Journal of Curriculum and Instruction (JoCI)
November 2010, Vol. 4, No. 2, Pp. 51-70
http://www.joci.ecu.edu

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

Third Grade Reading Performance and Teacher Perceptions of the Scott Foresman *Reading Street* Program in Title I Schools in South Mobile County

Jamie Ladnier-Hicks
Mobile County Public School System

Rose M. McNeese
James T. Johnson
The University of Southern Mississippi

Abstract

This study was conducted to determine if third grade reading performance improved as a result of first year implementation of the Scott Foresman *Reading Street* program, obtain the overall satisfaction level of the certified instructional personnel using the new curriculum, and identify predictors that may improve future student performance. Reading performance was measured using the *Stanford Achievement Test-10* (SAT-10). Although slight improvements in student outcome data were noted during the initial implementation year, no statistically significant differences between the performance of third grade participants before and after the implementation of *Reading Street* were found. A literature review revealed that it is common for reading achievement to remain the same or decrease following curriculum change. These findings appear characteristic of the reported curvilinear nature of reading curriculum implementation. Questionnaire data indicated that educators were very satisfied with *Reading Street*, and no specific predictors that may improve future performance within the participating population were revealed.

In August 2008, the Mobile County Public School System (MCPSS) implemented a district-wide reading curriculum for elementary students titled *Reading Street*. Following a thorough review of the literature, it was determined that independent (defined as non-commissioned, non-contracted) research regarding the *Reading Street* program was not found. Since 2005, Pearson, *Reading Street*'s publisher, has contracted independent consulting firms such as Gatti Evaluation, Magnolia Consulting, and Claremont Graduate University to complete studies on the *Reading Street* curriculum (Berry, Byrd, & Collins, 2009; Gatti, 2005, 2006; Wilkerson, Shannon, & Herman, 2006, 2007). Independent studies completed by entities not associated with or contracted by Pearson appear absent from the literature at this point in time, and there is a critical need for non-commissioned research to be conducted in order to determine the effectiveness of *Reading Street*.

This study was created with three major purposes in mind. The primary purpose of this study was to determine if third grade student reading performance as measured by the *Stanford Achievement Test-10* (SAT-10) improved as a result of the first year implementation of *Reading Street*. This study was also designed to obtain information regarding the overall satisfaction of the instructional personnel using the program and to

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

attempt to identify predictors that may improve future student performance. Since a significant amount of money is spent by systems nationwide to purchase curriculum and state and local school districts are required by law to utilize research-based materials, independent research documenting a program's effectiveness is necessary. Systems have limited funds available due to difficult economic times, and school systems and their stakeholders want their funds to be used wisely. Therefore, completion of this study was essential and overdue.

Literature Review

History of Curriculum Implementation

Many researchers have provided insight into the evolution of the process of curriculum implementation. In 1969, Fuller proposed a three-phase developmental framework of common teacher concerns. The Concerns-Based Adoption Model (CBAM) was developed as an extension of Fuller's work throughout the early 1970s and mid-1980s (Anderson, 1997). Hall, George, and Rutherford (1977) hypothesized that there were definitive categories of concern related to the adoption of a product, a curriculum or program, or an instructional approach (which they referred to as an innovation), and these concerns progressed in a logical sequence as the users became more efficient in using the innovation. Many researchers assess the fidelity of new innovation implementation based upon the CBAM. In 1975, Loucks investigated the implementation of new innovations and revealed that when reading instruction was the focus, a curvilinear relationship was documented indicating that reading achievement scores do not increase in direct relation to the number of years the new program has been in place.

Hall and Loucks (1977) conducted extensive research which suggested that implementation is not a dichotomous phenomena consisting of use versus nonuse, but that implementation consisted of levels of use. Additionally, Hall and Hord (1987) emphasized that change is a process and not an event, and it is possible to anticipate much of the change that will occur during implementation. The work of Hall and Loucks as well as Hall and Hord support the idea that many of the benefits of new curriculum implementation will not be documented within the first year.

