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The Effects of K-2 Commercialized Reading Programs on 3rd Grade Reading Mastery as Measured by the Pennsylvania System of School Assessment (PSSA)

Jesse T. Wallace III

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THE EFFECTS OF K-2 COMMERCIALIZED READING PROGRAMS ON 3RD
GRADE READING MASTERY AS MEASURED BY THE PENNSYLVANIA
SYSTEM OF SCHOOL ASSESSMENT (PSSA)

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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Title: The Effects of K-2 Commercialized Reading Programs on 3rd Grade Reading Mastery as Measured by the Pennsylvania System of School Assessment (PSSA)

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The purpose of this a two-phase explanatory sequential mixed–methods research designed study was to determine if a significant difference exists between four modalities of teaching reading: teacher-developed, Step by Step Learning, Inc. (scripted), other commercialized reading programs (non-scripted), or a combination of scripted/non-scripted programs on the reading ability of third-grade students as measured by the Pennsylvania System of School Assessment (PSSA). All 500 superintendents in the Commonwealth of Pennsylvania were sent an online survey to complete and volunteer for a follow-up telephone interview.

Findings of this study revealed a statistically significant difference between the amounts of time the scripted/non-scripted approach to teach reading is utilized and proficient/advanced 3rd grade PSSA scores. In addition, there was a statistically significant difference between the perceptions of superintendents that a student’s background characteristics influence proficient/advanced 3rd grade PSSA scores.

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TABLE OF CONTENTS

Chapter	Page
I	INTRODUCTION.....1
	Statement of the Problem.....2
	Purpose of Study.....4
	Significance of the Study.....5
	Theoretical Framework.....11
	Rationale.....13
	Research Questions.....15
	Research Methodology.....15
	Definition of Terms.....16
	Limitations.....18
	Summary.....19
II	REVIEW OF LITERATURE.....21
	The Importance of Reading by Third Grade.....23
	The Challenge of Learning to Read: Brain Research and Reading.....30
	Modalities of Teaching Reading.....34
	Scripted, Step by Step Learning, Inc. (SBSL).....34
	Teacher-Developed Reading Programs.....44
	Non-Scripted, Commercialized Reading Programs.....52
	Houghton-Mifflin-Harcourt.....52
	McGraw Hill.....66
	Pearson-Scott-Foresman.....73
	Scripted/Non-Scripted Combined Reading Programs.....77
	Components of Reading.....81
	Comprehension.....81
	Vocabulary.....84
	Phonics and Phonemic/Phoneme Awareness.....90
	Phonics.....90
	Phoneme/phonemic awareness.....95
	Fluency.....99
	Obstacles to Success.....105
	Program Cost.....105
	State Funding.....107
	Funding Conflicts.....108
	Professional Development.....108
	Student Demographics.....111
	English Language Learners.....113
	Parent Involvement.....114
	Special Education.....116
	Summary.....116

Chapter	Page
III	METHODOLOGY 120
	Introduction..... 120
	Research Questions..... 121
	Study Design..... 121
	Sample..... 127
	Research Instrument..... 128
	Research Procedures..... 132
	Method for Data Collection..... 134
	Piloting..... 136
	Data Analysis..... 137
	Summary..... 139
IV	DATA ANALYSIS 140
	Setting of Survey Sample Population 142
	Quantitative Demographic Data of the Surveyed Sampled Population..... 143
	Modality to Teach Reading and Research Questions 145
	Data Analysis of the Research Questions 150
	Research Question 1 150
	Teacher-developed curriculum 150
	Non-scripted curriculum 153
	Scripted (SBSL, Inc.) curriculum 156
	Non-scripted/scripted combination curriculum 159
	Research Question 2 164
	Reading program/PSSA content similarity 164
	Classroom size and PSSA results 167
	Daily K-2 reading instruction and compatibility to the PSSA..... 170
	PSSA comparability to teachers' judgment..... 172
	District reading texts/material compatibility to PSSA content..... 175
	Instructional methods and quality of education..... 177
	PSSA scores, student characteristics, and school effectiveness..... 180
	PSSA and educational practices..... 183
	Research questions and modality to teach reading 185
	Research Question 3 189
	Interview discussion..... 190
	Perceptions of effective reading practices 191
	Summary..... 215

Chapter	Page
V	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....218
	Introduction.....218
	Summary of Findings.....219
	Conclusions.....220
	Recommendations.....242
	Future Research244
	Study Limitations.....246
	Importance of the Field of Study247
	REFERENCES252
	APPENDICES275
	Appendix A – Pedulla Survey.....275
	Appendix B – 3 rd Grade Proficient/Advanced PSSA Scores.....283
	Appendix C – Pontillo Interview Questions286
	Appendix D – Welcome Letter/Request to Participate.....288
	Appendix E – IRB Approval.....289
	Appendix F – Follow-Up Reading Interview Questions291
	Appendix G – Superintendent Reading Program Survey292
	Appendix H – Pedulla Permission295
	Appendix I – Pontillo Permission296

LIST OF TABLES

Table		Page
1	Research Matrix	125
2	Frequency Distribution of School District Geographical Location	143
3	PSSA Score Comparison to Districts Within County/City	144
4	Average Classroom Size of Sample Districts	144
5	Reading and PSSA Content Similarity	145
6	Likert Scale, Reading Modality and PSSA Alignment.....	146
7	Likert Scale, Texts and Materials and PSSA Comparability Alignment.....	147
8	Likert Scale, Influence of 3rd Grade PSSA Scores and K-2 Reading Program Alignment	148
9	Frequency Distribution, All Reading Approaches Combined	149
10	Frequency Distribution, of Years Engaged Teacher-Developed Modality/Mean PSSA Score	152
11	Independent Samples Test for Teacher-Developed Reading Modality/Years Utilized.....	153
12	Frequency Distribution for Non-Scripted, PSSA Scores	154
13	ANOVA, Number of Years in Reading Modality and PSSA Scores, Non-Scripted	156
14	Test of Homogeneity of Variances for School Years 2011-2014, Non-Scripted	156
15	Frequency Distribution of Average PSSA Scores of Scripted Reading Modality.....	157
16	Significance of the Scripted Modality and PSSA Scores, Test of Homogeneity of Variances	158
17	Scripted Modality and PSSA Scores ANOVA	159

Table	Page
18 Frequency Distribution of Non-Scripted/Scripted Modality and PSSA Scores.....	160
19 Non-Scripted/Scripted Combination, PSSA Scores Test of Homogeneity of Variances.....	160
20 Non-Scripted/Scripted Modality PSSA Scores Robust Test of Equality of Means.....	161
21 Non-Scripted/Scripted Combination PSSA Results, ANOVA.....	162
22 Test of Homogeneity of Variances, All Reading Modalities.....	163
23 Robust Tests of Equality of Means, All Reading Modalities.....	163
24 Frequency Distribution of Reading Content/PSSA Similarity.....	165
25 K-2 Reading Program/PSSA Content Similarity ANOVA.....	166
26 Reading Program/PSSA Content Similarity, Test of Homogeneity of Variances.....	167
27 Frequency Distribution of Classroom Size and PSSA Scores.....	167
28 Class Size and PSSA Scores, Test of Homogeneity of Variances.....	168
29 Classroom Size and PSSA Scores ANOVA.....	169
30 Robust Test of Equity of Means, Class Size and PSSA Results.....	170
31 District K-2 Reading Instruction and PSSA Compatibility, Group Statistics.....	171
32 K-2 Reading Instruction and PSSA Compatibility, Independent Samples Test.....	172
33 PSSA Compatibility and Teachers' Judgment, Group Statistics.....	173
34 PSSA Comparability and Teachers' Judgment 2-Tailed Independent Samples t-test.....	174
35 Text/Material Compatibility to PSSA, Group Statistics.....	175

Table	Page
36 Text/Material Compatibility to PSSA, Independent Samples Test.....	177
37 Instructional Method and Quality of Education, Group Statistics	178
38 Instructional Method and Quality of Education, Independent Samples Test.....	179
39 PSSA Scores, Student Characteristics, and School Effectiveness, Group Statistics	181
40 PSSA Scores, Student Characteristics vs. School Effectiveness, Independent Samples Test	182
41 PSSA and Educational Practices, Group Statistics	184
42 PSSA and Educational Practices, Independent Samples Test.....	185
43 Frequency Distribution, Reading Modality and Survey Questions	186
44 Reading Modality and Survey Questions, Test for Homogeneity of Variances	187
45 Robust Tests of Equality of Means, Reading Modality and Survey Questions.....	188
46 List of Interviewees and Modality Used to Teach Reading.....	190
47 Effective K-2 Reading Practices.....	193
48 Ineffective Reading Practices.....	195
49 Perception That the PSSA Measures High Standards.....	198
50 Student Background is/is not a Factor to Learning.....	202
51 Effective Reading Strategies.....	205
52 Strength of District Reading Program.....	209
53 Effective Reading Instructional Practices	213

LIST OF FIGURES

Figure	Page
1 Creswell explanatory sequential design.....	122

CHAPTER I

INTRODUCTION

“When you read a classic you do not see in the book more than you did before. You see more in you than there was before.” Clifton Fadiman

In reflection of Fadiman’s (2015) quote above, the ability to understand and comprehend what is read encompasses the foundation of literacy. Anemic to the literacy issue, as recently as 2015, portions of the adult population are unable to read highway signs with a level of comprehension necessary to navigate areas outside their familiar community. In essence, declaring these individuals prisoners of their immediate surroundings (Parents, 2015). In this vein, the ability to read with understanding is paramount in our nation’s ability to prosper. Consequently, some believe that if America does not quickly incorporate viable educational strategies and techniques into the current curriculum that allow students to master the skills necessary to compete in a global economy, America may continue to fall behind other nations (Freidman, 2007; Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013).

Compounding the challenge, No Child Left Behind (NCLB), decreasing national, state and local funding, Common Core, Value-Added teacher evaluation tools, dropping of America’s prominence in the global economy, the demand for increased educational accountability, and many other factors have contributed to the rush to adopt a comprehensive and sustainable educational program that will launch America back into global dominance (Freidman, 2007; Freidman & Mandelbaum, 2011; Pennsylvania Department of Education, 2014). Adding complexity, if left unattended, America will continue, in the eyes of some, to fall further behind our global competitors. Hence,

current efforts to bridge this gap of declining prominence, the Federal Government has instituted grants such “Race to the Top” (RTT), “Smaller Communities Learning Grant” (SLC), and the “School Improvement Grant” (SIG) to name a few whose focus is on redefining the educational practices of the current model. These programs incorporate flexibility of the local school district to think outside the box, utilizing best practices and creativity to formulate working solution(s) to increase student learning, and the ability to apply learned concepts. At the foundational level of America’s core, is the ability to read, without it the individual is destined to earn and accomplish far less than those students who do (Fiester, 2010; Julian & Kominski, 2011).

Statement of the Problem

At the foundational level of this vexing issue is the inability of America’s public education system to produce proficient readers by the third grade (Education, 2003; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). Studies suggested that finding success in future educational pursuits, career advancement, and in maintaining America’s position in the global economy, reading on a proficient level by the third grade is imperative (Kame'enui, Adams, & Lyon, 2014; Freidman, 2007; Lesnick, Smithgall, & Gwynne, 2010; Moats & Tolman, 2009). Unfortunately, the current educational delivery system has not produced the results needed to sustain America’s world class status (Fiester, 2010; Fiester, 2013; Freidman, 2007; Freidman & Mandelbaum, 2011; Lesnick, Smithgall, & Gwynne, 2010; Marshall, 2009).

Research has suggested that the United States continues to fall behind other countries in maintaining a sound literacy foundation (Goodman, 2013). Consequently, studies have indicated that this decline is not new; for example, the United States

government in 2003, estimated that 14 percent of the adult population is “below basic,” 29 percent are classified as “basic,” and 13 percent have been identified as “proficient” relative to one’s ability to read. Individuals classified in the two lowest groups are not able to read with the fluency, accuracy, and comprehension needed to understand newspapers, schedule(s), or manuals (Education, 2003; Wennersten, 2013). As indicated by Moats and Tolman (2009), The National Institute of Child Health and Human Development declared that reading difficulty in the 1990s was a concern deserving priority on the national research agenda. This group determined that “inadequate reading skills are characteristic of approximately 38 percent of fourth-grade students nationally and up to 70 percent of poor students” (p. 5). Although recognized over a decade ago, the continued lack of reading skills, most notably reading comprehension, still remains a vital concern today (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013).

Handicapped by decreasing budgets, the public school arena is often fiscally overburdened with the task of providing quality reading programs aligned with professional development aimed at addressing “best/next” practice reading needs of America’s public education students (Haywoode, 2013; International Center for Leadership in Education, 2014). Adding to this complexity, in the state of Pennsylvania, public school funding has been stalemated due to a five-month state budget impasse (Pennsylvania Department of Education, 2015). In short, as of this entry, public schools in Pennsylvania have not received their state monetary allotment. In this vein, private industry has jumped into the educational game. As the stakes rise in educational

accountability, discussions regarding the need to produce proficient readers have continued to rise in academic circles.

Many solutions to this problem have been explored, some with success and some without. Debate continues on the effectiveness of “teacher developed” (using the pedagogy and expertise of the teacher as the reading instructional and curricular guide) and “commercialized reading programs” (engaging the district purchased, published text, using district resources to complement the text and/or implement commercialized driven scope and sequence structures to teach reading).

Purpose of the Study

Through careful planning and implementation, opportunities exist for public schools to produce increased reading ability in elementary aged students. The rationale of this study is strongly related to reading comprehension. This two-phase sequential explanatory mixed–methods research designed study will investigate the relationship between four modalities of teaching reading; scripted Step by Step Learning, Inc. (SBSL), teacher-developed, non-scripted/other commercialized reading programs and scripted/non-scripted combination in increasing the reading ability of third-grade students in the state of Pennsylvania as measured by the Pennsylvania System of School Assessment (PSSA). Of note, the researcher began the study with a focus on teacher-developed, scripted, and non-scripted approaches to teach reading. However, as data began to evolve, it was apparent that the scripted/non-scripted approach was utilized by responding districts. Thus, the scripted/non-scripted modality was added to the research design number. The archived PSSA scores of third-grade students who were taught with the SBSL, teacher-developed, other commercialized reading program, or a combination

of programs thereof prior to the third grade were analyzed to determine if a relationship existed in scoring proficient and advanced on the reading/ELA section of the PSSA. In addition, the perceptions of school leaders regarding the effective and ineffective practices within each modality were analyzed to determine their effect(s) in third-grade reading ability.

If coupled with districts' federal funds allotment, the financial burden of attaining the targeted reading skills may be less threatening and within the means of financially struggling districts. Additionally, the current budget deficits faced by all districts are a national epidemic; engaging thought provocative best/next practices offers educators the ability to bring sound research-based programs into the district, while maintaining and growing the professional development piece of the equation. Therefore, the purpose of this study was to explore the qualitative and quantitative effectiveness of four approaches to teaching reading: the Step by Step, Inc. (SBSL) reading program, teacher-developed reading programs, other commercialized reading programs, and a combined approach utilized in the state of Pennsylvania in improving the reading ability of third grade students.

Significance of the Study

The significance of this study is based on the platform of America's public school system's ability to produce students who are able to comprehend text at levels necessary in acquiring post-secondary education, sustainable/rewarding careers, and enhancing the literacy levels of the nation (Friedman & Mandelbaum, 2011; Goodman, 2013; Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010). Durkin (1993) agreed that comprehension has come to be the essence of reading. However, constricting budgets, the

influx of non-English speaking residents, and the challenges of poverty, to name a few, are adding to the reading challenge. That said, by examining four approaches to teaching reading, results may determine one as frontrunner in the quest for achieving sound readers.

As a comparison, private industry must constantly train and educate its staff to maintain competitiveness. This cost is most often a by-product of annual profits; unfortunately for public schools, profits are not measured in monetary excesses, but in student performance. In most if not all cases, the cost of this training is financially impossible for most school districts. For example, studies have suggested that the cost to provide viable professional development on a per teacher basis can easily exceed \$100,000.00 per teacher (Jenkins, 2008); multiply this amount by district size and the cost of professional development can reach into the hundreds of thousands of dollars in small districts and into the millions of dollars for larger districts.

In this context, research has shown that when students develop the ability to comprehend meaning from text on or before the third grade, the savings and income returned to society can easily reach the hundreds of millions of dollars (Haywoode, 2013). Additionally, by engaging the services of a commercialized organization, that cost can be shared and dispersed over a wide customer base; thereby, offering cutting edge practices at an affordable price. In the world of business, it is common practice to constantly track the progress of products and the quality control under which they are produced. This practice helps ensure customer satisfaction, expansion of market share, and return of customers (United States Department of Commerce, 2012).

In the reading comprehension realm, similar models focus on high frequency tracking of students reading ability (progress monitoring), coupled with instructional and curricular controls designed to increase reading ability incorporated at the public school level may yield similar results. Along these lines, the current drive to increase district/school accountability of learning processes catapults student learning to the forefront of our nation's existence (Pennsylvania Department of Education, 2014). On the business front, company and department sustainability orbits market share and profit (United States Department of Commerce, 2012). These data points of success/failure are reported through monthly and year-end financial reports; accountability is always present and a determining factor in corporate existence.

Similarly, the public education arena is experiencing required accountability through the NCLB Act and the inclusion of State/National Common Core initiatives. According to present statistics, results are not as promising as thought (Pennsylvania Department of Education, 2014; International Center for Leadership in Education, 2014; Fiester, 2010; Fiester, 2013). As such, in the state of Pennsylvania, 2014-15 PSSA results have plummeted due to the currently implemented PA Core standards (Pennsylvania Department of Education, 2015). Subsequently, Pennsylvania has applied for and received a waiver of reporting 2014-15 PSSA results for the School Performance Profile and have been advised to utilize the 2014-15 results as baseline data for future scores (Pennsylvania Department of Education, 2015). As mentioned earlier, only 13 percent of American adults have been identified as "proficient" readers (Education, 2003; Wennersten, 2013). Therefore, a prominent need exists to produce reading comprehension results for the American students who are currently finding little to no

success in the public educational system. Some have suggested that public schools can be operated similarly or identical to private business (Adams, 2011). As a result, and to further complicate matters, recent legislation allowing individuals who have MBAs and CPAs the ability to attain superintendent/school leader status with little or no educational background further deteriorates the educational cycle (Adams, 2011).

One such example of this failed attempt surfaced in the recently and highly publicized downfall of the New York City Public School System's total immersion of a corporate head Ms. Cathie Black, (Hearst Magazines chairwoman) into New York's lead public education chancellor position without any educational background knowledge; only to resign three months later due to her lack of educational sense and/or insight. This oversight resulted in a division of administrative and collective bargaining collaboration, parental disappointment, and increased deterioration of the student learning cycle (Goldenberg, 2011). Pros and cons exist on both sides of this issue, to insinuate that schools as a whole can be commercialized are false. The movement to an "all or none" environment of schools being operated as a business is questionable at best.

As mentioned earlier, the corporate world is in need of a quality work force capable of sustaining industrial profits. This quest begins at the public education level. The skill set of problem solving, teaming, and understanding/applying simple and complex text to the environment faced have begun to falter in the United States (Barra, 2007; Freidman, 2007; Freidman & Mandelbaum, 2011).

To educate students successfully in today's competitive global environment, practitioners must incorporate strategies that are conducive to success. The ability to read with understanding must be a core component of this strategy. Consequently, an example

of America's challenge was brought to light in an interview with Ms. Mary Barra, General Motor Corporation's Senior Vice President of Global Product Development. She addressed the challenges faced by global competition and the lack of a workforce capable to compete. Ms. Barra explained that at the basic level of corporate profit and expansion is customer satisfaction and return. Within this context, vehicle maintenance and repair are a top priority, a happy customer purchases additional products, and innovation increases market-share. Current employees are required to read, comprehend, and apply explicit texts from training manuals and apply protocols learned from recurrent training to properly maintain the engines and operating systems of today's technical automobiles.

Unfortunately, she cited a strong disconnect in the ability of today's employees to perform in this manner. In fact, she directly attributed this inefficiency to the current educational system and its lack of producing high school graduates who can read on a basic level (Barra, 2007). It appears that the current model used to teach reading is not preparing America's students to be successful in what once was considered a basic profession; one can only assume a greater disparity in more complex professions. Again, the core of success is founded in one's ability to read (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). In contrast, it appears that the current educational arena possesses the ability to improve student learning by engaging the commercialized spectrum of educational programs designed to provide needed professional development and increased student learning.

The mission of School-Business engagement is to improve the quality of education by mobilizing and involving businesses and move them beyond charity or philanthropy toward true engagement (Andaloussi, 2011). Understood by business, the

concept of training employees on corporate enhancements or product evolution, parallels educational best practice concepts (Dellicker Strategies, 2012; Gardner, 1999; Perkins, 1993). Stakeholders are demanding an improvement in the quality of education.

Accountability for success is growing on a national scale. For example, in Pennsylvania, the Adequate Yearly Progress (AYP) indicator has been changed to the “School Performance Profile, (SPP)” a 100-point rating system that will incorporate and annually display multiple district success variables that stakeholders can compare to other schools and districts within the state (Pennsylvania Department of Education, 2015).

The education profession in Pennsylvania is being held accountable on multiple levels for student learning and district initiatives (Pennsylvania Department of Education, 2015). Of these accountability measures, the ability to comprehend what is read is at the forefront. Through this framework, research has suggested that the beginning of student learning starts with the ability to read (Baker, 2007; National Reading Panel, 2000; Robb, 2012; Thomas & Thorne, 2009; Wilhelm, 2014). Conversely, most if not all public school districts lack the financial capacity to engage the resources necessary to provide professional development in systematic and sustainable levels for all staff. The climate in the public education arena is dictating to those within it a need to explore avenues that redefine the way education is being delivered to our stakeholders.

Through this lens, success in reading comprehension has been noted in four approaches to teaching reading and/or a combination of approaches. For example, teacher-developed reading programs have produced positive results in increasing elementary aged students’ ability to read (Archer, 2004; Baker K. A., 2001; Balkiewicz, 1991). Additionally, commercialized products alone, and in conjunction with established

district initiatives have also shown promise in teaching students to read (Bowling, 2011; Clark, 2012; Miller, 2008). Did a rural Southwestern Pennsylvania school district's implementation of a commercialized reading program aligned with the current basal text, focused on scope and sequence of professional development, student tracking, and learning theory increase the reading levels of elementary aged students. All approaches have shown success. The purpose of this study was to shed light on what approach works best.

Theoretical Framework

There are multiple modalities used to teach reading, within the context of this study four approaches were examined, scripted (Step by Step Learning, Inc.), teacher-developed, other commercialized reading programs (non-scripted), and a combination of scripted/non-scripted programs. To determine if one modality surfaces as a frontrunner, the researcher examined the theories of Howard Gardner's multiple intelligences (1999), David Perkins (1993), teaching and learning for understanding creativity, Jerome Bruner's (1996) theory, citing important outcomes of learning include not just the concepts, categories, and problem-solving procedures invented previously by the culture, but also the ability to "invent" these things for oneself, Vygotsky's (1978) theories stressing the fundamental role of social interaction in the development of cognition and , other reading theorist were examined in the four modalities of teaching reading. In a similar manner, Robinson (2014) theorized that success in reading must conclude with buy-in strategies focused on phonemic awareness, constructing words to meaning, building on past knowledge and scaffolding learned concepts to past knowledge.

In an effort to add clarity in regards to modality and reading theories examined, overlaps may exist from one reading theorist/researcher's platform for reading to the reading modality used. For example, in a teacher-developed reading program the curricular and instructional processes may include a strong alignment with the theories of Bruner (1996), Vygotsky (1978), and Teale and Sulzby (1986) who have strong ties to the notion that reading ability emerges as a result of a student's exposure to language, and social influences prior to and during the school years. In short, from an emergent literacy perspective, reading and writing develop concurrently and interrelatedly in young children, fostered by experiences that permit and promote meaningful interaction with oral and written language, such as following along in a big book as an adult reads aloud or telling a story through a drawing (Sulzby & Teale, 1991). The teacher is viewed as a collaborator and his/her role diminishes as time passes (Vygotsky, 1978).

Within the scripted (SBSL, Inc.) modality, the association to the NRP's (2000) report and the theories of Moats and Tolman (2009), Gardner (1999), and Perkins (1993) may align to curricular and instructional practices in an elevated analytical perspective. Embedded in this family of theory, Gardner's (1999) multiple intelligences on the plane of linguistic and logical-mathematical types, along with Moats/Tolman's (2009) reliance on the aspects of direct instruction within the context of phonics, phonemic awareness, fluency, vocabulary and comprehension, and Gardner's (1999) scaffolding theory incorporate a different approach to teaching reading than the emergent train of thought.

Lastly, other non-scripted commercialized reading programs incorporate the theories of the preceding experts at various levels within their respective products. For example, in the basal reading product of Houghton-Mifflin-Harcourt (2015), the authors

appear to align instruction to the theories of Moats and Tolman (2009) and the NRP's (2000) report. Conversely, Pearson-Scott-Foresman (2015) offers another popular basal reading series currently being utilized on a national scale. However, the curricular and instructional methodology appears to align with an emergent theme; incorporating the theories of Bruner (1996), Vygotsky (1978), and (Kame'enui, Adams, & Lyon, 2014). Thus, this study seeks to shed light onto the following research questions.

Rationale

The rationale of this study is strongly related to reading comprehension. This two-phase sequential explanatory mixed-methods research designed study investigated the relationship between four modalities of teaching reading, scripted (SBSL), teacher-developed, commercialized (non-scripted), or a scripted/non-scripted combination of reading programs in increasing the reading ability of third-grade students in the state of Pennsylvania as measured by the PSSA. The archived PSSA scores of third-grade students who were taught with the SBSL (scripted), teacher-developed, other commercialized reading program (non-scripted) or combination of programs prior to the third grade were analyzed to determine if a relationship exists in scoring proficient and advanced on the reading section of the PSSA. In addition, the perceptions of school leaders regarding the effective and ineffective practices within each modality was analyzed to determine their effect(s) in third-grade reading ability.

Mixed-methods studies are often used to make sense of different forms of data. In short, mixed-methods studies test the consistency of the findings through data obtained from various instruments (Green, Caracelli, & Gram, 1989). Onwuegubuzie and Leech (2006) agreed, "conducting mixed-methods research involves collecting, analyzing, and

interrupting quantitative and qualitative data in a single study” (p. 474). This methodology may prove valuable in determining if a significance difference exists, between the quantifiable aspect of proficient and advanced PSSA scores of third-grade students, and the qualitative aspects of school leaders perceived effective and ineffective practices associated with teaching reading comprehension through the reading instructional modality used within their respective districts. The mixed-methods design aligns with this study on many levels. Through this lens, the qualitative data allows the researcher to gain perspective from different levels within the study (Creswell, 2008).

To gain answers to the research questions is the goal of the research design. Building on this foundation, the question should not be which design method is superior, but rather which design method can give the most convincing answers to the study (Thomas, 2003). According to Rocco, Bliss, Gallagher, and Perez-Prado (2003) purely quantitative research oversimplifies causal relationships while purely qualitative research allows for selective reporting. Embedded within this study are quantitative and qualitative variables that may be linked to the success of reading comprehension in elementary aged students. Thomas (2003) agreed with this generalization, in stating that the best answer usually comes from a combination of quantitative and qualitative research methods.

The mixed-methods design fits this study well. The quantitative portion of this study consisted of archived proficient and advanced reading comprehension PSSA scores of third-grade students. At the other end of the spectrum, the qualitative portion of this study consisted of individual interviews with school leaders regarding perceived effective and ineffective practices within their districts’ instructional modality used to teach reading. The ability for participants to elaborate in a study is a key determinant for using

an interview in the qualitative portion of a study (Haight, 2011). Interviewing provides the researcher the ability for greater flexibility and personal control and is considered superior to observation in the efficiency of collecting data regarding people's knowledge and opinions (Thomas, 2003).

Research Questions

The following three research question served as a platform for this study.

1. Is there a significant difference between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading?
2. Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?
3. What are the perceived effective and ineffective practices used within different approaches to teaching reading comprehension, as determined by superintendents?

Research Methodology

To determine which of the four reading program modalities is currently being utilized in each of the 500 public school districts in the state of Pennsylvania, the researcher distributed to all Pennsylvania superintendents or designee, a web-based survey through Qualtrics© (2015) software to determine program utilization.

Through analyzing data received from the survey, the researcher determined two school districts within each modality, to conduct a telephone interview with the superintendent or designee to determine the perceived effective and ineffective practices

associated with each modality in increasing third-grade reading ability through hand coding.

Once survey data was compiled, the researcher employed the parametric statistical tool of one-way, two-way analysis of variance (ANOVA), Independent Sample t-test, Measures of Central Tendency, Test of Homogeneity of Variances, and Robust Tests of Equality of Means (Welch, Brown-Forsythe) to determine if a significant difference exists in third-grade students scoring proficient and advanced on the PSSA in districts being studied for the 2011-12, 2012-13, and 2013-14 school years respectively.

Definition of Terms

- *Adequate Yearly Progress (AYP)* - NCLB required states, school districts, and schools to ensure all students are proficient in grade-level math and reading by 2014. States define grade-level performance. Schools must make "adequate yearly progress" toward this goal, whereby proficiency rates increase in the years leading up to 2014. The rate of increase required is chosen by each state. In order for a school to make adequate yearly progress (AYP), it must meet its targets for student reading and math proficiency each year. A state's total student proficiency rate and the rate achieved by student subgroups are all considered in the AYP determination (Pennsylvania Department of Education, 2014).
- *Common Core State Standards*- The Common Core State Standards (CCSS) are a set of high quality academic expectations in English-language arts (ELA) and mathematics that define the knowledge and skills all students should master by the end of each grade level in order to be on track for success in college and career (Council of Chief State School Officers, 2015).

- *Comprehension*- Intentional thinking during which meaning is constructed through interactions between text and reader (Durkin, 1993).
- *Fluency*- The ability to read a text quickly, accurately, and with proper expression (National Reading Panel, 2000).
- *No Child Left Behind (NCLB)* - landmark in education reform designed to improve student achievement and change the culture of America's schools. The law enacted in 2002, represents a sweeping overhaul of federal efforts to support elementary and secondary education in the United States. It is built on four common-sense pillars: accountability for results; an emphasis on doing what works based on scientific research; expanded parental options; and expanded local control and flexibility (United States Department of Education, 2015).
- *Pennsylvania System of School Assessment (PSSA)* - includes assessments in English Language Arts and Mathematics which are taken by students in grades 3, 4, 5, 6, 7 and 8. Students in grades 4 and 8 are administered the Science PSSA. The English Language Arts and Mathematics PSSAs include items that are consistent with the Assessment Anchors/Eligible Content aligned to the Pennsylvania Common Core Standards in English Language Arts and Mathematics. The Science PSSA includes items that are aligned to the Assessment Anchors/Eligible Content aligned to the Pennsylvania Academic Standards for Science, Technology, Environment and Ecology (Pennsylvania Department of Education, 2014).
- *Phoneme Awareness*- The ability to focus on and manipulate phonemes in spoken words (National Reading Panel, 2000).

- *Phonemes*- The smallest units constituting spoken language (National Reading Panel, 2000).
- *Phonics*- A method of teaching people to read by correlating sounds with letters or groups of letters in an alphabetic writing system (National Reading Panel, 2000).
- *Step by Step Learning, Inc. (SBSL)*- Step By Step Learning works with School Districts to implement a comprehensive research-based approach to literacy that includes assessment, effective classroom instruction techniques, collaborative problem-solving and research-supported intervention models to ensure all students succeed in reading.
- *Response To Intervention (RTI)*- A comprehensive, multi-tiered intervention strategy to enable early identification and intervention for students at academic or behavior risk (Pennsylvania Department of Education, 2015).

Limitations

The focus of this study is confined to public schools located in Pennsylvania. Leadership implications on a national scale are beyond the scope of this study; although, results of this study may prove to be beneficial to others on a national and global scale with similar demographics. It does not seek to have implications beyond the stated boundaries. Additionally, the product described in this study is one of many in the reading improvement arena. Additionally, teacher directed reading programs may be utilized with varying results; urban districts or districts that have varying demographics may find similar results depending on the instructional modalities used.

Additionally, the financial and time requirements of implementing a reading program may prove to be overwhelming for some districts depending on size and

structure. Therefore, the culture of the district may prove to be a deterrent to success if less than 100% commitment is leveraged from the community stakeholders, school board, administrative, and teaching ranks. Finally, this study used only the PSSA to measure effective reading; some may argue that this assessment does not effectively measure one's true ability to read.

Summary

As Friedman (2007) theorized, the world is flattening at a staggering pace. As such, the present and past have demonstrated that not all Americans within our society are able to read and comprehend at levels necessary to advance America's growth. The global competition of college entry, job availability, and overall quality of life, warrant challenges to American students that will increase exponentially in the future. Therefore, to adequately meet the challenges of global competition and national survival, American students must possess the ability to read past a primary level. The stewardship of this endeavor rests solely on the shoulders of the American public education system. As of late, the results of national assessments that measure American student's ability to read effectively have produced less than glowing marks (Friedman & Mandelbaum, 2011). Many reasons are given for the shortfall. For example, costs, time, training, student demographics are a few. Therefore, this study sought to determine which modality of teaching reading produces the greatest increase in reading comprehension, teacher-developed/basal texts, SBSL, other commercialized reading programs or a combination of programs.

The focus of this chapter is to shed some light on the gravity of a shrinking global economy, its relationship to American prosperity, and ultimately to the foundational issue

of personal success and quality of life. Within this context, reading ability is the cornerstone of personal and national success (Allington, 2015).

Chapter II will focus on the literature surrounding the component of reading comprehension by the third grade in a successful reading program, and four examples of current instructional modalities, scripted (SBSL), teacher-developed, other commercialized reading programs (non-scripted), scripted/non-scripted combined approach, and the challenges faced when choosing to engage such a program. Finally, the research and learning theory of Howard Gardner's (1999) multiple intelligences, David Perkins' (1993) problem solving, Jerome Bruner's (1996) important outcomes of learning, and Vygotsky's (1978) social interaction in the development of cognition provided the foundation for building a successful reading program.

CHAPTER II

REVIEW OF LITERATURE

No other skill taught in school and learned by school children is more important than reading. It is the gateway to all other knowledge. If children do not learn to read efficiently, the path is blocked to every subject they encounter in their school years (Kame'enui, Adams, & Lyon, 2014; O'Neill, 2004). School districts are confronted with a multitude of challenges in providing this critical service. For example, tight budgetary constraints provide a fiscal barrier to needed services, coupled with society's demand that our public schools produce a best in class educational vehicle worthy of America's prominence. The United States of America is struggling at best (Friedman, 2007).

