component that has not yet been discussed with previous literature. While socioeconomic status (SES) has been considered one of the strongest mitigating factors in determining student success in school, Marzano's research offered a unique perspective through the work of Karl White. White identified "four elements associated with SES and student achievement: The income of the adults (e.g., parents) in the home, the education of the adults in the home, the occupation of the adults in the home, and the atmosphere in the home" (qtd. in Marzano 127). Marzano went on to summarize White's work in that while "the effects of SES have historically been thought of as extremely large and impervious to change...the most important aspect of SES is the effect of home environment..." (Marzano 127). This representation of the impact of SES on achievement is important when one considers the role of the school. "Where a school cannot change the income, education, or occupation

of adults in the home, it can have a potential impact on the atmosphere in the home” (Marzano 128). The second student-level factor, learned intelligence and background knowledge, can be identified in two categories: *crystallized intelligence* (background knowledge) or *fluid intelligence* (innate and not subject to alteration) (Marzano 133-134). Just as Ruby Payne addressed the impact of vocabulary development on one’s ability to achieve at a higher level, Marzano’s collection of research denotes the importance of exposure to vocabulary as a key to one’s development of background knowledge, thus impacting student achievement.

For example, Nagy and Herman (1984) found a consistent difference in vocabulary development between groups of different socioeconomic status (SES) levels. They estimated a 4,700-word difference in vocabulary knowledge between high- and low-SES students. Similarly, they estimated that mid-SES 1st graders know about 50 percent more words than do low-SES 1st graders. Michael Graves and Wayne Slater (1987) found that 1st graders from higher-income backgrounds had about double the vocabulary size of those from lower-income backgrounds. (qtd. in Marzano 138)

The final student-level factor involves student motivation and its connection to student achievement. Marzano identified five lines of research that dive into “the nature of motivation: (1) drive theory, (2) attribution theory, (3) self-worth theory, (4) emotions, and (5) self-system” (144). Ultimately, these five theories of motivation can be summarized into four action steps that address how to motivate students to stay engaged and motivated. In order to motivate students to achieve at a higher level, educators must alter “the competitive nature of classroom success, engaging students in long-term

projects that tap into their deeply held passions, and providing students with information about motivation and training in techniques to control their motivation” (Marzano 152-153).

The collective research presented above by those such as Marzano and Hattie must be considered when addressing the literacy gap among students as a subcategory of the overall achievement gap that continues to plague educational environments. If we do not consider the impacts of the factors identified above, we are not considering the whole picture as it exists. This compilation of research presented a variety of components that significantly impact student achievement and subsequently one’s ability to become a literate member of society.

PROGRAMS FOR STUDY

This study looked specifically at two remedial reading programs implemented in District X in an effort to close the literacy gap. Specifically, the Read 180 program – which is a prescriptive program described in detail below – and the Differentiated Reading curriculum were implemented over the course of three school years. The Differentiated Reading program implemented in District X was modeled after the works of Chris Tovani and the Reader’s Workshop Model of instruction.

Read 180

“Read 180 is a comprehensive reading intervention program geared for students reading below the proficient level in Grades 4-12” (Scholastic 3). The Read 180 reading intervention program was originally created in the late 1990s, after several years of trial research, as a cooperative effort driven by a Scholastic engineering team in conjunction with the Cognition and Technology Group at Vanderbilt University and the Orange

County Literacy Project in Florida. Ted Hasselbring along with members of the Cognition and Technology Group at Vanderbilt University began their research in 1985 to determine how the use of technology could be utilized as a tool to support struggling readers (Scholastic 4). Hasselbring and his team worked to create a software program – originally known as the Peabody Learning Lab – that became the prototype for the Read 180 Topic Software. This software program addressed the four key areas that were identified as the major deficits in older struggling readers. “This software program consisted of a carefully planned sequence of student activities that provided individualized skills instruction and practice. Each element was designed to address one or more of the problems Dr. Hasselbring had identified” (Scholastic 4). Dr. Hasselbring’s team of researchers found that the key to using a program of this nature is to consistently assess the level at which the student is currently performing. As a result the software program is designed to meet the reader at their current ability level and move them to the next level with repetition and practice. The Read 180 software program is designed to begin with a short video followed by a passage that summarizes that video. Students progress through the software and are presented with activities that promote fluency and automaticity, allowing for better overall comprehension. Additionally, the software provides corrective feedback immediately for students through the use of audio and visual support which generates immediate strategies for remediation (Scholastic 5-6).

In 1994, Dr. Hasselbring with the assistance of Dr. Janet Allen from the University of Central Florida partnered with the Orange County School District to develop the Orange County Literacy Project. “The Literacy Project was based on two

complementary approaches to improving essential skills;” 90 minutes of uninterrupted literacy work each day in classes limited to 20 students or less and 20-30 minutes a day, four days a week students on the computer using the Peabody Learning Lab software (Scholastic 9-10). The research conducted through the Orange County Literacy Project led to the development of what is now known as Read 180 Model. Using the instructional plans based on the Orange County study, Scholastic developed an instructional model for secondary classroom teachers. “The model assures daily teacher-led instruction in Whole-Group instruction and intervention in Small-Group instruction, experience with Modeled and Independent Reading, and use of the research-proven Software” (Scholastic 12). It is also recommended that the model be implemented daily in a 90-minute block of instructional time.

Additional research continues to be conducted by Scholastic in order to ensure that the Read 180 program addresses literacy deficiencies accurately and appropriately for the needs of the learner. Although research has shown students to make significant gains in closing the literacy gap through the use of the Read 180 model, the literacy crisis continues to be of great concern among educators nationwide. According to the writings of Dr. Ernest Fleishman, the National Assessment of Educational Progress (NAEP) from 2003 reports that “more than two-thirds of the nation’s eighth graders (68 percent) read below the proficient level and approximately one quarter are unable to read at even the most basic level” (Fleishman 1). As indicated in previous sections in this chapter, the inability of one to be literate significantly impacts society as a whole. Dr. Fleishman, in his research, reiterates this when he states, “according to a 2001 report of the Coalition of Juvenile Justice, the nation is drained of more than \$200 billion in lost earnings and taxes

because of America's high dropout rate" (Fleishman 3). Students that are unable to read, write and communicate effectively have a much higher risk of becoming a high school dropout. The statistics of high school dropouts are even more alarming. "According to 2001 National Census data, 42 percent of 16 to 24-year olds who failed to graduate from high school or earn a GED reported no employment income that year" (Fleishman 3). Not only do high school dropouts face higher rates of unemployment, "The Coalition for Juvenile Justice (2001) reports that 82 percent of prison inmates are high school dropouts, and a very high proportion of them cannot read" (Fleishman 3). Statistics such as these are important to the creators and developers of the Read 180 intervention program; this need is what sparked the development of such a program to use technology and intensive instructional strategies in order to reach students before they become a statistic. "Read 180 shows respect for the older struggling reader by presenting age-appropriate materials that engage them at all reading levels" (Fleishman 6). While the Read 180 Model has research based approaches to closing the literacy gap, this is just one example of strategies that can be implemented to improve a student's ability.