In the book *Change in Schools: Facilitating the Process*, Hall and Hord (1987) cautioned against using student outcome data results from the first 3 years of implementation as a basis for policy decision-making practice. Douglas Reeves (2006) stated that research on reading curriculum implementation has indicated that the relationship between program implementation and student outcome data can be described as a clear nonlinear relationship. Furthermore, he explained that only when a new reading curriculum is thoroughly implemented will student outcome measures exhibit the most significant impact on student achievement, and it is not until that point the curve in student achievement will begin to rise. Therefore, it may be unreasonable to expect improvements in student outcome measures during the implementation phase of curriculum change.

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

Bowen (2006) completed a study which investigated the effects of implementing *A Comprehensive Approach to Balanced Literacy (ACABL)* curriculum over a period of six years. Bowen reported consistent overall gains in student outcome measures. Specific patterns of student achievement were more readily observable with a more detailed analysis of performance by grade and achievement level. The most pronounced improvements in third grade student performance across all proficiency levels were not exhibited until year 6 of implementation. This finding appeared to be consistent with the research indicating that the most pronounced effects of new program implementation may not be observed until the program has been in place for several years. In addition, this finding also supported the idea that implementation timelines may vary according to individual student and school characteristics.

History of Reading Instruction

The first textbook used for reading instruction in America was published in 1687 and was entitled the *New England Primer*. The *Primer* included the alphabet, brief word lists ranging from two to six syllables, the Lord's Prayer, and the Christian Creed (Witty, 1949). Students learned the material using rote memory and no reference to specific instructional methods were recorded (Hester, 1955). As a result of the Revolutionary War, political leaders attempted to unify the people by encouraging the early colonists to speak one language. Therefore, schools began to emphasize oral reading and encourage the mastery of speaking the English language correctly. Textbooks began to publish selections written by American authors that conveyed the grandeur of our people and our land (Hester).

The alphabet method was the first documented instructional method used in the U.S. to teach reading which consisted of children mastering specific skills in sequential order, such as memorizing upper- and lower-case letters, spelling and decoding syllables, phrases, sentences, and then stories (Witty, 1949). In conjunction with the alphabet method, educators began to emphasize elocution (Rasinski, 2003). In 1872, Hamill and Hamill published a book emphasizing the technique of elocution and thirteen styles of utterance. They identified some of the characteristics of good elocution as distinct articulation, adequate respiratory support, and a rich tone. Therefore, because of an emphasis on elocution and lack of emphasis on reading comprehension, the alphabet method began to be criticized (Rasinski, 2003). According to Hester (1955), new books began to appear which incorporated topics such as science, philosophy, and art. During the 1800s, the popular *McGuffey Readers* were published (Teale, 1995). These readers contained texts which gradually increased in difficulty and gave birth to basal reading programs. However, early basal reading programs were criticized because of an emphasis on middle-class culture, tightly controlled vocabulary, and excessive narrative selections (Durkin, 1987).

The word method was the next documented instructional reading technique. This technique consisted of memorizing a list of sight words. Once the child demonstrated

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

mastery of these targeted words, they used the words they knew to read books and other printed material which were interesting to them (Teale, 1995). However, many parents became dissatisfied with the word method because their children were unable to decode new and unfamiliar words (Witty, 1949). Yoakam (1955) pointed out that as a result of this parental dismay, extensive phonics programs emerged between 1880 and 1918. These phonics programs emphasized teaching the phonetic sounds of letters and specific letter combinations for decoding words (Hester, 1955).

No specific instructional method prevailed between the early- and mid-1900s; however, the influence of behavioral theorists could be seen in reading instruction which began to promote the idea that learning was facilitated through the pairing of a printed word and its pronunciation (Teale, 1995). At that time, Scott Foresman published the popular *Dick and Jane* reading series which implemented an associative learning style, or whole word approach (Reyhner, 2008).