First exemplified by the National Institute of Child Health and Human Development (1990) declaring that reading difficulty was a concern deserving priority on the national research agenda, numerous theories and programs have since been established attempting to rectify the literacy gap (Gonzales, 2012; Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009; National Reading Panel, 2000). Over the past decade, Americans have become increasingly concerned about the United States' drop in global education ranking (Friedman, 2007; Friedman & Mandelbaum, 2011; Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013) and the high numbers and costs associated with remediating high school dropouts (Fiester, 2010; Haywoode, 2013). For example, in an increasing global and technical economy, the United States is struggling to find qualified workers (Fiester, 2010). Additionally, higher education is expending large amounts of resources and time offering remedial courses to those students who possess a high school diploma but are unprepared for college level work

(Fiester, 2010; Friedman, 2007; Friedman & Mandelbaum, 2011; Lesnick, Smithgall, & Gwynne, 2010).

At the root of this issue is the ability to read with a level of comprehension necessary to apply learned skills to one's betterment. Consequently, studies have suggested that all but 2-5 percent of children can learn basic reading skills by the first grade, even in populations where the socioeconomic environment may appear to be a barrier (Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009). Adding complexity to this issue, the pendulum swings of early-reading approaches over the last 30 years have spanned a large spectrum of reading approaches which included basal readers, whole language, and intensive phonics (Morris, 2015). As a result, Morris (2015) posited that all three approaches teach 75-80 percent of students to read. However, 20-25 percent of students are not successful within any of the three approaches.

The purpose of this chapter is to review the recent literature about the importance of developing functional reading skills in students prior to the third grade, different commercialized modalities utilized in teaching reading and teacher-developed reading instruction programs. Additionally, it seeks to understand what processes are necessary to achieve reading competency prior to the third grade and barriers to that achievement. Grounded in the research of Howard Gardner's (1999) Multiple Intelligences whereby the human intelligence is not predicated on one single theory or entity as proposed by behaviorists such as Piaget (Papalia, Sterns, Feldman, & Camp, 2002); the multiple intelligence theory helps educators adapt instruction and curriculum to meet the educational needs of students (Gardner, 1999; Papalia, Sterns, Feldman, & Camp, 2002). David Perkins (1993) theory of teaching and learning for understanding creativity,

problem-solving, and reasoning in the arts, science and everyday life emphasized the interlocking relationships about thinking. In addition, the works of theorist Jerome Bruner (1996) cited important outcomes of learning include not just concepts, categories, and problem-solving procedures invented previously by culture, but also the ability to “invent” these things for oneself; and, Vygotsky’s (1978) theory that stressed the fundamental role of social interaction in the development of cognition will also serve as cornerstones in the development of building increases in the reading ability of elementary aged students. This chapter aims to bring clarity to the concepts most associated with successful reading theory program components and practice.

The Importance of Reading by Third Grade

As stated by President Obama in 2009, “The relative decline of American education is untenable for our economy, unsustainable for our democracy, and unacceptable for our children, and we cannot afford to let it continue” (Fiester, 2013, p. 4). On an expanded scale, studies support the link between reading deficiencies and broader social consequences such as poverty, social disparity, and future earning potential (Campaign for Grade-Level Reading 2014; Fiester, 2013; Haywoode, 2013; Kame'enui, Adams, & Lyon, 2014; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). It has been suggested by some that the third grade represents a transition from learning to read literary and informational text to reading to learn content. While the more skilled readers in the class learn knowledge and new words from context, poor readers, out of frustration, begin to avoid reading (Wennersten, 2013). Thus, a vicious cycle sets in: school assignments increasingly require background knowledge and familiarity with academic and domain-specific words (literary, abstract, and technical

words)—competencies that are themselves acquired through reading (Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). Meanwhile, content classes such as science, social studies, and math, rely more on textual analysis, so that struggling readers begin to fall behind in these subjects, as well. In this way, they fall further and further behind in school, dropping out at a much higher rate than their peers (Kame'enui, Adams, & Lyon, 2014; Wennersten, 2013). Some may suggest and/or claim that reading deficiencies are predisposed to certain socio-economic classes (Bowey, 1995). However, this school of thought is in contrast to others who have suggested that reading deficiencies are a product of multiple variables:

Reading failure is not concentrated among particular types of schools or among specific groups of students. To the contrary, students who have difficulty reading represent a virtual cross-section of American children. They include rich and poor, male and female, rural and urban, and public and private school children in all sections of the country. According to the NAEP assessment, for example, nearly one-third (32 percent) of fourth graders whose parents graduated from college are reading at the "below basic" level. (Kame'enui, Adams, & Lyon, 2014, p. 1)

Armed with this knowledge, practitioners are able to target this reading gap on multiple levels. Knowing that reading deficiencies are not subject to one socio-economic class or learning style of student, teachers can build instructional practices based on current reading research. In fact, studies have suggested that the single most important year of an individual's academic career is third grade (Wennersten, 2013). The reason attributed to this finding is that third grade is the year in which students transition from

learning to read, decoding words using their knowledge of the alphabet, to reading to learn (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). The books children are expected to master no longer are simple primers, but fact-filled informational texts (Wennersten, 2013).

Consequently, in its 2011 “Nation’s Report Card,” the National Assessment of Education Progress (NAEP), a federally supported program that tracks the performance of American students in core academic subjects, reported that American fourth-graders have not experienced reading comprehension growth since 2009. Others have concluded that American fourth-graders could not understand uncomplicated narratives and high-interest informative texts (Kame'enui, Adams, & Lyon, 2014). One researcher suggested that this failure may be a result of built-in disadvantages such as stilted language, uninteresting stories, and insufficient repetition of high-frequency words (Morris, 2015). It would appear that the United States may not be any better today at teaching students to read than in 2009 or earlier. This sentiment echoes that of others who feel the greatness of America may only exist in the past, and due to the perceived lack of focus on maintaining America’s status of prominence through literacy, America will continue to fall (Friedman, 2007; Friedman & Mandelbaum, 2011; Thomas & Thorne, 2009). Therefore, the demand for students to have a strong literacy foundation is paramount. The ability to effectively read, analyze, and apply written text by the third grade is of great importance. In fact, since 2013, the Education Commission of the States (ECS) recently released a summary on state third-grade reading policies. Based on data from the summary, 13 states have passed legislation aimed at improving early literacy outcomes (Wennersten, 2013).

On the other end of the spectrum, literacy is struggling on many levels. Research has suggested that “children with the lowest reading scores account for 33% of all students, yet they account for 63% of all children who do not graduate high school” (Fiester, 2013, p. 2). Adding to the third grade reading foundation experts agree:

One of the most vexing problems facing educators today is the third grade reading hurdle. Students who do not ‘learn to read’ during the first three years of school experience enormous difficulty when they are subsequently asked to ‘read to learn.’ (Robinson, 2014, p. 1)

Teaching students to read by the end of third grade is the single most important task assigned to elementary schools (Kame'enui, Adams, & Lyon, 2014). By fourth grade, children should read easily enough to process the meaning of text and to avoid tiring quickly. Unfortunately, this is not the case for many children, who read too slowly or inaccurately, to use reading as a tool for learning.

To the extent that poor fluency undermines the accrual of background knowledge, fluency problems can have far-reaching implications for later reading development (Allington, 2015a; Ashby, Dix, Bontrager, Dey, & Archer, 2013; Bruner, 1996; Clay, 1975; Vygotsky, 1978). Furthermore, studies show that at least ten million children in the United States are affected by reading problems (All Kinds of Minds, 2014; Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Kame'enui, Adams, & Lyon, 2014). For as many as four in ten children, learning to read is a difficult task; and one in five has significant reading difficulties (All Kinds of Minds, 2014; Wilhelm, 2014).

Compounding the problem, most public school landscapes incorporate a system that by the fourth grade schooling takes on a very different purpose, one that in many ways is

more complex and demanding of higher-order thinking skills. If efficient reading skills are not developed by this time, the English language, history, mathematics, current events, and the rich tapestries of literature and science become inaccessible (Kame'enui, Adams, & Lyon, 2014).

In contrast, research suggested that if a student has successfully demonstrated the ability to read by the third grade, his/her chances for success in future grades and obtaining a productive and self-fulfilling career are greatly enhanced (Fiester, 2013; Julian & Kominski, 2011; Reardon, Valentino, & Shores, 2012). Unfortunately, those students who encounter difficulty establishing basic reading skills at an early age are prone to drop out of school, experience social problems, engage in criminal activities and face possible incarceration (Cunningham & Stanovich, 2001; Fiester, 2010; Fiester, 2013; Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009, Robinson, 2014). Research showed that one-third of U.S. middle school students do not possess the ability to read with comprehension skills necessary to understand grade level text (Reardon, Valentino, & Shores, 2012). Therefore, it has been speculated that educating our youth is far less expensive than incarcerating them as adults.

Additionally, studies have shown that the return on reading investment far outweighs the cost to educate. For example, Fiester (2013) reported that improvement in education outcomes produced a long-term return on investment of \$8.24 for every \$1 invested in early literacy education of students 4-6 years old. Anchoring this sentiment, historically, third grade represents the transition from learning to read to reading to learn (Kame'enui, Adams, & Lyon, 2014; Lesnick, Smithgall, & Gwynne, 2010; National

Reading Panel, 2000; Wennersten, 2013). Therefore, early success in reading may impact future earnings performance.

Students move from decoding words based on the alphabet and phonics to mastery of fact-filled informational texts (Creed, Conlon, Zimmer, & Melanie, 2007; Fiester, 2013). From a societal perspective, studies show that early reading ability correlates with future educational success; lack thereof results in a student who is four times more likely to become a high school dropout (Fiester, 2013; Kame'enui, Adams, & Lyon, 2014; Lesnick, Goerge, Smithgall, & Gwynne, 2010). Moreover, it has been determined that only 2% of those who finish high school work full time and marry before having children, end up in poverty, compared to 75% for those who experienced reading/literacy dysfunction at or before third grade; conversely, this gap does not dissipate over time (Fiester, 2013; Fiester, 2010; Kame'enui, Adams, & Lyon, 2014).

Hence, third grade and beyond requires a literacy sequence of skills geared toward understanding, applying and synthesizing written text (Barra, 2007; Fiester, 2013, Fiester, 2010). Adding to this ocean of complexity, data associated with not being able to read by the third grade paint a troubling picture not only for the student but for the country as well. Continuing to engage in lackluster reading endeavors will ultimately burden our society on multiple levels. For example, if this vacuum continues to exist, studies show that every student who does not graduate high school costs the country an estimated \$260,000 in lost earnings, taxes, and productivity (Fiester, 2013).

Building upon this foundation, according to one study, American adults continue to struggle when compared to other countries. Average scores on the “Program for the International Assessment of Adult Competencies” (PIAAC) literacy scale for adults

concluded that compared with the U.S. average score, average scores in 12 countries were higher (Goodman, 2013). In addition, when the component of problem solving in technology-rich environments was assessed, 14 countries scored higher than the U.S. Only twelve percent of U.S. adults age 16 to 65 performed at the highest proficiency level on the PIAAC literacy scale. Of note, the percentage of adults performing at this level was higher in seven other countries. Compounding this dilemma, six percent of U.S. adults age 16 to 65 performed at the highest proficiency level on the PIAAC problem solving in technology-rich environments scale (Goodman, 2013).

The current pool of qualified high school graduates is neither large enough nor skilled enough to supply our nation's workforce, higher education, leadership and national security needs (Fiester, 2010; Haywoode, 2013; Wennersten, 2013). In retrospect, these headwinds are not new, Mckinsy and Company estimated that the United States Gross Domestic Product (GDP) in 2008 could have been 1.3 trillion to 2.3 trillion higher if U.S. students had met the educational achievement levels of higher performing nations between 1983 and 1998 (Fiester, 2010; Wennersten, 2013). The stakes are high; the pool of knowledge linking the ability to read by third grade and life success continues to mount. According to some, reading proficiently by third grade is the most important predictor of high school graduation and career success. Yet more than 80% of low-income children miss this milestone (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; The Campaign for Grade-Level Reading, 2014; Wennersten, 2013).

Consequently, the success or failure of reading programs that implement the five elements mentioned earlier may be attributed to the sequence and scope of use (Learning Point Associates, 2004). In any case, the importance of learning to read by the end of

third grade has far reaching implications that not only pertain to the students' own personal success or failure. The success and/or failure of America's students' ability to comprehend text by the third grade may have a profound effect on the success, growth, and maintenance of the American way of life.

The Challenge of Learning to Read: Brain Research and Reading Theory

Insight into the origins of reading ability can be tracked to the study of the brain and how it functions at various stages of chronological growth. At different stages of human life the species is able to analyze and synthesize multiple stimuli (Cunningham & Stanovich, 2001; Papalia, Sterns, Feldman, & Camp, 2002). Reading effectively requires the brain to translate visual symbols into words, and words into meaning (All Kinds of Minds, 2014). To adequately understand reading theory and brain functions of reading, humans must realize that reading and language are related; hence the nature of reading changes over time; therefore, the study and understanding of the neurodevelopment underpinnings of the reading process is paramount (All Kinds of Minds, 2014; Moats & Tolman, 2009).

Studies have suggested that there are five distinct and essential components necessary for reading skills to be taught effectively: phonemic awareness, phonics, fluency, comprehension, and vocabulary (All Kinds of Minds, 2014; Learning Point Associates, 2004; Moats & Tolman, 2009; National Reading Panel, 2000; Step by Step Learning, Inc., 2015). However, there are some who believe that reading ability emerges at an early age and the findings of the National Reading Panel (2000) may be overstated (Allington, 2002; Clay, 1975; Sulzby & Teale, 1991). The market is full of specialized reading programs claiming to be the "silver bullet" to address the third grade reading

barriers; all proclaiming if their program is purchased, Adequate Yearly Progress (AYP), the present day target of educational achievement, is just around the corner.

Some have suggested that literacy or the act of becoming literate is highly influenced and emerges from birth to school age without conventional teacher led activities (Clay, 1975; Gunn, Simmons, & Kameenui, 1995; Teale, 1983; Teale & Sulzby, 1986; Yaden, Rowe, & MacGillivray, 1999). According to the American Speech-Language-Hearing Association (ASHA), spoken language is “hard-wired” inside the human brain; we are fully adapted for language processing. All children, unless neurologically or hearing impaired, will learn to talk (American Speech-Language-Hearing Association, 2013; Valencia & Sulzby, 1991). Additionally, the ability to process and develop language incorporates pyramiding words learned through each year of chronological age (American Speech-Language-Hearing Association, 2013; Bruner, 1996; Gardner, 1999; Perkins, 1993; Vygotsky, 1978).

Based on the above, further evidence correlates and supports the “scaffolding/pyramiding” and “use of prior learning” language platform established by Gardner (1999), Bruner (1996), Vygotsky (1978), and Perkins (1993). In contrast, the ability to read and write are skills that the human brain has yet to evolve (Lieberman, Shankweiler, & Liberman, 1989). Thus, empirical reasoning suggests that the human brains are naturally wired to speak not to read and write (Gardner, 1999; Liberman, Shankweiler, & Liberman, 1989; Papalia, Sterns, Feldman, & Camp, 2002). Students must have abilities in other components of language to gain meaning from their reading. They must have developed an understanding of syntax (how to combine words and word endings into phrases and sentences), as well as skill in semantics (a solid vocabulary and

knowledge of word meanings). Comprehension of text thus depends heavily on a reader's language abilities (All Kinds of Minds, 2014; Diamond & Gutlohn, 2006; Hasbrouck, 2010; National Reading Panel, 2000).

The ability to read, spell, and write fluently are tasks that most Americans find challenging and often become barriers to educational and life success. The reoccurring theme echoed in reading circles suggested that ten million students in the United States are not proficient readers, and will struggle greatly to become proficient readers (All Kinds of Minds, 2014). Reading theorist surmised that the struggle to become proficient readers may be a result of direct teaching void of flexibility (Moats and Tolman, 2009). Conversely, this lack of flexibility is in direct conflict with the principles of building and scaffolding on prior knowledge and the customizing of learning to the student's learning ability (Bruner, 1996; Gardner, 1999; Perkins, 1993; Robinson, 2014; Vygotsky, 1978). The human brain has networks that distinguish sounds (banging of sticks, cymbals, noise) from linguistics (the ability to sound out words and engage in language) and the latter has properties that require its own specialized neural networks and is vulnerable to developmental problems (All Kinds of Minds, 2014; Fiester, 2010; Fiester, 2013; Moats & Tolman, 2009).

Adding to this dilemma, research shows that reading comprehension requires facility with many aspects of language. Phonemic/phonological awareness (knowledge of the sounds of letters and letter combinations) underlie the accurate and rapid retrieval of word meanings (word decoding) (All Kinds of Minds, 2014; Kame'enui, Adams, & Lyon, 2014). Decoding is a crucial component of reading comprehension. Students who are effective decoders of words are more likely to be able to attend to and remember an

author's intended meaning. However, as mentioned earlier, a large majority of students are not acquiring this ability (All Kinds of Minds, 2014; Kame'enui, Adams, & Lyon, 2014). Is there an answer to this dilemma? To adequately answer this question a review of what the brain does when engaged in reading will be examined to increase the knowledge base of the reading process.

In assessing the effectiveness of a reading program, research showed that an understanding of what the brain does when reading is important (Gardner, 1999; Moats & Tolman, 2009; Papalia, Sterns, Feldman, & Camp, 2002). Research has suggested that to prevent reading failure in kindergarten and first grade, the implementation of six principles may assist in bridging the reading gap. These principles include leveled books, phonics, teacher training, readalouds, 20-25 minutes of independent reading, and writing (Morris, 2015). To this end, the ability to craft effective K-2 reading programs that produce third grade students able to comprehend the meaning of written text (comprehension), a background of the following components of effective reading theory as prescribed by the National Reading Panel (2000) will be discussed. These components are phonemic awareness, phonics, fluency, comprehension, and vocabulary.

Additionally, the research of reading theorists Rosenblatt, Teale, Sulzby, and Allington contribute varying, and sometimes opposing views to the traditional school of thought regarding reading comprehension. Therefore, to gain a broader knowledge base of reading theory, and to assist in the navigation of the ocean of complexity that often orbits its implementation into the public school setting, the views and perspectives of experts with varying positions on the reading spectrum will be examined.

Modalities of Teaching Reading

The scope of this study will examine four modalities of teaching reading to elementary aged students, in the state of Pennsylvania, scripted (Step by Step Learning, Inc. SBSL) programs, teacher-developed programs, non-scripted commercialized reading programs, and scripted/non-scripted programs. Of note, the intent of this study is not to determine if one school of thought is superior to another or if one theory(s) is preferred to another, it seeks to determine the emergence of a program frontrunner (that may incorporate a blend of many theories, sometimes opposing) able to produce increases in the reading ability of elementary-aged students.

Scripted, Step by Step Learning, Inc. (SBSL)

Many programs encompass the scripted modality. Due to the saturation of scripted modalities, the researcher narrowed the field to focus on the Step by Step Learning, Inc. (SBSL) modality. The SBSL reading program aligns with various schools of thought surrounding effective reading instruction. Step By Step Learning, Inc., is considered a scripted commercialized reading program, primarily due to its engagement “with school districts to implement a comprehensive research-based approach to literacy that includes assessment, effective classroom instruction techniques, collaborative problem-solving and research-supported intervention models to ensure all students succeed in reading” (Step by Step Learning, Inc., 2015, p. 1). Adding to this foundation, “through a professional development model that includes ongoing coaching and mentoring support, Step By Step Learning crafts a unique implementation strategy for each local district,” utilizing the “Response to Intervention” model as a vehicle for delivery (Step by Step Learning, Inc., 2015, p. 1).

At the foundational level, the SBSL program incorporates a Pre-K component “*Teach Me To Read at Home*,” intended for families of 3-5 year-old children. Family members learn about the component skills of print awareness, letter recognition, vocabulary building, phoneme awareness, and letter sounds and how to interact with their children in the home environment to strengthen pre-reading skills. A *Teach Me To Read At Home* goal is to give families resources needed to construct a firm foundation upon which their children can build strong reading skills prior to formalized instruction (Allington, 2002; Allington, 2011; Allington, 2015; Bruner, 1996; Step by Step Learning, Inc., 2015; Vygotsky, 1978).

Next, the SBSL module provides for administrator/staff training in the capacity of using universal screeners to evaluate the students’ reading status. For example, time and resources are attached to providing the educator with an “*Introduction to administering screening assessments to collect valid data*” (Step by Step Learning, Inc., 2015). “*Universal screening*” assessment materials used to determine student reading progress and status are Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Center for Improving the Readiness of Children for Learning and Education (CIRCLE), and current internet based technology. Of note, the utilization of DIBELS and CIRCLE are viewed by some, as polar opposites to sound reading theory (Allington, 2015; Clay, 1975; Teale & Sulzby, 1986). However, in the context SBSL practices DIBELS and CIRCLE serve in the capacity of “Progress Monitoring;” thereby, fulfilling the scope of effective reading practices agreed upon by many experts (Allington, 2002; Allington, 2011; Allington, 2015; Bruner, 1996; Clay, 1975; Cribbs, 2013; Durkin, 1993; Step by Step Learning, Inc., 2015; Teale & Sulzby, 1986). Participants learn the purpose, administration, and scoring

of the universal screeners and the research supporting their use. To complete this area of training, staff is trained to utilize “*Data analysis*” to enhance reading instruction. Staff learn, practice, and then apply the systematic process for analysis of their students’ data collected from the *Universal screener* (Step by Step Learning, Inc., 2015). They apply the analysis to determine which students will receive a diagnostic assessment. Staff are introduced to the Preventative Approach using a 3-tier model or district’s identified RTI model (Allington, 2015; Step by Step Learning, Inc., 2015). In addition, practitioners set goals for moving their students toward the 95% benchmark. Armed with these skills the teacher is prepared to adequately analyze student data to determine which students should receive a specified diagnostic, use data to identify areas of individual student needs and whole group needs, discuss the components of a Preventative Model, navigate the reports using technology, share the current status of their students achieving benchmark and a plan for moving students towards benchmark, and construct a schedule for progress monitoring (Clay, 1975; Step by Step Learning, Inc., 2015).

On the “*Instructional planning*” front, SBSL offers opportunities for teachers to increase their knowledge of delivering researched based instruction. For example, teachers are trained in “*Introduction to administering informal diagnostic assessments to collect informal data*” through selections of informal diagnostics based on screening data and learn to administer informal surveys to determine students’ instructional level. Thereby, developing an understanding of how the data can be used to identify student’s instructional levels (Step by Step Learning, Inc., 2015). Next, “*Planning for effective intervention instruction*” involves the teacher in analyzing informal surveys previously administered to students, identifying individual student’s academic needs as determined

by the assessment data, grouping students according to results, and planning instructional goals. Time is allotted for the introduction of appropriate interventions for grade level groups. For example, the formation of differentiated small groups for intervention into the school day, creation of a plan for scheduling intervention into the school day, and the discussion of the importance of targeted small group instruction. “*Intervention logs and logistical planning for intervention*” are the next component of the SBSL program. Included are the tools teachers will find necessary to review samples of intervention logs, create their own intervention log for grade level use or individual classroom usage, learn the steps for systematic logistical small group instructional planning, classroom management strategies for managing multiple small groups and centers, and examine the current schedule and document times for intervention on a calendar (Carrier, 2006; National Reading Panel, 2000; Thomas & Thorne, 2009; Step by Step Learning, Inc., 2015). Applied correctly, practitioners are able to construct intervention logs that meet individual record keeping styles, develop strategies for classroom management during small groups or centers, and formulate a schedule/rotation plan for intervention that accounts for students’ needs and minimum time/frequency requirements based upon need (Step by Step Learning, Inc., 2015).

Next, “*Instructional modeling*,” “*Classroom coaching visits*” and “*Student intervention response meetings*” are other levels of the SBSL modality. Following what is considered by researchers as best practice in the teaching arena, “*Instructional modeling*,” incorporates first hand observation of the platform in which learning is enhanced (Allington, 2002; Bruner, 1996; Clay, 1975; Perkins, 1993; Teale & Sulzby, 1986; Vygotsky, 1978). Practitioners are exposed to a SBSL instructor explaining and

modeling relevant instructional interventions with students in the classroom, participants practice systematic and explicit instructional interventions with the coach, a conference and debrief completes the visit. Consequently, an outcome of this training results in the practitioner being able to identify components of systematic explicit instruction in a modeled lesson and then plan to include components in their intervention lessons and identify areas of personal growth in the instructional process (Step by Step Learning, Inc., 2015). “*Classroom coaching visits*” consist of SBSL trained staff visiting classrooms and observing practitioners engaged in the act of teaching and providing feedback in the area of systematic and explicit instructional interventions. A conference and debrief completes the visit for the teacher to discuss outcomes and to set personal growth goals (Step by Step Learning, Inc., 2015). Moreover, the ability to apply a problem solving strategy, collaboratively plan with colleagues using a systematic approach, and use progress monitoring data and intervention logs to determine which students required an instructional adaptation is the goal of “*Student intervention response meetings*.” In short, practitioners facilitate a meeting to determine student progress as a result of classroom intervention. The 25-Minute Process for Academic or Behavior Concerns are introduced and modeled as a tool for collaborative problem solving. Participants practice and then apply the student focused process targeting a current problem. (Step by Step Learning, Inc., 2015). Consequently, all modules of training incorporate resources pertinent to increasing student reading ability. For example, the material includes intervention forms, intervention logs, sample lessons, video-taped demonstration, instructional manipulative materials (syllable felts, phonological picture cards, phoneme chips, letter sound cards, mini white boards, phoneme-grapheme mapping charts, Elkonin boxes, spelling sort

cards, oral reading fluency passages), egg timer, fluency progress chart, instructional intervention materials list, syllabus, resources for interventions, and core reading curriculum teacher manual.

Furthermore, the addition and implementation of a “*Systematic and explicit instruction,*” module coincides with the theories of Bruner (2002) by explaining and providing samples of systematic instructional sequences. Trainers explain the components of an explicit lesson and then model relevant instructional interventions with the group. Practitioners watch video clips to determine if the lesson is explicit and how they might make it more explicit, practice systematic and explicit instructional interventions in small groups, and craft an explicit lesson to use in their classroom (O’Neill, 2004; Step by Step Learning, Inc., 2015). Next, by making available the concepts of LETRS training, yet another level of reading theory is available to districts wishing in increase their staff’s depth of knowledge in effective reading practices and strategies. For example, LETRS “*Foundations*” introduces educators to the concepts and practices supported by reading science. This three-day training (through substitute coverage or professional development time)

prepares teachers for the more rigorous, in-depth modules of the LETRS professional development program. Crafted for the adult learner, this module addresses the differences between good and poor readers; aspects of language that are important for literacy; the components of effective instruction; principles of systematic, explicit instruction in each component; and instructional activities that can support the implementation of any comprehensive core program. (Step by Step Learning, Inc., 2015, p. 2).

Some may take an oppositional position to LETRS theory. Most notable are the theorists who believe some or all of the components targeted by LETRS may not be relevant to a student's ability to read. As such, the ability of a child to become literate "emerges" from birth to school age. Therefore, the home environment and access to life's experiences play a vital role in the development of reading skills targeted by trainings such as LETRS (Allington, 2015; Allington, 2002; Allington, 2011; Bruner, 1996; Clay, 1975; Gunn, Simmons, & Kameenui, 1995; Teale, 1983; Teale & Sulzby, 1986; Vygotsky, 1978; Yaden, Rowe, & MacGillivray, 1999). Thus, through these experiences, young students are constantly developing the skills necessary to become literate and effective readers.

Including *Foundations*, LETRS training is composed of twelve modules of training, of which, the first nine are pertinent to elementary aged learners. Included are:

"Module 1-The Challenge to Learning to Read," exploring the reasons why many students have reading difficulties and explains how children learn to read. Case studies illustrate the progression of reading development; the influences of biological, genetic, cognitive, environmental, and instructional factors in learning to read; and the components of effective reading instruction. A "four-part processing system" model is explored in detail (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

"Module 2-The Speech Sounds of English: Phonetics, Phonology, and Phoneme Awareness," this module introduces phonemes (speech sounds) and discussed the importance of phonological awareness in reading and spelling instruction. This one-day training discusses the features of consonants and vowels and covers some of the problems that children who speak other languages or

dialects may have when learning English (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 3- Spellography for Teachers: How English Spelling Works,” explores the structure and history of English spelling from several angles: phoneme-grapheme correspondences, letter patterns within words, syllables, meaningful word parts (morphemes), and historical layers in the orthography. This one-day training addresses differences between syllables and morphemes, between “irregular” and “high frequency” words, and among six syllable types. After learning this content, teachers can approach phonics, spelling, and word study with confidence (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 4- The Mighty Word: Building Vocabulary and Oral Language,” Vocabulary instruction differs from other areas of reading. This one-day training addresses varied approaches to instruction, including indirect (contextual) and direct methodologies, and stresses techniques for fostering word use, knowledge of word relationships, and awareness of word structure and its connection to meaning. Participants apply what they have learned about vocabulary instruction to several examples of narrative and expository text (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 5- Getting up to Speed: Developing Fluency,” incorporates deliberate fluency-building at sub-word, word, phrase, and text levels for those students who are progressing slower than their peers. This one-day training reviews the rationale for a fluency component in lesson design. Participants learn and practice techniques for speed drills, repeated readings, simultaneous and alternate

oral reading, calculating reading fluency, and charting the results of exercises (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 6- Digging for Meaning: Teaching Text Comprehension,”

Comprehension instruction is one of the most researched areas in reading education, yet one of the most challenging. This one-day training addresses the research base for teaching comprehension, the reasons why children have difficulty with comprehension, and approaches for teaching comprehension at the phrase, sentence, paragraph, and passage levels. Questioning techniques and strategies useful before, during, and after reading are reviewed. Exercises include text analysis for planning instruction (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 7- Teaching Phonics, Word Study, and the Alphabetic Principle,”

With contributions from TIME for Teachers™ Online, developed by Blanch Podhajsky, Ph.D., and produced by Marilyn Varricchio, M.Ed., at the Stern Center for Language and Learning in Williston, Vermont. Effective, enjoyable, systematic phonics instruction involves many sub-routines that are all practiced in this module (Moats and Tolman, 2009). In this one-day training, the sequence and substance of concept development in code-based instruction is emphasized, including the importance of applying learned skills to reading and writing. Answers to common questions are provided, including, “How Much Phonics?”, “Who Needs Phonics?”, “What Kind of Phonics?”, and “Why Phonics?” (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 8- Assessment for Prevention and Early Intervention,” which distinguishes screening and progress monitoring assessments from diagnostic and outcome assessment. This one-day training reviews the rationale for early screening with fluency-based measures and teaches a developmental spelling inventory. DIBELS is used as the example of a valid, reliable, efficient approach to early screening. Exercises include a review of classroom reports and individual case studies in light of children’s instructional needs and the “three tier” concept of intervention (Moats & Tolman, 2009; Step by Step Learning, Inc., 2015).

“Module 9- Teaching Beginning Spelling and Writing,” this module addresses writing instruction for children in grades K-3 who need to be taught the component skills that underlie composition. Drawing on recent research at the University of Washington that explicates the cognitive and linguistic components of composition skill, a framework for analyzing writing samples is applied to several examples of students at different levels of achievement in this one-day training. Instruction that builds automaticity in critical components while teaching children the stages of the writing process is explained and modeled (Moats and Tolman, 2009; Step by Step Learning, Inc., 2015).

In sum, the properties and components of reading effectiveness are threaded throughout the SBSL vehicle. As mentioned earlier there are those who may take issue with some or all of the protocols employed by this model. Conversely, as demonstrated by the literature, the SBSL model appears to have overlaps of many reading theories at opposite ends of the reading spectrum; therefore, a potential customer may have the ability to structure a reading program that blends the best of many best/next practices.

Should a school district invest the time and resources necessary to engage the services of SBSL, the possibility of increased reading ability in elementary aged students may be increased.

Teacher-Developed Reading Programs

For the purpose of this study, a teacher-developed reading program will employ the methodology of the “teacher” engaging school district supplied resources to produce an instructional/curriculum pathway for his/her students and/or, relying independently on his own pedagogy to craft and implement reading curriculum and instruction, or a blend of both to deliver the reading program. Within this context, practitioners may rely on commercially produced, school district purchased text, as a resource or guide in the teaching of reading. Some may consider this avenue contrary to the fidelity of a true teacher-developed reading program. For example, a district’s basal text is considered as a non-scripted commercialized reading program (Ladnier-Hicks, 2010; Lawrence, 2010); therefore, putting this form of instruction into the commercialized arena. Additionally, Allington (2002) believed that published reading programs fall into the orbit of the commercialized reading programs.

Adding to this complexity, one study suggested that the ability of the practitioner to make the learning environment motivating to the student, produced sound readers, regardless of modality used (Laverick, 2005). That said, published reading texts produced commercially will be considered non-scripted commercialized reading programs, and will be discussed later in the chapter.

Debate continues in the reading arena regarding the implementation of whole language, phonics, and other methodologies. However, the scope of this study will focus

on the teacher developing the avenues necessary to teach reading. Conversely, those avenues may incorporate one or more of the popular reading modalities (emergent/constructivist theory, direct instruction, phonics, whole language to name a few). Through this lens, numerous variations of instructional strategies incorporating the platform(s) of renowned reading theorists may overlap and be utilized, involve some outside professional development offered by the district, and progress on resources offered by the basal text publisher (Valencia & Sulzby, 1991).

As mentioned earlier, the constraints of shrinking school district budgets coupled with the increased demand for educational accountability may warrant such an approach. To these ends, if operating in the arena of teacher-developed reading programs, by no means diminishes the opportunities for success in teaching elementary students to read as compared to any other modality (Carrier, 2006; Dreher & Gray, 2009). For example, O'Neill (2004) found that,

Whole language vs. phonics is now more about when and how to teach phonics, vocabulary, and comprehension strategies rather than whether to teach them. Teaching these skills when the children demonstrate a need for them in reading and writing contexts, the “teachable moment” is fine for those who can learn that way, but many students do not learn enough at these times, or the times may not arise often enough for them to get what they need. Therefore, instruction has to be more explicit and direct for these students. (p. 12)

Furthermore, through the eyes of some, basal text products by nature are considered a commercialized reading program (Allington, 2002; Ladnier-Hicks, 2010). Research showed that employing the combined resources of the teacher and district basal text,

successes are common in reading gains (Balkiewicz, 1991; O'Neill, 2004). In addition, Balkiewicz (1991) concluded that,

Teachers realize that they cannot merely utilize published materials. Instead they must align both the climate and the activities in their classrooms with the framework emphasized (in this case, whole language) with this philosophy. In doing so, they need to be viewed as action researchers who experiment with multiple instructional strategies, flexible groupings of children, and various reading and writing materials/themes. (p. 5)

To this end, research demonstrated that teacher-developed instructional strategies utilizing a blended approach infused with teacher supplied pedagogy can often produce greater gains in student reading ability than the stand alone basal text (Balkiewicz, 1991; O'Neill, 2004). For example, Balkiewicz (1991) found through her research that students engaged in a teacher-developed learning environment performed well in decoding and better in comprehension when compared to students in a basal reading program. On a deeper level, Balkiewicz (1991) cited two studies by Ramsey and Rhodes and Dudley-Marlin stating that Pre-K students engaged in similar programs made significant gains in reading ability. As a result, students engaged in a teacher-developed reading program utilizing blended pedagogy components out performed a stand-alone basal text reading program. Programs should be balanced and draw not just on different teaching methods but a balance of theoretical perspectives (O'Neill, 2004). Of equal importance, effective reading programs should also identify struggling readers early in the process; thereby increasing the effectiveness of remediation (Balkiewicz, 1991; O'Neill, 2004).