Reader's Workshop Model

Differentiated Reading is a model of instruction developed by a team of educators in District X based primarily from the works of Chris Tovani and the Reader's Workshop model of literacy instruction. According to the work of Tovani, who continues to practice these strategies as a Reading Teacher in Colorado,

Teaching Reading is about teaching students how to think about what they are reading using reading strategies. Oftentimes public perception of reading is oversimplified and thought of as merely decoding words on a page. "In

general...Many believe that reading is merely sounding out words. They don't stop to consider what sophisticated thought processes are involved and that reading becomes more demanding as students get older." (13)

Oftentimes, parents and educators alike fail to recognize the complex process that literacy encompasses. If we refer back to our established definitions from the beginning of this chapter, we are reminded that to be literate means one is able to read, write and speak in English in order to be a functioning member of society. As students progress throughout elementary school and into the secondary level, the materials become more complex to decode. "Middle and high school students don't automatically know how to cope with rigorous reading material just because they've left elementary school" (Tovani 14). Therefore, we must teach students strategies that can be utilized while they are reading that will allow them to experience success and independence in learning. "A strategy is an intentional plan that readers use to help themselves make sense of their reading. Strategies are flexible and can be adapted to meet the demands of the reading task" (Tovani 5). The following are strategies identified through the work of Tovani that have proven to allow students to experience success in decoding and comprehending complex material. The Think aloud – shows students how an expert reader makes sense of the text (Tovani 26). "I stop often to think out loud for my students. I describe what is going on in my mind as I read. When I get stuck, I demonstrate out loud the comprehension strategies I use to construct meaning" (Tovani 27). Another useful tool is teaching students how to Mark Text – helps readers pay attention and remember what was read (Tovani 29). This strategy may have some limitations when using materials that are not able to be written in; however, reproducing the material for the purpose of the

exercise may prove to be worth the time and effort given by the teacher to improve student skills. Double-Entry Diaries where readers divide their note page in half with questions and main ideas on the left side of the page and specific information on the right is another strategy that allows the reader to engage with the text on a different level (Tovani 30). Finally, Comprehension Constructors – requires readers to use two or more thinking strategies. Typically introduced once students know how to mark text and use the double-entry diary. It is a worksheet designed to guide students through difficult text using a particular comprehension strategy (Tovani 32).

The implementation of specific reading strategies is only one component of the program. In a workshop model teachers must guide students to recognize when they become stuck or confused while reading a text through modeling and questions. “Readers who are successful need to know when they are stuck so they can help themselves get unstuck. Readers who understand what they comprehend aren’t wasting their time; when they finish reading, they are able to use the information” (Tovani 37). In order for readers to become proficient and learn how to develop meaning once they recognize when they are stuck in a text, they must have a bank of what are referred to as “fix-it” strategies. Tovani recommends eleven different strategies from which the reader can select in order to begin to construct meaning. Below are the eleven strategies that are utilized as part of the workshop model:

- Make a connection between the text and: (allows the reader to engage background knowledge)

Your life.

Your knowledge of the world.

Another text.

- Make a prediction – anticipate what is coming next.
- Stop and think about what you have already read – connect newly acquired knowledge with information they already know.
- Ask yourself a question and try to answer it – ask questions about what was read, and then continue reading trying to find the answer.
- Reflect in writing on what you have read – writing down what they are thinking about the material allows reader to clarify their thinking.
- Visualize – create images in their head to make sense of what the words say.
- Use print conventions – items in the text such as bolded print, italicized words, capital letters, and punctuation to enhance understanding.
- Retell what you've read – helps the reader to reflect and can activate background knowledge.
- Reread – most commonly known among students.
- Notice patterns in text structure – recognizing how the piece is organized can help the reader to locate information more quickly.
- Adjust your reading rate: slow down or speed up – can slow down when something is difficult, or speed up when material is more familiar. (Tovani 51-56)

SUMMARY

The key to understanding and implementing the Reader's Workshop Model of literacy instruction lies in the teacher understanding the importance of teaching these literacy strategies. In addition, it is imperative that the teacher utilize modeling on a

regular basis to demonstrate to struggling readers how to utilize each strategy.

Understanding Tovani's research and model for literacy instruction can boil down to one key concept – teaching reading means teaching students how to think. “Readers of tomorrow must do more than memorize words. They must be prepared to analyze, validate, and ask the next logical question. They have to know how to think” (Tovani 110-111).

Chapter Three

Methods

This chapter outlines the purpose of this study and the methods used to gather and analyze the data as it related to the research questions proposed in chapter one and established hypotheses that are referenced later in this chapter. This study was designed to evaluate the impact of two different prescribed literacy curriculums – Read 180 and Differentiated Reading – and the impact of three demographic variables gender, ethnicity and socioeconomic status in order to increase the academic achievement of minority and at-risk students and their effectiveness in closing the literacy gap. The review of the literature supports the necessity for literacy remediation across the nation. This study consisted of a quantitative research approach in which data were collected and analyzed over a three year period to determine the effectiveness on student achievement of the Read 180 literacy curriculum as compared to the Differentiated Reading program on student achievement in the area of literacy. Two different assessment tools, the Scholastic Reading Inventory and the Missouri Assessment Program Communication Arts test, were utilized to compare the effectiveness of the prescribed literacy curriculums.

RESEARCH DESIGN

The researcher utilized a quantitative research design analyzing two dependent variables along with four independent variables. Academic Achievement as measured by the SRI assessment was the first dependent variable. The second dependent variable consisted of the MAP assessment in Communication Arts. The following independent variables were included in the research design: reading program (Read 180 or

Differentiated Reading), socioeconomic status (Free/Reduced or Full Pay), gender (Male or Female), and ethnicity (Minority Status or Non-minority).

A factorial ANOVA, according to Fred Lunenburg and Beverly Ivy is a “generic term that means that two or more independent variables are analyzed together.” (74) Multiple two-way ANOVAs were used to determine which reading program was associated with the greatest academic impact in literacy proficiency. In addition, the ANOVAs were used to determine to what extent the independent variables of socioeconomic status, gender and ethnicity influenced differences in academic achievement.

Population and Sample

The target population for this study consisted of 8th grade students in a Midwest suburban school district that has been identified as District X. In order to be considered for this study students had to perform two or more grade levels below their cohort on the Scholastic Reading Inventory (SRI) assessment at the conclusion of their 7th grade year. The sample for this study consisted of 8th grade students enrolled in one of three Middle Schools – A, B, or C – in the school district for the school years ranging 2009-2012. Students in the sample were enrolled in Read 180 for the 2009-2010 and the 2010-2011 school years, and students were enrolled in Differentiated Reading for the 2011-2012 school year.