During the late 1900s, there appeared to be two major approaches to reading instruction being used, whole language and phonics approaches (Teale, 1995). Whole language was characterized by a holistic instructional method which incorporated functional and meaningful language experiences with the individual interests and existing knowledge of children. The role of the teacher in whole language reading instruction consisted of responsibilities such as supervising, encouraging, and creating environments in which children would be exposed to practical and purposeful learning experiences. This technique did not require direct reading instruction, and it was believed that these experiences would facilitate an intrinsic motivation to learn how to read (Graves, Watts, & Graves, 1994).

Balanced literacy is a multifaceted approach composed of blending the strengths of past instructional techniques with current best practices (Heydon, Hibbert, & Lannacci, 2004). Balanced literacy is a widely-known approach to reading instruction that continues to be practiced in classrooms across the United States today.

Accountability in Education

Concerns regarding educational accountability escalated during the 1950s with the Russian launch of the first orbiting space satellite, Sputnik (Reiser, 2001). Alarmed and insecure regarding the future security and safety of the United States, the federal government granted millions of dollars for math and science programs to develop new instructional materials which were never piloted for effectiveness and were later determined ineffective (Reiser). Throughout the 20th century, educational reform evolved into even more of a national issue due to social and economic concerns (Airasain, 1987). The passage of the Civil Rights Act of 1964, the Elementary and Secondary Education Act of 1965, and the Education for All Handicapped Children Act of 1975 have ensured an education for all students and have often provided additional funding for schools (Allington & McGill-Franzen, 2000; U.S. Department of Education, 2005).

ISSN: 1937-3929
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In 1986, *What Works: Research about Teaching and Learning* was published and provided information regarding effective strategies in the home, classroom, and school that could easily be implemented to improve student performance (U.S. Department of Education, 1986). At the end of the 20th century, the vast array of scientific research and knowledge available was used to identify best practices in instructional techniques through the work of the National Reading Council, the National Reading Panel, and the Partnership for Reading (National Reading Panel, 2000; Partnership for Reading, 2003; Snow, Burns, & Griffin, 1998). These techniques are referred to as the *Reading First* principles and consisted of instructional emphasis on the following five basic components: phonemic awareness, phonics, fluency, comprehension, and vocabulary (Partnership for Reading, 2003).

The 21st century commenced with the passage of No Child Left Behind Act (NCLB) in 2001. Increased accountability and the use of research-based programs and practices were required within all educational settings which receive federal funding (U.S. Department of Education, 2004). The priorities of NCLB included increasing accountability, requiring the use of research-based programs and practices, increasing state and local flexibility in spending federal funds, and empowering parents through improved communication and transfer options from low- to high-performing schools. The Executive Summary of NCLB disclosed the fact that the federal government was spending $120 billion per year on programs that had not been documented by research to improve student achievement. NCLB became the first legislation to increase public school accountability by financially rewarding states that exhibit educational progress and withholding federal funding from states that fail to exhibit such progress. NCLB requirements do not extend to the private sector. Therefore, publishing companies are not required to create curriculum and materials that are research-based or scientifically proven as effective; however, states that receive federal funding are legally bound to utilize research-based curricula or risk losing federal funds. Therefore, in order for new products to be marketable, publishing companies must market their products as being scientifically sound and research-based. A review of the literature revealed that some publishing companies boast their reading curricula are research-based due to the fact they were created and developed using the findings of the National Reading Council (1998), National Reading Panel (2000), and the Partnership for Reading (2003) reports; however, limited (if any) research has been conducted to determine the effectiveness of their specific products. In spite of these facts, Pearson Scott Foresman has commissioned independent entities to complete studies on their products to ensure product effectiveness.

More recent legislation included the American Recovery and Reinvestment Act of 2009 (ARRA) which provided funds to purchase and implement effective reading curricula. Given that the federal government poured millions of dollars into ineffective instructional programs during the 1950s and 1960s, an increased focus on accountability requirements prevails and today's educators are burdened with the additional responsibility to exhibit progress in student outcome data. The *Reading Street* curriculum (which is the focus of this research study) has embedded the five *Reading First*

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principles within the program. *Reading Street* is one of many reading curriculum programs which have been adopted by state and district educational leaders across the United States as being an effective, research-based program.