Adding to this foundation, Gonzales (2012) claimed that when teachers develop pedagogy through researching themselves and finding their identity, they can teach differences within a society and apprentice the students to be critical of their role in the future. This train of thought aligns with the constructivist theory of reading mentioned earlier (Allington, 2015; Bruner, 1996; Clay, 1975; Gunn, Simmons, & Kameenui, 1995; Sulzby E. , 1985; Teale, 1983; Vygotsky, 1978). As a result, being a 21st century teacher not only requires teachers to move away from a teaching methodology that sets limitations for learning, but to also remove boundaries around their own professional learning to develop a more critical, reflective, transformative pedagogy created through self-exploration (Balkiewicz, 1991; Gonzales, 2012; O'Neill, 2004). Additionally, research showed that that some states are moving towards a teacher centered platform that allows the teacher to take a more flexible approach to the restructuring of teaching; consequently, this train of thought aligns with others in the field of reading research (Archer, 2004; Baker K. A., 2001; Balkiewicz, 1991).

Documented by Balkiewicz (1991) in her research, Goodlad (1984) found supportive and sensitive leadership, involvement of teachers in school-wide decisions, and the availability of assistance to be related to teacher enthusiasm and professionalism, therefore suggesting that teacher-developed reading programs can offer opportunities for teachers to assume a leadership role in the education of their students. Studies suggest that by infusing teachers into an increased role of responsibility, reading growth and achievement can be substantial (Balkiewicz, 1991). One example of this theory targets the “whole-language” school of thought in reading instruction; whole language is one methodology lending itself to teacher development. It is a philosophy not a specific

program. Therefore encouraging the teacher to structure the learning to fit the multiple needs of all students; consequently, this position incorporates overlap of numerous reading theorists (Balkiewicz, 1991; Bruner, 1996; Clay, 1975; Durkin, 1993; Gardner, 1999; International Center for Leadership in Education, 2014; Moats & Tolman, 2009; National Reading Panel, 2000). Again Balkiewicz (1991) summed and echoed by others,

In response to this philosophy, teachers realize that they cannot merely use published materials. Instead, they must align both the climate and the activities in their classroom with the framework emphasized by this philosophy. In doing so they need to be viewed as action researchers who experiment with multiple instructional strategies, flexible groupings of children, and various reading and writing materials/themes. (p. 12)

Teacher-developed reading programs possess the capacity to substantially impact the reading ability of students on multiple levels.

Adding to this body of research, Baker (2001) found that teacher-developed reading programs contribute greatly to the platform of reading growth and achievement when compared to commercialized reading programs. For example, in her study the teacher-developed model was compared to a modified basal model (Baker, 2001). Baker (2001) found that a commercialized reading program, did have a significant positive effect on students' reading ability as compared to a teacher developed program, however, the teacher-developed program did produce growth gains aligned to the commercialized program. In review of Baker's (2001) research, Cunningham (1990) constructed a study involving 48 kindergarten and 48 grade one children involved in a teacher-developed reading program, results indicated that kindergarten children and grade one children who

were part of the experimental groups performed significantly better than the students who were part of the control group, though the experimental groups did not differ. Moreover, these findings led Baker (2001) to posit that reading is hierarchical in nature, with each level building on the previous one (Allington, 2015; Archer, 2004; Ashby, Dix, Bontrager, Dey, & Archer, 2013; Balkiewicz, 1991; Bruner, 1996; Clay, 1975; Gardner, 1999; Gonzales, 2012; Gunn, Simmons, & Kameenui, 1995; Moats & Tolman, 2009; National Reading Panel, 2000; Perkins, 1993; Sulzby & Teale, 1991; Vygotsky, 1978).

Another recipe for success in the use of teacher-developed reading programs surfaced through Archer's (2004) research which postulated that "America's educational school system relies on efficient teachers to provide the most effective, successful reading instruction to improve students' education. Furthermore, Collins and Cheek (2000) found that teachers have long recognized that there is no one best way to teaching reading" (Archer, 2004, p. 2). Adding to this foundation, "a combination of approaches to instruction is essential since students vary in their needs and learning styles" (Archer, 2004, p. 2). Therefore, according to Archer (2001), it is reasonable to conclude that implementing a balanced approach to reading, spearheaded by the practitioner may yield positive reading results. Educators are finding that all students learn differently, each with his/her own particular learning style. The balanced approach recognized the need to use a variety of strategies, often crafted by the teacher, that match each student's learning style on an individual basis, such strategies might include use of basal, phonics, trade books, or all three combined (Archer, 2004). Adding to this foundation Archer (2001) cites Lesley Morrow (2002) that a study of schools in 32 nations found the most critical element in building an effective reading program is the teacher. Richard Allington (2002) agreed

“effective teachers manage to produce better achievement regardless of which curriculum materials, pedagogical approach, or reading program they use” (p. 740).

Furthermore, teachers of all ages and experiences across America deliver reading instruction in a variety of ways (Archer, 2004; Baker, 2001; Balkiewicz, 1991). Students require different characteristics and teaching styles from the classroom teacher to sufficiently meet individual learning style needs during reading instruction (Archer, 2004; National Reading Panel, 2000). Reading teachers must be able to link mastery of skills with the student’s comprehension process. Teaching requires educators to deliver effective reading instruction with specific characteristics that are critical in providing and implementing an effective reading program (Archer, 2004; International Center for Leadership in Education, 2014; National Reading Panel, 2000). In a convergence of theories, Archer (2004) claimed that effective reading teachers lead each and every student in the classroom to become proficient and successful readers. Effective teachers do not use only one specific method or technique, but implement many strategies and skills to accommodate the needs and learning styles for each individual student in the classroom. There are obviously characteristics that are used in each independent reading program that overlap from teacher to teacher (Archer, 2004; Baker, 2001; Balkiewicz, 1991; Moats & Tolman, 2009; National Reading Panel, 2000). In short, effective instruction demands the use of many strategies. Successful reading teachers are cognizant of the fact that reading can be taught using a variety of methods (Archer, 2004). Experts agree, it is teacher modeling and creative strategies that increase effectiveness; teacher developed strategies can target the whole class, small groups, and the individual student (Allington, 2002).

In a study comparing two teacher-developed reading programs Jeong (2009) found that differences in teacher developed reading programs resulted in reading gains; however, they did not show a significant gain of one instructional strategy over the other. Using the theory of “zone of proximal development (ZPD)” developed by Vygotsky (1978) provides practical implications for alternative instruction. The ZPD is the gap between the actual developmental level, in which learners can independently resolve tasks or problems, and the potential developmental level, where learners can figure out problems with adult guidance or in collaboration with more capable peers (Vygotsky, 1978). Learning takes place in the ZPD through scaffolding, which is a process of assisting novices in solving problems that are beyond their present capabilities (Bruner, 1996; Cribbs, 2013; Gardner, 1999; Moats & Tolman, 2009; National Reading Panel, 2000; Cribbs, 2013; Step by Step Learning, Inc., 2015; Vygotsky, 1978). Rooted in constructivism, these perspectives view students as constructors of knowledge and teachers as facilitators who enhance interactions with and among students and provide learning environments in which students take on active roles (Allington, 2015; Archer, 2004; Baker, 2001; Clay, 1975; Jeong, 2009; Sulzby E., 1990; Teale & Sulzby, 1986; Vygotsky, 1978). Success in teacher developed programs showed that the teacher flexibly adjusts the level of assistance in response to students’ performance. As students come to succeed in performing the task, the level of a prompt becomes less specific and vice versa. Scaffolding is a common thread in many of the teacher developed modalities of instruction (Bruner, 1996; Jeong, 2009; Perkins, 1993; Vygotsky, 1978). In sum, Jeong (2009) claimed that teacher-developed reading programs can contribute to improving

reading comprehension of informational texts, which students increasingly encounter as they proceed to upper grades.

As mentioned earlier, published reading texts produced for use within school districts are considered non-scripted reading programs. This avenue most often takes the form of the basal text. Therefore, to bring increased clarity and to offer a comprehensive example of these programs, the researcher will review non-scripted reading program texts offered by three of the biggest publishers in the United States, Houghton-Mifflin-Harcourt, McGraw-Hill, and Pearson-Scott-Foresman.

Non-Scripted Commercialized Reading Programs

Houghton-Mifflin-Harcourt. In building a platform for their flagship reading program, “*Journeys*,” Houghton-Mifflin-Harcourt (HMH) apply the cornerstone of Common Core State Standards (CCSS) as a foundation from which the reading program is built. Within this context HMH target student achievement, enhancing outcomes and achieving higher scores. Citing the importance of evidence claiming that choice of instructional materials has large effects on student learning, effects that rival teacher effectiveness (Houghton-Mifflin-Harcourt, 2015). Additionally, applying rigorous evaluation criteria to the selection of instructional content based on evidence that curricula impact student achievement (Houghton-Mifflin-Harcourt, 2015). Multiple researchers contributed to the foundation of authorship. For example, Dr. Shane Templeton, program author, Foundation Professor Emeritus of Literacy Studies at the University of Nevada, Reno, Ms. Irene Fountas, consulting author, Literacy Collaborative in the School of Education at Lesley University, Ms. Carol Jago, Common Core Consultant, director, California Reading and Literature Project at UCLA, Dr. Marjorie

Lipson, program author, Professor of Education at the University of Vermont, Dr. Sheila Valencia, program author, Dr. MaryEllen Vogt, program author, Distinguished Professor Emerita of Education at California State University, Long Beach, John J. Pikulski, program author, Professor of Education at the University of Delaware, Dr. David J. Chard, program author, Associate Dean for the College of Education at the University of Oregon, Dr. J. Helen Perkins, common core consultant, Assistant Professor of Reading and Urban Literacy and Coordinator of the Reading Program at the University of Memphis, Dr. James F. Baumann, program author, professor in the Department of Elementary and Early Childhood Education at the University of Wyoming, Dr. Jamal Cooks, program author, Associate Professor at San Francisco State University in the Department of Secondary Education, Dr. J. David Cooper, program author, literacy consultant and former Professor and Director of Reading at Ball State University, Dr. Russell Gersten, program author, Executive Director of the Instructional Research Group, Dr. Lesley Mandel Morrow, program author, Professor of Literacy at the Rutgers University Graduate School of Education, and Ms. Cathy Valentino, program author, University of Rhode Island.

In regards to student achievement, research suggested that the effectiveness of such a rigorous evaluation criteria concluded that differences in instructional materials accounted for a difference of 0.17 standard deviations in student achievement. By way of comparison, a review of ten research papers on the impact of teacher quality found that teacher effectiveness impacted student achievement by 0.08-0.11 standard deviations (Chingos & Whitehurst, 2012). Furthermore, HMH contends that viewed through the lens of enhancing outcomes, content has the most substantial impact on achievement and

growth. For example, in analyzing data from over 8,000 students, evaluating four key aspects of instruction; quantity of assignments, coherence of instruction, student voice in curricular and pedagogical issues, and the content of instruction, researchers found that of the four instructional dimensions studied, content quality had the greatest impact on student outcomes (Carbonaro & Gamoran, 2002). Finally, when addressing the component of:

achieving higher scores, the positive impact of the standards-based programs on student performance can be remarkably consistent. Riordan and Noyce (2001) examined the impact of standards-based curriculum on student achievement, relative to "traditional" instructional programs, and found statistically significant differences that favored the standards-based curriculum in nearly all dimensions of instruction. These differences were "remarkably consistent" across student demographic groups and across student ability levels. Furthermore, when controlling for other externalities, the researchers found that the differences favoring the standards-based curriculum could not be attributed to differences in teacher qualifications nor differences in self-reported teacher instructional practice. (Riordan & Noyce, 2001, pp. 368-398)

Empirical evidence suggested that curriculum and the quality of educational content have a substantial bearing on students' achievement and outcomes. Armed with this knowledge HMH developed the "*Journeys Common Core*" K–6 reading program, threading rigorous Common Core instructional design into the development process. The unique close reading routine builds better readers while also providing intervention for students who struggle in reading (Houghton-Mifflin-Harcourt, 2015). *Journeys Common*

Core is a literacy program designed around the Common Core State Standards. Additional components include, digital learning tools, including mobile apps and interactive whiteboard lessons, scaffolding and differentiation to meet the needs of all students (Bruner, 1996; Gardner, 1999; Houghton-Mifflin-Harcourt, 2015; Perkins, 1993; Sulzby E., 1985; Teale, 1983; Valencia & Sulzby, 1991). As such, the *Journeys* Common Core reading program consists of the following components: comprehensive instruction, close reading of complex authentic text, digital learning, interactive whiteboard, workshop approach, guided reading levels and common core reading, assessment and performance tasks, reading intervention, teacher model lessons, and *Journeys* Common Core initial program overview.

First, the Comprehensive Instruction components incorporate the modalities of whole- and small-group instruction coupled with efficient and effective navigation between the two. Additionally:

interactive focus walls provide key Common Core skills and concepts at a glance, with quick links to online instruction and practice. Grab-and-Go® lesson resources put each week's resources into one manageable location, eliminating the need to search through multiple components. Explicit instruction of Foundational Skills ensures mastery of basic reading and decoding skills. Exemplar Texts provided throughout each level offer rich, high-quality literature and give students the opportunity for close reading and analysis using full-length trade books. A strong stepped-out instructional plan ensures close reading of complex text. Daily Classroom Conversations help students clearly express their ideas in a variety of settings. (Houghton-Mifflin-Harcourt, 2015, p. 64)

Digging deeper into complex text with “text-based questions worth thinking about and answering engage students in classroom discussions” (Houghton-Mifflin-Harcourt, 2015, p. 64). Differentiating instruction to help every child succeed with multiple opportunities to differentiation, including Write-In Readers that offer personalized intervention for emergent, reluctant, or struggling readers (Bruner, 1996; Clay, 1975; Houghton-Mifflin-Harcourt, 2015). Raising the bar with apps, Interactive Whiteboard Lessons, eTextbooks, online student and teacher collaboration, and research and assessment, allows users to teach, practice, apply the instruction through student and teacher collaboration (Houghton-Mifflin-Harcourt, 2015).

Second, through the concept of Close Reading (reading to uncover layers of meaning that lead to deep comprehension) of complex authentic text, the practitioner can engage *authentic text* by scanning the table of contents. Within the table of contents, teachers will see favorite authors, engaging topics, and grade level appropriate texts for instruction and practice. Consequently, these texts can be found in local libraries, bookstores, and on eReaders (Houghton-Mifflin-Harcourt, 2015). Adding to the layer of resources within this category, *Close Reading Routine* activities are founded on brain research, demonstrating that a routine allows the brain to focus on learning content. By using the same process with every Anchor Text in Grades K–6, this routine teaches students how to deeply comprehend any text and is transferrable to all reading (Gardner, 1999; Houghton-Mifflin-Harcourt, 2015; Perkins, 1993). Next, *First Read to Think Through the Text* includes a clearly marked path for close reading to promote thoughtful, repeated, and extensive reading of the text for deep comprehension. Lessons begin with a First Read and a shared/community reading with students. As a

result, the *Second Read to Target and Analyze* component takes place during the Second Read, students revisit two or three targeted areas to analyze text on a deeper level and are prepared to analyze the text using the prompt questions. However, emerging readers may experience difficulty in this area of comprehension; therefore, *Journeys* includes extra support for students who may not be quite ready to analyze on their own (Houghton-Mifflin-Harcourt, 2015). Finally, through the *Dig Deeper* component, *Journeys* includes Dig Deeper mini lessons that teach students specific ways to analyze text before releasing them during the second read. This depth of support is unique to *Journeys* and helps all readers access the complex texts called for by the Common Core (Houghton-Mifflin-Harcourt, 2015).

In keeping with 21st Century learning practices, *Journeys* utilizes a digital component to the learning arena. Through the *Digital Learning* component of the program, *Journeys Common Core* supports the digital classroom with a full suite of mobile learning resources optimized for smartphones, eReaders, tablet devices, and computers. Within this context, *Journeys Common Core Dashboard* provides at a glance look and one click access to all of the key online features of the program, key components, lesson plans, assignments, and reports on student progress. The dashboard also creates a consistent user experience with other HMH K–12 products. In addition, the *mySmartPlanner* auto-populates suggested lesson plans for an entire school year with a few clicks. Once lessons are implemented into the *mySmartPlanner* calendar, all lesson resources can be launched with one click right from the lesson plan. Practitioners can modify lesson plans and save them from year to year. To further optimize student learning, *Journeys Common Core Student eTextbook* utilizes electronic versions of the

student books and magazines, includes full audio, zoom capability, and links to fun learning activities. Other components available in the eTextbook format are the Write-In Reader, Vocabulary in Context Cards, Alphafriend Cards, and Reading Adventures magazines. The *Journeys* Common Core Student Books is available in Kno™ format, adding more interactive and collaborative features that sync with the online Student Book. To further capitalize on the link between writing and reading comprehension, *myWriteSmart* provides an interactive online writing and performance assessment tool designed to encourage the 21st-century skill of collaboration. This component offers interactive writing support and performance tasks to further build conceptual knowledge. Building upon the digital platform, the *HMH Readers app for iPad®* provides reading support for all students, whether reading on, below, or above grade level. HMH Readers feature audio, highlighting, and bookmarks. This feature boasts the ability to put an entire library at the students' fingertips, features leveled nonfiction and fiction texts to reinforce reading skills, promotes academic vocabulary acquisition, and improves reading fluency and comprehension in young readers (Houghton-Mifflin-Harcourt, 2015; Moats & Tolman, 2009; National Reading Panel, 2000). HMH also includes the *HMH Readers app*, providing reading support for teachers, parents, and all students, whether reading on, below, or above grade level. HMH Readers features audio, highlighting, and bookmarking capabilities as well as search and browsing by title, author, or key word. Rounding out the digital component arena is the *HMH Common Core Reading Practice and Assessment App* providing ARCC™ and SBAC* type assessment items for content area passages that are in the correct Lexile® grade level bands. The practice assessments provide corrective feedback and the assessment item results are reported in a Teacher

Resource Center online. The HMH Reading Common Core Practice and Assessment app provides a mobile format that allows students to practice and acquire test-taking skills that will help them succeed on PARCC and SBAC* assessments, while providing teachers with real time data on student progress. Each week, two informational passages in the correct Lexile® Level band are used with a practice test that provides corrective feedback and an assessment with questions that include tech-enhanced items (Houghton-Mifflin-Harcourt, 2015).

To address the trend of classroom interactive technology, *Journeys Common Core* incorporates *Interactive Whiteboard* technology to increase teacher effectiveness and student learning. Through the interactive whiteboard thread, *Journeys Common Core* provides for interactive lessons with hands-on activities immersed into the curriculum. Common Core-aligned Whiteboard Lessons provide fun, interesting, and hands-on learning in the areas of phonics, vocabulary strategies, grammar, text analysis, and writing skills, allowing students to immerse themselves in each lesson (Houghton-Mifflin-Harcourt, 2015).

In efforts to enhance reading comprehension, *Journeys Common Core Reader's and Writer's Workshop* approach is designed to get students thinking, talking, reading, and writing about text in a way that supports learning and fosters a love of reading. The Literacy and Language Guide combines the rigor of the *Journeys Common Core* core program with active literacy learning through effective resources needed for Reader's and Writer's Workshop, all in one easy-to-use book. The comprehensive guide gives a weekly overview for planning within Reader's and Writer's Workshop, also included are detailed plans for Whole Group Reading, spelling and vocabulary Word Study, and

Writing minilessons. Included features, Support the Common Core emphasis on having students read and write about complex literature and informational text. Additionally, the program allows for lesson flexibility to maximize student learning, and provides accessible rigor. On broader plane this component builds Tier III Vocabulary, specifically that vocabulary associated with Response to Intervention Instruction (RTII). In targeting flexibility, a three tiered approach to address students with learning challenges is established (Pennsylvania Department of Education, 2015). For example, instruction in the Literacy and Language Guide from *Journeys* consulted with author Irene Fountas. As a result, reading block time is sectioned into three main categories: Whole Group, Small Group, and Independent Literacy Time. Whole Group instruction using *Journeys* Common Core literature selections ensures that all students learn the same literacy skills through on-level interactive and shared reading, minilessons, and genre studies. Students work in small, flexible groups using Leveled Readers on their instructional level as they move toward reading more complex text. Students practice and extend skills and strategies taught during Whole Group and Small Group instruction, while the teacher works with Guided Reading Groups (Houghton-Mifflin-Harcourt, 2015). Concluding this module, HMH utilizes the *Journeys Common Core* writing instruction modality to effectively increase student learning through Minilessons focusing on informative (explanatory), argumentative (opinion), and narrative writing. Dr. Shane Templeton brings the principles of *Words Their Way* to the *Journeys Common Core* classroom and provides a developmental approach to phonics, spelling, and vocabulary instruction. By implementing the Daily Spelling/Phonics and Vocabulary Lessons the practitioner effectively targets word study instruction according to student need and ability. Adding to

this platform, activities include word sorts that actively engage and motivate students to productively explore words and their patterns, provides supports for differentiated instruction with suggested word lists for struggling, on-level, and advanced students with word work, and by the qualitative Spelling Inventory and Checklist (Houghton-Mifflin-Harcourt, 2015).

Included next in the HMH reading package, is the component of *Guided Reading Levels and Common Core Reading Journeys* Common Core uses the Common Core to engage students and build comprehension skills with materials leveled to ensure all readers receive the proper support and challenge. Leveled by consulting author Irene Fountas, *Journeys* Common Core Leveled Readers apply comprehension skills and strategies from the core lessons and support students at their instructional level (Houghton-Mifflin-Harcourt, 2015). Of note, “this component enables students to respond to reading through writing and additional activities while working with the text. Available for each Leveled Reader, Running Records provide an assessment of individual progress by recording a student’s key reading behaviors and conceptual understanding, which should be documented over time to show student progress” (Houghton-Mifflin-Harcourt, 2015, p. 69).

In addressing the importance of assessment and performance of students’ progress, *Journeys* Common Core provides practitioners with a comprehensive assessment system involving the use of data needed to make informed instructional decisions and guide students on the path to Common Core success (Houghton-Mifflin-Harcourt, 2015). *Journeys* Common Core provides a wide range of formative and summative assessment opportunities throughout the year incorporating performance tasks

with familiar assessments, allowing teachers to track student growth and progress to move students into and out of appropriate interventions as necessary. In regards to student performance, performance tasks feature text-based classroom discussion and responsive writing, and include collaboration between students and teachers to promote a healthy learning environment. Weekly text-based writing exercises are designed to build comprehension and writing skills. Extended, multi-step media projects require students to conduct research, evaluate sources, and collaborate to create a final product over the course of a unit (Houghton-Mifflin-Harcourt, 2015).

In targeting the complexity of struggling readers, *Journeys Common Core* contains strategies that help learners at-risk close the achievement gap. Tier I Support in the *Journeys Common Core Teacher's Edition*, *Journeys* features research-based core instruction with built-in daily Tier I support. *Daily Assessment and Corrective Feedback routines* provide differentiated support for phonics and decoding, Tier II and III (tiers within the RTii process) Vocabulary, comprehension, language, and writing (Houghton-Mifflin-Harcourt, 2015; Moats & Tolman, 2009; National Reading Panel, 2000; Step by Step Learning, Inc., 2015). *Scaffolded instruction* offers support for the reading of complex text (Allington, 2002c; Bruner, 1996; Gardner, 1999; Perkins, 1993). *Small Group Instruction using Leveled Readers* ensures student support at their individual instructional level. Progress monitoring is provided every two weeks at each grade level from K–6. Biweekly assessment supports Tier II intervention instruction centered on the Write-In Readers (Houghton-Mifflin-Harcourt, 2015; Moats & Tolman, 2009; National Reading Panel, 2000; Step by Step Learning, Inc. , 2015).

Efforts to enhance the practice of *Teacher Modeling* is also addressed through the *Journeys* Common Core reading text. For example, *Journeys* Common Core Teacher-to-Teacher model lesson videos demonstrate best practices in literacy instruction and provide practical, easy-to-implement ideas and strategies to implement within the classroom. Adding to this body of knowledge, research shows that professional development and ongoing, job-embedded teacher support are crucial for deep implementation of any program to have an impact on student achievement (Houghton-Mifflin-Harcourt, 2015). Designed for teachers that are new to *Journeys Common Core*, is a three-hour training providing an overview of the program organization, instructional resources, and technology. Teachers learn how to apply understanding of program organization and pedagogy to daily instruction, integrate components and resources that support differentiation, assessment, and effective whole and small group instruction, use technology to enhance instructional delivery and student learning. Onsite implementation training and professional development modules assist in ensuring optimal student results. These sessions can be geared to full day and webinar formats. Pricing for these sessions vary.

The body of research available in determining the success or failure rate of the HMH reading series on elementary aged students is limited due to the recent merger of the Houghton-Mifflin and Harcourt companies. Therefore, a comprehensive overview of the success/failure of the two company's pre-merger basal text reading programs will be detailed.

First, in a 2008 Seton Hall University study, research determined that the "Harcourt Trophies" (HT) reading program did not show significant growth and/or

achievement patterns when compared to another established publishers' reading program (Miller, 2008). A review of the HT program determined that the targeted areas of emphasis include, oral language, comprehension, vocabulary, reading, writing, grammar, spelling, phonemic awareness, systematic phonics, fluency, assessment, listening, speaking, an Intervention Resource Kit, and ELL Resource Kit (Miller, 2008; Moats & Tolman, 2009; National Reading Panel, 2000). Data collected from studies examined by the NRP suggested that text comprehension is enhanced when readers actively relate ideas presented in print to their own knowledge and experiences and construct mental representations in memory (NRP, 2000). Therefore, a relationship exists between the thinking process and reading text, the outcome is comprehension (Houghton-Mifflin-Harcourt, 2015; Miller, 2008). Through this lens, text is constructed by the readers' own interpretation of their experiences while they are reading (Miller, 2008; Rosenblatt, 1978). Building on this foundation, HT emphasized the reader's use of prior experiences to select images and feelings that allow the reader to shape the text at the same time that the text shapes the reader by creating new experiences (Allington, 2015a; Bruner, 1996; Clay, 1975; Houghton-Mifflin-Harcourt, 2015; Miller, 2008; Rosenblatt, 1978; Teale & Sulzby, 1986). Additionally, Miller (2008) found that HT incorporates a "Progress Monitoring" component. As mentioned earlier, there are varying modalities to accomplish the tracking of student progress. For example, DIBELS, CIRCLE, and running records are all forms of progress monitoring; however, they differ dramatically in respect to reading theory (Allington, 2002c; Clay, 1975; DIBELS, 2013; Houghton-Mifflin-Harcourt, 2015; Miller, 2008; National Reading Panel, 2000; Step by Step Learning, Inc., 2015). In sum, the HT series showed that third grade classes made more

than twice the growth of a national comparison control group on the Reading Comprehension Subtest and on the Reading Score as measured by the Stanford Achievement Tests (SAT), 9th edition 2001-2002 (Miller, 2008).

In contrast, research at Walden University claimed that when compared to another commercial reading program, HT failed to show significant reading gains. For example, The Harcourt Trophies series did not consider individual student reading ability, a major component of the commercialized competitor (Bowling, 2011). Results indicated that the commercialized reading program outperformed HT due to increases in the utilization of individualized leveled readers, allowing the students to focus on the understanding of the passage and not the vocabulary (Bowling, 2011).

Along these lines, a 2012 Walden University mixed methods study designed to determine the impact of the HMH *Storytown* program on reading achievement revealed that using the Iowa Test of Basic skills (ITBS), a substantial gain in vocabulary skills was indicated. Further, Storytown was highly rated by the participating teachers as an effective reading and language program that boosts reading achievement and one that meets the high academic standards of NCLB (2001) (Clark, 2012). Adding to this platform, Clark (2012) found that Abt Associates conducted a six school district study that included 59 schools and involved 5,667 students who used the Storytown reading program as their main instructional tool. Using a host of standardized tests and assessment programs, the results indicated that the reading part of the test showed improvement compared to previous years, especially in Title I schools. However, results of Clark's study indicated that performance scores displayed that the students' reading achievement showed an increase in first grade, but significantly decreased at the

beginning of second grade; however, there was an increase within second grade assessment periods (Clark, 2012). The third grade's reading scores indicated a decline in students' reading achievement, the greatest gains were found in second grade (Clark, 2012). In sum, according to these findings, the HMH Storytown basal reading program's design provided students with a strong foundation in reading in first and second grade. Conversely, a loss of students' reading achievement momentum occurred in third-grade (Clark, 2012). A detailed program description and marketing information can be found at <http://www.hmhco.com/shop/education-curriculum/reading/core-reading-programs/journeys>.

McGraw Hill. In McGraw Hill's reading program, the CCSS is the platform from which the reading program is derived (McGraw Hill, 2015). Combining research-based instruction with new tools to meet modern day reading challenges, every component and every lesson is designed for effective and efficient CCSS instruction (McGraw Hill, 2015). Of note, the program authors of McGraw Hill's CCSS reading and language arts programs "*Wonders*" include renowned reading theorists recognized within their field. For example, participants included Dr. Diane August, managing director of the American Institutes of Research, Dr. Donald Bear, Iowa State University, Dr. Janice Dole, University of Utah, Dr. Jana Echeverria, California State University, Dr. Douglas Fisher, San Diego State University, Dr. David Francis, University of Houston, Dr. Vicki Gibson, educational consultant, Dr. Jan Hasbrouck, educational consultant and researcher, Ms. Margaret Kilgo, educational consultant, Dr. Jay McTighe, educational consultant, Dr. Scott Paris, Vice President, research, Educational Testing Service, Dr. Timothy

Shanahan, University of Illinois at Chicago, and Dr. Josefina Tinajero, University of Texas at El Paso.

By utilizing a rich range of diverse print and digital media, *Wonders* provides the instructional support and materials geared and created to teach the rigor, intent, and depth of the new Common Core State Standards (McGraw Hill Education, 2015). According to program developers, *Wonders* provides support for building a strong reading foundation, accessing complex text, finding and using text evidence, engaging in collaborative conversations, and writing to sources. Additionally, through an integrated approach, *Wonders* builds all learners, both striving and struggling, as well as English and Spanish speaking into stronger readers and writers (McGraw Hill, 2015). The program is divided into sections that the practitioner can understand and manipulate to drive instruction.

First, the component of *Reading/Writing Workshop* serves as the key to the CCSS by providing all core lessons in one place. Teacher centered, this avenue seeks to answer and provide guidance to the teacher's question, "What do I have to teach?" Included at the base level, *The key to all instruction*, a book of short reads to teach/model close reading. Threaded into the fabric of the program, practitioners engage in guided and collaborative practice of key skills. Opportunities to teach and model close reading with the Reading/Writing Workshop allows students to practice and apply learned skills with the *Literature Anthology*, leveled readers, and trade books. In this arena, students hone their writing skills by working through the week's essential question, skills, and strategies, providing rich opportunities for collaborative conversations (McGraw Hill Education, 2015; Moats & Tolman, 2009; National Reading Panel, 2000).

Next, within the *Literature Anthology* module, McGraw Hill aims to entice students to read by engaging anchor texts. *Literature Big Books* provides age appropriate and student interest texts targeting the formulation of oral vocabulary. In addition, this component provides access to complex text through read alouds and builds foundations for close reading (Allington, 2011b; Bruner, 1996; Cribbs, 2013; McGraw Hill, 2015; Moats & Tolman, 2009). Within this foundation, *Literature Anthology* provides for the application of close reading, builds reading stamina, and connects reading and writing. In efforts to accommodate 21st learning through the application and use of technology, Wonders provides an eBooks tool that is iPad® compatible, tracks print with audio support, supports close reading and analytical writing (Archer, 2004; Barra, 2007; DIBELS, 2013; Freidman, 2007; McGraw Hill, 2015; National Reading Panel, 2000).

Yet another layer of support is offered through the *Leveled Readers-Differentiate to Accelerate* component of the reading program. Review of this item revealed a *Built-in acceleration* plan focused on the development of the students' ability to scaffold through the implementation of resources designed for scaffolding, and offering multiple opportunities for writing with every leveled reader (Beck, McKeown, & Kucan, 2002; Bruner, 1996; Clay, 1975; McGraw Hill, 2015; Sulzby & Teale, 1991; Vygotsky, 1978). Adding to this platform of differentiation, the *Literacy* and *Informational Text* are coupled in a manner that provides the student with a same topic, same vocabulary and comprehension skill, joined with a paired selection on the same topic for reading across texts in the *Literacy text* component. Consequently, the *Informational Text* provides for similar scope and sequence by targeting same content, through different complexity

levels, integrating science/social studies content, and pairing selections on the same topic for reading across texts (McGraw Hill Education, 2015).

Adding to this body of knowledge, the *Wonders* product includes a *Classroom Library* designed to provide students with the necessary materials and skills to increase reading ability. For example, included within the library is practice and apply modules with additional engaging texts. Threaded into this feature are trade books with thematic, extended, and complex texts on diverse and engaging subjects, allowing students to apply close reading skills in each unit in small groups or individually (McGraw Hill, 2015). The *Classroom Library* includes trade books and companion lesson plans; thereby, providing students with support for accessing complex text, reviewing text dependent questions, and writing about reading. Once engaged in these activities, the *Classroom Library* is designed to help practitioners differentiate and accelerate student progress when they are ready. Opportunities exist for students to practice and apply learned skills across many texts, including the *Reading Wonders* leveled readers discussed earlier. In addition, analytical writing and research projects are integrated and allow for further focus and discussion on the week's essential question, skills, and strategies (McGraw Hill, 2015).

Next on the component list is *Wonders* capacity to build a strong foundation for readers. Through the *Foundational Skills* component, practitioners receive the materials and direction needed to build and maintain strong readers. Materials include the protocols necessary to implement daily instruction that is explicit and systematic. Areas of focus include phonological and phonemic awareness, phonics, and high-frequency words. These themes are threaded into a *Practice and Application* protocol allowing students to experience engaging selections and practice skills learned in a connected text

(Hasbrouck, 2010; McGraw Hill, 2015; Moats & Tolman, 2009; National Reading Panel, 2000). In keeping with 21st century technology trends, *Wonders* includes a digital and print resource for every phonics lesson allowing students to engage sound spelling songs, word sort activities, phonics/spelling practice, phonics games, and word study games (McGraw Hill, 2015).