Sampling Method

A purposive sampling method was used to select the sample of students for this study. “Purposive sampling involves selecting a sample based on the researcher’s experience or knowledge of the group to be sampled.” (Lunenburg 175) The

students in the sample were selected based on the criterion that students qualified for the intervention program due to the fact that they were two or more years below grade level.

Instrumentation

The instrumentation utilized in this study consisted of two different standardized assessment tools. The first tool utilized was the Scholastic Reading Inventory (SRI) assessment. According to Scholastic, the SRI is a computer adaptive assessment that can be administered to students in grades K-12 that measures reading comprehension using a Lexile Score. “SRI focuses on the skills readers use when studying written materials sampled from various content areas. These skills include referring to details in the passage, drawing conclusions, and making comparisons and generalizations” (Knutson 1). Additionally, “reading comprehension is operationally defined on the SRI as: ‘paraphrasing information in the passage, drawing logical conclusions based on information in the passage, making inference, identifying a supporting detail, or making a generalization based on information in a passage’” (Knutson 3). The SRI assessment was administered at the conclusion of the 7th grade year for all students in that grade level to determine qualification for remediation. Likewise, the SRI assessment was administered three times over the course of the school year – beginning of the year, middle of the school year, and at the conclusion of the school year – for students that were enrolled in Read 180 or Differentiated Reading. Additionally, any students transferring into the school district were administered the SRI assessment to determine the necessity of placement in a remedial Reading course.

The Lexile Framework, which was developed through Scholastic, Inc. in partnership with MetaMetrics, Inc., “provides a common scale for measuring reader

ability and text complexity” (Scholastic, Inc. 2). The Lexile score reflects the complexity of the text that a student is able to read with understanding. Lexile scores are reported in numeric value with an L behind the numeric value most commonly between the ranges of 200L and 1700L. The higher the numeric value the greater the complexity of the text. Students in grade 8 that are reading on or above grade level should receive a Lexile score between 800L – 1100L. Students scoring two or more years below grade level earned a Lexile score of 665L or below.

The second assessment tool utilized in this study was the Communication Arts MAP grade-level assessment. The Communication Arts MAP assessment is administered to students in grades 3-8 annually. Each assessment requires three to five hours of test administration time. The assessment is comprised of three types of test items: selected-response, constructed response and a performance event. The Communication Arts assessment also includes a special performance event in the form of writing prompt. (CTB/McGraw-Hill 1) The following content standards are addressed through the Communication Arts assessment:

1. Speaking and writing Standard English;
2. Reading and evaluating fiction, poetry, and drama;
3. Reading and evaluating nonfiction works and material;
4. Writing formally and informally;
5. Comprehending and evaluating the content and artistic aspects of oral and visual representations;
6. Participating in formal and informal presentations and discussions of issues and ideas;

7. Identifying and evaluating relationships between language and culture.

(CTB/McGraw-Hill 2)

All students participated in the Seventh Grade Communication Arts assessment in the spring semester prior to their eighth grade school year. This score was used as part of the formula that would qualify students for enrollment into a remedial course in their 8th grade year. The students in the same cohort participated in the Eighth Grade Communication Arts assessment in the following school year. The years of assessment utilized in this study range from spring 2009 – spring 2012.

According to CTB/McGraw-Hill, student performance on the Communication Arts MAP test is reported in four achievement levels: Below Basic (MAP score range: 530-638); Basic (MAP score range: 639-695); Proficient (MAP score range: 696-722); Advanced (MAP score range: 723-875). (CTB/McGraw-Hill 6) According to the assessment manual provided by CTB/McGraw-Hill via the Missouri Department of Elementary and Secondary Education (MODESE), the number of correct responses are used to derive a MAP scale score. This scale score was used to determine the students' level of achievement "on a continuum that in most cases spans the complete range of Grades 3-8...ranging in value from 455-875 for Communication Arts" (CTB/McGraw-Hill 4). The MAP scale score ranges referenced above was for students in the eighth grade. Students scoring in the Below Basic range in the seventh grade would have a MAP scale score ranging from 515-633. A MAP scale score for seventh grade students scoring in Basic would range from 634-679, Proficient would range from 680-711, and Advanced would range from 712-865 (CTB/McGraw-Hill 6).

DATA COLLECTION

Data were collected following a request for permission to conduct research from the Baker University Institutional Review Board (See Appendix A) and District X to complete the study. The researcher requested permission from District X during a meeting with the Associate Superintendent of Curriculum and Instruction to conduct the study, as well as in writing from the Assistant Superintendent of Human Resources. At the conclusion of the meeting the researcher was given verbal consent to conduct the study with the condition that the students and the district were to remain anonymous.

Upon consent to proceed from the district (Appendix A) and Baker University (Appendix B), the researcher requested archived data via the Assistant Director of Technology and the Literacy Curriculum Coordinator. The data were downloaded from two different databases – SAM and Power School. The data collection included a sampling of achievement data from the last two years that the Read 180 program was implemented at the 8th grade level [2009-2011]. The data collection also consisted of achievement data from students that participated in the Differentiated Reading program for 2011-2012 school year. This information allowed the achievement scores of the students in the Read 180 program to be compared to students in the Differentiated Reading program in order to determine whether there was an impact based on gender, ethnicity or socioeconomic status. The data was collected at the conclusion of each school year that the Read 180 curriculum and the Differentiated Reading curriculum was in place at Middle Schools A, B and C. The span of data collected includes a three year period of time beginning with student data from the 2009-2010 school year through the 2011-2012 school year.

DATA ANALYSIS AND HYPOTHESIS TESTING

The researcher developed eight hypotheses to be tested over the course of this study to address the eight research questions. Below each of the research questions is listed with the corresponding hypothesis, as well as, the two-factor analysis of variance (ANOVA) that was used to test the hypothesis.

Research Question one: To what extent is there a difference in achievement as measured by the Scholastic Reading Inventory (SRI) between students enrolled in Read 180 and students enrolled in Differentiated Reading?

Research hypothesis one: There is a significant difference in achievement as measured by the Scholastic Reading Inventory between students enrolled in Read 180 and students enrolled in Differentiated Reading.

Three two factor ANOVAs were conducted to address research questions one and two. The dependent variable was the SRI score as measured by SRI 1, SRI 2, and SRI 3. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between enrollment status and gender. The main effect for enrollment status was used to test hypothesis one. The significance level was set at .05.

Research question two: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research hypothesis two: The difference in achievement as measured by the SRI test between students enrolled in Read 180 and students enrolled in Differentiated Reading is affected by gender.

The two-way interaction effects from the first three two factor ANOVAs between enrollment status and gender were used to test hypothesis two. The significance level was set at .05.