ISSN: 1937-3929
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Reading Street Research

Pearson Scott Foresman has commissioned several studies to examine the effectiveness of *Reading Street*. Gatti Evaluation completed two studies in which *Reading Street* assessment items were analyzed to determine whether a correlation to state reading standards existed. The analyses determined that the *Reading Street* program was closely aligned to state standards across the nation (Gatti, 2005, 2006). In two additional studies commissioned by Pearson in 2006 and 2007, Magnolia Consulting, under the direction of Wilkerson, Shannon, and Herman, completed two separate year-long research investigations to determine the effectiveness of the *Reading Street* program. Both reports indicated that students who received instruction using *Reading Street* exhibited significant gains in reading achievement, but those gains were similar to gains achieved by students who were instructed in other basal reading curricula (Wilkerson et al., 2006, 2007). Berry et al. (2009) conducted a study contracted by Pearson which was designed to continue research on the curriculum by building upon the findings of the 2006 and 2007 Wilkerson et al. studies. The findings of Berry et al. were consistent with the findings of Wilkerson et al. as gains were noted in reading achievement.

The Pearson studies provided a basis on which to design and create further *Reading Street* studies. If additional independent, non-commissioned research studies were completed and the *Reading Street* curriculum was determined to be effective, both district and state leaders would know with assurance their students were receiving a quality education. Furthermore, stakeholders may be more willing to purchase supplemental *Reading Street* materials and provide additional professional development for teachers which would further ensure the program was being implemented with fidelity. All too often, districts are pressured by political and social entities to change curriculum programs if significant progress is not documented during the first several years of implementation. When districts make frequent curriculum changes, students and parents may become confused and teachers may become frustrated, resulting in a negative school atmosphere. Since the research indicates it may take up to six years for significant improvements in reading achievement to occur, educators can share these findings with their stakeholders.

Methodology

Reading Street Instruction Prior to Implementation

As a direct result of NCLB legislation, Alabama developed the *Alabama Reading Initiative* (ARI) which consisted of scientifically-based pedagogical strategies for reading instruction. These strategies were identified as the most effective instructional techniques that educators could use and have become known as best practices. Furthermore, these findings have provided educators with reliable and valid research-based knowledge regarding the specific skills that are needed for individuals to become

ISSN: 1937-3929
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successful independent readers. The basic components of ARI consisted of systematically addressing phonemic awareness, phonics, fluency, comprehension, and vocabulary (Bell, 2003). Each district decided which specific curriculum would be used to address these ARI components. Before MCPSS adopted and implemented the *Reading Street* curriculum, the system had adopted and purchased Scholastic's *Literacy Place* curriculum. However, local schools were allowed flexibility in supplementing and utilizing other instructional materials during reading instruction as long as the ARI components were embedded within the curriculum.

This study utilized a quantitative design, including a Likert scale questionnaire administered to classroom teachers. Quantitative data included summative and formative assessments as well as attendance data on all third grade students who were enrolled in Title I schools in south Mobile County during the 2007-2008 and 2008-2009 school years, regardless of gender, ethnicity, special education status, English Language Learner (ELL) status, transiency, truancy, cognitive status, or at-risk status. Although participants within the subgroups of ELL and special education were included in the study, they were not identified as such. Demographic information such as gender, school, and socioeconomic status was also included as categorical variables in the analyses. In addition, nominal data such as whether or not the student received instruction using the *Reading Street* program were collected. No one received *Reading Street* instruction during the 2007-2008 school year, but all students in the system received instruction using the new reading program the following year.

The MCPSS is the largest district in the state of Alabama. It is located in the southwest corner of the state near the Gulf of Mexico, and it enrolls over 64,000 students per year. The MCPSS consistently educates a higher percentage of low-income students (as defined by qualifying for free or reduced lunch) than the state average (Alabama State Department of Education, 2007, 2008, 2009). Due to the vast size of the system, it was decided that the population should be limited to Title I elementary schools in south Mobile County. Since the majority of schools in the system are Title I schools, it was assumed that this population was representative of the larger system's population. For purposes of this study, south Mobile County elementary schools were defined as elementary schools with a feeder pattern in which most of their students enroll in Alma Bryant High School for their secondary education.