Finally, McGraw Hill addresses the assessment and performance arena in a variety of ways. For example, the *Wonders* series includes activities for daily, weekly, unit assessments, progress monitoring, and summative assessment. First, *Daily Quick Checks* provides the teacher with guided instructional decisions, informal assessment, small group lessons, and provides opportunities for daily instructional differentiation. Second, the *Weekly Assessment* is designed to assess skills taught during the week. Included are leveled weekly assessments, fresh reads to assess skills taught, and multiple choice and constructed response items. Third in this component is *Fluency Assessment* protocols, utilizing fluency norms based on research conducted by Hasbrouck and Tindal (McGraw Hill, 2015). Within this realm are leveled passages, goals and accuracy rates, and suggested testing schedules provided for different groups. The fourth assessment category targets *Unit Assessment*, designed to assess skills taught in the unit. Practitioners are able to assess CCSS, included are multiple choice and constructed response, pencil-and-paper or online administration resources are available. Also included and designed to increase student learning is the *Benchmark Assessment* component designed to assess achievement toward year-end goals, CCSS, includes multiple choice and constructed response, and provides item analysis capacity. Adding to 21st century trends McGraw-Hill *eAssessment* provides the teacher with the tools necessary to administer tests and

track data online. Additionally, these components bears a “Robust” test generator, allows for differentiation, online administration, complete CCSS reporting capabilities, and is compatible with any device (McGraw Hill, 2015).

In addressing professional development and product training, McGraw Hill offers various opportunities for practitioners to cultivate their learning needs through online courses and in-person training for all programs, driven to giving teachers a deep knowledge of effective implementation strategies and instructional practices (McGraw Hill, 2015). Of note, McGraw Hill bases its professional development opportunities on a five principle foundation consisting of content-specific learning, active engagement, teaching models, collaborative learning, and practical application. Based on this foundation, opportunities exist for teachers and districts to explore the Professional Learning Environment (PLE) for grades K-12 giving teachers instant access to a range of resources geared to mastering the programs utilized daily. The comprehensive PLE empowers teachers to control their own professional learning from implementation onward. Tools within the PLE support professional learning and help teachers meet continuous improvement objectives (McGraw Hill, 2015).

In efforts to provide teachers the tools necessary in acquiring a seamless transition into the *Wonders* series, McGraw Hill offers a free *Quick-Start* course led by Reading Wonders experts; this course provides practitioners with the tools necessary teach effectively during the first few weeks of program implementation. For example, tools and program materials enable the teacher to assign activities, eBooks, and online materials to students, administer placement and diagnostic tests, and set up classes online (McGraw Hill, 2015). Also available, McGraw Hill (2015) offers *Mastery Courses* targeting in-

depth knowledge for essential topics, professional-level and self-paced online courses address key classroom issues and challenges. Designed using principles of effective professional learning, they build a deep understanding of rigorous learning standards, effective teaching practices for specific content, and resources to optimize classroom instructional materials and elevate student results. Lastly, available are *Gibson Hasbrouck Online Resources*, providing access to videos and professional development resources from Vicki Gibson, Ph.D. and Jan Hasbrouck, Ph.D., nationally acclaimed teachers, authors, and trainers (McGraw Hill, 2015). A complete context of marketing information can be accessed through McGraw Hill's web page at <https://www.mheonline.com/program/view/1/1/2729/READWONDER/>.

In contrast, one study is critical of the scope and sequence utilized in published basal texts (Holderness, 2013). For example, research has suggested that text in these materials lack features, such as enough repetition of vocabulary to support beginning readers (Holderness, 2013). However, products from the three largest publishers in the textbook arena are widely used throughout the nation. This Florida International University study comparing the effects of a McGraw Hill reading series to another commercialized reading program showed that McGraw Hill's product did not produce gains in reading comprehension (Holderness, 2013). In fact, research revealed that the alternate commercialized reading program produced significant gains in reading comprehension; however, comprehension did not significantly increase from pre to posttest assessments (Holderness, 2013). However, when the McGraw Hill assessment products were applied to a Liberty University study focused on elementary students' ability to comprehend text, results were significantly positive (Talada, 2007).

Pearson-Scott-Foresman. A review of the Pearson-Scott-Foresman (PSF) elementary reading program, “*Reading Street Common Core*” revealed a product that is aligned with the CCSS. PSF utilize a lesson format focused on Common Core State Standards, with an emphasis of moving children toward higher-order thinking and college and career readiness (Pearson-Scott-Foresman, 2015). According to PSF’s online product review, the practitioner is supplied with resources that will assist in prioritizing instruction to support higher levels of reading and writing in elementary aged students through increased text complexity in reading, providing accessible rigor, balancing fiction and informational texts, building content-area knowledge, emphasizing close reading, focusing on informative/explanatory, argumentative/opinion, and narrative writing, implementing performance assessments, and integrating media and 21st century skills (Pearson-Scott-Foresman, 2015). Additionally, teachers are provided annotated lessons containing a glossary of Common Core terminology and professional development articles on varying topics (Pearson-Scott-Foresman, 2015). In efforts to increase student reading comprehension, *Reading Street* seeks to engage the student through the text component of *Reading Street Sleuth*. This component seeks to teach students to find text clues when reading to enhance understanding, to ask questions, examine evidence, draw conclusions, and make their case. Students read a selection from *Sleuth* on a weekly basis to assist in unlocking the mysteries and challenges of complex text (Pearson-Scott-Foresman, 2015). The contents of *Sleuth* target short reading selections with higher grade-level readability, increased challenging literary and informational content, providing all students access through scaffolded instruction, and weekly opportunities for close reading and performance tasks; as such, aligns with

reading theorist mentioned earlier (Bruner, 1996; Gardner, 1999; National Reading Panel, 2000; Pearson-Scott-Foresman, 2015; Vygotsky, 1978).

Through this theoretical framework, the realm of assessment, student tracking, and focused instruction are also addressed through the *Reading Street* program.

According to Pearson-Scott-Foresman (2015), teachers and students have access to a wide range of formative and summative assessments designed to ensure that students are moving up levels of text difficulty, and provide resources for them to use when they are not performing to expectations.

In aligning with 21st century learning and to further engage students, PSF utilizes *eStreet* on demand. This technological component is designed to move, speak, and personalize instruction (Pearson-Scott-Foresman, 2015). Within *eStreet* practitioners have access to the component *Grammar Jammer* designed to teach grammar and mechanics without overwhelming students. *Grammar Jammer* allows the teacher to add short, engaging animations to the writing workshop program. Next, to assist in the practitioner's task of grading, *eStreet* provides *EssayScorer*. This component assists teachers and students through an online automated scorer. According to Pearson-Scott Foresman (2015), this aspect of the reading program allows the teacher to save time when tasked with grading students' work. Additionally, students can edit and receive instant feedback as writing occurs. Finally, in efforts to assist teachers in gaining command of the *Reading Street* product, PSF incorporates the Pearson *Successnet*, a teacher online resource for training and guidance (Pearson-Scott-Foresman, 2015). At the time of print, and according to Pearson-Scott-Foresman (2015), webinars are available for gaining a deeper level of instructional knowledge and pedagogy; however, no examples were

available. A complete cadre of PSF's marketing package can be found at:

<http://www.pearsonschool.com/index.cfm?locator=PS1gC9&PMDBSiteId=2781&PMDBSolutionId=6724&PMDBSubSolutionId=&PMDBCategoryId=3289&PMDBSubCategoryId=28138&PMDBSubjectAreaId=&PMDBProgramId=88541>.

Pearson-Scott-Foresman utilizes many researchers and renowned reading theorists in the production of the *Reading Street* product. For example, program authors include Dr. Peter Afflerbach, Professor; Department of Curriculum and Instruction, University of Maryland; College Park, Maryland, Dr. Camille L. Z. Blachowicz, Professor; National College of Education National-Louis University, Dr. Candy Dawson Boyd, Professor, School of Education; Saint Mary's College, Dr. Elena Izquierdo, Associate Professor, University of Texas at El Paso, Dr. Connie Juel, Professor of Education; Stanford University, Dr. Edward J. Kame'enui, Dean-Knight Professor of Education and Director, Institute for the Development of Educational Achievement, and the Center on Teaching and Learning; College of Education; University of Oregon, Dr. Donald J. Leu, John and Maria Neag Endowed Chair in Literacy and Technology Board of Directors, International Reading Association, Dr. Jeanne R. Paratore, Professor of Literacy, Language, and Cultural Studies; Boston University School of Education, Dr. P. David Pearson, Professor and Language, Literature and Culture; Graduate School of Education; University of California; Berkeley, California, Dr. Sam L. Sebesta, Professor Emeritus; Curriculum and Instruction College of Education, University of Washington, Dr. Deborah Simmons, Professor in the Department of Educational Psychology, College of Education and Human Development, Texas A&M University, Dr. Susan Watts Taffe, Associate Professor and Program Coordinator of Literacy and Second Language Studies; School of

Education; University of Cincinnati, Dr. Alfred Tatum, Associate Professor and Director, UIC Reading Clinic, University of Illinois at Chicago, Dr. Sharon Vaughn, H. E. Hartfelder/The Southland Corporation Regents Professor; University of Texas; Austin, and Dr. Karen Kring Wixson, Dean of Education, University of North Carolina (Pearson-Scott-Foresman, 2015).

The body of knowledge regarding the effectiveness of the *Reading Street* program is limited; however, nuggets of research are available. A 2010 University of Virginia mixed-methods study revealed that the Pearson-Scott-Foresman reading program offered teachers the ability to exert instructional freedom. Teachers are able to adapt to the needs of their classroom and use their own professional principles to inform instruction (Lawrence, 2010). Reading comprehension may increase. Conversely, this study also claims that the use of basal reading programs, of any type, may prove despairing to teachers. As a result, teachers “surrender control of or responsibility for curricular and instructional decisions in reading to the materials, thus abrogating their previously learned and acquired teaching skills” (Lawrence, 2010, p. 8). Conversely, Lawrence (2010) stated that it cannot be assumed that teachers implement the same program in the same way. Therefore, the teacher’s fidelity of use with the program may determine success or failure in reading achievement. Thus, results of the study determined that no relationship existed between teachers’ fidelity to the Scott Foresman Reading Program and first grade reading achievement. Instead, achievement was associated with teachers’ specialized training in reading as indicated by a reading endorsement (Lawrence, 2010).

In another 2010 mixed-methods study seeking to determine if the Pearson-Scott-Foresman Reading Street program improved the reading achievement in elementary aged

students, research findings indicated no significant differences between the performance of participants before and after the implementation of the Reading Street curriculum (Ladnier-Hicks, 2010). In addition, statistical analyses revealed no specific predictors within the data that may improve future student performance within the participating population (Ladnier-Hicks, 2010). Consequently, a review of the literature associated with this study revealed that generally speaking, reading achievement outcomes did not immediately increase following the first or second year of curriculum change and implementation (Ladnier-Hicks, 2010).

Lastly, a 2014 Capella University study comparing Pearson-Scott-Foresman's reading program to another national competitor suggested that there was less achievement by fifth-grade students who had been taught using the Scott Foresman program than those using the competitor's product (James, 2014). However, when comparing third and fourth-grade student results, results indicated there was no statistically significant difference whether reading instruction was the competitor or the Scott Foresman reading program. The conclusion that both of these scientifically research-based reading programs can effectively meet the learning needs of students is encouraging and worth implementing (James, 2014).

Scripted/Non-Scripted Combined Reading Programs

For the purpose of this study, Scripted/Non-Scripted combined reading programs will be viewed through the lens of reading programs of a scripted nature that function as a replacement to the basal text or as an addition to the basal text program and offered by a private vendor. For example, one type of comprehensive reading program is the basal reading program. Basal reading programs provide collections of literature, trade books,

and leveled libraries discussed earlier. The teacher selects from multiple activities to develop reading components, such as phonics, fluency, vocabulary, and comprehension in order to meet the needs of a particular class (Lawrence, 2010). They also use skill sequences to organize instruction; comprehensive basal programs can be scripted or non-scripted. Scripted reading programs are traditionally regarded as commercial reading programs that determine the content, pace and specific language teachers use during instruction. Non-scripted basal reading programs may provide a script for teachers, but they do not require teachers to follow a specific pace or use language that is specific to the program (Lawrence, 2010).

The ocean of complexity orbiting the commercialized reading program arena is vast. The marketplace is saturated with reading programs promising reading achievement. Therefore, due to this vastness, attempts will be made to narrow the focus to the types of programs most commonly utilized. With this in mind, researchers at Johns Hopkins University has compiled a comprehensive list of commercialized reading programs currently being utilized in the United States (Slavin, Lake, Chambers, & Cheung, 2009). Within this study, overall, 63 experimental-control comparisons met the inclusion criteria, of which 19 used random assignment to treatments. Effect sizes (experimental-control differences as a proportion of a standard deviation) were averaged across studies, weighting by sample size (Slavin, Lake, Chambers, & Cheung, 2009). An exhaustive search considered more than 2000 published and unpublished articles. It included those that met the following criteria. Schools or classrooms using each program had to be compared to randomly assigned or well-matched control groups (Slavin, Lake, Chambers, & Cheung, 2009). Study duration had to be at least 12 weeks, outcome

measures had to be assessment of the reading content being taught in all classes, and included almost all are standardized tests or state assessments. The review placed particular emphasis on studies in which schools, teachers, or students were assigned at random to experimental or control groups (Slavin, Lake, Chambers, & Cheung, 2009). Through this framework, evidence on four types of programs designed to improve beginning reading achievement were studied: Reading Curricula (Curr), such as Open Court Reading, Reading Street, and other standard and alternative textbooks. Instructional Technology (IT), such as Waterford, Lexia Learning Systems, and Writing to Read. Instructional Process Programs (IP), such as cooperative learning and phonological awareness training. Combined Curriculum and Instructional Process Programs (Curr & IP), such as Success for All and Direct Instruction (Slavin, Lake, Chambers, & Cheung, 2009). Data revealed:

Reading Curricula (Curr). Studies of reading curricula found minimal effects of using particular textbooks. Mean weighted effect size across 7 studies: +0.12.

Instructional Technology (IT). Studies of IT also found minimal effects. Mean weighted effect size across 13 studies: +0.09.

Instructional Process Programs (IP). Studies of programs that provide extensive professional development to help teachers use well-specified teaching methods had relatively positive effects overall. Mean weighted effect size across 17 studies: +0.37. Particularly positive effects were found for cooperative learning (ES=+0.46), phonics-focused professional development (ES=+0.43), and teaching of phonological awareness to kindergartners (ES=+0.22 at the end of first or second grades).

Combined Curriculum and Instructional Process Programs (Curr & IP). Programs that

combine innovative phonetic materials with extensive professional development for teachers found positive effects overall. In particular, positive effects were found for Success for All (ES=+0.29 in 23 studies). (Slavin, Lake, Chambers, & Cheung, 2009, p. 1)

Results indicated that reading programs focused on *Reading Curricula* (Curr) found minimal effects when using particular textbooks. *Instructional Technology* (IT) studies also found minimal effects. *Instructional Process Programs* (IP) that provide extensive professional development to help teachers use well-specified teaching methods had relatively positive effects overall, and *Combined Curriculum and Instructional Process Programs* (Curr & IP) that combine innovative phonetic materials with extensive professional development for teachers found positive effects overall (Slavin, Lake, Chambers, & Cheung, 2009). The review concluded that instructional process programs designed to change daily teaching practices have substantially greater research support than programs that focus on curriculum or technology alone. In particular, positive achievement effects were found for programs embedded with phonological awareness training and programs focused on professional development as part of the instructional/curricular focus (Slavin, Lake, Chambers, & Cheung, 2009).

In sum, there is a universe of products designed to target reading achievement in elementary aged students within the marketplace. Armed with this knowledge, practitioners must approach reading achievement from a multitude of perspectives when engaged in the purchase such products. As mentioned earlier, the scope of this study is to determine if a significant difference exists in the utilization of *Teacher developed*, *SBSL*,

or *other commercialized reading programs* in the quest of elementary school reading achievement.

Components of Reading

The literature to this point has targeted four modalities utilized when teaching reading to elementary aged students. However, the goal of reading is the ability to comprehend material read. Through this lens, the components of reading play a vital role in the acquisition of sound reading skills (Adler, 2001; Allington, 2011; Baker, 2001; Cribbs, 2013; Moats & Tolman, 2009). The following section will examine the components of reading, comprehension as the goal of reading, vocabulary, phonics and phonemic/phoneme awareness, and fluency.

Comprehension

Tentacled to the above modalities is reading comprehension, the ability to acquire meaning from a written passage or text (Moats & Tolman, 2009; Morris, 1968; National Reading Panel, 2000). As mentioned earlier, a large proportion of U. S. students are not acquiring the skills necessary to understand written text (National Reading Panel, 2000). A 2009 University of Michigan study concluded that a significant amount of students learn how to decode text and identify main ideas, but most never advance past basic levels of comprehension (Scott, 2009). Therefore, reading comprehension, because of its importance in learning, is often referred to in ideological terms as the “essence of reading” (Clark, 2012; Durkin, 1993; National Reading Panel, 2000).

Comprehension is critically important to the development of children’s reading skills and, therefore, to the ability to obtain an education; it is essential not only to academic learning in all subject areas but to lifelong learning, as well (Freidman, 2007;

Haywoode, 2013; Holderness, 2013; Kame'enui, Adams, & Lyon, 2014; National Reading Panel, 2000; Wennersten, 2013). Empirical reasoning suggests that the process of learning to read is one of the most important things children accomplish in elementary school because it is the foundation for most of their future academic endeavors (Holderness, 2013; Ladnier-Hicks, 2010; Talada, 2007; Wennersten, 2013). From the middle elementary years through the rest of their lives as students, children spend much of their time reading and learning information presented in text. The activity of reading to learn requires students to comprehend and recall the main ideas or themes presented in text (National Reading Panel, 2000; Stevens, Slavin, & Farnish, 1991).

As the capstone of learning, comprehension is a must for all students; consequently, studies have shown that the building blocks mentioned earlier (i.e., phonemic awareness, fluency, vocabulary and phonics) are all vital components to the reading comprehension goal (Connor, Alberto, Compton, & O'Connor, 2014; National Reading Panel, 2000; Thomas & Thorne, 2009; Zipke, 2008). What does comprehension consist of and what processes must a reader engage to acquire this needed skill? Text comprehension may be described as “intentional thinking during which meaning is constructed through interactions between text and reader” (Harris & Hodges, 1995, p. 39). Thus, readers derive meaning from text when they engage in the intentional, problem solving thinking processes. The data suggest that text comprehension is enhanced when readers actively relate the ideas represented in print to their own knowledge and experiences and construct mental representations in memory (National Reading Panel, 2000; Thomas & Thorne, 2009; Wilhelm, 2014). Armed with this knowledge, the

American public school system of education is struggling with reading comprehension and how to bridge that gap.

Research suggested that comprehension can be improved by teaching students to use specific cognitive strategies or to reason strategically when they encounter barriers to understanding what they are reading (Connor, Alberto, Compton, & O'Connor, 2014; Ladnier-Hicks, 2010; James, 2014; Morrison, Wheeler, & Wlodarczyk, 2009; Wilhelm, 2014; Willingham, 2006; Thomas & Thorne, 2009; Zipke, 2008). Readers acquire these strategies informally to some extent (Allington, 2002; Bruner, 1996; Clay, 1975), but explicit or formal instruction in the application of comprehension strategies has been shown to be highly effective in enhancing understanding (National Reading Panel, 2000; Moats & Tolman, 2009; Step by Step Learning, Inc. , 2015).

Consequently, seven scientific instructional strategies met the National Reading Panel's methodological criteria for effective comprehension instruction for non-impaired students: a) comprehension monitoring, where readers learn how to be aware of their understanding of the material; b) cooperative learning, where students learn reading strategies together; c) use of graphic and semantic organizers (including story maps), where readers make graphic representations of the material to assist comprehension; d) question answering, where readers answer questions posed by the teacher and receive immediate feedback; e) question generation, where readers ask themselves questions about various aspects of the story; f) story structure, where students are taught to use the structure of the story as a means of helping them recall story content in order to answer questions about what they have read; and g) summarization, where readers are taught to integrate ideas and generalize from the text information (National Reading Panel, 2000).

Since the NRP's study, these components have been studied by others and have found to be just as imperative today in the quest for reading comprehension as then; in fact, when used in combination, studies suggested these strategies can improve scores on standardized tests (Grant, 2013; National Reading Panel, 2000; Piper, 2013).

However, Durkin (1993) observed 4,469 minutes of reading instruction in fourth grade and found that only 20 minutes of this time were spent in teaching students how to comprehend what they were reading. Therefore, classroom instructional strategies must be developed to attack this gap and the reading curriculum must be aligned to these efforts (Grant, 2013). The educator's role is imperative. Effective reading comprehension is the foundation of successful reading and the classroom teacher must take an active role in the development of reading strategies that will strengthen understanding of text, which a child will use. Teachers must have a clear methodology for developing reading comprehension skills (Piper, 2013). By engaging in explicit teaching of the reading comprehension strategies, teachers allow students to see how strategies are used and when to use them (Piper, 2013).

The importance of reading comprehension was discussed in the preceding section. Research has suggested that vocabulary is strongly aligned with the ability to read with a level of comprehension necessary to advance through most facets of life and career (Beck, McKeown, & Kucan, 2002; Diamond & Gutlohn, 2006; Partnership for Reading, 2001; Silverman, 2007).

Vocabulary

The component of vocabulary or the knowledge of word meaning plays a vital role in text comprehension; vocabulary is the knowledge of words and word meanings.

(Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007; Diamond & Gutlohn, 2006; Lane & Allen, 2010; National Reading Panel, 2000). This aspect of reading has origins that surpass the decades as written by Whipple (1925), “Growth in reading power means, therefore, continuous enriching and enlarging of the reading vocabulary and increasing clarity of discrimination in appreciation of word values” (p. 76). Even today, the prominence of vocabulary is visible; the body of research regarding vocabulary instruction suggested that vocabulary is strongly related to reading comprehension (Flynt & Brozo, 2008; Holderness, 2013; National Reading Panel, 2000; Silverman, 2007).

Vocabulary knowledge is not something that can ever be fully mastered; it is something that expands and deepens over the course of a lifetime (Diamond & Gutlohn, 2006). Thus, vocabulary occupies an important position in learning to read. As a learner begins to read, reading vocabulary encountered in texts is mapped onto the oral vocabulary the learner brings to the task. That is, the reader is taught to translate the (relatively) unfamiliar words in print into speech, with the expectation that the speech forms will be easier to comprehend. A benefit in understanding text by applying letter-sound correspondences to printed material only comes about if the resultant oral representation is a known word in the learner’s oral vocabulary (Holderness, 2013; Hurst, S., 2012; National Reading Panel, 2000; Silverman, 2007).

Adding to this foundation, if the resultant oral vocabulary item is not in the learner’s vocabulary, it will not be better understood than it was in print. Thus, vocabulary seems to occupy an important middle ground in learning to read. Oral vocabulary is a key to learning, to make the transition from oral to written forms, whereas

reading vocabulary is crucial to the comprehension processes of a skilled reader (Beck, McKeown, & Kucan, 2002; National Reading Panel, 2000).

The vocabulary platform is not without headwinds. The National Reading Panel (2000) also stated, “Studies have shown that reading ability and vocabulary size are related, but the causal link between increasing vocabulary and an increase in comprehension has not been demonstrated. It has been difficult to demonstrate that teaching vocabulary improves reading ability” (National Reading Panel, 2000, p. 4-15). That said, scientific reasoning suggested that both vocabulary and comprehension involve meaning of text, albeit at different levels. Vocabulary is generally tied closely to individual words while comprehension is more often thought of in much larger units (of understanding). To get to the comprehension of larger units requires the requisite processing of the words. Precisely separating the two processes is difficult, if not impossible (National Reading Panel, 2000; Silverman, 2007). Complicating matters further, the measurement of vocabulary comes in many forms. For example, “Receptive Vocabulary” encompasses the vocabulary we hear when people speak or what is encountered while reading text, while “Productive Vocabulary” represents the vocabulary used when writing or speaking to others (Diamond & Gutlohn, 2006; Lane & Allen, 2010; National Reading Panel, 2000).

In most cases, the vocabulary a student recognizes is often different than what is used. Additionally, the scope and size of a student’s vocabulary may entail words that are not assessed in the formal classroom setting (Beck, McKeown, & Kucan, 2002; Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007; National Reading Panel, 2000). Summarizing this challenge, The National Reading Panel conducted a broad scientific

search of multiple data bases regarding scientific reports of research, experimental, and quasi-experimental studies; subsequently this search revealed that the Panel found no research that met the National Reading Panel's criteria that explicitly addressed the issues of measuring vocabulary. This is clearly a gap in our knowledge and a research need (National Reading Panel, 2000).

Conversely, current efforts by textbook publishers are addressing the vocabulary component in their products (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Moats & Tolman, 2009; Pearson-Scott-Foresman, 2015; Step by Step Learning, Inc. , 2015). Due to these challenges, vocabulary has returned to a prominent place in discussions of reading, and it is alive and well in reading instruction and reading research (Flynt & Brozo, 2008). In any case, research suggested that vocabulary is a vital component in the reading process, and must have its place in the instructional vehicle (Beck, McKeown, & Kucan, 2002; Diamond & Gutlohn, 2006; Lane & Allen, 2010; Pilgrim, 2000).

Undoubtedly, having a strong vocabulary background will assist not only in understanding and applying written text, it will assist the student on multiple levels in the acquisition of a fulfilling life and, on a larger scale, contribute to the longevity and maintenance of America's global prominence (Bowling, 2011; Clark, 2012; Freidman, 2007; Miller, 2008; Talada, 2007). Vocabulary plays an important part in learning to read. Beginning readers must use the words they hear orally to make sense of the words they see in print (Beck, McKeown, & Kucan, 2002). Students who hear more words spoken at home learn more words and enter school with better vocabularies. This larger vocabulary pays off exponentially as a child progresses through school (Allington, 2002;

Bruner, 1996; Clark, 2012; Clay, 1975; Ladnier-Hicks, 2010; Lawrence, 2010; Reading Rockets, 2014); therefore, vocabulary is directly related to reading comprehension. In short, readers cannot understand what they are reading without knowing what most of the words mean.

As children learn to read more advanced texts, they must learn the meaning of new words that are not part of their oral vocabulary (Beck, McKeown, & Kucan, 2002; James, 2014; Reading Rockets, 2014). As mentioned earlier, the body of knowledge targeting the development of a sound working vocabulary is pivotal in the development of reading; vocabulary knowledge is a major building block in children's early literacy development. It provides the foundation for learning to decode and comprehend text (Hurst S. , 2012; Lane & Allen, 2010; Silverman, 2007). Beginning readers use knowledge about words to help them make sense of what they're reading. The more words a reader knows, the more they are able to comprehend what they're reading or listening. Talking to and reading with students help them hear and read new words (Diamond & Gutlohn, 2006; Hurst G. , 2014; Lane & Allen, 2010; Pilgrim, 2000; Reading Rockets, 2009). Additionally, twenty years of research indicated that incorporating fluency and phonemic awareness into daily instruction will assist in solidifying the prerequisites needed for decoding (Boulware-Gooden, Carreker; Lane & Allen, 2010; Hurst S., 2012; Thornhill, & Joshi, 2007).

Learning to decode is a means to an end, and that end is to read and understand written communication created by others and to be able to write in order to communicate. In other words, reading instruction does not end when students can decode the words. They continue to need instruction that will support their understanding of what they are

reading (Boulware-Gooden, Carreker; Lane & Allen, 2010; Hurst, 2012; Thornhill, & Joshi, 2007). Therefore, when children ‘sound out’ a word, their brain is working hard to connect the pronunciation of a sequence of sounds to a word in their vocabulary. If they find a match between the word on the page and a word in their vocabulary, they have learned through listening and speaking. If it makes sense to them, they will keep reading (Allington, 2015; Hurst S., 2012; Teale & Sulzby, 1986; Vygotsky, 1978). If a match is not created because the word they are reading is not found in their vocabulary comprehension is interrupted. In addition, this block is evident in cases where students are able to generate the correct pronunciation through the decoding process (Hurst, 2012).

Adding to this body of knowledge, a University of North Texas study suggested the amount of words in a person’s vocabulary best predicts how well he or she comprehends text. In addition, students with extensive vocabularies perform better on reading comprehension tests than students with smaller vocabularies (Pilgrim, 2000). Vocabulary learning is an inherently important part of language acquisition (Pilgrim, 2000).

The literature to this point has alluded to the importance of learning to read by the third grade, challenges to learning to read, three modalities of teaching reading, comprehension, and the connection of vocabulary to reading comprehension. Within the ebb and flow of research and reading theory, the components of phonemic awareness, phonics, and fluency often overlap, or are listed independently as contributors to reading comprehension. Therefore, to acquire a basic understanding of these reading components, a description of these components and their relationship to reading comprehension follows.

Phonics and Phonemic/Phoneme Awareness

As mentioned earlier, the National Reading Panel (2000) and others (Gunn, Simmons, & Kameenui, 1995; Kame'enui, Adams, & Lyon, 2014; Lyon, 1998; Moats & Tolman, 2009; University of Oregon, 2014) have posited the importance of phonics and phonemic awareness in the successful endeavors of practitioners in teaching reading. These components of reading will be examined in the following paragraphs.

Phonics. First, when teaching students to read, the effectiveness of the teacher may be enhanced with the incorporation of phonics (Clark, 2012; Hasbrouck, 2010; McGraw Hill, 2015; Houghton-Mifflin-Harcourt, 2015; Miller, 2008; Moats, 2005; National Reading Panel, 2000; Talada, 2007). Phonics includes the principles of sound-symbol associations; “the primary focus of phonics instruction is to help beginning readers understand how letters are linked to sounds (phonemes) to form letter-sound correspondences and spelling patterns and to help them learn how to apply this knowledge in their reading” (National Reading Panel, 2000, p. 1).

In short, the process of phonics increases a student’s ability to understand the relationship between letters and the sounds they represent. Not knowing letter names is related to children's difficulty in learning letter sounds and in recognizing words (Texas Education Agency, 2002). Children cannot understand and apply the alphabetic principle (understanding that there are systematic and predictable relationships between written letters and spoken sounds) until they can recognize and name a number of letters (Chard & Osborn, 2014; Texas Education Agency, 2002). Scientific thinking suggested that children whose alphabetic knowledge is not well developed when they start school need sensibly organized instruction that will help them identify, name, and write letters

(Allington, 2002; Bruner, 1996; Clay, 1975; Rosenblatt, 1978; Sulzby E., 1990; Teale & Sulzby, 1986). Once children are able to identify and name letters with ease, they can begin to learn letter sounds and spellings. Children appear to acquire alphabetic knowledge in a sequence that begins with letter names, then letter shapes, and finally letter sounds (Chard & Osborn, 2014; Texas Education Agency, 2002).

According to Hurst, (2014) the successful application of this principle and its tracking by educational psychologist, Marlynne Grant, increased the reading scores of children taught to read using the phonics method. Results and observations were obtained when they started primary school, increased their reading age by two years more than expected from when they started primary school at four years old to the end of their third year, aged seven. Of note, when anchoring phonics to successful reading, instruction should include activities in which children learn to identify, name, and write both upper case and lower case versions of each letter (Texas Education Agency, 2002). Magnin (2011) agrees, phonics instruction is more effective in improving the reading ability of first grade students.

Conversly, research has shown that few programs included an explicit phonics approach, and student reading selections often did not correspond to the words children were learning during word-recognition instruction making most of the selections inaccessible to the readers (Chard & Osborn, 2014). However, some researches believe that a phonics approach to reading may not be necessary for adequate progress. For example, Teale (1983) and others believe that some students become capable readers before attending school (Gunn, Simmons, & Kameenui, 1995). Thus, the home environment often contributes to emerging reading skills in students' birth to school age.

This phenomenon is often referred to as “natural literacy development” (p. 1). The ability of parents to scaffold the experiences of a child’s life towards the development of reading often enhances reading ability (Bruner, 1996; Gardner, 1999; Perkins, 1993; Teale, 1983). For example, a child learns to follow the pages of a book often read by parents, to turning the pages and knowing what comes next in the story (Teale, 1983). In short, the social interactions of children with environment may directly affect literacy acquisition.

At the other end of the spectrum, adding further stress to a student’s ability to read, the National Reading Panel (2000) found that in reading programs that do not teach phonics, such as whole-language, the emphasis is on meaning-based reading and writing activities, phonics is taught incidentally and integrated as the teacher sees fit. Thus, phonics instruction is vital in helping children determine and understand the alphabetic system of written English and become comfortable with that system as they become readers. Phonics then is the system of instruction used to teach children the connection between letters and sounds (Chard & Osborn, 2014; Moats & Tolman, 2009; National Reading Panel, 2000). Adding to this foundation, children must become expert users of the letters they will see and use to write their own words and messages (Chard & Osborn, 2014; Kame'enui, Adams, & Lyon, 2014; Lyon, 1998).

Children's knowledge of letters is a strong predictor of their success in learning to read. That is, children who begin kindergarten or first grade able to quickly and accurately identify, say, and write the letters of the alphabet have an advantage in learning to read. Conversely, as Teale (1983) theorized, this attribute may be related to the child’s literacy environment prior to formal teaching. Children whose knowledge of letters is not well developed when they start school need a lot of sensibly organized

practice that will help them learn how to identify, name, and write letters (Chard & Osborn, 2014; Kame'enui, Adams, & Lyon, 2014; University of Oregon, 2014), phonics provides this knowledge. An important part of helping children figure out the system underlying the printed word is leading them to understand the alphabetic principle. In short, to understand that in written English words are composed of patterns of letters that represent the sounds of spoken English words (Chard & Osborn, 2014; Kindervater, 2012; Lyon, 1998; National Reading Panel, 2000; Texas Education Agency, 2002; University of Oregon, 2014). However, the goal of phonics is not that children be able to state the "rules" governing letter-sound relationships. Rather, the purpose is to get across the alphabetic principle, the principle that there are systematic relationships between letters and sounds (Chard & Osborn, 2014; Longmire, 2007).

Hence, the alphabetic principle plays a vital role in reading development. Studies suggest that children's reading development is dependent on their understanding of the alphabetic principle, the idea that letters and letter patterns represent the sounds of spoken language (Chard & Osborn, 2014; Longmire, 2007). Learning that there are predictable relationships between sounds and letters allows children to apply these relationships to both familiar and unfamiliar words, and to begin to read with fluency (National Reading Panel, 2000; Texas Education Agency, 2002; University of Oregon, 2014). The goal of phonics instruction is to help children to learn and be able to use the alphabetic principle. Phonics instruction helps children learn the relationships between the letters of written language and the sounds of spoken language (National Reading Panel, 2000; Texas Education Agency, 2002; University of Oregon, 2014). Phonics is one of the primary

building blocks of reading. Without an understanding of the relationship between letters and sounds, reading cannot occur.

This multifaceted connection between print and pronunciation provides readers with tools for discovering new written words (Brummitt-Yale, 2014; Chard & Osborn, 2014; National Reading Panel, 2000). Adding to this foundation of decoding tools, studies suggested that by the end of second grade students should be able to decode almost any unfamiliar word so that they can attend to uncovering the meaning (Learning First Alliance, 2002). At the intersection of reading theory, experts agree, children's knowledge of letters is a strong predictor of their success in learning to read (Kame'enui, Adams, & Lyon, 2014; Lyon, 1998). Children who begin first grade able to quickly and accurately identify, say, and write the letters of the alphabet have an advantage in learning to read (Chard & Osborn, 2014; Learning First Alliance, 2002).