Research question three: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research hypothesis three: The difference in achievement as measured by the SRI assessments between students enrolled in Read 180 or students enrolled in Differentiated Reading is affected by socioeconomic status.

Three two factor ANOVAs were conducted to address research question three. The dependent variable was the SRI Score. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for socioeconomic status, and a two-way interaction effect between enrollment status and socioeconomic status. The two-way interaction effect between enrollment status and socioeconomic status was used to test hypothesis three. The significance level was set at .05.

Research question four: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

Research hypothesis four: The difference in achievement as measured by the SRI of students enrolled in Read 180 or Differentiated Reading is affected by ethnicity.

Three two factor ANOVAs were conducted to address research question four. The dependent variable was the SRI score. The two-factor ANOVA can be used to test

three hypotheses including a main effect for enrollment status, a main effect for ethnicity, and a two-way interaction effect between enrollment status and ethnicity. The two-way interaction effect between enrollment status and ethnicity was used to test hypothesis four.

Research question five: To what extent is there a difference in achievement as measured by the Communication Arts MAP (CA MAP) test between students enrolled in Read 180 and Differentiated Reading?

Research hypothesis five: There is a difference in achievement as measured by the CA MAP assessment between students enrolled in Read 180 and students enrolled in Differentiated Reading.

A two factor ANOVA was conducted to address research questions five and six. The dependent variable was the CA MAP score. The two factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between enrollment status and gender. The main effect for enrollment status was used to test hypothesis five. The significance level was set at .05.

Research question six: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research hypothesis six: The achievement as measured by the CA MAP of students enrolled in Read 180 or students enrolled in Differentiated Reading is affected by gender status.

An eleventh two factor ANOVA was conducted to address research questions five and six. The dependent variable was the CA MAP score. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between enrollment status and gender. The two-way interaction effect between enrollment status and gender was used to test hypothesis six.

Research question seven: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research hypothesis seven: The difference in achievement as measured by the CA MAP of students enrolled in Read 180 and students enrolled in Differentiated Reading is affected by socioeconomic status.

A twelfth two factor ANOVA was conducted to address research question seven. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for socioeconomic status, and a two-way interaction effect between enrollment status and socioeconomic status. The two-way interaction effect between enrollment status and socioeconomic status was used to test hypothesis seven. The significance level was set at .05.

Research question eight: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

Research hypothesis eight: The achievement as measured by the CA MAP of students enrolled in Read 180 and students enrolled in Differentiated Reading is affected by ethnicity.

A thirteenth two factor ANOVA was conducted to address research question eight. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for ethnicity, and a two-way interaction effect between enrollment status and ethnicity. The two-way interaction effect between enrollment status and ethnicity was used to test hypothesis eight. The significance level was set at .05.

LIMITATIONS

According to Lunenburg and Irby, “limitations are factors that may have an effect on the interpretation of the findings or on the generalizability of the results,” (133). The following factors limit the generalizability of the study:

1. The accuracy of records kept and the measurability of the MAP Communication Arts test and the SRI assessment limits the study in that these calculations are collected from an external database.
2. The various teaching abilities of those assigned to teach both Read 180 and Differentiated Reading. Although teachers were provided with training prior to being assigned to this course, each has their own unique ability to implement the program once they have been trained.
3. The number of teachers assigned to teach the remedial reading course in each of the three Middle schools. Two of the three Middle Schools assign one primary remedial reading teacher to all of the sections. The third Middle

School assigns multiple teachers to each of the sections designated for remedial reading courses.

4. Four years of data were used; therefore, there is always a possibility that other factors impacted the study over the course of time.

Each of these limitations presented factors that are outside the control of the researcher when conducting the study (Lunenburg 133).

SUMMARY

The purpose of this chapter was to present the reader with the various components of the research setting and design. Throughout the chapter the population and method for sampling were described in detail. There was also a detailed account of the instrumentation used for collecting and analyzing the data. Finally the research questions and hypothesis were presented along with the limitations that were considered for this study. In the following chapter, the researcher will present the results of the data collected throughout this study.

Chapter Four

Results

This chapter reviews the methods used to gather and analyze the data as it related to the research questions proposed in chapter one and the results of the hypotheses testing. The purpose of this study was to evaluate the impact of two different prescribed literacy curriculums – Read 180 and Differentiated Reading – as related to the areas of gender, ethnicity and socioeconomic status in order to increase the academic achievement of minority and at-risk students and their effectiveness in closing the literacy gap. Two different assessment methods, the SRI assessment that was administered three times each year and the CA MAP assessment that was administered at the end of each year, were reviewed by the researcher using the two-factor ANOVA test.

SRI RESULTS

Research Question one: To what extent is there a difference in achievement as measured by the Scholastic Reading Inventory (SRI) between students enrolled in Read 180 and students enrolled in Differentiated Reading?

Research hypothesis one: There is a significant difference in achievement as measured by the Scholastic Reading Inventory between students enrolled in Read 180 as compared to students enrolled in Differentiated Reading.

Three two factor ANOVAs were conducted to address research questions one and two. The dependent variable was the SRI score as measured by SRI 1, SRI 2, and SRI 3. The first two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between

enrollment status and gender. The main effect for enrollment status was used to test hypothesis one. The significance level was set at .05.

The results of the analysis with SRI 1 as the dependent variable indicated a statistically significant difference between the two means, $F = 4.297$, $df = 1, 111$, $p = .041$. See Table 3 for the means and standard deviations for this analysis. The average SRI 1 score for students enrolled in Differentiated Reading ($M = 686.27$) was higher than the average SRI 1 score for students enrolled in Read 180 ($M = 614.13$).

Table #3

Descriptive Statistics for the Results of the SRI 1 for H#1

Reading Program	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	686.27	135.55	37
Read 180	614.13	189.07	78

The results of the analysis with SRI 2 as the dependent variable indicated a statistically significant difference between the two means, $F = 4.36$, $df = 1, 97$, $p = .039$. See Table 4 for the means and standard deviations for this analysis. The average SRI 2 score for students enrolled in Differentiated Reading ($M = 736.03$) was higher than the average SRI 2 score for students enrolled in Read 180 ($M = 670.51$).

Table #4

Descriptive Statistics for the Results of the SRI 2 for H#1

Reading Program	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	736.03	130.23	34
Read 180	670.51	182.44	67

The results of the analysis with SRI 3 as the dependent variable indicated a statistically significant difference between the two means, $F = 6.31$, $df = 1, 70$, $p = .014$. See Table 5 for the means and standard deviations for this analysis. The average SRI 3 score for students enrolled in Differentiated Reading ($M = 780.69$) was higher than the average SRI 3 score for students enrolled in Read 180 ($M = 699.40$).

Table #5

Descriptive Statistics for the Results of the SRI 3 for H#1

Reading Program	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	780.69	136.26	26
Read 180	699.40	142.67	48

Research question two: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research hypothesis two: The difference in achievement as measured by the SRI test between students enrolled in Read 180 and students enrolled in Differentiated Reading is affected by gender.