Sample size included 712 students from six elementary schools which approximated an even split in the population based on gender and *Reading Street* participation. Socioeconomic levels were determined using free/reduced/paid lunch status categories. The participating population included 68.5% free/reduced lunch status and 31.5% paid lunch status (see Table 1).

ISSN: 1937-3929
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Table 1

Descriptive Statistics by Participant Population

	Percentage
Gender	
Male	51.0%
Female	49.0%
Free/Reduced/Paid Lunch Status	
Free/Reduced Lunch Status	68.5%
Paid Lunch Status	31.5%
Ethnicity	
Caucasian	77.0%
African-American	14.0%
Asian	8.0%
Hispanic	1.0%
Other	<1%

Data Collection

For the purposes of this study, third grade *Stanford Achievement Test-10th Edition* (SAT-10) reading percentile scores were considered the dependent variable. Independent variables included the following: *Alabama Reading and Mathematics Test* (ARMT) scores (as measured by a score of Level I, II, III, or IV); *Otis-Lennon School Ability Test* (OLSAT) School Ability Index (SAI) scores (as measured by an interval score which is considered commensurate with cognitive ability); *Dynamic Indicators of Basic Early Literacy Skills* (DIBELS) Oral Reading Fluency subtest scores (as measured by words per minute); socioeconomic status (as measured by qualification for free or reduced lunch); attendance; and whether or not the student was instructed with and participated in the Scott Foresman *Reading Street* program. Statistical analyses included an analysis of covariance (ANCOVA) and multiple linear regression analyses.

The *Reading Street* teacher questionnaires were created by a focus group and were piloted within the county by local school literacy coaches. Reliability of the questionnaire was calculated and revealed an overall Cronbach's Alpha of .926 indicating the instrument should produce reliable scores. Teacher satisfaction was measured by mean scores obtained from these questionnaires that utilized a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Independent variables on this analysis consisted of the following categorical data: school; teaching degree; grade level taught during the 2009-2010 school year; and years of experience ranging from 0 to above 21 that were categorized by 5-year increments. A multiple linear regression was conducted on these data.

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Results

Although no significant differences were revealed, a comparison of mean SAT-10 total reading percentile ranks between years indicated a very slight increase in the scores of participating students. An Analysis of Covariance (ANCOVA) was performed to determine whether a statistically significant difference between SAT-10 scores of third grade students before and after the initial year of implementation existed while controlling for any effects from differences in variations of cognitive ability as measured by OLSAT SAI scores. Levene's Test of Equality of Error Variances revealed a significance level of .536 indicating that the assumption of homogeneity of variance was met. ANCOVA results revealed that when variations in cognitive abilities were controlled, there was no statistically significant difference in SAT-10 scores between students who received and did not receive instruction using the *Reading Street* program ($F(1,711)=.250$, $p=.617$).

Table 2 displays the descriptive statistics characterized by the variables included in the study. Independent variables included ARMT Performance Level, OLSAT SAI, Beginning-, Middle-, and End-of-the-Year Oral Reading Fluency (ORF) subtest scores from the DIBELS, and total absences. ARMT Performance Levels have a minimum of Level I (indicating non-proficiency) and a maximum of Level IV (indicating high proficiency); therefore, a mean and standard deviation were not determined. If considering a normal standard deviation to be approximately one-third to one-fourth of the mean, examination of the standard deviation values revealed normal standard deviations associated with Middle-of-the-Year and End-of-the-Year DIBELS ORF subtest scores. The OLSAT SAI exhibited a low standard deviation indicating the distribution may have been somewhat leptokurtic in nature with a more acute peak around the mean which is associated with less variability. Both the SAT-10 total reading percentile rankings and Beginning-of-the-Year ORF DIBELS scores exhibited significantly larger standard deviations ranging from approximately 40% to 45% of the mean.