Accurate and fluent word recognition depends on phonics knowledge. The ability to read words accounts for a substantial proportion of overall reading success even in older readers (Learning First Alliance, 2002). Good readers do not depend primarily on context to identify new words. When good readers encounter an unknown word, they decode the word, name it, and then attach meaning. The context of the passage helps a reader get the meaning of a word once a word has been deciphered (All Kinds of Minds, 2014; Learning First Alliance, 2002; National Reading Panel, 2000). Adding to the complexity and importance of phonics in learning to read, the physical aspect of reading and understanding the English language is ripe with trap doors that warrant a sound systematic phonics foundation. For example, phonics is the connection between graphemes (letter symbols) and sounds. Because adults have been readers for a good

portion of their lives this relationship seems apparent and common sense. However, in reality there is no natural connection between words and their meanings. There is nothing innately “cup-like” about the word “cup”. The written letters making up the word “cup” do not reflect anything about an actual cup. The word and its written form are agreed upon by English speakers and thus must be learned in order to communicate (Brummitt-Yale, 2014).

Therefore, by scaffolding and application of the principles of multiple intelligences, as founded by Perkins (1993) and Gardner (1999), children map the relations between letters and sounds. Effective phonics and word-recognition strategy instruction should provide students with opportunities to become comfortable with the alphabetic principle and phonemic awareness (Chard & Osborn, 2014; National Reading Panel, 2000).

Phoneme/phonemic awareness. As mentioned earlier, the ability to read effectively has a profound effect on the life/educational successes of the reader and the advancement of the nation in general. Therefore, by deconstructing the challenges of reading, the ability to plot successful strategies and implement meaningful programs to combat literacy shortfalls may be possible. Studies showed that whatever the reason children fail to read by the end of the third grade, most nonreaders share a common problem. They have not developed the capacity to recognize what reading experts call phonemes (Ashby, Dix, Bontrager, Dey, & Archer, 2013; Kame'enui, Adams, & Lyon, 2014; Longmire, 2007; Lyon, 1998). These struggling readers cannot group words with similar and dissimilar sounds (*mat, mug, sun*), blend and split syllables (f oot), blend sounds into words (m_a_n), segment a word as a sequence of sounds (e.g., *fish* is made

up of three phonemes, /f/ , /i/ , /sh/), and detect and manipulate sounds within words (change *r* in *run* to *s*). Reading is the product of decoding and comprehension.

Studies suggested that thirty years of research converge on the conclusion that phonemic awareness is a fundamental contributor to early decoding, word recognition, and has become front and center in the discussions regarding reading acquisition. Efficient word recognition is a prerequisite for reading achievement (Ashby, Dix, Bontrager, Dey, & Archer, 2013; Kindervater, 2012; University of Oregon, 2014). Thus, weak phonemic awareness can make it difficult for children to apply letter-sound mappings to identify printed words and to intuit how our alphabet functions to encode spoken word forms (Lyon, 1998). The inaccurate decoding that can result introduces variation and ambiguity into the word-specific representations readers store in memory, and the poor quality of those representations slows future recognition of those words (Longmire, 2007).

Consequently, Longmire (2007) further stated that research shows that children without rich preschool experiences require more direct, systematic training in phonemic awareness. These preschool experiences seem to overlap with the theories of emergent literacy, cited by many as an opposite platform to the NRP's (2000) findings (Allington, 2015; Clay, 1975; Gunn, Simmons, & Kameenui, 1995). Children with phonological deficits read text slowly because they are slower to recognize familiar words and slower to identify unfamiliar words, even when serial naming speed is normal. Because they read slowly, they encounter fewer words overall and see common words less often than do fluent readers. The limited text exposure that slower readers experience early in

reading development interferes with building a large "sight" vocabulary (Ashby, Dix, Bontrager, Dey, & Archer, 2013).

Learning to read is much tougher than people think (Lyon, 1998). To learn to decode and read printed English, children must be aware that spoken words are composed of individual sound parts termed phonemes; a phoneme is a speech sound. It is the smallest unit of language and has no inherent meaning (Newland, 2013). This is what is meant by phoneme awareness; this awareness is auditory and does not involve words in printed form (Lyon, 1998; University of Oregon, 2014). When educators assess phoneme awareness skills, they ask children to demonstrate knowledge of the sound structure of words without any letters or written words present. For example, "What word would be left if the /k/ sound were taken away from *cat*?" "What sounds do you hear in the word *big*?" To assess phonics skills, they ask children to link sounds (phonemes) with letters. Thus, the development of phonics skills depends on the development of phoneme awareness (All Kinds of Minds, 2014; Lyon, 1998; University of Oregon, 2014).

Conversely, research has demonstrated that accomplished readers are adept at recognizing phonemes and putting them together to construct words and phrases (Kame'enui, Adams, & Lyon, 2014; Newland, 2013). They do this quickly, accurately, and automatically. The absence of this critical linguistic skill makes it difficult for children to decode and read single words, much less sentences, paragraphs, and whole stories (Kame'enui, Adams, & Lyon, 2014; Kindervater, 2012). Some question, why is phoneme awareness critical in beginning reading, and why is it difficult for some children (Longmire, 2007; Lyon, 1998)? Because to read an alphabetic language like English, children must know that written spellings systematically represent spoken sounds. When

young students figure this out, either on their own or with direct instruction, they have acquired the alphabetic principle (Longmire, 2007; Lyon, 1998). However, if beginning readers have difficulty perceiving the sounds in spoken words for example, if they cannot "hear" the /at/ in *fat* and *cat* and perceive that the difference lies in the first sound, they will have difficulty decoding or sounding out new words. In turn, developing reading fluency will be difficult, resulting in poor comprehension, limited learning, and little enjoyment (Longmire, 2007; Lyon, 1998). Therefore, teaching phoneme awareness is vital in building a strong foundation for reading. Phoneme awareness involves the ability to take a word apart into its component speech sounds and blend those sounds together to decode unfamiliar words (Kame'enui, Adams, & Lyon, 2014; Lyon, 1998; Moats & Tolman, 2009).

To illustrate, phonemes are the smallest units of speech the basic building blocks of speaking and writing. The word "*cat*," for example, contains three phonemes the /k/, /a/, and /t/ sounds. Phonemes are often identical to individual letters, but not always. The word "*ox*," for example, has two letters but three phonemes-the /o/, /k/, and /s/ sounds (Ashby, Dix, Bontrager, Dey, & Archer, 2013; Kame'enui, Adams, & Lyon, 2014; Lyon, 1998). Consequently, the National Reading Panel found over 50 scientifically credible studies concluding the importance of phoneme awareness for learning to read and in treating reading difficulties (Moats, 2005; National Reading Panel, 2000); Moats (2005) stated that phoneme awareness is directly linked to a student's ability to read and write an alphabetic orthography.

Therefore, adding to the theories of Gardner (1999) and Bruner (1996) relating to multiple intelligences and scaffolding, phonological awareness activities build on and

enhance children's experiences with written (e.g., print awareness) and spoken language (e.g., playing with words). A beginning reader with successful phonological awareness and knowledge of letters ostensibly learns how words are represented in print (Kame'enui, Adams, & Lyon, 2014; Newland, 2013). Through this framework, practitioners may find success on the rungs of the reading ladder; thus, teaching phonemic awareness and discrimination among phonemes is imperative for all students. Therefore, teaching beginners to read must be highly purposeful and strategic. Effective techniques have been developed for helping students, including those with learning disabilities, to develop phonological awareness, word recognition, and other advanced skills required for reading (Kame'enui, Adams, & Lyon, 2014; Kindervater, 2012).

Fluency

Adding to this body of reading research is the component of fluency. Fluency is believed by some to be pivotal in the pedigree of successful reading programs (Hasbrouck, 2006; Houghton-Mifflin-Harcourt, 2015; Ladnier-Hicks, 2010; McGraw Hill, 2015; National Reading Panel, 2000; Slavin, Lake, Chambers, & Cheung, 2009; Talada, 2007).

According to the National Reading Panel (2000), the component of fluency is a necessary element of reading; therefore, when developing a reading program inclusion of this aspect is highly recommended. As defined by Webster's (2000) to be fluent is to speak and/or write easily. In the context of reading comprehension, fluency incorporates a student's ability read text correctly, quickly, accurately, and properly expressing certain words, by putting the right feeling, or emotion on the word or phrase. (Baker, 2007; National Reading Panel, 2000; Kame'enui, Adams, & Lyon, 2014; American Federation

of Teachers, 2013). On a broader platform, anchoring the importance of fluency in the reading process was established by a University of Oregon study declaring that the National Reading Panel's definition of fluency is important because it determines the role that fluency plays in the acquisition of reading skills. A deeper definition of fluency would view the construct as part of a developmental process of building decoding skills that will form a bridge to comprehension and that will have a "reciprocal, causal relationship with reading comprehension" (Baker, 2007, p. 115).

Adding to this foundation, a 2010 San Diego State University study (Palmer, 2010) revealed that reading fluency is directly correlated to reading comprehension. Those students who read fluently with few errors comprehend more text. In a like manner, those students who do not read fluently showed difficulty comprehending what they read (Palmer, 2010). Fluent readers can read text with speed, accuracy, and proper expression. Fluency depends upon well-developed word recognition skills, but such skills do not inevitably lead to fluency.

Others have suggested that fluency may be a by-product of emergent reading and listening skills already developed (Allington, 2015; Bruner, 1996; Clark, 2012; Sulzby E., 1985; Teale & Sulzby, 1986); therefore, shedding doubt on the importance of fluency in the acquisition of reading ability. Moreover, when teaching fluency, practitioners must be cognizant that fluency is a representation of a complicated multilevel process that includes a reader's automatic identification of letter-sound correspondence, initializing those sounds into recognizable wholes, automatically accessing lexical representations, processing meaningful connections within and between sentences, relating text meaning to prior information, and making inferences to supply missing information (Baker, 2007;

Hasbrouck, 2006; Lawrence, 2010). Unfortunately, fluency is often neglected in classroom instruction (Palmer, 2010). That neglect has started to give way as research and theory have re-conceptualized this aspect of reading, and empirical studies have examined the efficacy of specific approaches to teaching fluency (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; National Reading Panel, 2000; Palmer, 2010).

Contributing to this complexity, studies have shown that of a nationally representative sample of fourth grade reading fluency skills found 44% of students to be non-fluent even with grade-level stories that the students had read under supportive testing conditions (National Reading Panel, 2000). Furthermore, that study also revealed a close relationship between fluency and reading comprehension. That said, students who exhibit low levels of fluency when reading may have difficulty getting the meaning of what they read (National Reading Panel, 2000). Therefore, fluency must be taught in a systematic fashion. Armed with this knowledge, the reading landscape is evolving to incorporate the component of fluency into classroom teaching (Allington, 2002; Cribbs, 2013; Hasbrouck, 2006; Texas Education Agency, 2002).

The question remains, why has this component been neglected in the past? One researcher, Baker (2007) surmised that the complicated process of reading is derived from its nature, specifically, it develops gradually over the elementary school years, rates of growth or performance slopes and can be traced within and between individuals allowing educators and researchers to track the development of reading competence, and it distinguishes levels of reading expertise among students. Adding to this platform, others, (Bruner, 1996; Clay, 1975; Teale, 1983) have concluded that the gradual

development of fluency posited by Baker (2007) may be due to emergent skills acquired naturally through a student's home and other environments.

Oral reading has been thrown to the forefront of reading theory as the most accepted vehicle for fluency improvement. Consequently, the practice of oral reading aligns with the scientific thinking of reading theories regarding the aspect of “scaffolding” (Allington, 2015; Bruner, 1996; Perkins, 1993). More specifically, Perkins (1993) theorized that teaching and learning for understanding creativity, problem-solving, and reasoning in the arts, sciences and everyday life emphasizes the interlocking relationships about thinking. Building on this theory, Shanahan (2014) stated reading is a language activity, not the execution of various subskills. To make sense of a text, students must simultaneously use a hierarchy of language features. The body of knowledge relating to fluency parallels that of the National Reading Panel; that is, to prevent reading difficulties in young children, adequate progress in learning to read English (or, any alphabetic language) beyond the initial level depends on sufficient practice in reading to achieve fluency with different texts (Hasbrouck, 2006; National Reading Panel, 2000; Texas Education Agency, 2014).

This practice takes the form of reading aloud, thereby offering the teacher added opportunities to monitor and assess progress. The best strategy for developing reading fluency is to provide students with as many opportunities as possible to read the same passage aloud orally several times (Baker, 2007; Texas Education Agency, 2014).

Fluency develops gradually over time and through practice. At the earliest stage of reading development, students' oral reading is slow and labored because students are just learning to "break the code", to attach sounds to letters and to blend letter sounds into

recognizable words (Partnership for Reading, 2001). Even when students recognize many words automatically, their oral reading still may be expressionless, not fluent. To read with expression, readers must be able to divide the text into meaningful chunks. Readers must know to pause appropriately within and at the ends of sentences and when to change emphasis and tone (Partnership for Reading, 2001).

To adequately build fluent readers and ultimately produce students who can understand and apply what has been read, repeated oral reading substantially improves the process of reading word recognition, speed, and accuracy as well as fluency (Moats & Tolman, 2009; Step by Step Learning, Inc., 2015). To a lesser but still considerable extent, repeated oral reading also improves reading comprehension. Repeated oral reading improves the reading ability of all students throughout the elementary school years. It also helps struggling readers at higher grade levels (Cribbs, 2013; Partnership for Reading, 2001). In fact, reading appears to be “easy” when the decoding and comprehension processes are automatic. When these processes require conscious attention to complete their operations, reading seems to be “difficult” (Baker, 2007; Slee, 2008).

Through this lens, Cribbs (2013) suggested that the various perspectives on reading fluency is made more complex by the wide range of instructional and assessment practices that are currently in use. However, as research advances in reading theory, practitioners are recognizing significant gains regarding how successful fluency practices are applied in the classroom. Current oral reading instructional methods represent a systematic effort to produce confident readers. Unlike America’s early emphasis on

memorization and elocution, modern methods focus on developing smooth and natural oral reading (Cribbs, 2013).

Additionally, Baker (2007) concluded that if students are highly efficient in their early reading skills, including phonemic awareness, the understanding of the alphabetic principle and of elementary propositional encoding (the understanding of how a few words are assembled in a single phrase or sentence), then they can use their processing resources to develop higher level comprehension skills (e.g., developing appropriate inferences within and across sentences). Baker (2007) indicated that oral reading fluency is a significant predictor of reading comprehension in Spanish and in English (Baker, 2007). Thus, oral reading fluency is not just an indicator of reading comprehension, but it is also a direct measure of comprehension in both languages. A major finding, however, is that oral reading fluency, word list fluency, and vocabulary combined, account for the majority of the variance explained in comprehension, meaning that the integration of these three tasks has a larger effect on reading comprehension than their unique effects (Baker, 2007).

The template for reading is influenced by fluency, reading fluency is manifested in smooth and natural oral production of text (Bowling, 2011; Houghton-Mifflin-Harcourt, 2015; Ladnier-Hicks, 2010; McGraw Hill, 2015). As an external expression of internal comprehension processes, reading fluency provides a glimpse into a reader's mind (Cribbs, 2013). Therefore, when students read fluently, they do not have to focus exclusively on an author's individual words; they can focus on the author's message. To have reading comprehension you must have fluency. Non-fluency takes up valuable mental capacity necessary to understand the author's meaning (Palmer, 2010). In sum,

the role of fluency in reading proficiency of connected text has increased in prominence. One University of North Carolina study suggested that skilled reader oral fluency rates exceeded rates of students with reading disabilities by a factor of three. The authors posited that the significant differences in rates between skilled and poor readers may account for differences in comprehension ability found between these groups (Slee, 2008).

Obstacles to Success

The pressure for America to achieve in the global economy and beyond is great. Therefore, producing a work-force and society capable of understanding written text at moderate to advanced levels is crucial to America's sustained existence (Barra, 2007; Freidman, 2007; Grant, 2013; National Reading Panel, 2000). This aspect of the educational system begins in the elementary schools with entrance into kindergarten. The challenges and conflicts that orbit reading readiness and its potential success are many (Creed, Conlon, Zimmer, & Melanie, 2007; Piper, 2013; Willis, 2008). As mentioned earlier, the tightening of school budgets is by far one of the biggest conflicts to overcome; coupled with the socioeconomic barriers that a large portion of students bring into the learning environment, the challenge of learning to reading expands. Therefore, to effectively develop a sound reading program, conflicts and obstacles often associated to the reading process will be examined; program cost, professional development, and student demographics.

Program Cost

First, the issue of cost is one of the biggest barriers to success of any program; the development of an effective reading readiness program is no different. As experienced by

the state of Maine in 1997, when attempting to implement a statewide Reading Recovery program, the cost of implementation resulted in the failure of the endeavor (Rhodes, Ann, & Johnson, 1997). Reading Recovery has been shown to increase the reading ability of struggling readers and may have effectively improved the reading ability of all students in the state of Maine (Galluzzo, 2010; Simon, 2011). The tightening of budgets at the federal, state, and local levels is forcing school districts to do more with less. The competition for federal dollars and the decrease in ability of government to fund educational programs has resulted in almost all federally funded programs to undergo strong scrutiny. This scrutiny has resulted in uncovering funding overlaps and perceived waste that results in funding decreases (Baker, Sciarra, & Farrie, 2012; Rhodes, Ann, & Johnson, 1997). According to one report addressing fragmentation, overlap, and potential duplication in federal programs, the United States Government Accountability Office concluded and outlined multiple opportunities to reduce potential duplication across a wide range of federal programs, including educational quality programs. This study revealed a long history of work where a number of education programs with similar goals, beneficiaries, and allowable activities were funded by multiple federal agencies. This work will assist and inform congressional deliberations on how to prioritize spending in the public school realm given the rapidly building fiscal pressures facing our nation's government (Scott, 2011). As these overlaps and fragmentation issues are brought to light, the pool of federal money available for local school districts will no doubt decrease, causing possible gaps in the educational process. Often, the above mentioned overlap of services and funding target the same populations, however focusing on multiple challenges and issues associated with the targeted group, an area of fiscal

cutbacks public education cannot afford (James, 2014; Ladnier-Hicks, 2010; Slavin, Lake, Chambers, & Cheung, 2009).

State Funding

On state levels the ability to fund proposed reading readiness or other educational programs is directly related to federal dollars; therefore, decreases at the federal level trickle down to state funding ability (Baker & Corcoran, 2012; Rhodes, Ann, & Johnson, 1997). Coupled with competition from charter schools, decreasing state budgets, and decreases in federal assistance, states are pulling back the reins of available dollars for educational purposes (Merrifield, 2006; Rhodes, Ann, & Johnson, 1997). Consequently, due to NCLB and increased educational accountability standards such as Pennsylvania's "School Performance Profile," basic education subsidies become strained. Coupled with the recent addition of the "Teacher and Administrator Effectiveness" tool, Pennsylvania's obligation to fund foundational research and oversight of these two programs result in competition for state funds; therefore, the pool of available money for student centered programs becomes even shallower (Pennsylvania Department of Education, 2015). These two areas of accountability have resulted in increased state funding to the development, implementation, and training of staff to become better educators. This program has decreased the money available to fund student centered programs (Pennsylvania Department of Education, 2015). Additionally, the political push of states such as Pennsylvania to sell its state owned liquor distribution to private industry in attempts to help fund the educational vehicle is one instance of the issue at hand (Pennsylvania Office of Budget, 2013). In addition, as of print (February, 2016), public school systems in the state of Pennsylvania have not received state funding allocation due

to an impasse budget conflict at the state level (Pennsylvania Department of Education, 2015).

Funding Conflicts

Funding conflicts at the local level are also resulting in monetary shortfalls. As the demand for educational accountability increases, so does the demand for efficient and effective use of local funds (Baker & Corcoran, 2012; Rhodes, Ann, & Johnson, 1997). In Pennsylvania, taxpayers are searching for alternative avenues to traditional millage increases to fund their schools. For example, a local politician in the 51st district of Pennsylvania launched a campaign to consolidate five districts in his county of 579 square miles; and to use only one superintendent and curriculum director to handle the central office responsibilities (Lemal, 2013). Additionally, in March of 2015 the same politician introduced House Bill 840 to the legislature as a means to force all school districts within the Commonwealth of Pennsylvania to consolidate as a means to monetary savings (Mahoney, 2015). As budgets tighten, interest in these types of efforts may increase nationally. In states where school boards have taxing authority, the demand for quality educational programs is in direct competition with the vehicle used to fund them. Tax payers want the best education possible for their community, however, when school boards raise millage rates to fund; stakeholders most often take offense (Baker & Corcoran, 2012), often feeling that they are being taxed for erroneous reasons.

Professional Development

Professional development is another area of conflict, posing a possible obstacle to program success if not correctly implemented. Teacher buy-in and program sustainment prove to be two areas of conflict within the professional development realm (Moats &

Tolman, 2009; Step by Step Learning, Inc., 2015; Willis, 2008). Teacher buy-in to the professional development cycle of a program is imperative to its success. If staff feels the program or the training is irrelevant then success is challenged. Therefore, the ability of the district to involve staff in the process of program selection and training helps overcome the buy-in challenge (Adamson & Darling-Hammond, 2012; Grant & Wong, 2003). By establishing committees involving teachers, administrators and parents, a system is established to ensure a team effort and ownership of training (Fischer & Hamer, 2010). As the research base widens on what works and what doesn't in regard to reading theory, valid reading programs must embrace the change and evolve with research (Grant, 2013; Morris, 1968; Willis, 2008). What is currently known is that research has established that not all students learn in the same way; therefore, we must tailor and personalize instruction to meet this need (Dreher & Gray, 2009; Evans & Waring, 2011; Houghton-Mifflin-Harcourt, 2015; McGraw Hill Education, 2015; National Assessment Governing Board, 2012; National Reading Panel, 2000). Therefore, establishing and maintaining teacher buy-in and levels of professional development that evolve with student reading needs is a must for any program to be successful.

Next, in the professional development arena is program sustainment. For the reading program to thrive and survive, it must be able to flow from year to year empowering and educating current staff and incorporate training for staff that move into the profession or program for the first time (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Pearson-Scott-Foresman, 2015; Step by Step Learning, Inc. , 2015). The ability to incorporate and promote a lifelong learning aspect to the program will assist in longevity and success, if not accomplished the program may fail (Hashimoto, Pillay, &

Hudson, 2010). The recruitment, implementation, and effectiveness of a reading program are enhanced when committees of parents, teachers, and administrators are formed to review and scrutinize various programs for district “fit” and “demographics.” Once complete, the district can incorporate a reading program that is sustainable and reflects the needs of the community. Taking into account the interests of all internal and external stakeholders, planning models that forecast and balance stakeholder interests support learning because they support implementation and sustainability (Umble & Dooley, 2004).

Yet another barrier to program sustainment has been due to administrative or school board turnover. A new superintendent, curriculum director, or school board member(s) may affect the educational viability of any program. Barriers to the success of numerous programs include inability to radically change the community's weak economic base and a belief that schools should not be responsible for anything but learning. However, American public schools are supplying services far beyond the daily math and reading lessons. Therefore, the political, governance, stakeholder, and sustainability issues must be addressed for a reading program to be viable. If viewed as ineffective by this leadership group, sustainment may not follow (Amrein, 2000). The long-term effectiveness of any program involves a time component to produce positive results; at times the political wheel hampers this process, more so today given the economic constraints under which districts are operating. Districts must allow adequate time for professional development to happen if positive results are a goal. As noted by a recent study on the effects of state and local No Child Left Behind activities indicated that 80 percent of elementary teachers reported participating in 24 hours or less of professional

development on reading instruction during the 2003-2004 school year and summer (National Center for Education Evaluation and Regional Assistance, 2009). This said, program sustainability and effectiveness are threatened.

All too often programs are purchased without the professional development component necessary to achieve program results (Connor, Alberto, Compton, & O'Connor, 2014; Willis, 2008). As mentioned earlier, program costs at the federal, state, and local level are factors that must be taken into consideration when considering the purchase of any educational program (Rhodes, Ann, & Johnson, 1997). Therefore, the importance of acquiring the appropriate professional development piece adds to the constraints of the process. However, if not implemented correctly, the success of the program may be jeopardized. Studies have shown that effective professional development has increased the ability of students to read if implemented correctly (Jarrett, Evans, Dai, Williams, & Rogers, 2010). It is understandable for school leaders to attempt to implement a reading program and utilize district resources to address the professional development issue, economic conditions dictate this aspect of program development (Baker & Corcoran, 2012). In contrast, the professional development offered by the program manufacturer or publisher may yield additional training and benefits not realized by in-house training (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Pearson-Scott-Foresman, 2015).

Student Demographics

Student demographics offer a substantial obstacle and conflict with reading program success on many levels. Lack of parental support/involvement, English Language barriers, student disengagement, and the challenging socioeconomic conditions

that some students live in are a few of these obstacles. The global competitiveness of the 21st Century (Ladnier-Hicks, 2010; Lawrence, 2010; Friedman, 2007) requires that we develop, implement and sustain reading programs that reach all students. The home environments from which students arrive pose the most threat to program success, socioeconomic (SES) challenges, English Language Learners (ELL) understanding, and parent involvement seem to reoccur most often as barriers to reading (Creed, Conlon, Zimmer, & Melanie, 2007; Miller, 2008). Studies show that all students can learn, just not at the same rate (Galluzzo, 2010; Simon, 2011; Evans & Waring, 2011; National Assessment Governing Board, 2012). Socioeconomic barriers come in many forms. Most notable are high residential mobility (HRM) families, homelessness, and the increasing population of students who qualify for free and reduced lunch are all obstacles to one's ability to read (Herbers et al., 2012). Obstacles to reading should not be confused with preventers. Students may know and be aware of the alphabetic principle necessary to read but remain poor readers due to the lack of a home environment conducive to application and repetition of those learned principles (Allington, 2002c; Bruner, 1996; Clay, 1975; Snow, 1998; Teale & Sulzby, 1986; Vygotsky, 1978). If these known threats are addressed in the selection and professional development phase of program selection, can the barriers be overcome? Unfortunately, literacy skills can be influenced by one's socioeconomic status. Reardon, Valentino, and Shores (2012) stated that the literacy skills of roughly 10 percent of seventeen-year-olds are at the level of the typical nine-year-old:

This variation is patterned in part by race and socioeconomic background. Black and Hispanic students enter high school with average literacy skills three years behind those of White and Asian students; students from low-income families

enter high school with average literacy skills five years behind those of high-income students. (p. 19)

Attempting to remediate in high school may prove to be too late. And while the racial and ethnic disparities are smaller than they were forty to fifty years ago, socioeconomic disparities in literacy skills are growing (Reardon, Valentino, & Shores, 2012). Therefore, a need exists to examine and implement reading readiness programs that meet the needs of all students at the earliest of age. When students arrive to school without food, adequate clothes, and the uncertainty of where home exists, reading and all academics become secondary (Creed, Conlon, Zimmer, & Melanie, 2007).

English Language Learners

The influx of English Language Learners (ELL) into the American public school system poses another barrier to reading comprehension. Practitioners without knowledge and fluency in other languages are not equipped to effectively navigate the inclusion of these students into the learning environment. Most notable, the Hispanic population is expected to grow exponentially over the next few decades. Studies show that 25 percent of the total American population will consist of Spanish-speaking immigrants by the year 2050 (Nora & Crisp, 2012). Armed with this knowledge, school leaders must employ a system that addresses the needs of all students. Educators will be expected to teach reading comprehension to a student population and culture that differs from current the form. Language barriers have the ability to generate greater gaps in reading readiness than America currently experiences (Grant & Wong, 2003; Morris, 1968). To adequately address this concern, reading programs must be scrutinized and implemented with change

in mind (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Pearson-Scott-Foresman, 2015; Willis, 2008).

Parent Involvement

The challenge of parent/family involvement in the student's educational pursuits is another barrier to the success of reading comprehension (Peterson, 2008). One of the biggest concerns of educators is the aspect of generating and sustaining parent/family involvement in their student's academic pursuits (Creed, Conlon, Zimmer, & Melanie, 2007). When support for reading or any academic program starts and ends at the school house doors effectiveness is jeopardized. Therefore, how can the issue of parent/family involvement be addressed to increase success in reading?

Currently, many school districts have incorporated numerous attempts and programs such as family reading nights, spaghetti reading dinners, and author teas to reach out to non-involved parental and family members to address this issue (Creed, Conlon, Zimmer, & Melanie, 2007). In any case, to effectively teach all students this bridge must be built. In review of issues keeping parents away from school involvement, studies claimed that students/families of low-SES status often feel embarrassed to visit or help their child with homework due to their own educational deficiencies (Crosnoe & Turley Lopez, 2011; Peterson, 2008). As a result, these families feel embarrassed to communicate with school staff. Having parent/family support for a student's academic success is imperative. The family unit in our society today is not what some consider traditional. Today mothers, fathers, uncles, aunts, cousins, grandparents and in some cases great-grandparents are the primary care giver; additionally, the economic challenges families encounter outweigh the education process. School readiness appears

to be one area of potential risk for children from immigrant families, especially those of Mexican origin; school, family, community, and other contextual disadvantages may suppress advantages or lead to immigrant risks (Crosnoe & Turley Lopez, 2011).

Therefore, taking time out to read and/or listen to a young child read becomes a family challenge in its own right.

Some argue that the demographic trends in the United States that are shaping an ecological transaction of American youth--family-school connections to fuel the intergenerational transmission of inequality. Research has pointed to the tendency for many schools to have assumed scripts for family-school connections that are grounded in middle-class (and White) values about parenting. Consequently, working-class and poor parents (especially racial/ethnic minorities) may not live up to the expectations of school personnel. Because the parents are perceived as less supportive and less involved than they actually are, their children may be penalized. In contrast, children from middle-class homes are rewarded for having parents who engage in behaviors that make them more visible in schools and demand more attention from school personnel. As a result, family-school connections are promoted by policies targeting socioeconomic disparities in achievement. In short, demographic trends may be exacerbating such problems beyond the usual suspects of class and race. In particular, immigration and family change make the working model of family-school connections which are valued in so many schools seem especially out of touch with the reality of today's families, in turn putting at risk the futures of increasingly large numbers of children and youth (Crosnoe & Benner, 2012).

Special Education

In conjunction with the challenges previously stated, the number and type of students with special needs who require additional help with reading skills is on the increase. Consequently, research has indicated that these numbers will continue to rise (Kauffman & Hallahan, 2011). Given the intrinsic aspect of individualized education pertinent to the special education population, these avenues to meet reading needs trends must be threaded into larger learning support populations. One such avenue of servicing this need is through the “inclusion” model of education; pushing a special education teacher into the classroom with learning support students instead of pulling the students out for separate instruction; thereby increasing educational effectiveness and monetary savings (Gustafson, Falth, Svensson, Tjus, & Heimann, 2011). The dramatic increase in students diagnosed with Autism and Other Health Impairments (OHI) has overwhelmed school districts. Nationally, the number of students with autism quadrupled from 93,000 to 378,000, while OHI numbers more than doubled from 303,000 to 689,000 during the school years of 2000-01 to 2009-10 (Scull & Winkler, 2011). The need to accommodate and educate these students is an obligation to the stakeholder, their parents and community. As mentioned earlier federal, state and local budgets are not expanding; therefore, the challenges of achieving this feat are great (Lemal, 2013; Mahoney, 2015).

Summary

According to some, The United States’ loss of stature in the public educational arena has been linked to the decline of American competitiveness, (Collins, 2001; Friedman, 2007). The global competitiveness of our ever changing society has placed a need and obligation for America to produce a workforce capable of rebuilding and

sustaining our place in the global economy (Barra, 2007; Friedman & Mandelbaum, 2011). At the foundation of this obligation is the ability to read, comprehend, and apply moderate to complex written text (Barra, 2007). Studies have shown that the American educational system is struggling to produce the results needed to produce a student/employee poised to compete in the global workforce they will encounter upon exiting public education (All Kinds of Minds, 2014; Kame'enui, Adams, & Lyon, 2014). The business community may offer a viable solution to various public school challenges in the realm of finance and achievement. A recent study indicated that public schools are developing prosperous partnerships with private business to achieve numerous educational goals (Jackson, 2013). Additionally, a Florida State University study revealed that businesses want to partner with schools to assist in producing a workforce capable of sustaining profits consistent and representative of the U.S. brand (Cook, 2005). Gerstner, Semerad, Doyle, and Johnson (1994) reported that:

...the business interest is simply having an educated citizenry that can take their place alongside the world's best workforces. ...autonomous problem-solvers, men and women who can think for themselves, reason, troubleshoot, and continue learning on the job. (p. 90)

Similarly, Anderson, Corcoran, and Davis, (2012) concluded that any school leader who is not taking advantage of potential business partnerships is missing a tremendous opportunity.

With careful planning and implementation the reading gap discussed in this chapter can be bridged. Studies suggested that success in teaching elementary aged students to comprehend what they read is achievable. This achievement can be measured

at various levels through the four modalities examined, teacher-developed (Archer, 2004; Baker D. M., 2007; Balkiewicz, 1991; Jeong, 2009), scripted/SBSL (Moats & Tolman, 2009; Step by Step Learning, Inc. , 2015), non-scripted other commercialized programs, and scripted/non-scripted combined (Bowling, 2011; Clark, 2012; Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Miller, 2008; Pearson-Scott-Foresman, 2015; Talada, 2007). There exists a convergence of a vast range of reading research and theorist who postulate what are the best/next practices within the reading comprehension spectrum (Allington, 2015a; Bruner, 1996; Clay, 1975; Hasbrouck, 2010; Moats & Tolman, 2009; National Reading Panel, 2000; Perkins, 1993; Rosenblatt, 1978; Sulzby E., 1985; Teale, 1983; Vygotsky, 1978).

Reports such as the National Reading Panel's 2000 report claim that incorporating phonemic awareness, phonics, fluency, comprehension, and vocabulary into a reading readiness program, success in building the reading levels of students prior to the third grade is achievable. However, on the opposite end of the spectrum, others (Allington, 2002c; Bruner, 1996; Clay, 1975; Teale & Sulzby, 1986) claim that the NRP's (2000) reliance on the five components may be overstated; leading way to other successful avenues to teach reading comprehension. Adding to the above platform, the motivating effects and personal characteristics of the teacher to influence students to learn, while working through any of the three modalities may assist in producing reading results. Commercialized reading programs may prove useful and accelerate the reading process, make available continued professional development, and financial offsets less of an issue.

In conclusion, the evidence behind the NRP (2000) report provides a foundation for success, as does the platform of emergent theory (Allington, 2002c; Bruner, 1996;

Clay, 1975; Teale & Sulzby, 1986; Vygotsky, 1978) offered earlier; however, the overlap of the “Big 5” components, embeddedness of available research, implementation of varying theory, and the ability of the practitioner to motivate students to learn may provide the receipt for reading success. Scripted/Step By Step Learning, Inc., teacher-developed, non-scripted/other commercialized reading programs, and scripted/non-scripted combined approach may provide a reading system that threads the multitude of theory and research into a system of instruction that corresponds with elevated PSSA scores and improve elementary aged students’ ability to read.