The two-way interaction effect between enrollment status and gender was used to test hypothesis two using SRI 1, SRI 2, and SRI 3 as the dependent variable. The significance level was set at .05.

The results of the analysis for SRI 1 indicated there was not a statistically significant difference between the two means, $F = 3.942$, $df = 1, 111$, $p = .050$. See Table 6 for the means and standard deviations for this analysis. Though the difference was not statistically significant, the average score for female students enrolled in

Differentiated Reading ($M = 655.95$) was higher than the average SRI 1 score for female students enrolled in Read 180 ($M = 652.95$). The average score for male students enrolled in Differentiated Reading ($M = 718.28$) was higher than the average SRI 1 score for male students enrolled in Read 180 ($M = 579.10$).

Table #6

Descriptive Statistics for the Results of the SRI 1 for H#2

Reading Program	Gender	M	SD	N
Differentiated Reading	Female	655.95	132.41	19
	Male	718.28	135.03	18
Read 180	Female	652.95	160.58	37
	Male	579.10	207.27	41

The results of the analysis for SRI 2 indicated a statistically significant difference between at least two means, $F = 4.53$, $df = 1, 97$, $p = .036$. See Table 7 for the means and standard deviations for this analysis. The average score for female students enrolled in Differentiated Reading ($M = 703.32$) was lower than the average SRI 2 score for female students enrolled in Read 180 ($M = 704.75$). The average score for male students enrolled in Differentiated Reading ($M = 777.47$) was higher than the average SRI 2 score for male students enrolled in Read 180 ($M = 630.74$). A Tukey's HSD post hoc was conducted to determine which of the differences between the average SRI 2 scores were significantly different. The results indicated that the average score for male students enrolled in Differentiated Reading was statistically different from the score for male students enrolled in Read 180, $HSD = 137.78$, $N = 22.3$

Table #7

Descriptive Statistics for the Results of the SRI 2 for H#2

Reading Program	Gender	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	Female	703.32	141.67	19
	Male	777.47	104.29	15
Read 180	Female	704.75	139.19	36
	Male	630.74	218.14	31

The results of the analysis for SRI 3 indicated there was not a statistically significant difference between any two means, $F = .004$, $df = 1, 111$, $p = .947$. See Table 8 for the means and standard deviations for this analysis. Although not statistically significant, the average score for female students enrolled in Differentiated Reading ($M = 761.63$) was higher than the average SRI 3 score for female students enrolled in Read 180 ($M = 716.76$). The average score for male students enrolled in Differentiated Reading ($M = 811.20$) was higher than the average SRI 3 score for male students enrolled in Read 180 ($M = 680.52$).

Table #8

Descriptive Statistics for the Results of the SRI 3 for H#2

Reading Program	Gender	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	Female	761.63	151.28	16
	Male	811.20	108.41	10
Read 180	Female	716.76	124.34	25
	Male	680.52	160.94	23

Research question three: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research hypothesis three: The achievement as measured by the SRI of students enrolled in Read 180 or Differentiated Reading is affected by socioeconomic status.

Three two factor ANOVAs were conducted to address research question three. The dependent variable was the SRI scores. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for socioeconomic status, and a two-way interaction effect between enrollment status and socioeconomic status. The two-way interaction affect between enrollment status and socioeconomic status was used to test hypothesis three. The significance level was set at .05.

The results of the analysis for SRI 1 indicated there was not a statistically significant difference between any two means, $F = .186$, $df = 1, 111$, $p = .667$. See Table 9 for the means and standard deviations for this analysis. Although not statistically significant, the average score for FR students enrolled in Differentiated Reading ($M = 679.04$) was higher than the average SRI 1 score for FR students enrolled in Read 180 ($M = 600.02$). The average score for U students enrolled in Differentiated Reading ($M = 695.75$) was higher than the average SRI 1 score for U students enrolled in Read 180 ($M = 647.87$).

Table #9

Descriptive Statistics for the Results of the SRI 1 for H#3

Reading Program	SES	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	FR	679.05	123.51	21
	U	695.75	153.58	16
Read 180	FR	600.02	193.13	55
	U	647.87	178.56	23

Note. SES = Socioeconomic Status; FR = Free and Reduced; U = Full Pay

The results of the analysis for SRI 2 indicated there was not a statistically significant difference between any two means, $F = .18$, $df = 1, 97$, $p = .674$. See Table 10 for the means and standard deviations for this analysis. Although not statistically significant, the average score for FR (Free and Reduced) students enrolled in Differentiated Reading ($M = 718.74$) was higher than the average SRI 1 score for FR students enrolled in Read 180 ($M = 648.67$). The average score for U (Full Pay) students enrolled in Differentiated Reading ($M = 757.93$) was higher than the average SRI 2 score for U students enrolled in Read 180 ($M = 718.33$).

Table #10

Descriptive Statistics for the Results of the SRI 2 for H#3

Reading Program	SES	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	FR	718.74	134.64	19
	U	757.93	125.49	15
Read 180	FR	648.67	193.63	46
	U	718.33	148.29	21

Note. SES = Socioeconomic Status; FR = Free and Reduced; U = Full Pay

The results of the analysis for SRI 3 indicated there was not a statistically significant difference between any two means, $F = .68$, $df = 1, 70$, $p = .411$. See Table 11 for the means and standard deviations for this analysis. Although not statistically significant, the average score for FR students enrolled in Differentiated Reading ($M = 787.67$) was higher than the average SRI 1 score for FR students enrolled in Read 180 ($M = 689.11$). The average score for U students enrolled in Differentiated Reading ($M = 771.18$) was higher than the average SRI 1 score for U students enrolled in Read 180 ($M = 734.00$).

Table #11

Descriptive Statistics for the Results of the SRI 3 for H#3

Reading Program	SES	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	FR	787.67	149.68	15
	U	771.18	121.98	11
Read 180	FR	689.11	148.06	37
	U	734.00	122.63	11

Note. SES = Socioeconomic Status; FR = Free and Reduced; U = Full Pay

Research question four: To what extent is the difference in achievement as measured by the SRI between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

Research hypothesis four: The achievement as measured by the SRI of students enrolled in Read 180 or Differentiated Reading is affected by ethnicity.

Three two factor ANOVAs were conducted to address research question four. The dependent variable was the SRI scores. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for ethnicity,

and a two-way interaction effect between enrollment status and ethnicity. The two-way interaction effect between enrollment status and ethnicity was used to test hypothesis four. The significance level was set at .05.