Table 2

Descriptive Statistics by Variables

Variable	Min	Max	Mean	Standard Deviation
SAT-10 Total Reading Percentile	2	99	58.32	25.75
ARMT Reading Performance Level	I	IV	-	-
OLSAT Total School Ability Index	51	150	100.12	.63
DIBELS ORF Beginning-of-the-Year	4	218	85.33	34.42
DIBELS ORF Middle-of-the-Year	6	224	101.97	30.70
DIBELS ORF End-of-the-Year	4	280	121.30	34.93
Total Annual Absences	0	47	8.60	6.85

ISSN: 1937-3929
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The most significant characteristic of the range of standard deviations was associated with total annual absences. The standard deviation of total annual absences was approximately 80% of the mean and, therefore, was considered well outside of normal limits for standard deviation figures. This phenomenon may have been associated with the presence of several extremely high outliers regarding attendance (such as 47 total absences a year). These outliers were not excluded from the analyses in this study since the researchers decided to retain all original data values. However, addressing them may have allowed for the development of a prediction equation containing yearly attendance figures in the regression analysis.

A multiple regression analysis was conducted to determine whether a statistically significant relationship existed between SAT-10 results and the ARMT Reading Performance Level Scores, OLSAT SAI scores, DIBELS Oral Reading Fluency subtest scores, socioeconomic status, attendance, gender, and *Reading Street* participation. According to the analysis, approximately 65% of the variability found in SAT-10 scores was related to the independent variables included in the study. Results of the multiple regression analysis revealed a statistically significant relationship between the dependent and several independent variables ($F(8,703)=161.913$, $p=<.001$, $R^2=.648$). The results are displayed in Table 3.

Table 3

Independent Variable Results of the Multiple Regression Analysis

Model	b b-weight [a]	B Beta [b]	*t*	Sig.
OLSAT SAI	.854	.479	18.452	<.001*
DIBELS ORF (Beginning)	.173	.231	4.153	<.001*
DIBELS ORF (Middle)	.122	.146	2.007	.045*
DIBELS ORF (End)	.054	.074	1.129	.259
Total Annual Absences	.133	.035	1.564	.118
Gender	-1.062	-.021	-.912	.362
Reading Street Participation	-.669	-.013	-.573	.567
Free/Reduced Lunch Status	3.306	.060	2.608	<.009*

[a] *b-weight is the unstandardized regression coefficient*
[b] *Beta is the standardized regression coefficient*
**Indicates statistical significance at the .05 level*

Standardized regression coefficients indicated that *OLSAT* scores had the greatest impact on SAT-10 scores followed by DIBELS ORF scores and free/reduced lunch status. No meaningful results were obtained regarding the identification of specific predictors that may improve future student performance.

The results of the teacher questionnaire were subjected to a multiple regression analysis to determine whether a statistically significant relationship existed between the

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

attitudes of teachers toward the *Reading Street* program by school, grade level taught, degree, or years of experience. Statistically significant differences were found in teacher perceptions and satisfaction levels between schools and grade levels in overall (mean) scores on the questionnaire ($F(15,77)=2.890$, $p=.001$, $R^2=.360$). However, all satisfaction ratings were well above the 2.5 neutral rating average on the Likert scale which indicated that instructional personnel had more positive ratings of *Reading Street* as compared to either neutral or negative ratings. Teachers' perceptions regarding individual components of the *Reading Street* program are contained in Table 4. Overall, teachers exhibited a positive perception and level of satisfaction regarding the program with a mean of 3.59 and standard deviation of .65.