CHAPTER III
METHODOLOGY

Introduction

It has been theorized by prominent authors, economists, and the United States government that America's status as a world literacy leader has been challenged as of late; furthermore, it has been suggested that the nexus of this dilemma lies in the lack of reading comprehension levels necessary to grow and maintain national and personal prosperity (Fiester, 2013; Freidman, 2007; Friedman & Mandelbaum, 2011; United States Department of Education, 2015). Through this lens, the American public education system has been racing to find a viable solution to the enhancement of reading comprehension skills in American students. The development of a skilled workforce that is highly literate, knowledgeable, and skilled is a must. Some have suggested the root of this endeavor is firmly planted in one's ability to read by the third grade (Friedman, 2007; Haywoode, 2013; The National Governors Association, 2013; Wennersten, 2013). Currently, the United States of America is struggling at best to flourish and meet the third grade standard (Baker, 2001; Lesnick, Smithgall, & Gwynne, 2010). In efforts to overcome the reading comprehension deficiency, commercialized reading programs have surfaced as a vehicle to increase elementary aged students' reading ability.

The goal of this mixed-methods study was to determine if a significant difference exists between four modalities of teaching reading: teacher-developed, Step by Step Learning, Inc. (scripted), other commercialized reading programs (non-scripted), or a combination of scripted/non-scripted programs on the reading ability of third-grade

students as measured by the Pennsylvania System of School Assessment (PSSA). This study seeks to shed light on the following research questions.

Research Questions

1. Is there a significant difference between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading?
 - 1a. *H₀: There is no significant difference between the reading/ELA scores of 3rd grade students and different approaches to teaching reading.*
2. Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?
 - 2a. *H₀: There is no significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students.*
3. What are the perceived effective and ineffective practices used within different approaches to teaching reading comprehension, as determined by superintendents?
 - 3a. *H₀: There are no perceived effective and ineffective practices used within different approaches to teaching reading comprehension as determined by superintendents.*

Study Design

The study is a two-phase explanatory sequential mixed-methods research design; built on the foundation of “collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results” (Creswell, 2012, p. 542).

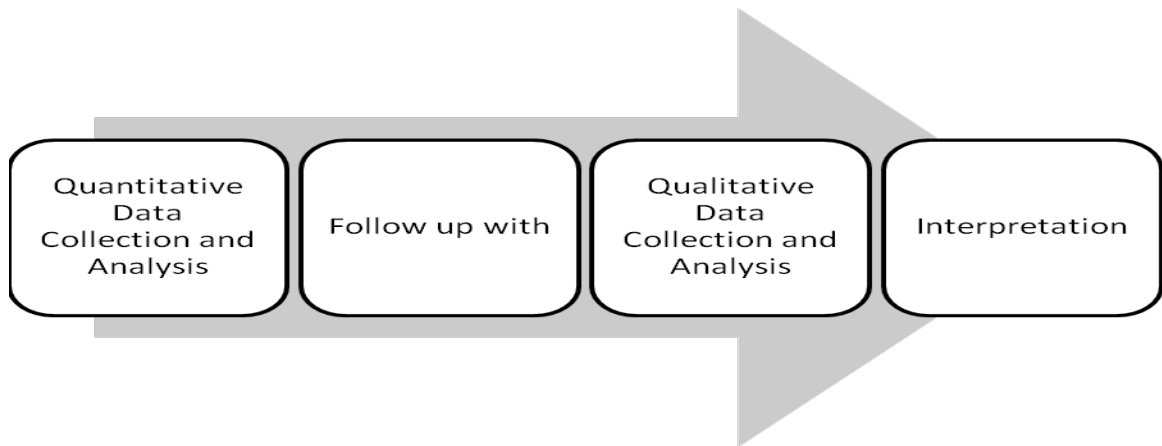


Figure 1. Creswell explanatory sequential design.

A mixed-methods research design involves the intentional collection of both quantitative and qualitative data and the combination of the strengths of each to answer research questions (U.S. Department of Health and Human Services, 2015). This style of research aims to provide better understanding of the research questions and to provide in-depth analysis for the collected data (Creswell, 2008). Furthermore, “the use of both quantitative and qualitative research within a single study creates an opportunity to better investigate the research questions through the data collection analysis and interpretation” (Creswell, 2008, p. 552).

When engaging in a mixed-methods study the researcher will be collecting both qualitative and quantitative data. The researcher must determine if data will be collected sequentially or concurrently, how data will be weighted, if there will be mixing of the data, and whether or not the study is guided by a theoretical perspective (Creswell, 2008). For the purposes of this study, data were collected in two phases; the quantitative data was collected first, followed by the qualitative data. Quantitative data was given priority; primarily due to the information gathered intended to drive further exploration in the

qualitative vein. The qualitative data sought to provide a richer base, and increase the depth of details; therefore, the quantitative and qualitative data was connected.

In phase one, permission was granted by The Center for the Study of Testing, Evaluation and Educational Policy at Boston College to utilize their survey in whole or in-part, the “Perceived Effects of State-Mandated Testing Programs on Teaching and Learning” (Pedulla, et al., 2003) (see Appendix H). This survey was developed to account for and measure: (a) school climate, (b) pressure on teachers, (c) perceived value of the state test, (d) alignment of classroom practices with the state test, (e) impact on the content and mode of instruction, (f) test preparation and administration, (g) perceived unintended consequences, and (h) accountability and use of test results (Pedulla, et al., 2003). This survey served as a foundation for the researcher to explore the quantitative data needed to advance phase two. Consequently, this survey has been utilized on a national scale to assist districts in refining and improving instructional technique (Pedulla, et al., 2003).

Based on data collected in phase one, phase two of data collection consisted of a combined and modified questionnaire, incorporating interview questions from the “Perceived Effects of State-Mandated Testing Programs on Teaching and Learning” (Pedulla, et al., 2003), and “Teacher’s Interview Questions” (Pontillo, 2012). The researcher was granted permission to use in whole or in-part the “Perceived Effects of State-Mandated Testing Programs on Teaching and Learning” (Pedulla, et al., 2003), and (Appendix H) and “Teacher’s Interview Questions” (Pontillo, 2012) (Appendix I).

Quantitatively, this study examined four modalities of teaching reading to kindergarten, first, and second grade students within all 500 public school districts

located in the state of Pennsylvania ($N = 500$); the study sample resulted in 89 respondents ($N = 89$): scripted (SBSL), teacher-developed, other commercialized reading programs (non-scripted), or a combination of scripted/non-scripted modalities. Data was collected through a sixteen question modified survey, based on the Center for the Study of Testing, Evaluation, and Educational Policy (CSTEED), “Perceived Effects of State-Mandated Testing Programs on Teaching and Learning” (Pedulla, et al., 2003) (Appendix A). Reading ability was measured by third-grade archived proficient and advanced reading scores on the PSSA (Appendix B). District use of one of the four modalities used to teach reading was also a measure obtained from the survey.

This study used qualitative data to determine school district superintendents or designee perceived effective and ineffective practices within each teaching modality. Information gained for this perspective was sought through the utilization of Pedulla’s (2003) (see Appendix A) “Perceived Effects of State-Mandated Testing Programs on Teaching and Learning,” and Pontillo’s (2012) “Teacher’s Interview Questions” (see Appendix C); resulting in a seven question telephone interview template. Thus, reading program demographics were analyzed to determine if a relationship exists between the perceptions school leaders have in regard to effective and ineffective practices associated within the reading program modality being utilized and reading ability. The following matrix was used to assist in analyzing superintendent responses to interview questions:

Table 1

Research Matrix

<p>Research Question 3</p> <p>What are the perceived effective and ineffective practices used within these three approaches of teaching reading comprehension, as perceived by superintendents?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none">1) What are your perceptions of effective K-2 reading practices in your school and in general?2) What are your perceptions of ineffective K-2 reading practices in your school and in general?3) In regard to K-2 reading instructional methods used in your district, what is your perception that the 3rd grade reading/ELA portion of the PSSA measures high standards of achievement? Why? (Pedulla #29 modified)4) In regard to K-2 reading instructional methods used in your district, do you perceive differences among schools on the 3rd grade PSSA are more a reflection of students' background characteristics than of school effectiveness? (Pedulla #35 modified)5) In regard to the teaching methods used in your district, what are the reading strategies you believe are most effective in teaching reading? Describe how they impact teacher behavior and student learning. (Pontillo #1 modified)6) In regard to the teaching methods
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	<p>used in your district, what is the strength of your reading program and how did you acquire those strengths? (Pontillo #2 modified)</p> <p>7) In regard to the teaching methods used in your district, describe your perceptions of effective reading instruction practices. (Pontillo #3 modified)</p>
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To evaluate the effects of teacher-developed, SBSL (scripted), other commercialized reading programs (non-scripted) or combinations of modalities on the reading ability of elementary aged students, the researcher utilized the Pennsylvania System of School Assessment (PSSA) English Language Arts (ELA) scores of advanced and proficient for third-grade students within the Commonwealth of Pennsylvania. The annual Pennsylvania System of School Assessment (PSSA) is a standards-based, criterion-referenced assessment used to measure a student's attainment of the academic standards while also determining the degree to which school programs enable students to attain proficiency of the standards (Pennsylvania Department of Education, 2015). The English Language Arts and Mathematics PSSAs include items that are consistent with the Assessment Anchors/Eligible Content aligned to the Pennsylvania Core Standards in English Language Arts and Mathematics (Pennsylvania Department of Education, 2015). Most specifically, the ELA portion of the third-grade assessment is comprised of four types of questions to measure reading ability, multiple-choice, selected-response, short-answer, and mode-specific prompts (Pennsylvania Department of Education, 2015).

Sample

This study took place in the Commonwealth of Pennsylvania. All 500 school district superintendents were surveyed ($N = 500$). The study sample represented 89 ($N = 89$) respondent public school districts and their superintendent/designee. The sample also took into account the K-2 reading modality used in the 500 public school districts of the Commonwealth, coupled with the third-grade archived proficient and advanced PSSA scores of those districts willing to participate in a voluntary telephone interview. In total the K-3 cohort student population of this study encompassed approximately 531,179 ($N = 531,179$) students (Pennsylvania Department of Education, 2015). Consequently, this includes the researcher's home district; however, data collected were not incorporated into the total population of respondents. Therefore, no significant skewing of data occurred. Both female and male school leaders participated, with no gender restriction associated with the study. Additionally, participants of this study received no compensation or were be exposed to any known risks.

Once approval was granted from the Institutional Review Board (IRB) at Indiana University of Pennsylvania, the researcher began the process of soliciting participants for the study. Each superintendent within the Commonwealth was emailed a welcome letter (see Appendix D) describing the study, soliciting participation, and access to an embedded link to the survey. The survey was open for a four (4) week window. A reminder email was distributed to those superintendents who had not responded to the survey at the end of the third week mark. Contact information for superintendents was gained through the Pennsylvania School Boards Association (PSBA), Penn Link, and Intermediate Unit 1 (IU1). Based on survey participation, the researcher targeted two (2)

school districts utilizing one of the four modalities to teaching reading, to conduct a telephone interview; resulting in a eight (8) school district total sample.

Criteria for selection was based on a cross-section of student demographics; for example, number of students within the K-3 cohort, size of district, instructional modality used to teach reading, and willingness to participate in a follow-up telephone interview. The researchers' goal through the quantitative framework was to provide an equal and balanced representation of school districts using one of the four modalities to teach reading and their respective third-grade proficient and advanced PSSA scores, ideally two from each modality; thereby, leading into an in-depth qualitative framework to determine the perceived effective and ineffective practices within each modality. Depending on participation numbers, the sample excluded some districts based on maintaining equal and balanced samples within each modality.

Research Instrument

Two data collection instruments were used (survey and interview protocols) in this two-phase sequential explanatory mixed-methods study to collect data. Data was collected to determine if a significant difference existed in the proficient and advanced reading scores of third-grade students on the PSSA, based on instructional reading modality used, and the perceptions school leaders have regarding the effective and ineffective practices associated within the reading instructional modality used within their district to teach reading.

Subsequently, the survey and interview protocol were discovered through the review of literature regarding current practices and modalities used to teach reading to elementary aged students. Within this context, four modalities of teaching reading were

analyzed, teacher-developed, SBSL (scripted), other commercialized reading programs (non-scripted) or a combination of programs. Of note, each modality may function differently from the other in teaching reading instruction; however, during the review of literature, overlaps coupled with similarities in their respective approaches to teach reading were noticed by the researcher.

Teacher-developed reading programs incorporate the concept of the teacher employing learned and existing pedagogy to guide students through the scope (curriculum and instructional practices) and sequence (structured progress through the content) in teaching reading (Dreher & Gray, 2009).

The Step by Step Learning, Inc., (or scripted reading program) reading program employs vendor supplied professional development and modeling for staff and administration through the RtII process in conjunction with the basal text and coupled with detailed progress monitoring of student progress (Step by Step Learning, Inc., 2015).

Other commercialized reading programs may take the form of scripted (as discussed above), and are entered into with private vendors for a predetermined cost (and may work in conjunction with the non-scripted counterpart). At the other end of the spectrum, and considered by some as the most widely used are non-scripted approaches (Allington, 2002; Holderness, 2013). These reading programs are familiar to most educators and stakeholders; the non-scripted modality incorporates the published basal text as the vehicle to deliver reading instruction.

The instrumentation used to determine how many schools within the Commonwealth utilize which modality, determine proficient and advanced third-grade scoring on the PSSA, and determine the inclusion to be interviewed was a Likert-type

researcher modified “Superintendent Reading Program Survey” (see Appendix G) established by the National Board on Educational Testing and Public Policy, “Teacher Survey on the Impact of State-Mandated Testing Programs” (Pedulla, et al., 2003). The researcher gained approval to utilize the survey in whole or in part from the survey author and developer (Pedulla, et al., 2003). The survey was created and delivered using the Qualtrics Online Survey Software (© 2015 Qualtrics, LLC, 2015).

The instrument used in the collection of data needed in determining which of the four modalities of teaching reading is currently being utilized within each public school district in the Commonwealth was Pedulla’s (2003) researcher modified survey. Embedded within the survey are question(s) targeting the school leader’s willingness to disclose which modality is currently being utilized to teach reading. This information provided the researcher the necessary data to distinguish a balanced sample of each modality, and determine if further investigation through a phone interview was warranted.

Similarly, the instrument used in the collection of data needed in determining past PSSA scores of third-grade student within each modality of teaching reading was the Required Federal Reporting Measures web page of the Commonwealth of Pennsylvania (Pennsylvania Department of Education, 2015). Of note, numeric data that are accessible through public educational avenues are known as factual information (Creswell, 2008). Consequently, current PSSA scores are public knowledge, and can be retrieved from the Pennsylvania Department of Education’s web site (Pennsylvania Department of Education, 2015). The significance of PSSA scores lies in the reliability and validity of the assessment to measure reading comprehension. According the Pennsylvania

Department of Education (2015), the Pennsylvania System of School Assessment (PSSA) is a standards-based, criterion-referenced assessment used to measure a student's attainment of the academic standards while also determining the degree to which school programs enable students to attain proficiency of the standards.

Instrumentation used to collect data regarding interview participants was Pedulla's (2003) researcher modified survey. Embedded within the survey are prompts targeting the school leader's willingness to participate in a telephone interview. Interviews were determined by the researcher establishing a balanced sample of 2 respondents within each modality or combination thereof. Once determined, the researcher connected with the school leader through a recorded telephone interview to investigate a more in-depth level, the perceptions regarding effective and ineffective practices associated with the district's reading program.

Instrumentation utilized in collecting data pursuant to superintendents' perceived effective and ineffective practices within each modality of teaching reading was through the combined and researcher modified "Interview Questions" (see Appendix F). Interview questions were based on Pedulla's (2003) survey (see Appendix A), and Pontillo's (2012) "Teacher's Interview Questions" (see Appendix C). Once a balanced sample was established, the researcher conducted a recorded telephone interview with the school leader to acquire detail-rich perceptions regarding the effective and ineffective practices used within the modalities of teaching reading. Upon completion of the telephone interview, the researcher transcribed the recording for accuracy and detail.

Instruments utilized to determine the mathematical significance of the quantitative (proficient and advanced third-grade PSSA scores) data were the parametric statistical

tool of one-way analysis of variance (ANOVA), Independent Samples t-test, Measures of Central Tendency, Test of Homogeneity of Variances, and Robust Test of Equality of Means (Welch, Brown-Forsythe) to determine if a significant difference existed in establishing a quantitative frontrunner modality in teaching elementary students to comprehend text read. Conversely, this data was blended with the qualitative results of the interview protocol through “Dictation Software” (Wreally Studios, 2015) and hand coded analysis (Creswell, 2012).

Research Procedures

Once permission was granted to conduct the research study by the Institutional Review Board of Indiana University of Pennsylvania (see Appendix E), a web based cover letter of introduction and invitation to participate in the study (see Appendix D) was emailed through Qualtrics (© 2015 Qualtrics, LLC, 2015) to each superintendent or designee within the Commonwealth of Pennsylvania ($N = 500$, study population $N = 89$). Follow-up emails were sent to non-respondents three weeks after initial contact. Included in the email was an embedded link to the survey instrument. Contents of the letter included an explanation of the study, notification that participation was voluntary, affirmation that there will be no negative consequences for non-participation, and insurance that participant and subsequent school district name will remain anonymous. The embedded link through Qualtrics (© 2015 Qualtrics, LLC, 2015) provided anonymity for the participants.

The Qualtrics® program through the embedded link allowed the researcher to deliver the sixteen question Likert-style researcher modified “Superintendent Reading Program Survey” (see Appendix G) based on Pedulla’s, et al (2003) (see Appendix A) and

Pontillo's (2012) survey (see Appendix C). In regard to research question 1, "Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?" A One-Way ANOVA determined if a significant difference existed between third-grade reading/ELA PSSA scores and the four approaches to teaching reading.

In regard to research question 2, "Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?" A One-Way ANOVA and correlation was utilized to determine if a significant difference existed between survey (see Appendix G) results and the four approaches to teaching reading.

Once data collection concluded, the researcher determined through completed surveys, that there was a balanced and equal number of participants agreeing to voluntarily participate in the telephone interview. For those who accepted the invitation to participate in a telephone interview, superintendents were supplied a link identifying their name, school district, email address, telephone number, mutually agreed upon date and time to connect. Selection of participants was based on convenience and purposeful sampling. If more than five superintendents volunteered within their respective reading instructional modality, a wait-list was offered to the remaining volunteers.

In regard to research question 3, "What are the perceived effective and ineffective practices used within these approaches of teaching reading comprehension, as determined by superintendents?" The qualitative data collected was through a semi-structured

interview protocol (Creswell, 2008) to assist the researcher in determining the perceived effective and ineffective practices associated with the district's modality of teaching reading, that relationship to perceived third-grade reading ability, and proficient and advanced scores on the third-grade reading/ELA portion of the PSSA. The interviews were conducted in an open-ended-question interview protocol; thereby, allowing the participant to voice opinions and perceptions unconstrained by the researcher or past research findings (Creswell, 2012). Interview questions were developed and based on the researcher modified "interview Questions" (see Appendix F) using the National Board on Educational Testing and Public Policy survey "Teacher Survey on the Impact of State-Mandated Testing Programs" (Pedulla, et al., 2003) (see Appendix A) in whole and in part with Pontillo's (2012) "Teacher's Interview Questions" (see Appendix C).

Telephone interviews were audio-recorded with participant consent, formatted in an open and close-ended platform, transcribed by the researcher, and coded to determine similarities and likenesses. Once completed, the researcher agreed to provide each participant a copy of the transcription to review for accuracy; none of the participants wished to review the transcription. Additionally, information collected from the telephone interview was analyzed to refine and elaborate on the quantitative findings, providing a better understanding of the research problem (Creswell, 2008).

Method for Data Collection

Once quantitative survey data were compiled through returned surveys, the researcher transferred the data from Qualtrics to SPSS. Once transferred the researcher employed the parametric statistical tool of one-way analysis of variance (ANOVA), Independent Samples t-test, Measures of Central Tendency, Test of Homogeneity of

Variances, and Robust Test of Equality of Means (Welch, Brown-Forsythe) to determine if a significant difference existed in differences and variances of third-grade students scoring proficient and advanced on the PSSA in districts being studied for the 2011-12, 2012-13, and 2013-14 school years respectively.

Consequently, since no student was identified by name or other feature, parent permission was not required. However, through survey results, the researcher looked to gain written permission from school districts exhibiting similar demographics in the acquisition of phone interviews and third-grade PSSA scores for the 2011-12, 2012-13, and 2013-14 school years respectively. Of note, all participants agreeing to participate remained anonymous with pseudonyms used for any identifying characteristics.

In relation to research question 1, data collected for this analysis included the proficient and advanced PSSA third-grade scores of all school districts responding to the survey ($N = 89$). To determine if a significant relationship existed in reading ability established by the utilization of one of the modalities, all data was entered into the Statistical Package for the Social Sciences (SPSS) program conducting a one-way ANOVA to determine if a significant relationship exists in reading ability as compared to modality used to teach reading and numerical proficient/advanced PSSA score.

In regard to research question 2, data collected from the survey (see Appendix G) provided a foundation to determine if a significant difference exists between superintendent's perception of their districts third-grade performance on the reading/ELA section of the PSSA and the approaches to teaching reading. All data were entered into the Statistical Package for the Social Sciences (SPSS) program conducting a one-way ANOVA, Independent Samples t-test, Measures of Central Tendency, Test of

Homogeneity of Variances, and Robust Test of Equality of Means (Welch, Brown-Forsythe) to determine if a significant difference exists between PSSA scores and modality used to teach reading.

In regard to research question number 3, through analyzing data received from the survey, the researcher determined two school districts within each modality, to conduct a telephone interview with the superintendent or designee, to determine the qualitative perceived effective and ineffective practices associated with each modality in increasing third-grade reading ability. Data collected for this analysis included the results from a seven (7) question survey (see Appendix F), and subsequent telephone interview with the district superintendent or designee. Data received were coded utilizing Transcribe “Dictation Software” (Wreally Studios, 2015) and/or Hand analysis (Creswell, 2012), to determine if similarities, likenesses, or dis-similarities exist. Any interviewee response yielding two or more of the same or similar perception were color coded and documented in table form.

Piloting

In regard to the validity and reliability of the third-grade reading/ELA section of the PSSA, the Pennsylvania Department of Education has determined that the reliability coefficient for the 2014 assessment is .92 and the validity coefficient is .81 with a Standard Error of Measurement of 2.7 (Pennsylvania Department of Education, 2014).

Created as an independent monitoring system for assessment in America, the Center for the Study of Testing, Evaluation, and Educational Policy (CSTEED), one of the nation's leading educational research organizations, located in the Carolyn A. and Peter S. Lynch School of Education at Boston College survey tool has been shown to be

both valid and reliable. The National Board provides research-based test information for policy decision making, with special attention to groups historically underserved by the educational systems of our country. Specifically, the National Board Monitors testing programs, policies, and products, evaluates the benefits and costs of testing programs in operation, assesses the extent to which professional standards for test development and use are met in practice (Pedulla, et al., 2003). The researcher gained approval from the developer and author to use in whole or in-part this reliable and valid survey (see Appendix H). As a result, the inclusion of the Likert-type researcher modified “Superintendent Reading Program Survey” (see Appendix G) established by the National Board on Educational Testing and Public Policy, “Teacher Survey on the Impact of State-Mandated Testing Programs” (Pedulla, et al., 2003; see Appendix A) in conjunction with Pontillo’s (2012) doctoral dissertation “Teacher Interview Questions” (see Appendix C), piloting of survey(s) and PSSA scores utilized was not be necessary. Pontillo is documented as piloting his survey prior to submission. However, to ensure alignment to Pedulla’s (2003) and Pontillo’s (2012) validity and reliability coefficients, the researcher piloted the survey within his own district. Subsequently, data from the researcher’s home district was omitted from the study.

Data Analysis

This study incorporated a two-phase explanatory sequential mixed-methods research design. Data collected for quantitative analysis was through Qualtrics® (© 2015 Qualtrics, LLC, 2015), utilizing an online medium for delivery. Each participant received the “Superintendent Reading Program Survey.” Data for this study was analyzed through use of the Statistical Package for the Social Sciences (SPSS). To determine if a statistical

significant difference existed between groups and variances, the parametric statistical tools one-way ANOVA, Independent Samples t-test, Measures of Central Tendency, Test of Homogeneity of Variances, and Robust Test of Equality of Means (Welch, Brown-Forsythe) was used to interpret PSSA archival data of increased, decreased or no change of third-grade cohorts over a three year span involved in the scripted Step by Step Learning, Inc., teacher-developed, non-scripted commercial reading readiness program, or scripted/non-scripted combination of programs.

Data collected for qualitative analysis was through the telephone interview protocol Data received was coded to determine if similarities or likenesses exist. Results of the survey conveyed to the researcher those participants who are willing to volunteer for a telephone interview. Based on the number of volunteers associated with each modality of teaching reading, the researcher imposed a convenient, purposeful (Creswell, 2012), and balanced sample of volunteers to participate in a telephone interview. Interview questions were developed and based on the researcher modified “Interview Questions” (see Appendix F) using the National Board on Educational Testing and Public Policy survey “Teacher Survey on the Impact of State-Mandated Testing Programs” (Pedulla, et al., 2003) (see Appendix A) in whole or in part with Pontillo’s (2012) “Teacher’s Interview Questions” (see Appendix C).

Interview question data for this study was analyzed and coded through the use of Transcribe Dictation Software (Wreally Studios, 2015) and Hand analysis (Creswell, 2012) to interpret superintendents’ perceptions on effective and ineffective practices associated within each of the three reading modalities based on open and closed-ended telephone interview questions.

Summary

This chapter provided the research problem and placed it within the context of the study. The relationship between the SBSL (scripted), Inc., teacher-developed, other commercialized reading programs (non-scripted), or combination of programs and the perceptions school leaders have in regards to the effective and ineffective practices associated with each modality will be analyzed through a variety of statistical tools to determine if a significant relationship exists among the four or combination thereof. Chapter IV will present the results of the data to determine if a relationship exists.

CHAPTER IV

DATA ANALYSIS

The rationale of this study was related to reading comprehension. The goal of this mixed-methods study was to determine if a significant difference exists between four modalities of teaching reading: teacher-developed, Step by Step Learning, Inc. (scripted reading programs), other commercialized reading programs (non-scripted) or a combination of programs on the reading ability of third-grade students as measured by the Pennsylvania System of School Assessment (PSSA). This chapter presents three sets of data: archived third grade PSSA scores for the school years 2011-12, 2012-13, and 2013-14 respectively, survey responses from superintendents, and interview results of superintendents' regarding their perceptions of effective and ineffective practices within the modalities of teaching reading. Findings are then analyzed, organized and presented in an attempt to address the following three research questions proposed by this mixed-methods study:

1. Is there a significant difference between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading?
 - 1a. *H₀: There is no significant difference between the reading/ELA scores of 3rd grade students and different approaches to teaching reading.*
2. Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?

2a. *H₀: There is no significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students.*

3. What are the perceived effective and ineffective practices used within different approaches to teaching reading comprehension, as determined by superintendents?

3a. *H₀: There are no perceived effective and ineffective practices used within different approaches to teaching reading comprehension as determined by superintendents.*

This study design includes two phases of data collection and analysis. Phase one, quantitative data analysis of archived 3rd grade PSSA results and survey response questions of superintendents who participated in the survey and phase two was comprised of qualitative data from superintendent interviews. The purpose of phase one was to answer research questions one and two by determining if a statistically significant relationship exists between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading, and to determine if a significant relationship exists in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA using different approaches to teaching reading in K-2 students. Quantitative data were collected through achieved results from the PSSA and superintendent responses to a survey mentioned in Chapter III. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 22.0. A one-way ANOVA, Measures of Central Tendency, Frequency Distribution, Independent Sample t-test, Test of Homogeneity of Variances, and Robust Tests of Equality of Means

(Welch, Brown-Forsythe) were used to determine if a significant difference existed. Subsequently, information gained through phase one served as a platform for the qualitative data collected in phase two.

Phase two consisted of eight telephone interviews with superintendents of districts utilizing the modalities of teaching reading, scripted (SBSL), teacher-developed, commercialized (non-scripted), or scripted/non-scripted combination modalities. Data were collected through a seven question interview protocol. Interview questions were developed and based on the researcher modified “Interview Questions” (Appendix F) using the National Board on Educational Testing and Public Policy survey “Teacher Survey on the Impact of State-Mandated Testing Programs” (Pedulla, et al., 2003) (Appendix A) in whole or in part with Pontillo’s (2012) “Teacher’s Interview Questions” (Appendix C). Transcription of superintendent dialogues was through Transcribe Voice Detection software (Wreally Studios, 2015) and hand analysis (Creswell, 2012). Subsequently, once transcribed, data gathered from telephone interviews were color coded for central themes, likenesses, diss-likenesses, and common threads.

Setting of Survey Sample Population

To answer these three research questions this mixed-methods study examined the PSSA scores of third grade student cohorts and the perceptions of superintendents about effective and ineffective reading practices within 89 public school districts located within the Commonwealth of Pennsylvania for three school years.

The school years 2011-12, 2012-13, and 2013-14 respectively were used to establish comparable cohort data. Data reported in this investigation was through the utilization of tables and statistical analysis. Further statistical scrutiny was established

with the employment of instruments mentioned earlier, utilized to determine the mathematical significance of the quantitative (proficient and advanced third-grade PSSA scores and quantitative superintendent perceptions) and qualitative (superintendent perceived effective and ineffective practices used within the approaches to teaching reading comprehension).

Initial review of the data included checking for missing values and overlaps of participant responses. This effort on the part of the researcher will provide a comprehensive and demographic picture of the districts’ responding to the survey. Consequently, one superintendent reached out to the researcher to ensure that her responses were counted once; she explained that she, “made mistakes on the first run, and started over”. As a result the researcher reviewed the data to ensure that duplicate responses were deleted from the data set to ensure accurate reporting. Thus, a final tally of 90 responses was recorded for data purposes.

Quantitative Demographic Data of the Surveyed Sampled Population

The survey provided demographic insight into three types of districts supplying data, urban, suburban, and rural school districts respectively.

Table 2

Frequency Distribution of School District Geographical Location

District Type	Urban	Suburban	Rural	Total
Number	11	34	44	89
Percent	12%	38%	50%	100%

Results indicated that substantially more suburban and rural districts responded to the survey than their urban counterparts. Consequently, according the Pennsylvania School Boards Association, this response rate somewhat echoes the urban, suburban,

rural demographic profile within the Commonwealth. As of print, within the state Pennsylvania, 28 (6%) districts are considered Urban, 227 (45%) Suburban, and 245 (49%) are considered Rural (Pennsylvania School Board Association, 2015).

Next, when superintendents were asked their perception of how their schools' 3rd grade reading/ELA PSSA scores compare to other schools within their County/City, results varied.

Table 3

PSSA Score Comparison to Districts Within County/City

How do your school's results of the reading portion of the PSSA compare to schools within your County/City?	Top	Above Average	Average	Below Average	Low
<i>N</i>	5	24	32	10	2

Results indicated that 29 superintendents responding perceived that their PSSA scores were "Top," to "Above Average," 32 reported scores were "Average," 10 responded with "Below Average," and 2 as "Low" when compared to other school districts within their County or City.

Data were analyzed to determine classroom size of districts responding.

Table 4

Average Classroom Size of Sample Districts

How many K-2 students do you average in a reading class?	1-15	16-20	21-25	26-30	31+
<i>N</i>	10	30	32	1	0
Percent	14%	41%	44%	1%	0%

Results indicated that the majority of school districts have between 16-25 students in a class, accounting for 85% of those districts reporting.

Data representing superintendents’ perception of the similarity of content taught in their respective K-2 reading program compared to content similarity presented on the PSSA were analyzed.

Table 5

Reading and PSSA Content Similarity

How similar is the content of the reading program you use to the content of the PSSA?	Very Similar	Somewhat Similar	Somewhat Dissimilar	Dissimilar	Total
<i>N</i>	22	44	6	1	73
Percent	30%	61%	8%	1%	100%

Data revealed that 91% of superintendents perceived that the content used in their K-2 reading program was either “Very Similar,” or “Somewhat Similar,” to that of the PSSA content. However, as will be documented later in the chapter, the PSSA scores do not reflect this notion.

Modality to Teach Reading and Research Questions

The researcher compared the survey questions to the four approaches to teach reading, teacher-developed, non-scripted (use of textbooks), scripted (SBSL, Inc.), and the scripted/non-scripted combination of modalities. In addition, quantitative data collection also included responses to the Likert-type questions on the survey targeting various perceptions regarding alignment of reading modality to PSSA scores. First, “Does your district’s modality of teaching reading align with what the PSSA measures?”

Table 6

Likert Scale, Reading Modality and PSSA Alignment

Question: Does your district’s modality of teaching reading align with what the PSSA measures?	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Total
Approach to teach reading- Teacher Developed	2	4	2	0	8
Non Scripted	8	27	3	0	38
Scripted	1	6	1	0	8
Both Scripted and Nonscripted	4	14	1	1	20
Total	15	51	7	1	74
Percent	20%	69%	9%	1%	99%

Data revealed that 20% of the respondents “Strongly Agree,” 69% “Agree,” 9% “Neither Agree nor Disagree,” and 1% “Disagree” that their districts’ modality of teaching reading aligned with what the PSSA measures. Comprising these results, 8 districts utilized the teacher-developed approach to teach reading, 38 districts engaged a non-scripted modality, 8 districts employed a scripted approach, and 20 school districts reported using a scripted/non-scripted combination to teach reading. Of note 89% of superintendents agree to some extent that the modality used to teach reading in their district is aligned with what the PSSA measures.

Next, in addressing the survey “In regards to K-2 reading instructional methods used in your district, do you perceive the instructional texts and materials used to teach reading are compatible with the PSSA?”

Table 7

Likert Scale, Texts and Materials and PSSA Comparability Alignment

Question: The instructional texts and materials the district utilizes to teach reading are comparable with the reading/ELA portion of the PSSA?	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Total
Approach to teach reading- Teacher Developed	2	4	2	0	8
Non Scripted	7	20	6	4	38
Scripted	2	4	1	1	8
Both Scripted and Nonscripted	4	13	2	1	20
Total	15	41	11	6	74
Percent	20%	55%	15%	8%	98%

Results indicated that 20% of superintendents “Strongly Agree,” 55% “Agree,” 15% “Neither Agree nor Disagree,” and 8% “Disagree” that the instructional texts and materials used to teach reading within their districts’ is comparable to the reading/ELA portion of the PSSA. Comprising these results, 8 districts utilized the teacher-developed approach to teach reading, 38 districts engaged a non-scripted modality, 8 districts employed a scripted approach, and 20 school districts reported using a scripted/non-scripted combination to teach reading. To sum, 75% of responding school leaders perceive that their materials and texts used to teach reading in their district is comparable to the reading/ELA portion of the PSSA.

The survey addressed perceptions regarding “to what degree do you feel that your third grade PSSA scores are positively influenced by your K-2 reading program?”