The results of the analysis for SRI 1 indicated there was not a statistically significant difference between any two means, $F = .004$, $df = 1, 111$, $p = .947$. See Table 12 for the means and standard deviations for this analysis. Although not statistically significant, the average score for minority students enrolled in Differentiated Reading ($M = 685.59$) was higher than the average SRI 1 score for minority (M) students enrolled in Read 180 ($M = 612.58$). The average score for non-minority (NM) students enrolled in Differentiated Reading ($M = 688.10$) was higher than the average SRI 1 score for non-minority students enrolled in Read 180 ($M = 620.60$).

Table #12

Descriptive Statistics for the Results of the SRI 1 for H#4

Reading Program	Minority Status	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	M	685.59	126.96	27
	NM	688.10	164.07	10
Read 180	M	612.59	195.10	63
	NM	620.60	167.32	15

Note. M = Minority; NM = Non-minority

The results of the analysis for SRI 2 indicated there was not a statistically significant difference between any two means, $F = 3.83$, $df = 1, 97$, $p = .053$. See Table 13 for the means and standard deviations for this analysis. Although the difference was not significant, the average score for minority students enrolled in Differentiated Reading ($M = 719.81$) was higher than the average SRI 2 score for minority students enrolled in

Read 180 ($M = 686.84$). The average score for non-minority students enrolled in Differentiated Reading ($M = 788.75$) was higher than the average SRI 1 score for non-minority students enrolled in Read 180 ($M = 587.36$).

Table #13

Descriptive Statistics for the Results of the SRI 2 for H#4

Reading Program	Minority Status	M	SD	N
Differentiated Reading	M	719.81	136.63	26
	NM	788.75	95.53	8
Read 180	M	686.84	167.30	56
	NM	587.36	238.02	11

Note. M = Minority; NM = Non-minority

The results of the analysis for SRI 3 indicated there was not a statistically significant difference between any two means, $F = 1.37$, $df = 1, 70$, $p = .246$. See Table 14 for the means and standard deviations for this analysis. Although the difference was not significant, the average score for minority students enrolled in Differentiated Reading ($M = 757.60$) was higher than the average SRI 3 score for minority students enrolled in Read 180 ($M = 699.28$). The average score for non-minority students enrolled in Differentiated Reading ($M = 857.67$) was higher than the average SRI 3 score for non-minority students enrolled in Read 180 ($M = 700.00$).

Table #14

Descriptive Statistics for the Results of the SRI 3 for H#4

Reading Program	Minority Status	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	M	757.60	139.41	20
	NM	857.67	98.71	6
Read 180	M	699.28	148.98	40
	NM	700.00	114.03	8

Note. M = Minority; NM = Non-minority

MAP RESULTS

Research question five: To what extent is there a difference in achievement as measured by the Communication Arts MAP (CA MAP) test between students enrolled in Read 180 and Differentiated Reading?

Research hypothesis five: There is a significant correlation in achievement between students enrolled in Read 180 and students enrolled in Differentiated Reading as measured by the CA MAP.

A tenth two factor ANOVA was conducted to address research questions five and six. The dependent variable was the CA MAP score. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between enrollment status and gender. The main effect for enrollment status was used to test hypothesis five. The significance level was set at .05.

The results of the analysis with CA MAP scores as the dependent variable indicated a statistically significant difference between the two means, $F = 5.387$,

$df = 1, 107, p = .022$. See Table 15 for the means and standard deviations for this analysis. The average CA MAP score for students enrolled in Differentiated Reading ($M = 662.91$) was higher than the average CA MAP score for students enrolled in Read 180 ($M = 653.60$).

Table #15

Descriptive Statistics for the Results of the CA MAP for H#5

Reading Program	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	662.91	18.91	34
Read 180	653.60	20.20	77

Research question six: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by gender?

Research hypothesis six: There is a difference in achievement as measured by the CA MAP test between male and female students enrolled in Read 180 and male and female students enrolled in Differentiated Reading.

An eleventh two factor ANOVA was conducted to address research questions five and six. The dependent variable was the CA MAP score. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for gender, and a two-way interaction effect between enrollment status and gender. The main effect for enrollment status was used to test hypothesis six. The two-way interaction effect between enrollment status and gender was used to test hypothesis six. The significance level was set at .05.

The results of the analysis for CA MAP indicated there was not a statistically significant difference between the two means, $F = 3.112$, $df = 1, 111$, $p = .081$. See Table 16 for the means and standard deviations for this analysis. Though not statistically different, the average score for female students enrolled in Differentiated Reading ($M = 663.69$) was higher than the average CA MAP score for female students enrolled in Read 180 ($M = 661.51$). The average CA MAP score for male students enrolled in Differentiated Reading ($M = 662.22$) was higher than the average CA MAP score for male students enrolled in Read 180 ($M = 646.28$).

Table #16

Descriptive Statistics for the Results of the CA MAP for H#6

Reading Program	Gender	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	Female	663.69	19.66	16
	Male	662.22	18.77	18
Read 180	Female	661.51	14.88	37
	Male	646.28	21.83	40

Research question seven: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by socioeconomic status?

Research hypothesis seven: The achievement as measured by the CA MAP of students enrolled in Read 180 or Differentiated Reading is affected by socioeconomic status.

A twelfth two factor ANOVA was conducted to address research question seven. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for socioeconomic status, and a two-way interaction

effect between enrollment status and socioeconomic status. The two-way interaction effect between enrollment status and socioeconomic status was used to test hypothesis seven. The significance level was set at .05.

The results of the analysis for CA MAP indicated there was not a statistically significant difference between the two means, $F = 1.203$, $df = 1, 107$, $p = .275$. See Table 17 for the means and standard deviations for this analysis. Although not statistically different, the average score for FR students enrolled in Differentiated Reading ($M = 664.11$) was higher than the average CA MAP score for FR students enrolled in Read 180 ($M = 651.57$). The average CA MAP score for U students enrolled in Differentiated Reading ($M = 661.40$) was higher than the average CA MAP score for U students enrolled in Read 180 ($M = 658.08$).

Table #17

Descriptive Statistics for the Results of the CA MAP for H#7

Reading Program	SES	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	FR	664.11	21.11	19
	U	661.40	16.31	15
Read 180	FR	651.57	18.73	53
	U	658.08	22.92	24

Note. SES = Socioeconomic Status; FR = Free and Reduced; U = Full Pay

Research question eight: To what extent is the difference in achievement as measured by the CA MAP between students enrolled in Read 180 and students enrolled in Differentiated Reading affected by ethnicity?

Research hypothesis eight: The achievement as measured by the CA MAP of students enrolled in Read 180 or Differentiated Reading is affected by ethnicity.

A thirteenth two factor ANOVA was conducted to address research question eight. The two-factor ANOVA can be used to test three hypotheses including a main effect for enrollment status, a main effect for ethnicity, and a two-way interaction effect between enrollment status and ethnicity. The two-way interaction effect between enrollment status and ethnicity was used to test hypothesis eight. The significance level was set at .05.