Table 4

Descriptive Statistics of Teacher Perceptions of the Reading Street Program

Variable	Min	Max	Mean	Standard Deviation
Overall Satisfaction Level	2.2	5.00	3.59	.65
Preparation/Training/Support	1.7	5.00	3.67	.85
Planning/Scheduling	1.3	5.00	3.88	.83
Materials	2.0	5.00	3.67	.67
Curriculum & Content	1.9	5.00	3.64	.72
Differentiated Instruction	1.4	5.00	3.40	.85
Connections	1.4	5.00	3.39	.77
Outcomes	1.0	5.00	3.55	.84

N = 92; Likert Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Demographic information describing the instructional personnel who participated in the *Reading Street* questionnaire survey is displayed in Table 5. The frequency and percentage of individual variables associated with grade level participation, highest academic degree, and years of experience. Grade level teacher participation appeared to be evenly distributed with second and fifth grades exhibiting somewhat less participation. Fifty-seven percent of the participating teachers had obtained Bachelor's Degrees, 40.9% Master's Degrees, and 1.1% Specialist's Degrees. Years of teacher experience were also evenly distributed with participants having 0-5 years of experience exhibiting the highest participation rate and participants with 11-15 years of experience having the lowest participation rate.

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Table 5

Frequencies and Percentages Related to the Results of the Reading Street Questionnaire by Demographic Variables

Variable	Frequency	Percentage
Grade Level Participation of Questionnaire Participants		
Kindergarten	15	16.1%
First	17	18.3%
Second	8	8.6%
Third	13	14.0%
Fourth	12	12.9%
Fifth	9	9.7%
Other	10	10.8%
Highest Academic Degree of Questionnaire Participants		
Bachelor's Degree	53	57.0%
Master's Degree	38	40.9%
Specialist's Degree	1	1.1%
Years of Experience of Questionnaire Participants		
0-5 years	24	25.8%
6-10 years	23	24.7%
11-15 years	16	17.2%
20 or more years	19	20.4%

Discussion

The results of this study revealed that even though students exhibited very slight improvements in SAT-10 scores following the first year of implementation of *Reading Street*, no statistically significant differences were found. The results of the regression analyses indicated that OLSAT SAI scores had the greatest impact on SAT-10 scores followed by DIBELS ORF scores and free/reduced lunch status when cognitive differences were controlled. Specific predictors that may improve future students' performance were not revealed within the data. Furthermore, the data also indicated that teachers across schools, by grade level, and regardless of years of experience or highest level of education, had more positive ratings of *Reading Street* as compared to negative or neutral ratings.

The results of this study are congruent with the findings of previous research regarding curriculum implementation (Bowen, 2006; Fuller, 1969; Hall & Hord, 1987; Loucks, 1975; Reeves, 2006). Research indicated that curriculum implementation is a process, and it may take many years before the full effects of the program are documented. As noted in the literature, typically reading achievement outcomes do not immediately increase following the first or second year of curriculum change and implementation. Despite the fact that specific research in the reading achievement of

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

Title I schools during the initial implementation year of a new reading curriculum has not been conducted, general patterns of reading achievement during initial curriculum implementation have appeared in the literature indicating it is very common for measures of student outcome data to remain the same, exhibit very little improvement, or even decrease slightly during the first couple of years. However, when an effective new curriculum has been in place for several years, student outcome data that reflect improvements in student achievement are more readily observable.

Supovitz, Taylor, and May (2002) reported that a review of the literature revealed that it is difficult to master reading instruction; therefore, it takes a long time for changes to be implemented. Furthermore, Supovitz et al. suggested that if it takes a longer time to master effective delivery of reading instruction, then it is rational to expect it to take longer periods of time to accurately document the ultimate effects of new reading curriculum implementation. It is suspected that the findings of this *Reading Street* study are characteristic of the curvilinear nature of reading curriculum implementation. Although no statistically significant differences were found in test scores before and after the implementation of *Reading Street*, small gains in student outcome data were noted during the initial year of implementation.

In conclusion, the implementation of the *Reading Street* program appears to exhibit the potential for significantly increasing reading achievement scores and the findings of this study are indicative of the nonlinear nature of the implementation process. Slight increases in student outcome data were noted in spite of the fact that new curriculum implementation is often associated with increased anxiety and stress as the process evolves (Hall & Hord, 1987; Hall & Loucks, 1977). It is the opinion of the researchers that the findings of this study serve as a good prognostic indicator of future improvements in student reading achievement performance. In addition, this study revealed that instructional personnel implementing *Reading Street* in Title I schools in south Mobile County had positive perceptions and high satisfaction levels of the new program.