Table 8

Likert Scale, Influence of 3rd Grade PSSA Scores and K-2 Reading Program Alignment

Question: To what degree do you feel that your third grade PSSA scores are positively influenced by your K-2 reading program?	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Total
Approach to teach reading-					
Teacher Developed	3	3	2	0	8
Non Scripted	10	16	11	1	38
Scripted	5	3	0	0	8
Both Scripted and Nonscripted	7	11	2	0	20
Total	25	33	15	1	74
Percent	34%	45%	20%	1%	100%

The data resulted in 34% of the districts “Strongly Agree,” 45% “Agree,” 20% “Neither Agree nor Disagree,” and 1% “Disagree” that their 3rd grade PSSA scores are positively influenced by their K-2 reading program. Comprising these results, 8 districts utilized the teacher-developed approach to teach reading, 38 districts engaged a non-scripted modality, 8 districts employed a scripted approach, and 20 school districts reported using a scripted/non-scripted combination to teach reading. Data indicated that 79% of the respondents perceived that their 3rd grade PPSA scores are positively influenced by their K-2 reading program.

Lastly, the researcher sought to analyze all groups together regarding modality used to teach reading and 3rd grade PSSA scores.

Table 9

Frequency Distribution, All Reading Approaches Combined

	N	Mean	Std. Deviation
PSSA 2011-12			
Teacher-Developed	8	81.12	7.62
Non-Scripted	49	79.83	7.10
Scripted	8	74.00	12.58
Scripted/Non-Scripted	19	77.36	8.53
Total	84	78.84	8.19
PSSA 2012-13			
Teacher-Developed	8	80.50	5.55
Non-Scripted	49	79.02	7.28
Scripted	8	72.75	13.89
Scripted/Non-Scripted	19	76.47	10.49
Total	84	77.98	8.82
PSSA 2013-14			
Teacher-Developed	8	81.12	7.73
Non-Scripted	49	76.16	8.59
Scripted	8	68.12	14.51
Scripted/Non-Scripted	19	75.47	10.70
Total	84	75.71	9.94

Results indicated that the teacher-developed modality produced the most advanced 3rd grade PSSA scores when compared to the other modalities for the three years studied, 81%, 80%, and 81% respectively. In addition, the non-scripted approach produced the second best results of 79%, 79%, and 76% respectively. Producing the third best results, was the scripted/non-scripted modality 77%, 76%, and 75% respectively. Rounding out the category, the scripted modality produced the least impressive results 74%, 72%, and 68% respectively. For the 2012-13 and 2013-14 school years, the data also indicated that the standard deviation for the groups were double digits for the scripted and scripted/non-scripted approach, (scripted, 13.89 and scripted/non-scripted, 10.49; scripted, 14.51 and scripted/non-scripted 10.70 respectively); therefore, large

overlaps in PSSA scores may be present. Of note, for the 2011-12 school year the scripted approach produced a double digit standard deviation of 12.58.

Data Analysis of the Research Questions

The following section includes a report of the analysis of the three research questions utilized for this study. These data were collected using a survey (phase 1 of the study) emailed to all 500 superintendents in the Commonwealth of Pennsylvania and an interview protocol (phase 2 of the study) utilized in the telephone interview portion of the study.

Research Question 1

To answer research question 1, the researcher reviewed and documented through the “Required Federal Reporting Measures of the Commonwealth of Pennsylvania” (Pennsylvania Department of Education, 2015), a state mandated comprehensive document outlying all Pennsylvania public school districts’ PSSA scores, the PSSA scores of all 500 school districts located in the Commonwealth of Pennsylvania. Once obtained, the data were implemented into the SPSS statistical program and compared to the approaches of teaching reading through a one-way ANOVA.

Teacher-developed curriculum. As mentioned earlier, the Teacher-developed modality to teach reading involves the “teacher” engaging school district supplied resources to produce an instructional/curriculum pathway for their students and/or, relying independently on his own pedagogy to craft and implement reading curriculum and instruction, or a blend of both to deliver the reading program. Descriptive statistics revealed that in regard to four approaches to teaching reading, those districts utilizing teacher-developed reading programs, 4 have done so for 1-3 years, zero districts have

incorporated this modality for 4-6 years, zero districts have used this modality for 7-9 years, and 2 have engaged the teacher-developed modality for 10 or more years.

Table 10 identifies the mean PSSA scores for school systems in the population that used the teacher-developed modality to teach reading. For all three years, the mean scores averaged a low of 79.25% to a high of 83.50%. In the 2011-12 and 2012-13 school years, the 10+ year curriculum scored higher than the 1-3 year group. In the 2013-14 school year, that trend changed, with the 1-3 year group outperforming the 10+ group. The data in Table 10 also demonstrates that in this sample, there are no districts that use the teacher-developed modality after the 3rd year unless they have used this approach of teaching for 10 plus years. Therefore, according to the data, those districts who employed the teacher-developed modality of teaching reading for 10 or more years, on average reaped greater 3rd grade reading/ELA PSSA scores than those districts utilizing this modality to teach reading for less than 10 years. Of note, during the 2013-14 school year, this trend was not established.

Table 10

Frequency Distribution, of Years Engaged Teacher-Developed Modality/Mean

PSSA Score

For how many years have you been engaged in using your current K-2 reading modality- Teacher Developed	N	Mean	Std. Deviation
PSSA 2011-12			
1-3 years	4	79.75	10.62
10+ years	2	83.50	4.94
PSSA 2012-13			
1-3 years	4	79.25	6.55
10+ years	2	82.50	.707
PSSA 2013-14			
1-3 years	4	82.00	10.89
10+ years	2	80.50	4.94

The researcher employed Independent Samples t-test to determine if a statistical significant difference existed between two groups for the 2011-12, 2012-13, and 2013-14 school years respectively. Results indicated there was no statistically significant difference in districts who utilized the teacher-developed modality of teaching reading and 3rd grade proficient/advanced reading/ELA scores on the PSSA for the 2011-12 school year: $t(4) = -.45, p = .673$. Similarly, for 2012-13 school year: $t(4) = -.66, p = .545$, and the 2013-14 school year: $t(4) = .18, p = .868$, no significant results were obtained. Consequently, the Levene's test revealed no violation of variances assumed.

Table 11

Independent Samples Test for Teacher-Developed Reading Modality/Years Utilized

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal variances assumed	4.52	.101	-.454	4	.673
Equal variances not assumed			-.589	3.94	.588
PSSA 2012-13 Equal variances assumed	6.50	.063	-.660	4	.545
Equal variances not assumed			-.981	3.13	.396
PSSA 2013-14 Equal variances assumed	.651	.465	.178	4	.868
Equal variances not assumed			.232	3.96	.828

Non-scripted curriculum. Published reading texts produced for use within school districts are considered non-scripted reading programs. As mentioned in Chapter II the three largest publishers are Houghton-Mifflin-Harcourt (HMH), McGraw Hill, and Pearson-Scott-Foresman (PSF). These products are most familiar to practitioners. The published texts and workbooks incorporate research based sequence and scope methodologies with various add-ons and professional development menus from the publisher.

Of those districts engaged in a non-scripted modality to teach reading, 14 have done so for 1-3 years, 10 have utilized this modality for 4-6 years, 4 have been engaged

for 7-9 years and 7 have used this method for 10 or more years respectively. To analyze the data, the researcher tested for differences between means across units. A one-way analysis of variance (ANOVA) was conducted for the 2011-12, 2012-13, and 2013-14 school years respectively to explore the impact of number of years a district was engaged in a non-scripted modality and proficient/advanced 3rd grade reading/ELA PSSA scores. The homogeneity of variances tests were run for each one-way ANOVA at the $p < .05$ range to determine whether there was a significant difference in the variances of each group.

Table 12

Frequency Distribution for Non-Scripted, PSSA Scores

	N	Mean	Std. Deviation
PSSA 2011-12			
1-3 years	14	78.71	8.07
4-6 years	10	82.20	5.95
7-9 years	4	76.50	4.35
10+ years	7	81.57	6.90
Total	35	80.02	6.95
PSSA 2012-13			
1-3 years	14	79.14	6.03
4-6 years	10	80.40	8.78
7-9 years	4	70.25	8.13
10+ years	7	77.85	7.08
Total	35	78.22	7.63
PSSA 2013-14			
1-3 years	14	73.92	8.82
4-6 years	10	77.20	9.29
7-9 years	4	73.00	5.47
10+ years	7	77.00	7.95
Total	35	75.37	8.33

For the years tested, districts engaged in the non-scripted approach for 1-3 years yielded mean PSSA scores of 2011-12 (78%), 2012-13 (79%), and 2013-14 (73%) respectively. Of note, those districts utilizing the non-scripted modality for 4-6 years

yielded the highest scores for all three years examined. However, in a reverse trend, during the 7-9 year range PSSA scores dropped, followed by a PSSA score increase during the 10 plus year of utilization.

In sum, Table 12 demonstrates the mean PSSA scores for those districts utilizing the non-scripted approach to teach reading. Low scores ranged from 73.92% for 1-3 year uses in 2013-14 to a high of 82.20% for 4-6 year uses in 2011-12. The mean scores presented in Table 12 identify an interesting trend with the non-scripted modality to teach reading. In all three years, the newest users of this modality, 1-3 years ranked third in the PSSA scores of the group, while the 4-6 year uses ranked first. The lowest average PSSA score was the 7-9 year group, but the second highest group was the 10 plus year group. What we see in this data set is a trend in which the 4-6 years of use nets the highest PSSA average PSSA scoring, only to fall to the lowest average scoring once we get to 7-9 years of use. The average PSSA scores rebound after 10 plus years of use. This trend is consistent across all three years of data measured for this type of instruction.

The researcher applied a one-way ANOVA between and within groups to determine if a statistical difference existed between the utilization of a non-scripted modality to teach reading to K-2 students within the time frame of 1-3, 4-6, 7-9, and 10 plus years and 3rd grade proficient/advanced reading/ELA scores on the PSSA. Data indicated that for the 2011-12, 2012-13, and 2013-14 school years, $F(3, 31) = .94, p = .432$, $F(3, 31) = 1.95, p = .142$, and $F(3, 31) = .47, p = .703$ respectively, no statistical significant difference occurred between a school district's use of a non-scripted modality to teach reading to K-2 grade students within the time frame of 1-3, 4-6, 7-9, and 10 plus years and 3rd grade proficient/advanced, reading/ELA scores on the PSSA at $p < .05$.

Table 13

ANOVA, Number of Years in Reading Modality and PSSA Scores, Non-Scripted

	df	F	Sig.
PSSA 2011-12			
Between Groups	3	.944	.432
Within Groups	31		
Total	34		
PSSA 2012-13			
Between Groups	3	1.948	.142
Within Groups	31		
Total	34		
PSSA 2013-14			
Between Groups	3	.474	.703
Within Groups	31		
Total	34		

The researcher employed the Test of Homogeneity of Variances to determine if a difference in the variances of the groups existed at $p < .05$ level of significance. Results indicated that school years 2011-12, 2012-13, and 2013-14, $p = .757$, $p = .743$, and $p = .392$ respectively, no statistical significant difference in variances between the years engaged within the modality and the non-scripted approach to teach reading.

Table 14

Test of Homogeneity of Variances for School Years 2011-2014, Non-Scripted

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	.395	3	31	.757
PSSA 2012-13	.416	3	31	.743
PSSA 2013-14	1.032	3	31	.392

Scripted (SBSL, Inc.) curriculum. A scripted commercialized reading program, engages with school districts to implement a comprehensive research-based approach to literacy that includes assessment, effective classroom instruction techniques,

collaborative problem-solving and research-supported intervention models to ensure all students succeed in reading. When analyzing scripted reading programs (SBSL, Inc.), 4 districts have been engaged in this modality for 1-3 years, 2 districts have utilized a scripted program for 4-6 years, and 3 school districts have utilized this method for 7-9 years. Zero school districts have engaged this modality for 10 or more years.

Data indicated that the highest average PSSA score was realized during the 4-6 year of usage (82.50%) in the 2011-12 school year. Likewise, the second highest PSSA score was also noted in the 2011-12 school year at the 1-3 year of use (75.25%). The lowest average PSSA score was produced during the 2013-14 school year in the 7-9 year of usage (67.66%).

Table 15

Frequency Distribution of Average PSSA Scores of Scripted Reading Modality

	N	Mean	Std. Deviation
PSSA 2011-12			
1-3 years	4	75.25	12.23
4-6 years	2	82.50	16.26
7-9 years	3	70.33	12.74
Total	9	75.22	12.32
PSSA 2012-13			
1-3 years	4	73.50	17.25
4-6 years	2	73.50	20.50
7-9 years	3	75.00	8.54
Total	9	74.00	13.52
PSSA 2013-14			
1-3 years	4	71.75	17.28
4-6 years	2	69.00	19.79
7-9 years	3	67.66	13.27
Total	9	69.77	14.45

The researcher then administered the Test of Homogeneity of Variances, to determine if the variance between groups is equal. In all school years listed, and within

years of modality engagement, the standard deviations are at levels that may overlap PSSA scores in upper and lower years; this concept can be visually depicted in Table 15 though analysis of standard deviations. Table 16 demonstrates no difference in variances.

Table 16

Significance of the Scripted Modality and PSSA Scores, Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	.148	2	6	.866
PSSA 2012-13	.950	2	6	.438
PSSA 2013-14	.220	2	6	.809

The researched employed a one-way ANOVA between and within groups to determine if a statistical significant difference existed between the utilization of the scripted modality and 3rd grade proficient/advanced reading/ELA scores on the PSSA. Thus, Table 17's representation of the one-way ANOVA for the 2011-12, 2012-13, and 2013-14 school years indicated no statistical difference existed, $F(2, 6) = .51, p = .623$, $F(2, 6) = .00, p = .991$, and $F(2, 6) = .05, p = .947$. In sum, the data indicated that no statistical significant difference existed between school districts utilizing the scripted modality to teach reading and the number of years each district utilized the scripted approach.

Table 17

Scripted Modality and PSSA Scores ANOVA

	df	F	Sig.
PSSA 2011-12			
Between Groups	2	.513	.623
Within Groups	6		
Total	8		
PSSA 2012-13			
Between Groups	2	.009	.991
Within Groups	6		
Total	8		
PSSA 2013-14			
Between Groups	2	.055	.947
Within Groups	6		
Total	8		

Non-scripted/scripted combination. Scripted/Non-Scripted combined reading programs incorporate a hybrid of scripted and non-scripted modalities. School districts and practitioners can utilize various aspects from each approach to teach reading. In some instances, teachers have the autonomy to thread or supplement instruction and/or curriculum independently. However in others cases the use of this approach may encompass a prescribed recipe from the district. For the three years examined, data indicated that those districts engaged in a combination of non-scripted and scripted reading modality, 4 have done so for 1-3 years, 8 districts for 4-6 years, 4 districts for 7-9 years, and 3 school districts have utilized the non-scripted/scripted combination for 10 or more years.

For all years examined, the highest average PSSA scores were realized during the 10 plus years of usage. The data also indicates that the longer this approach is utilized the better the PSSA score for all years examined. These descriptors are represented in Table 18.

Table 18

Frequency Distribution of Non-Scripted/Scripted Modality and PSSA Scores

	N	Mean	Std. Deviation
PSSA 2011-12			
1-3 years	4	70.50	1.29
4-6 years	8	78.12	10.81
7-9 years	4	78.75	6.70
10 + years	3	82.66	5.85
Total	19	77.36	8.53
PSSA 2012-13			
1-3 years	4	69.50	1.29
4-6 years	8	74.25	13.55
7-9 years	4	80.00	4.69
10 + years	3	87.00	2.00
Total	19	76.47	10.49
PSSA 2013-14			
1-3 years	4	65.50	9.18
4-6 years	8	76.50	12.88
7-9 years	4	78.50	4.79
10 + years	3	82.00	2.00
Total	19	75.47	10.70

To test the differences in variance the researcher administered the Test of Homogeneity of Variances to verify the variance between the groups was equal.

Table 19

Non-Scripted/Scripted Combination, PSSA Scores Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	2.042	3	15	.151
PSSA 2012-13	3.413	3	15	.045
PSSA 2013-14	2.768	3	15	.078

As a result of data cited in Levene’s test of homogeneity of variances for the 2012-13 school year (.045) the researcher administered the Robust Tests of Equality of Means, utilizing the Welch and Brown-Forsythe test.

Table 20

Non-Scripted/Scripted Modality PSSA Scores Robust Test of Equality of Means

	Statistic ^a	df1	df2	Sig.
PSSA 2012-13 Welch	50.327	3	6.511	.000
Brown-Forsythe	4.800	3	9.572	.027

Note. ^a Asymptotically F distributed.

Results for the 2012-13 school year demonstrated that statistical significance existed, $F = 50.327$ ($p = .000$) and $F = 4.80$ ($p = .027$) indicated a statistical significant difference between groups is noted. During the 2012-13 school year, both the Welch (.000) and Brown-Forsythe (.027) respectively. Data resulted in a statistically significant difference in the use of a non-scripted/scripted combined modality to teach K-2 reading and proficient/advanced 3rd grade reading/ELA PSSA scores; the longer the modality is used.

The researched employed a one-way ANOVA for school years 2011-12 and 2013-14 between and within groups to determine if a statistical significant difference existed between the utilization of the scripted/non-scripted modality and 3rd grade proficient/advanced reading/ELA scores on the PSSA. According to data presented in the ANOVA, for the 2011-12 school year, $F(3, 15) = 1.38$, $p = .285$ and the 2013-14 school year $F(3, 15) = 1.91$, $p = .171$, no statistical significant difference existed between the groups at $p < .05$ level of confidence.

Table 21

Non-Scripted/Scripted PSSA Results ANOVA

	df	F	Sig.
PSSA 2011-12			
Between Groups	3	1.388	.285
Within Groups	15		
Total	18		
PSSA 2013-14			
Between Groups	3	1.913	.171
Within Groups	15		
Total	18		

Data suggested that in at least one year (2012-13) a statistically significant difference existed between the scripted/non-scripted approach to teach reading and 3rd grade proficient/advanced reading/ELA PSSA scores the longer the modality is being used. During the 2011-12 and 2013-14 school year, the one-way ANOVA test revealed no statistically significant difference between the non-scripted/scripted combination modality to teach reading and 3rd grade proficient/advanced reading/ELA PSSA scores.

Lastly, the researcher sought to analyze all groups together to determine if a statistically significant difference existed between modality used to teach reading and 3rd grade PSSA scores. To test the differences in variance the researcher administered the Test of Homogeneity of Variances based on data presented earlier in Table 9 to verify the variance between the groups was equal. Based on Levene's test for homogeneity of variances, the data did violate this assumption for all three school years tested, 2011-12 ($p = .038$), 2012-13 ($p = .036$), and 2013-14 ($p = .015$). Therefore, Table 22 demonstrates that for all school years, the variances between the groups were not equal.

Table 22

Test of Homogeneity of Variances, All Reading Modalities

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	2.94	3	80	.038
PSSA 2012-13	2.99	3	80	.036
PSSA 2013-14	3.72	3	80	.015

The researcher administered the Robust Tests of Equity of Means. Results indicated that for all three years examined the Welch and Brown-Forsythe test did not indicate a statistical difference between the reading modality used and PSSA scores.

Table 23

Robust Tests of Equality of Means, All Reading Modalities

	Statistic ^a	df1	df2	Sig.
PSSA 2011-12				
Welch	.575	2	17.851	.573
Brown-Forsythe	.852	2	14.602	.447
PSSA 2012-13				
Welch	.030	2	19.794	.971
Brown-Forsythe	.032	2	31.285	.968
PSSA 2013-14				
Welch	.057	2	17.864	.944
Brown-Forsythe	.061	2	15.067	.941

Note. ^a Asymptotically *F* distributed.

To sum, data analyzed in regard to research question 1 indicated that through the lens of all reading modalities examined as a group, no statically significant difference existed between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading. Therefore, the researcher can reject the null hypothesis that the actual use of different reading modalities by themselves will not significantly influence PSSA results at the $p < .05$ level of confidence. However, within the data, themes emerged that produced interesting results. For example, based on Welch and

Brown-Forsythe test, the data indicated that within the scripted/non-scripted combined approach to teach reading a statistical significant difference existed between the number of years a school district engages this modality and increased PSSA scores for the 2012-13 school year. Based on the results presented, it appears that the longer this reading method is utilized, the more likely increased PSSA scores will be realized. In short, districts that can stay the course and remain committed to this approach may realize continued success in PSSA scores.

Research Question 2

Data gathered from the survey also served as a platform to quantitatively determine the perception of responding superintendents between their districts' K-2 reading program effectiveness and 3rd grade proficient/advanced reading/ELA PSSA scores. Survey questions targeting these perceptions will be analyzed to determine if a statistical significant difference existed.

Reading program/PSSA content similarity. Data representing superintendents' perception of the similarity of content taught in their respective K-2 reading program compared to content similarity presented on the PSSA were analyzed. Respondents reported their perception as "very similar," "somewhat similar," "somewhat dissimilar," and "dissimilar."

Table 24

Frequency Distribution of Reading Content/PSSA Similarity

	N	Mean	Std. Deviation
PSSA 2011-12			
Very Similar	21	78.61	8.26
Somewhat Similar	42	78.14	8.86
Somewhat Dissimilar	6	79.50	5.54
Dissimilar	1	83.00	.
Total	70	78.47	8.31
PSSA 2012-13			
Very Similar	21	80.28	7.34
Somewhat Similar	42	75.69	10.07
Somewhat Dissimilar	6	75.83	8.44
Dissimilar	1	84.00	.
Total	70	77.20	9.28
PSSA 2013-14			
Very Similar	21	77.14	10.47
Somewhat Similar	42	73.42	10.43
Somewhat Dissimilar	6	80.83	5.23
Dissimilar	1	78.00	.
Total	70	75.24	10.21

Results indicated that for two of the years examined, 2011-12 and 2012-13, although only one respondent reported, the mean 3rd grade PPSA score for that superintendent who perceived that his/her district’s K-2 reading program content was “Dissimilar” to the content of the PSSA yielded the highest PSSA score, 83% and 84%. However, those superintendents who perceived their district’s K-2 reading program content was “Somewhat Dissimilar” (6) to the content of the PSSA yielded the highest PSSA score, 81% for the 2013-14 school year. Ironically, those superintendents who perceived their district’s K-2 reading program content was “Very Similar” (21) and “Somewhat Similar” (42) to the content of the PSSA yielded the lowest PSSA scores for the 2011-12 (78% and 78%) and 2013-14 (77% and 73%) school years.

The researcher utilized a one-way ANOVA between and within groups to test for differences for the 2011-12, 2012-13, and 2013-14 school years respectively, in determining if a statistical significance difference existed between superintendent perceptions of their district's K-2 reading program content is similar to the content of the PSSA. One-way ANOVA results for the 2011-12, 2012-13, and 2013-14 school years indicated that no statistical significant difference existed between superintendents perception that their K-2 reading program content is "Very Similar," "Somewhat Similar," "Somewhat Dissimilar," and "Dissimilar" to the content assessed in the PSSA: $F(3, 66) = .148, p = .931$, $F(3, 66) = 1.389$, and $p = .254$ and $F(3, 66) = 1.325, p = .274$ at the $p < .05$ level of confidence.

Table 25

K-2 Reading Program/PSSA Content Similarity, ANOVA

	df	F	Sig.
PSSA 2011-12			
Between Groups	3	.148	.931
Within Groups	66		
Total	69		
PSSA 2012-13			
Between Groups	3	1.389	.254
Within Groups	66		
Total	69		
PSSA 2013-14			
Between Groups	3	1.325	.274
Within Groups	66		
Total	69		

The researcher employed the Test of Homogeneity of Variances to determine if the variance between groups is equal. According to the Levene Statistic, no variance between the groups was realized: 2011-12 ($p = .383$), 2012-13 ($p = .400$), and 2013-14 ($p = .305$) respectively.

Table 26

Reading Program/PSSA Content Similarity, Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	.973 ^a	2	66	.383
PSSA 2012-13	.929 ^b	2	66	.400
PSSA 2013-14	1.209 ^c	2	66	.305

Note. ^a Groups with only case are ignored in computing the test of homogeneity of variance for 2012.

^b Groups with only case are ignored in computing the test of homogeneity of variance for 2013.

^c Groups with only case are ignored in computing the test of homogeneity of variance for 2014.

Classroom size and PSSA results. Classification of student classroom

population were categorized utilizing the following structure, 1-15 students, 16-20 students, and 21-25 students respectively.

Table 27

Frequency Distribution of Classroom size and PSSA Scores

	N	Mean	Std. Deviation
PSSA 2011-12			
1-15	8	74.12	12.63
16-20	30	78.90	6.84
21-25	31	79.25	8.39
Total	69	78.50	8.37
PSSA 2012-13			
1-15	8	77.37	9.16
16-20	30	77.50	7.78
21-25	31	76.90	10.94
Total	69	77.21	9.35
PSSA 2013-14			
1-15	8	76.62	15.42
16-20	30	74.90	8.35
21-25	31	75.41	10.76
Total	69	75.33	10.26

The data indicated that for the three years tested, 8 school districts reported classroom size of 1-15 students, 30 indicated classroom size of 16-20 students, and 31

school districts reported classroom size of 21-25 students. The highest PSSA score was realized during the 2011-12 school year (79.25%), with classroom size at its largest reported capacity of 21-25 students. For the 2011-12 (78.90%) and 2012-13 (77.50%) school years the second highest reported PSSA scores were realized with class sizes of 16-20 students. In the 2013-14 school year only did the highest PSSA score (76.62%) result from the lowest class size of 1-15 students.

The researcher administered the Test of Homogeneity of Variances to determine if a difference existed in the variance between the groups. The data did reveal a difference in variances for school years 2011-12 and 2013-14.

Table 28

Class Size and PSSA Scores Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PSSA 2011-12	4.485	2	66	.015
PSSA 2012-13	1.000	2	66	.373
PSSA 2013-14	3.432	2	66	.038

For the 2012-13 school year, a one-way ANOVA was administered between groups to analyze K-2 grade classroom size and 3rd grade proficient/advanced reading/ELA PSSA scores for the 2012-13 school year. Results indicated for the 2012-13 school year, no statistical significant difference in the average classroom size and 3rd grade proficient/advance reading/ELA PSSA scores: $F(2, 66) = .031, p = .969$ at $p < .05$.

Table 29

Classroom Size and PSSA scores, ANOVA

	df	F	Sig.
PSSA 2012-13			
Between Groups	2	.031	.969
Within Groups	66		
Total	68		

One-way ANOVA results are based on the assumption of homogeneity of variances. Conversely, based on Levene’s test for homogeneity of variances, the data violate this assumption for the 2011-12 (.015) and 2013-14 (.038) school years. Since the Homogeneity Test of Variances indicated a violation for the 2011-12 and 2013-14 school years, the researcher then used the Robust Test of Equality of Means the Welch and Brown-Forsythe test in to determine if a statistical difference existed. The Welch and Brown-Forsythe test indicated that for the 2011-12 and 2013-14 school year, $F = .575$ ($p = .573$) and $F = .852$ ($p = .447$) and $F = .057$ ($p = .944$) and $F = .061$ ($p = .941$) respectively; no statistical significant difference existed at the $p < .05$ level of confidence. The data did not reveal a statistically significant difference between classroom size and 3rd grade proficient/advance reading/ELA PSSA scores. In sum, the data indicated that contrary to common thought and practice, lower classroom size did not produce significant differences in PSSA scores.

Table 30

Robust Test of Equality of Means. Class Size and PSSA Results

	Statistic ^a	df1	df2	Sig.
PSSA 2011-12				
Welch	.575	2	17.851	.573
Brown-Forsythe	.852	2	14.602	.447
PSSA 2013-14				
Welch	.057	2	17.864	.944
Brown-Forsythe	.061	2	15.067	.941

Note. ^a Asymptotically *F* distributed.

Daily K-2 reading instruction and compatibility to the PSSA. Next, the researcher utilized the survey to quantifiably measure the perceptions of superintendents’ in the Commonwealth of Pennsylvania as to their districts K-2 reading instructional methods used to teach reading compatibility to the content of the PSSA. The response data were categorized into “yes” and “no” answers. The survey question asked: “In regards to the K-2 instructional method used in your district, do you perceive your reading program daily instruction compatible with the PSSA?” The researcher employed an Independent Samples Test in the form of a two tailed t-test to determine if a statistically significant difference existed between those districts who perceived their instructional methods are compatible with the PSSA and those who do not.

Table 31

District K-2 Reading Instruction and PSSA Compatibility, Group Statistics

Perception of reading program daily instruction compatible with the PSSA?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	52	78.96	8.41
No	17	76.70	8.19
PSSA 2012-13			
Yes	52	78.13	8.89
No	17	73.94	10.12
PSSA 2013-14			
Yes	52	75.63	10.45
No	17	73.88	9.93

Results indicated that for the 2011-12, 2012-13, and 2013-14 school years, 52 superintendents’ responded “yes” and 17 responded “no.” Data showed that those school leaders, who perceived that the K-2 daily instructional method utilized in their district was compatible to the PSSA, realized average PSSA scores higher than those who responded “no” for all three years tested. For example, 2011-12 “yes” 78.96%, “no” 76.70%, 2012-13 “yes” 78.13%, “no” 73.94%, and 2013-14 “yes” 75.63%, “no” 73.88%.

A two-tailed Independent Samples t-test was administered to determine if a significant difference existed. The Levene’s results indicated that for the 2011-12, 2012-13, and 2013-14 school years, $t(67) = .965, p = .338$, $t(67) = 1.631, p = .108$, and $t(67) = p = .546$ respectively, no violation in the variances assumed. In summary, the Independent Samples t-test showed no statistical significant difference in the perception of superintendents regarding the K-2 daily instructional method used in their district, and compatibility with the PSSA at the $p < .05$ level of confidence.

Table 32

K-2 Reading Instruction and PSSA Compatibility, Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal Variances Assumed	.038	.845	.965	67	.338
Equal Variances not Assumed			.978	27.88	.336
PSSA 2012-13 Equal Variances Assumed	.121	.730	1.631	67	.108
Equal Variances not Assumed			1.526	24.595	.140
PSSA 2013-14 Equal Variances Assumed	.304	.583	.607	67	.546
Equal Variances not Assumed			.623	28.526	.538

PSSA comparability to teachers' judgment. Next, the researcher wanted to determine the perceptions of superintendents in regard to the PSSA measuring accurate student reading achievement as compared to the classroom teachers' judgment. Thus, the survey question, "In regard to K-2 reading instructional methods used in your district, do you perceive the PSSA an accurate measure of student reading achievement as the teacher's judgment?" The response data were categorized into "yes" and "no" answers.

Table 33

PSSA Comparability and Teachers' Judgment, Group Statistics

Perception that the PSSA is an accurate measure of student reading achievement as the teacher's judgment?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	21	78.04	10.37
No	48	78.70	7.45
PSSA 2012-13			
Yes	21	76.76	11.51
No	48	77.22	8.29
PSSA 2013-14			
Yes	21	75.61	12.38
No	48	74.97	9.34

Results indicated that for the three years examined, 21 superintendents' responded "yes," and 48 responded "no." Of note, over double the respondents indicated they did not perceive the PSSA as an accurate indicator of student learning as the teacher's judgment. The data trend agreed with this perception during the 2011-12 and 2012-13 school years, producing higher PSSA scores 78.70% and 77.22% respectively. However, for the 2013-14 school year those superintendents responding to the affirmative produced higher PSSA score than those who did not, 75.61%.

To sum, data indicated that two times as many superintendents responded "no" than "yes" in regard to their perception that the PSSA is an as accurate measure of student achievement as the teacher's judgment. However, the data resulted in mean 3rd grade proficient/advanced reading/ELA PSSA scores that were closely aligned to each

other. Additionally, the standard deviations of the respondents reporting “yes” are relatively large, lending themselves to possible scoring overlaps.

A two-tailed Independent Samples t-test was administered. The Levene’s results indicated that for the 2011-12, 2012-13, and 2013-14 school years, $t(67) = .965, p = .338$, $t(29.469) = -.168, p = .868$, and $t(67) = p = .546$ respectively, for equal variances not assumed at $p < .05$. In summary, the Independent Samples t-test results indicated that for the all three school years, no statistical significant difference existed. Therefore, the data do not support the perception of school leaders that the PSSA is not an accurate measure of student achievement as the teacher’s judgment.

Table 34

PSSA Comparability and Teachers’ Judgment 2-Tailed Independent Samples t-test

	Levene’s Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal Variances Assumed	3.774	.056	-.300	67	.765
Equal Variances not Assumed			-.264	29.418	.794
PSSA 2012-13 Equal Variances Assumed	4.348	.041	-.191	67	.849
Equal Variances not Assumed			-.168	29.469	.868
PSSA 2013-14 Equal Variances Assumed	1.471	.229	.236	67	.814
Equal Variances not Assumed			.212	30.406	.834

District reading texts/material compatibility to PSSA content. To address superintendents’ perceptions of their districts K-2 reading texts/materials compatibility to the 3rd grade proficient/advanced reading/ELA scores to the content of the PSSA, respondents answered the following question: “In regard to K-2 reading instructional methods used in your district, do you perceive the instructional texts and materials used to teach reading are compatible with the PSSA?” The response data were categorized into “yes” and “no” answers.

Table 35

Text/Material Compatibility to PSSA, Group Statistics

Perception that instructional texts and materials used to teach reading are compatible with the PSSA?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	47	78.40	9.12
No	19	78.78	5.99
PSSA 2012-13			
Yes	47	77.95	9.84
No	19	75.36	7.85
PSSA 2013-14			
Yes	47	75.97	10.99
No	19	73.78	8.29

Results indicated that for the three school years tested, over twice as many superintendents responded “yes,” (47) than those who responded “no,” (19).

Additionally, for the 2012-13 and 2013-14 school years, those school leaders who responded “yes” yielded higher PSSA scores (77.95% and 75.97%) than those who responded “no” (75.36% and 73.78%). Only during the 2011-12 school year did this trend reverse. For example, those who responded “yes” acquired a mean PSSA score of

78.40% and those who responded “no” yielded an average score of 78.78%. In sum, the data indicated that over twice as many school leaders (47) perceived that their K-2 reading texts and materials were compatible with the PSSA than those who did not (19). However, for the years surveyed, average PSSA scores of respondents remained somewhat consistent, although during the 2012-13 and 2013-14 school years, slight increases were noticed. In addition, standard deviation variables are represented in such large capacity that overlap in PSSA scores is a possibility.

The researcher employed a two-tailed Independent Samples t-test. The Levene’s results indicated that for the 2011-12, 2012-13, and 2013-14 school years, no violation in the variances assumed. In summary, the Independent Samples t-test indicated no statistical significant difference existed for the three years examined.