The results of the analysis for CA MAP indicated there was not a statistically significant difference between any two means, $F = 2.459$, $df = 1, 107$, $p = .120$. See Table 18 for the means and standard deviations for this analysis. Although not statistically different, the average score for minority students enrolled in Differentiated Reading ($M = 658.96$) was higher than the average CA MAP score for minority students enrolled in Read 180 ($M = 653.82$). The average CA MAP score for non-minority students enrolled in Differentiated Reading ($M = 672.40$) was higher than the average CA MAP score for non-minority students enrolled in Read 180 ($M = 652.75$).

Table #18

Descriptive Statistics for the Results of the CA MAP for H#8

Reading Program	Minority Status	<i>M</i>	<i>SD</i>	<i>N</i>
Differentiated Reading	M	658.96	18.41	24
	NM	672.40	17.45	10
Read 180	M	653.82	18.91	61
	NM	652.75	25.23	16

Note. M = Minority; NM = Non-minority

SUMMARY

This chapter included a report of the results of the analyses of the demographics of three groups of students exposed to a remedial reading program over the course of three years utilizing descriptive statistics. The demographics described include student gender, ethnicity, and socioeconomic status for students enrolled in either Read 180 or Differentiated Reading. The results from the hypothesis testing were also presented in this chapter. The ANOVA results provided evidence of statistical significance in some areas for students enrolled in Differentiated Reading as measured by SRI scores. Other ANOVA results provided evidence that there was no statistical significance for students enrolled in Read 180 as measured by SRI and CA MAP scores. Chapter five will describe the findings related the results presented in chapter four as they are related to the literature, implications for action, conclusion and recommendations for future research related to closing the literacy gap.

Chapter Five

Interpretation and Recommendations

This study was designed to look at the impact that socioeconomic status, gender and ethnicity contributed to the underachievement in Reading of at-risk 8th grade students. Two different remedial reading programs were implemented in District X to address the literacy gap over the course of a three year time span utilized for this study. The Read 180 program developed by Scholastic, Inc. requires students to participate in a 90 minute block class session that is made up of three segments of instruction – whole group, small group, and a computer program component. This program focused on building reading fluency and overall comprehension of materials. The Differentiated Reading program was developed by district personnel as a result of the English curriculum becoming standardized, and no longer allowing for students to maintain growth in English and Reading concurrently. The Differentiated Reading program was conducted in a traditional 47 minute class period, and focused on teaching literacy strategies in a Reader’s Workshop model.

OVERVIEW OF THE PROBLEM

Dating back to the publication of “A Nation at Risk Report,” the focus on adolescent literacy continues to be at the forefront of education. What was once a concern primarily for underperforming and urban schools; the literacy gap is creeping its way into suburban and higher performing school districts as they become more diverse. While as a nation we saw a brief period of time that the data appeared to show the literacy gap closing in the late 1980s and early 1990s, unfortunately, we have far from met the goal set in 1991 to have “every adult American” be literate in our nation.

“According to the National Assessment of Education Progress (NAEP) approximately two-thirds of the 8th-12th graders read below the proficient level” (National Association of State Boards of Education 4). As addressed in the review of the literature, “poor academic skills are consistently linked with higher dropout rate, entrance into the juvenile justice system, and unemployment” (National Association of State Boards of Education 4).

PURPOSE STATEMENT

The purpose of this study was to determine if the Read 180 program was more effective than the Differentiated Reading program at closing the literacy gap. Additionally, a second purpose of this study was to determine if gender, socioeconomic status, or minority status had an impact on student performance when enrolled in either Read 180 or Differentiated Reading.

REVIEW OF THE METHODOLOGY

This study followed a quantitative research design using the 8th grade students enrolled in Read 180 or Differentiated reading from the three middle schools within District X. Multiple two-factor ANOVAs were used analyzing two dependent variables against four independent variables. Academic Achievement as measured by the SRI assessment was the first dependent variable. The second dependent variable consisted of the MAP assessment in Communication Arts. The following independent variables were included in the research design: reading program (Read 180 or Differentiated Reading), socioeconomic status (Free/Reduced or Full Pay), gender (Male or Female), and ethnicity (Minority Status or Non-minority) of the students enrolled. Multiple two-factor ANOVAs were used to determine which treatment demonstrated the greatest academic

impact on literacy proficiency. In addition, the ANOVAs were used to determine to what extent the independent variables of socioeconomic status, gender and ethnicity influenced differences in academic achievement.

MAJOR FINDINGS

Analysis using the ANOVAs revealed that there was a statistically significant difference in academic achievement as measured by the SRI assessments for students enrolled in the Differentiated Reading program over the students enrolled in the Read 180 program. Additionally, CA MAP scores indicated a positive mean impact for students enrolled in Differentiated Reading as compared to students enrolled in Read 180.

In addition to evaluating the overall effectiveness of the two remedial reading programs, the research questions addressed the impact of gender, ethnicity and socioeconomic status on student academic growth when enrolled. The results of the ANOVAs showed a significant difference related to gender using the SRI data for males enrolled in Differentiated Reading over males enrolled in Read 180. A Tukey's HSD post hoc test indicated that male students enrolled in Differentiated Reading demonstrated greater impact than male students enrolled in the Read 180 course. However, there was no significant difference in the findings related to gender when evaluating the CA MAP scores between the remedial programs. SRI data analysis showed no statistically significant impact based on socioeconomic status or ethnicity for either Read 180 or Differentiated Reading. Additionally, the results of the ANOVAs using the CA MAP data showed no statistically significant impact related to gender, socioeconomic status, nor ethnicity for students enrolled in either Read 180 or Differentiated Reading.

FINDINGS RELATED TO THE LITERATURE

One definition of literacy presented in the review of the literature is that “to be literate requires knowledge of letter-word correspondence as well as word recognition, and includes knowledge of one’s environment, which is necessary to comprehend what is read” (Wasik 4). This study considered demographic components (gender, ethnicity, and socioeconomic status) that impact a student’s ability to be successfully literate through their enrollment in a remedial reading program based on the definition provided above. The assessment tools used to assess student growth and academic progress also allowed the researcher, as well as the reader, to determine student progress through the lens provided by this definition. It is important to recognize that the SRI assessment provided data throughout the school year by assessing at the beginning of the school year, mid-year, and at the end of the school year; while the CA MAP assessment considered achievement after the treatment was provided. According to Conley and Hinchmann, NCLB emphasizes that “individually appropriate reading instruction, anchored in assessment of individuals and programs” is required to improve literacy skills (44). The Read 180 and Differentiated Reading programs both support the literature in that they require regular assessment of student progress throughout the student’s enrollment in a program.