Limitations of the Study

There were various limitations noted in this study. This study has limited generalizability since all of the participating schools were located in rural areas, and free/reduced lunch status percentages at participating schools ranged from 51.8% to 88.9%. Moreover, comparisons between third grade classes using populations of different students versus a study designed to evaluate the progress of the same students across grade levels may have revealed different information. Although data are not available from consecutive years of implementation, study limitations were created by solely investigating the initial year of student outcome data. In addition, a more formal assessment of the implementation process using the CBAM could have been used to determine the Stages of Concern, Levels of Use, and Innovation Configurations. The results from a CBAM would have officially documented the various stages of the implementation process and would have provided additional information indicating that

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

Reading Street was being implemented with fidelity.

Recommendations for Policy, Practice, and Future Research

This study should be used to provide data regarding year one implementation of the *Reading Street* program within Title I schools in south Mobile County. Limitations should be considered by researchers and administrative personnel while reviewing this study. Policy decisions should not be made based on this study alone, but additional research should be encouraged by the district in order to provide a more accurate portrayal of student achievement outcomes in reading throughout the implementation process. The MCPSS should consider offering additional professional development in the upper grades given that overall levels of satisfaction were slightly lower in the upper grades despite the fact they remained very favorable.

Most importantly, it is suggested that follow-up studies should be conducted for at least six years to reveal specific improvements in student achievement in the area of reading and document program effectiveness. Both formative and summative assessment data should be analyzed for several years to determine if any statistically significant differences are revealed. Multiple regression analyses (with original data and with attendance outliers addressed) should continue to be completed in order to determine the presence of any predictors which may improve student performance. In conclusion, future studies including both rural and urban students should be conducted to make the results more generalizable to a variety of populations.

Authors' Note. Special thanks to Amy Byxbe, Jerry Long, Sandra Morris, Pam Adams, and Marilyn Howell for their assistance in completing this study.

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November 2010, Vol. 4, No. 2, Pp. 51-70
http://www.joci.ecu.edu

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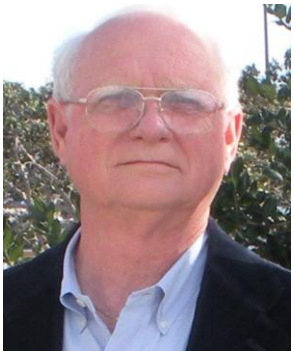
http://www.joci.ecu.edu

ISSN: 1937-3929
doi:10.3776/joci.2010.v4n2p51-70

About the Authors

Jamie Ladnier-Hicks, Ph.D., is currently employed by the Mobile County Public School System. For 22 years, she has served in a variety of roles including speech-language pathologist, special education reading teacher, and inclusion teacher at Castlen Elementary. Over the years, she has also served in various leadership roles within the local school and district. She assisted in developing a successful model site for inclusion services in the county. Her research interests include reading instruction in both general and special education settings. In addition, she is an adjunct statistics professor at Pensacola State College. She lives on the Alabama Gulf Coast with her husband, Steve, and two children, Jared and Caroline. Email: Jamie.ladnier.hicks@gmail.com

Rose M. McNeese, Ph.D. is in her sixth year as a professor in the Department of Educational Leadership and School Counseling at the University of Southern Mississippi, Hattiesburg, Mississippi. Prior experience included 34 years as a teacher, administrator, and/or curriculum director in Cobb County, Georgia. Areas of research interest include leadership, curriculum development and supervision, instruction and assessment, behavior change, school culture, alternative school, impact of poverty on learning, and disaster intervention and recovery. Publications include multiple peer-reviewed articles, conference proceedings, and contributions to books and presentations at state, national, and international conferences. Email: rose.mcneese@usm.edu



James T. Johnson, Ph.D., is the Director of the Center for Research Support at The University of Southern Mississippi. He provides statistical support to the entire University. His research interests include efforts to combat childhood obesity, cancer tumor marker efficacy, and uses of multivariate statistical procedures. In addition, he teaches statistics at the doctoral level. Email: jt.johnson@usm.edu