In the review of the literature it was established that the Read 180 program was developed in response to a growing deficit in student literacy in Orange County. “The Literacy Project was based on two complementary approaches to improving essential skills;” 90 minutes of uninterrupted literacy work each day in classes limited to 20 students or less and 20-30 minutes a day, four days a week students on the computer

using the Peabody Learning Lab software (Scholastic 9-10). When District X originally adopted the Read 180 program in the district it was implemented in its purest form. The students were enrolled in a 90 minute block period that allowed students to progress through the stations as designed. However, as District X began to align their English Language Arts (ELA) curriculum across the district, the Read 180 program did not meet the ELA standards in writing proficiency. Students assigned to Read 180 were not assigned to the grade level English course in order to provide the 90 minute block period; therefore, students in Read 180 were not engaging in the writing process while enrolled in this course as they would if enrolled in a traditional ELA course. In an effort to ensure that students were prepared to move to the next grade level in both English and Reading, District X began to modify the implementation of the Read 180 program to meet the curricular needs of the district. The implementation of the Differentiated Reading program was able to meet the needs of the students fostering continued progress in reading and writing as demonstrated in both the SRI and the CA MAP scores.

Wasik and Hermann stated that “reading difficulties occur more often among poor, non-white, and non-native English-speaking children” (9). While the data presented in chapter four validated an impact for students enrolled in Differentiated Reading over students enrolled in Read 180, the data did not show evidence of ethnicity nor socioeconomic as mitigating factors in student success or failure. The sample sizes for some of the ethnic groups used for each of the years analyzed were so small that the researcher had to collapse the categories to consist of minority and non-minority groups, as well as free and reduced and non-free and reduced in order to conduct the analyses.

Therefore the size of the sample could have decreased the ability to determine the actual impact of ethnicity and SES on student performance.

The National Assessment of Educational Progress (NAEP) reported in 2003 that “more than two-thirds of the nation’s eighth graders (68 percent) read below the proficient level and approximately one quarter are unable to read at even the most basic level” (Fleishman 1). The results of this study could affirm that the Differentiated Reading program has the ability to be more effective in reducing this gap than the Read 180 program for District X. The remainder of this chapter provides a discussion of the implications of these results on the future of reading instruction for District X.

CONCLUSIONS

Chapter one presented the notion that the literacy gap is once again on the rise throughout school districts across the country. District X is one of many public education institutions that have invested a tremendous amount of resources in closing the literacy gap. Programs such as Read 180 provide a prescriptive model of instruction, and require a significant amount of financial and personnel resources to ensure the success of the program. However, this program did not correlate with the district English Language Arts curriculum once a standardized curriculum involving a greater emphasis on writing was implemented. Additionally, implementing the Differentiated Reading program required a significant amount of financial resources invested in the staff members required to research and develop a reader’s workshop model curriculum that aligned with the district curriculum and goals. The findings from this study have implications for District X that are outlined in greater detail below.

IMPLICATIONS FOR ACTION

The SRI assessments and the CA MAP scores produced an overall positive mean score for students enrolled in Differentiated Reading over students enrolled in Read 180. Additionally, the SRI assessments indicated a marginally statistically significant impact on males enrolled in Differentiated Reading over males enrolled in Read 180; however, there was no statistical significance for the female subgroup enrolled in either program. Consequently, this creates implications for District X in that they should consider fidelity checks in instruction to discern that instructional assistance is provided equally among the males and females. Areas of weakness for female students should be identified and incorporated through small group instruction.

RECOMMENDATIONS FOR FUTURE RESEARCH

While there was no statistically significant difference associated with the ethnicity or socioeconomic status of the sample, implications for District X in further research should be considered with a larger sample size. It is important to note that at the time of this study District X was considered a suburban school district. However, the current status of the district would be considered in the urban tier. The implication of this shift from suburban to urban could increase the sample size for further study groups, as well as impact the need to modify instruction.

Given the fact that District X chose to discontinue the use of the Read 180 reading intervention program at the conclusion of the 2010-2011 school year at the middle school level, the recommendations for future research are geared towards the Differentiated Reading program. The first recommendation would be to consider a cohort study to determine student growth over an extended period of time as opposed to one year. A

study could follow students that enter middle school in 6th grade below grade level and follow them through 8th grade to determine the length of time enrolled in the Differentiated Reading course necessary to perform at or above grade level.

A second recommendation for future study would be to expand the study to include a qualitative research component that analyzes student and teacher perceptions at each of the three middle schools to analyzing the effectiveness of the Differentiated Reading program. Student perception of success can be a key indicator of whether or not the program will be effective in closing the literacy gap. In addition, teacher perception of the success of the literacy strategies taught and the Reader's Workshop model could determine the success of the program at each of the three middle schools in the district. Disaggregating the data by building could indicate that one building is more successful than another at closing the gap.

The new Common Core State Standards (CCSS) present a new component to curriculum development and student assessment. Students are now held to a higher standard of learning and progression with the CCSS. A third recommendation for future study would be to conduct a new study using the data collected from the new Common Core assessment tool to determine the effectiveness of the Differentiated Reading program in continued academic growth.

CONCLUDING REMARKS

To reiterate a quote from Tovani, "Readers of tomorrow must do more than memorize words. They must be prepared to analyze, validate, and ask the next logical question. They have to know how to think" (110-111). As educators we have a moral and ethical obligation to ensure that our students are prepared to be members of a global

society. As technology continues to advance, the demand for students to be literate increases and we must rise to the challenge of meeting students where they are when they arrive in our classrooms and move them to a level of proficiency by the time they graduate to the next level.

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Appendices

Appendix A: District Approval to Conduct Study



Raytown Quality Schools: a unified learning community leading individuals to achieve the exceptional.

To Whom it May Concern,

Ms. Jaime Sadich has been given permission to conduct her study entitled, "Closing the Literacy Gap: A Study of Read 180 and Reader's Workshop Model". If you have any questions, please let me know.

Respectfully,

A handwritten signature in black ink, appearing to read 'Steve Shelton', is written over a horizontal line.

Steve Shelton
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Appendix B: Baker University IRB Approval



BAKER
UNIVERSITY
Own Confidence

Jan. 17, 2014

Dear Ms. Sadich,

The Baker University IRB has reviewed your research project application and approved this project under Expedited Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

The Baker University IRB requires that your consent form must include the date of approval and expiration date (one year from today). Please be aware of the following:

1. At designated intervals (usually annually) until the project is completed, a Project Status Report must be returned to the IRB.
2. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
3. Notify the OIR about any new investigators not named in original application.
4. Any injury to a subject because of the research procedure must be reported to the IRB Chair or representative immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity. If you use a signed consent form, provide a copy of the consent form to subjects at the time of consent.
6. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

Please inform Office of Institutional Research (OIR) or myself when this project is terminated. As noted above, you must also provide OIR with an annual status report and receive approval for maintaining your status. If your project receives funding which requests an annual update approval, you must request this from the IRB one month prior to the annual update. Thanks for your cooperation. If you have any questions, please contact me.

Sincerely,

Thomas Peard
Chair, Baker University IRB

CC: Harold Frye