Table 36

Text/Material Compatibility to PSSA, Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2- tailed)
PSSA 2011-12 Equal Variances Assumed	3.673	.060	-.169	64	.866
Equal Variances not Assumed			-.201	50.242	.841
PSSA 2012-13 Equal Variances Assumed	.224	.638	1.021	64	.311
Equal Variances not Assumed			1.124	41.553	.268
PSSA 2013-14 Equal Variances Assumed	1.818	.182	.781	64	.438
Equal Variances not Assumed			.879	43.967	.384

Instructional methods and quality of education. To address K-2 reading instructional methods used and 3rd grade proficient/advanced reading/ELA PSSA scores compared to the perceived quality of education received, the following survey question provided insight: “In regard to K-2 reading instructional methods used in your district, do you perceive 3rd grade score on the PSSA accurately reflect the quality of education

students have received?” Response data were categorized into “yes” and “no” answers. Results indicated that for the three school years examined, 18 superintendents’ responded “yes,” and 51 responded “no.” For all years examined, those superintendents who responded “yes” acquired higher PSSA scores (80.27%, 81.22%, and 78.33%) than the overwhelmingly majority responding “no” (77.74%, 75.70%, and 74.15%).

Table 37

Instructional Method and Quality of Education, Group Statistics

In regards to K-2 reading instructional methods used in your district, do you perceive 3rd grade score on the PSSA accurately reflect the quality of education students have received?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	18	80.27	8.95
No	51	77.74	8.12
PSSA 2012-13			
Yes	18	81.22	7.40
No	51	75.70	9.58
PSSA 2013-14			
Yes	18	78.33	8.55
No	51	74.15	10.70

Review of these data suggested that those superintendents who perceive that their K-2 reading instructional methods used within their district accurately reflect the quality of education students are receiving, performed better on the PSSA than those who answered “no” for all three years surveyed. However, the standard deviation of all three years may result in score overlap.

A two-tailed Independent Samples t-test was administered. Results indicated that for the 2011-12 and 2013-14 school years, $t(67) = 1.107, p = .272$ and $t(67) = 1.49, p =$

.140 respectively, no statistical significant difference existed at the $p < .05$ level of confidence. In contrast, for the 2012-13 school year, data showed, $t(67) = 2.215$, $p = .030$; thus, resulting in a statistical significant difference at $p < .05$ level significance. Consequently, the Levene's test revealed no violation of variances.

Table 38

Instructional Method and Quality of Education, Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal Variances Assumed	.201	.655	1.107	67	.272
Equal Variances not Assumed			1.056	27.531	.300
PSSA 2012-13 Equal Variances Assumed	1.498	.225	2.215	67	.030
Equal Variances not Assumed			2.506	38.512	.017
PSSA 2013-14 Equal Variances Assumed	1.155	.286	1.494	67	.140
Equal Variances not Assumed			1.663	37.112	.105

In summary, for the 2011-12 and 2013-14 school years data suggested that no statistical significant difference existed (.272 and .140). In contrast, during the 2012-13 school year a statistically significant difference existed (.030) between superintendents whose perception that their K-2 reading instructional methods used and 3rd grade proficient/advance reading/ELA PSSA score accurately reflect the quality of education

students are receiving within their districts. Thus, data suggested that school leader confidence in the instructional methods used to teach reading yield positive standardized test results.

PSSA scores, student characteristics, and school effectiveness. To adequately measure the degree to which school leaders perceive scoring differences on the PSSA are more a reflection of school effectiveness or student background characteristics, the survey posed the question: “In regard to K-2 reading instructional methods used in your district, do you perceive score differences on the 3rd grade PSSA reflect changes in the characteristics of students rather than changes in school effectiveness?” Response data were categorized into “yes” and “no” answers. Results indicated that for all three school years tested, 40 superintendents responded “yes” and 30 responded “no.” The data showed that for all three years examined, those superintendents who responded “no” acquired higher PSSA scores (80.13%, 79.90%, and 77.60%) than those who responded “yes” (77.22%, 75.17%, and 73.47%).

Table 39

PSSA Scores, Student Characteristics, and School Effectiveness, Group Statistics

In regards to K-2 reading instructional methods used in your district, do you perceive score differences on the 3 rd grade PSSA reflect changes in the characteristics of students rather than changes in school effectiveness?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	40	77.22	8.81
No	30	80.13	7.42
PSSA 2012-13			
Yes	40	75.17	9.57
No	30	79.90	8.27
PSSA 2013-14			
Yes	40	73.47	10.83
No	30	77.60	8.96

The central tendency scores suggested that those superintendents responding to the survey are almost equally split (40 “yes” and 30 “no”) in regards to their perception that the K-2 reading instructional methods used within their respective districts are responsible for 3rd grade proficient/advanced reading/ELA PSSA scores when taking into consideration changes in student characteristics as opposed to school effectiveness. Of note, those superintendents who responded “no” produced greater PSSA scores than those who responded “yes.” Therefore, data indicated that a student’s background characteristics may not be a predictor or overriding factor of educational success.

The researcher administered an Independent Samples t-test. Results indicated that for the 2011-12 and 2013-14 school years, $t(68) = -1.460, p = .149$ and $t(68) = -1.694, p$

= .095 respectively, no statistically significant difference existed at the $p < .05$ level of confidence. In contrast, for the 2012-13 school year, data showed, $t(68) = -2.163$, $p = .034$; thus, resulting in a statistically significant difference at $p < .05$. In addition, the Levene's test revealed no violation in variances. Thus, those school leaders who do not perceive a student's background as a determining factor in the learning process, realize greater PSSA scores than those who do.

Table 40

PSSA Scores, Student Characteristics vs. School Effectiveness, Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal Variances Assumed	.984	.325	-1.460	68	.149
Equal Variances not Assumed			-1.496	67.033	.139
PSSA 2012-13 Equal Variances Assumed	.109	.743	-2.163	68	.034
Equal Variances not Assumed			-2.209	66.571	.031
PSSA 2013-14 Equal Variances Assumed	1.682	.199	-1.694	68	.095
Equal Variances not Assumed			-1.741	67.299	.086

In summary, during the 2012-13 school year a statistically significant difference existed (.034) between superintendents' perception that their K-2 reading instructional methods used and 3rd grade proficient/advance reading/ELA PSSA score are a reflection

of changes in students characteristics as opposed to changes in school effectiveness. The data reflects that those superintendents who perceive a student's background characteristics as a non-factor to learning produced higher PSSA scores than those who feel that student background characteristics influence learning. For the 2011-12 and 2013-14 school years respectively, data suggested that no statistical significant difference existed (.149 and .095) in regards to the survey question.

PSSA and educational practices. In an effort to gain knowledge of superintendents' K-2 reading methods used within their districts and their perception that the PSSA leads teachers to teach in way that contradict their own ideas of good educational practice, the survey asked the following question: "In regard to K-2 reading instructional methods used in your district, do you perceive that the PSSA leads some teachers to teach in ways that contradict their own ideas of good educational practice?" Response data were categorized into "yes" and "no" answers. Results indicated that for three years tested, 55 superintendents' responded "yes," and 15 responded "no."

Table 41

PSSA and Educational Practices, Group Statistics

Perception that the PSSA leads some teachers to teach in ways that contradict their own ideas of good educational practice?	N	Mean	St. Deviation
PSSA 2011-12			
Yes	55	77.81	7.80
No	15	80.86	9.89
PSSA 2012-13			
Yes	55	76.30	8.49
No	15	80.46	11.47
PSSA 2013-14			
Yes	55	74.56	9.48
No	15	77.73	12.61

Data suggested that those superintendents responding to the survey overwhelmingly (55 “yes” and 15 “no”) perceived that K-2 reading instructional methods used within their respective districts lead teachers to teach in ways that contradict their own ideas of good educational practice. Ironically, for each of the school years surveyed, those school leaders who responded “no” to the survey, received 3rd grade proficient/advanced reading/ELA PSSA scores higher (80.86%, 80.46%, and 77.73%) than those superintendents’ who answered “yes” (77.81%, 76.30%, and 74.56%).

Results from the Independent Samples t-test indicated that for the 2011-12 , 2012-13, and 2013-14 school years, $t(68) = -1.264, p = .211$, $t(68) = -1.553, p = .125$, and $t(68) = -1.066, p = .290$ respectively, no statistical significant difference existed between the groups at the $p < .05$ level of confidence. Additionally, the Levene’s test revealed no violation in variances. Therefore, the data suggested that during the 2011-12, 2012-13,

and 2013-14 school years respectively, no statistically significant difference existed between superintendents' perception that their K-2 reading instructional methods used in conjunction with 3rd grade proficient/advanced reading/ELA PSSA score leads some teachers to teach in manners that contradict their own ideas of good educational practice.

Table 42

PSSA and Educational Practices, Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
PSSA 2011-12 Equal Variances Assumed	.897	.347	-1.264	68	.211
Equal Variances not Assumed			-1.103	19.013	.284
PSSA 2012-13 Equal Variances Assumed	1.202	.277	-1.553	68	.125
Equal Variances not Assumed			-1.309	18.394	.207
PSSA 2013-14 Equal Variances Assumed	.602	.441	-1.066	68	.290
Equal Variances not Assumed			-.906	18.535	.377

Research questions and modality used to teach reading. The researcher compared the survey questions to the approaches to teach reading teacher-developed, non-scripted (use of textbooks), scripted (SBSL, Inc.), and the scripted/non-scripted combination of modalities through the Test of Homogeneity of Variances and the Robust Tests of Equality of Means.

Table 43

Frequency Distribution, Reading Modality and Survey Questions

			N	Mean	Std. Deviation
Does your district's modality of teaching reading align with what the PSSA measures?	2011-12	Teacher Developed	8	81.12	7.62
		Non-scripted	49	79.83	7.10
		Scripted	8	74.00	12.58
		Scripted/Non-Scripted	19	77.36	8.53
		Total	84	78.84	8.19
The instructional texts and materials the district utilizes to teach reading are comparable with the reading/ELA portion of the PSSA?	2012-13	Teacher Developed	8	80.50	5.55
		Non-scripted	49	79.02	7.28
		Scripted	8	72.75	13.89
		Scripted/Non-Scripted	19	76.47	10.49
		Total	84	77.98	8.82
To what degree do you feel that your third grade PSSA scores are positively influenced by your K-2 reading program?	2013-14	Teacher Developed	8	81.12	7.73
		Non-scripted	49	76.16	8.59
		Scripted	8	68.12	14.51
		Scripted/Non-Scripted	19	75.47	10.70
		Total	84	75.71	9.94

For all three years and survey questions examined, 8 districts employed the teacher-developed approach to teach reading, 49 utilized the non-scripted modality, 8 used the scripted approach, and 19 employed the scripted/non-scripted combination approach. In addition, for all three years examined, the teacher-developed approach yielded the highest

PSSA scores 81.25%, 80.50%, and 81.12% respectively. Second highest scores were realized by those districts using the non-scripted modality for all three years tested 79.83%, 79.02%, and 76.16%. Additionally, for all three years examined, the scripted/non-scripted combination approach yielded the third highest PSSA scores, 77.36%, 76.47%, and 75.47%. The lowest PSSA scores for all three years tested, were the scripted modality, yielding 74%, 72.75%, and 68.12%.

The researcher administered the test for Homogeneity of Variances based on the assumption that the variances between the groups is equal.

Table 44

Reading Modality and Survey Questions, Test for Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
2011-12 In regard to K-2 reading instructional methods used in your district, do you perceive your reading program daily instruction compatible with the PSSA?	2.940	3	80	.038
2012-13 In regard to K-2 reading instructional methods used in your district, do you perceive the instructional texts and materials used to teach reading are compatible with the PSSA?	2.993	3	80	.036
2013-14 To what degree do you feel that your third grade PSSA scores are positively influenced by your K-2 reading program?	3.724	3	80	.015

Since all three years resulted in violations to the assumption that differences may exist between the variances (2011-12, .038; 2012-13, .036; and 2013-14, .015) regarding modality used to teach reading to K-2 students and the quantitative survey questions, the researcher administered the Robust Tests of Equality of Means to determine if a statistically significant difference existed between the groups. The Welch and Brown-Forsythe data showed that for all three years tested, no statistically significant difference existed between the approach utilized to teach reading and the survey questions.

Table 45

Robust Tests of Equality of Means, Reading Modality and Survey Questions

	Statistic ^a	df1	df2	Sig.
PSSA 2011-12				
Welch	.969	3	17.332	.430
Brown-Forsythe	1.167	3	21.266	.345
PSSA 2012-13				
Welch	1.008	3	18.227	.412
Brown-Forsythe	1.180	3	19.661	.343
PSSA 2013-14				
Welch	1.788	3	17.824	.186
Brown-Forsythe	1.938	3	21.866	.153

In summary, the data indicated that the researcher can reject the null hypothesis that no statistically significant difference existed in regards to research question 2, “Is there a significant difference in the superintendent’s perception of the district’s third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?” Statistically significant findings appeared in two categories of the survey questions. First, in regard to the survey question: “In regards to K-2 reading instructional methods used in your district, do you perceive 3rd grade score on the PSSA accurately reflect the quality of education students have received?” During the 2012-13 school year, a statistically significant finding was revealed as represented by

Table 38. In a similar manner, for the 2012-13 school year, data indicated a statistically significant difference in regard to the survey question: “In regard to K-2 reading instructional methods used in your district, do you perceive score differences on the 3rd grade PSSA reflect changes in the characteristics of students rather than changes in school effectiveness?” This data is documented in Table 40; thus PSSA results of those school leaders who perceive all students can learn, regardless of background characteristics often result in higher test results than those who do not.

Research Question 3

Superintendent interviews were utilized to provide a deeper, richer and enlightening foundation to the quantitative data presented earlier. Therefore, in phase two of the study superintendent interviews assisted in gathering information in regard to superintendents’ perceptions of effective and ineffective K-2 reading practices used within their respective districts and within modality used to teach reading. Participants for the telephone interview were chosen as result of answering positively to “agree,” and providing contact information, to a telephone interview protocol through the initial survey. A list of seven interview questions was prepared by the researcher. Subsequently, two superintendents were chosen within each reading modality, totaling eight telephone interviews.

The researcher recorded each of the 8 interviews. Interview sessions ranged from 15 minutes to 45 minutes in length. As mentioned earlier, transcription of superintendent dialogues was through Transcribe Voice Detection software (Wreally Studios, 2015) and hand analysis coding (Creswell, 2012). Once interviews were completed, the researcher reviewed each interview for accuracy. Textual miscues were corrected to align with the

recorded dialogue. Transcriptions were hand-color-coded and highlighted to account for similarities, dis-similarities, trends, or recurring themes in the data, resulting in 24 pages of text.

Review of the transcripts demonstrated numerous strands of focus among the participants regardless of reading modality used to teach reading. In the presentation of this information, only fictitious names were used. This was intended to maintain anonymity of participants. The following presentation of data utilized a code for each superintendent within each reading modality. For example, TD1 and TD2 represented two superintendents of a teacher-developed modality, NS3 and NS4 represented two superintendents of a non-scripted commercialized modality, S5 and S6 represented two superintendents of the scripted (SBSL, Inc.), and C7 and C8 represented two superintendents of the scripted/non-scripted combined modality respectively.

Table 46

List of Interviewees and Modality Used to Teach Reading

Reading Modality	Teacher-Developed	Non-Scripted	Scripted	Scripted/Non Scripted Combination
TD1	X			
TD2	X			
NS3		X		
NS4		X		
S5			X	
S6			X	
C7				X
C8				X

Interview discussion. The interview questions targeted the effective and ineffective practices of teaching reading within the approaches to teach reading. Data were coded for likenesses and dis-likenesses. For example, any response duplicated more

than twice among interviewees was considered relevant and coded as such. Data were reported in narrative and table form, aligned with educational research practice. “The primary form for representing and reporting findings in qualitative research is a narrative discussion; there is no set form for this narrative, which can vary from study to study” (Creswell, 2012, p. 254).

Perceptions of effective reading practices. In response to interview question 1: “What are your perceptions of effective K-2 reading practices in your school district and in general?” The initial response of TD1 reflected a focus on “moving to small flexible grouping for K-2 grades, using books students want to read.” In addition, TD1 responded “we have some whole group, where all students are trying to get through the reading, we try to challenge them.” A strong belief that “everybody is responsible for learning expectations,” emerged as foundation for learning to read. Adding to this platform, TD2 perceived that effective reading practices incorporate a sound baseline starting point, “bench-mark assessments by the classroom teacher... provides more in-depth information about students’ reading achievement and their reading levels.” This leads to “guided reading, teachers work with students in groups based on their reading level, these groups are flexible.” Currently, this district is piloting a “balanced literacy approach,” to reading, TD2 continues “reading and writing are integrated, fiction and non-fiction text sets are used for whole group and small group instruction.” Implementation includes “two literacy coaches that rotate among four schools, collaborating with teachers, co-plan, exploring new strategies, review data, and plan instruction.”

When addressing practitioners of the non-scripted modality of teaching reading, NS3 perceived effective reading practices encompassed the utilization of the Response to

Intervention (RtII) process mentioned Chapter 2. “We have implemented K-2 grades with Rti, this is our third year of implementation, and we do an additional one-half hour of intervention or enrichment every day.” “We found this to be successful in moving to Common Core.” Additional effective practices involved, “allowing teachers to pick their own supplemental material to fit our curriculum, we found this to be successful, just keeping up with the times.” Adding to the argument, “. . .we were above the state average in the ELA section of the PSSA, which I think speaks volumes.” Next, NS4 feels that “we have been working very hard in our district to improve our K-2 reading program; we implemented the Rti process looking hard at our core reading program.” Success has been found by “incorporating every student into the core reading program, we work hard to make it as effective as possible.” Students are offered “additional interventions where needed . . .phonemic awareness is part of the intervention cycle.” “We progress monitor students every other week, intensive is every week, benchmark students are every month.” Of note, this school district is in their first year without utilizing a scripted (SBSL) program.

The documentation of effective reading practices of those school districts engaged in a scripted (SBSL) modality to teach reading found that S5 are “focus a lot on daily phonemic awareness, fluency, vocabulary, and writing activities. . . with formative assessments and utilization of the RtII process.” S5 believes that success is rooted in “trying to keep it simple, sticking to what we can do, we experience a great amount of teacher turnover.” Continuing, “We can specialize, we know how we can make it work, we do a lot of independent practice through a variety of genres.” Similarly, S6 perceived effective reading practices used in this district involve “structured phonics with an

analytic and synthetic direct instruction approach...phonics morphology and decoding skills” are targeted. “Comprehension is on the language level, structured instruction helps kids master the foundation of reading.” Success is also recognized through “progress monitoring, and the use of the big 5.”

The ability to thread the basal text and the scripted program are viewed by C7 as an effective reading strategy. “By applying the instructional strategies developed through our scripted reading program, we are able to offer a stronger reading curriculum to our students.” C7 continued, “professional development in the beginning really sealed the deal for effective teaching.” “We learned how to identify each student’s strengths and weaknesses, and progressively document gains and gaps.” C8 added that, “the RtII block allows our students who are having difficulty catch up.” “We focus on the concepts of phonics, fluency, vocabulary, comprehension, and phonemic awareness daily.” C8 concluded that “conscience efforts to incorporate reading and writing into all of the subject areas is of great importance, and increases student learning.”

Table 47

Effective K-2 Reading Practices

Interviewee	Small Groups	Data Use	RTi	Progress Monitoring	Big 5	PD
TD1	X					
TD2	X	X				X
NS3		X	X			
NS4			X	X	X	
S5			X		X	
S6				X	X	X
C7			X		X	
C8						

In summary, regarding superintendents’ perceptions of effective reading practices, there appeared to be a common thread of explicit instruction within the use of data, the

Rti process, the incorporation of the phonics based approach to teach reading (Big 5), and professional development within all modalities mentioned. Adding to this platform, progress monitoring and the ability to engage students in small flexible groups emerged as a practice of value to the respondents. Consequently, this train of thought aligns with the methodologies described in Chapter 2 regarding SBSL, and the work of Moats and Tolman (2009).

In addressing interview question 2: “What are your perceptions of ineffective K-2 reading practices in your school district and in general?” An overwhelming number of superintendents TD1, TD2, NS3, NS4, S5, S6, C7, and C8 responded that “there were no ineffective reading practices” being utilized in their districts. However, there was discussion regarding ineffective reading practices in general. TD1 explained that “whole group learning, where students are passive listeners” is ineffective. TD1 added, “I think we’re relying so heavy on a basal program or reading series...they’re basically all the same.” The conversation continued, “...basal text programs are being used as a stand-alone product...should be resource.” This sentiment was echoed by TD2, “in general, there are school districts that use whole group and have children reading from the same text regardless of individual reading achievement.”

Interviewee NS3, described ineffective reading practices as those that “are not taking note of the changes...not aligning to the new Core.” NS3 also perceived the “effects of data analysis and lingo changes in the reading process are not being effectively taught to students.” Additionally, “not allowing flexibility and using supplemental material.” Similarly, NS4 perceived “pulling kids out of the core program for remediation allows them to fall further behind.” Reason being, when students are not

part of that (core) they're not hearing the comprehension piece and the decoding...once they have that they are still behind.” NS4 continued, “If we skip the skills and just give access to more reading, kids don't have the skills to be successful.” However, “if all we do is skill work, that's not effective either.”

Ineffective reading practices, according to S5, focused on “engagement in fancy programs such as 100 book challenge, it's too tedious and time consuming.” Adding to this platform, S6 perceived that “giving children leveled text that has words in there they have not met or mastered.” “I'll focus on sight words, that is a strategy that is defunct and ineffective, should no longer be part of our reading instruction.”

Ineffective reading practices according to C7 included “reliance on one type of instructional approach to deliver the content.” “Some teachers are not using the resources that are available to them through technology or PD.” C8 took the approach that “failing to understand how learning works is ineffective. We must understand how the brain works at different chronological points in a child's development to adequately address comprehension.”

Table 48

Ineffective Reading Practices

Interviewee	None in District	Heavy Reliance on Basal	Lack of Flexibility	Whole Group	Outdated Materials
TD1	X	X	X	X	X
TD2	X		X		
NS3	X	X	X		X
NS4	X	X	X	X	X
S5	X				X
S6	X				
C7	X	X	X		X
C8	X				

In sum, regarding superintendents perceived ineffective reading practices to include whole group instruction where students are passive listeners, lacking small flexible groupings of students and over-reliance on the basal text as the sole mechanism to deliver reading instruction. In addition, the use of outdated materials and programs such as “fancy” reading challenges and not allowing students to participate in whole group instruction are considered ineffective reading practices.

Reflections of interview question 3: “In regard to K-2 reading instructional methods used in your district, what is your perception that the 3rd grade reading/ELA portion of the PSSA measures high standards of achievement? Why? Perceptions of TD1 targeted recent and past research citing “research over the past 20 years claiming 3rd grade as the magical year for some reason, that if a kid doesn’t have then, you’re not going to get it.” TD1 echoed the trend mentioned in Chapter, I and II regarding the use of Title I funds and scripted resources, “that's why we have added a lot of our Title I money to resources entering into our kindergarten, first, and second grades to make sure that our kids are reading at grade level especially in the 2nd grade area.” Adding to that foundation, “we have implemented literacy intervention kits, and those have worked out outstanding for us actually, now we are using our benchmark testing to determine, to see what's typical among grade levels, we determine where are they reading at and then we put them in small reading groups.” The researcher noticed that responses of this superintendent failed to answer the interview question with specifics, it is unknown if the response was intentional or not. In a similar manner, TD2 was uncomfortable with this question and did not offer a response.

School leader NS3 had similar responses to TD1 and TD2, however, NS3 touched on some of the points mentioned in the interview question. For example, NS3 feels that “RtII is helping students align content to high standards of achievement.” However, it was unclear to the researcher if this response was intentioned as a general statement or meant to be a link to what the PSSA assesses. Continuing, “I would say that we have commonality here in our grade levels we feel that writing ties into reading and we implement that whenever we can and often so we're keeping consistency.” Providing a more detailed response to the interview question, NS4 stated, “I believe the new reading/ELA PSSA in third grade really measures high level of achievement higher than where we were.” NS4 further stated, “The problem, is it possible to get to our goal and get all kids decoding by the end of grade 2.” Furthermore, “kids that are struggling on decoding are going to be blown away by the new test.”

Respondent, S5’s perception of the interview question focused on multiple measures of assessment to gauge a student’s understanding. For example,

I think students should have multiple avenues by which they demonstrate their mastery and understanding of the standards. I don't like the PSSA, it's just one measure for student achievement and I don't think it reflects the majority of the instructional methods used in the classroom used in the learning.

Consequently, paralleling research cited in Chapter I and II regarding the importance of reading by the end of third grade, S6 responded “I know grade level reading by the end of third grade and certainly by 4th grade is critical for future success.” S6 continued, “My experience has been, and again last year we started at the new PSSA, looking at the scores, they are certainly not what we want them to be; but I do think students who had

the foundational skills will be able to sail through the PSSA.” However, “I think that's kind of a loaded question because I do think grade level reading by 3rd grade is critical I'm not convinced that we have a solid assessment.”

Interviewee C7 believes that high standards of achievement can be viewed through more assessments than the PSSA. “The PSSA is only a snap-shot of a certain point in time of a student’s understanding.” Additionally, “the teacher assesses understanding through a variety of means, this gives us a better grasp of a student’s capability.” I think the PSSA measures to some point, high standards of achievement, but not all.” Along these lines, C8 added, “how can the PSSA be the standard for high achievement, when the test has resulted in a majority of students failing?” This year’s baseline is a new starting point, who knows where we will be tomorrow?”

Table 49

Perception That the PSSA Measures High Standards

Interviewee	PSSA Measures High Achievement	Need for Multiple Assessments
TD1		
TD2		
NS3		
NS4	X	
S5		X
S6		X
C7		X
C8		X

To sum, it appears that superintendents’ response to interview question 3 posed difficulties in answers. However, it shed light on foundations cited in Chapter, I and II regarding the utilization of Title I money, the importance of reading by 3rd grade, and the use of RtII to supplement and enrich reading instruction. Additionally, the perception of

multiple assessments to gauge student ability appeared to be a common thread among school leaders. Of note, only one interviewee perceived the PSSA as a measurement of high achievement.

Responses to interview question 4: “In regard to K-2 reading instructional methods used in your district, do you perceive differences among schools’ scores on the 3rd grade PSSA are more a reflection of students’ background characteristics than of school effectiveness?” TD1 perceived students’ background as a determining factor in the ability to read:

There's no way you can take out poverty of the in the equation and I say that sadly because when people talk about the education and the shortcomings of our educational system, they are afraid to talk about this real factor, that's what we need to fix is generational poverty; and until then, the traditional level programs will remain the same until we start holding people responsible.

Adding to this platform, TD1 responded:

We still have the same resources and all the kids will remain the same... I work in a district where kids rely on breakfast and lunch from us and they rely on us for most of their basic needs, everything from education to nutrition; all of this comes from the school so our customers and clientele are not the same as other places.

Furthermore, the economic challenges in this district are described as,

The technological device in school programs and online programming is awesome. However, families don't have internet connections some of them and most of them don't even have a phone and in most cases don't even have a car so

they have no access to Study Island and all these other type of tech resources outside of the school arena. Poverty is a strong barrier for kids to break.

Interviewee TD2 would respond to this question with “yes.”

Superintendent NS3 believes that student characteristics affect school effectiveness as follows. “Yes definitely, performance on the test is a reflection of student’s background characteristics and school effectiveness, yes most, definitely.”

Furthermore,

As a former school psychologist if your labeling a child is learning disabled and you are saying their ability to learn and potential to learn are two different things in different areas, then you are having them take a test on a level that they are not achieving at so yes, I think there's a huge difference due to background; especially with differentiated learning and multiple intelligences.

Conversely, the preceding perceptions are different in regard to NS4, “to be honest, in the past we haven't noticed a big difference among schools even though there's a difference in their socioeconomic status...3rd grade there really wasn't much of a difference at their reading levels.” Additionally, “higher economic schools did better so there's a small difference but it's not large.”

Superintendent S5 agrees, “I think there's certainly more of a reflection of the background than school effectiveness...I think we make an impact and I think we can change some things, we’re seeing a lot of transient students those factors are challenging for us than other things.” In contrast, S6 described an opposite perspective providing evidence of the success of a scripted reading program,

I do not believe that I don't have good evidence to what you are talking, we had only one Elementary in my previous district providing tangible evidence that this is the case...we implemented the Super Kids reading program with a very high level of fidelity had the strongest growth.

Enhancing this position S6 continued with “we have an extremely diverse population with an extremely high professional education population in that district with a very high poverty population and culturally diverse school had great performance.”

Interviewee C7 felt that all students can learn, “regardless of socioeconomic status and home life, all students are capable of learning, maybe just not at the same pace as others.” Interviewee C7 continued, “Our district utilizes progress monitoring in conjunction with our basal text, this allows for our RtII block to be more effective.”

Through this approach, C7 claims, “We have seen our primary grades become 95% or better, benchmarked at the end of the year, this takes into account all students.”

Respondent C8 added to this platform, “By providing multiple avenues for students to learn and differentiating instruction we have been able to reach the majority of our students.” Later adding, “Once student’s see the light of success we start to see the self-motivation move in, from there we build on the successes, taking background out of the equation.”

Table 50

Student Background is/is not a Factor in Learning

Interviewee	Student Background is a Factor	Student Background is not a Factor
TD1	X	
TD2	X	
NS3	X	
NS4		X
S5	X	
S6		X
C7		X
C8		X

Respondents to this question were evenly split as to their perceptions of student background. Interviewees provided an array of results ranging from strong perceptions that a student’s background experiences affect test performance as opposed to school effectiveness. As mentioned, some educational environments provide life’s basic needs to their students. Most of the superintendents perceived poverty and its associated challenges as a barrier to learning. Others felt that poverty was not a factor in their PSSA scores. Conversely, quantitative data presented in Table 39 and 40 demonstrates that those superintendents, who believe that student background characteristics do not play a role in a student’s ability to learn, produced higher PSSA results than those who do.

To add insight into the perceptions of superintendents’ perceptions of effective and ineffective K-2 reading practices interview questions 5 asked, “In regard to the teaching methods used in your district, what are the reading strategies you believe are most effective in teaching reading?” Describe how they impact teacher behavior and student learning.” To start, TD1 perceived that each student’s learning level must be assessed prior to instruction, “I think the most important thing is knowing where students

are, and assessing them where they are to determine a starting point.” Additionally, “are we holding them responsible for their learning?” To strengthen this foundation, data seemed to play a factor, “...but it all starts with data, we have so much thrown at us, you should know how to use that data to make decisions and to empower teachers to set up their programming to be relevant and rigorous.” According to TD1 the information gathered through data analysis allows the teacher to align instruction to standards, “third grade level standards are considered our resources and we try to allow our teachers to align their lessons accordingly, the resources you use, we leave that up to the teachers.” Furthermore, “We let teachers develop their own resources, what I want to know is when you're hitting standards and what resources you are using to get to the standards.” However, with this level of resource freedom, “the non-negotiables are you have to be teaching students, students have to be learning and growing, and in small flexible groups, that is an important aspect of that component.” TD2’s response was short and to the point, “Guided reading, this strategy allows the teacher to provide individualized and small group instruction to students at his/her reading level.”

Similarly, NS3 describes successful reading practices as, “I can say practice drill and repeat, getting that information and making sure is differentiated in the classroom, having multiple levels of learning going on at the same time is one thing that seems to work effectively along with centers.” Interviewee NS3 expanded on the utilization of the center concept,

centers may have the same overall topic but the levels are different compared to the student's ability. Students are getting that information on their individual

learning ability level, basically not teaching and moving on but teaching and re-teaching until children get it.

“The RtII process just reinforces all of these behaviors and that affects teachers behavior, because teachers are happy that students are learning and students are happy because they are learning. Teachers are not getting frustrated and breaking down and students are not becoming frustrated and just shutting down they have the ability to excel.” NS4 provided an expanded platform to the perceptions of previous superintendents, “What we really focus on explicit and systematic instruction.” In addition effective practices involve collaboration among administrators, “Principals are working very hard at communicating with each other on that, so our skill base is consistent and our teachers, although it took a while, have bought into it quite well they've all had the LETRS training for modules (consistency).”

Interviewee S5 describes effective reading practices as “Our core program is focused on new reading strategies every two weeks, basically students have an opportunity to master the strategies and then they practice it, we are trying to do some things with the differentiated instruction.” The use of a scripted reading program appeared to influence the response of S6. “In the beginning teaching foundational skills, teaching to coding and instruction in a systematic way to mastery... our district bought into the concept of Step by Step.” Adding to this platform,

What we have seen in the teachers and the kids is that success breeds success.

Teachers are enthusiastic because they see their students mastering skills and reading text, kids are astounded that that they can pick up a book and really read

it, they don't have to look at pictures to try and understand what they don't get. They can decode.

School leader C7 perceived that “incorporating the strategies and knowledge learned from Step by Step Learning, Inc. into the instructional mix, has been an effective reading strategy.” In addition, “the professional development and dedication of the consultant and staff went a long way in moving our reading program forward.” Added later, “I can’t say enough about progress monitoring, this give us a constant finger on the reading pulse of our students.” C8 perceived effective reading strategies to include “opportunities for variety in the delivery of instruction.” Stated later, “Allowing teachers the flexibility to thread creativity into the content helps students attend better.” However, “this creativity must align with best practices and remain relevant and rigorous.”

Table 51

Effective Reading Strategies

Interviewee	PD	Teacher Flexibility	Small Groups	Differentiated, Systematic, Explicit Instruction
TD1		X	X	
TD2			X	
NS3			X	X
NS4	X			X
S5				X
S6				X
C7	X			X
C8		X		

In short, superintendents perceived the formula to effective reading practices incorporates numerous strategies. These strategies include differentiated instruction, small flexible groups, the use of a scripted product, and data usage in the form of pre-reading assessments. As a reoccurring theme, the differentiated, systematic, and explicit

instruction emerged as tool utilized by five of the interviewees to increase reading ability. Consequently, data presented in research question, 1 and 2 echoes the qualitative data presented in Table 51. For example, based research question 1, the Welch and Brown-Forsythe test (Table 20), indicated that within the scripted/non-scripted combined approach to teach reading a statistical significant difference existed between the number of years a school district engages this modality and increased PSSA scores for the 2012-13 school year. Likewise, in research question 2, instructional methods used and quality of education for the 2012-13 school year (Table 37) and PSSA scores and student characteristics for the 2012-13 school year (Table 39) produced significant findings. Consequently, variables cited in Table 51 are utilized in the quantitative portion of the study.

Next the researcher sought to determine what perceptions superintendents have in regard to the strength of their respective K-2 reading programs, hence interview question 6, “In regard to the teaching methods used in your district, what is the strength of your reading program and how did you acquire those strengths?” Answers to this question varied widely, TD1 felt “I think our strength is not having a defined plan and not being militaristic...we are going to find the resources to help the learner.” In addition, “We're not marrying Scott-Foresman, if something's not working let's find something else.” “It can all line up so that we have certain programmatic things that we are all using. Study Island modules for assessment, we're all using CVC s, 6 minutes fluency.” TD1 continues, “When it comes to stories and reading we look for what's relevant and I believe that is one of our strengths. We hold ourselves accountable and we just don't blindly follow what's in a text-book or a program.” Adding to this perceptual thread TD1

feels that some districts fall short of this goal, “we see that in a lot of districts when we ask to see their curriculum and they just give us Scott-Foresman or some other text. That's a resource and it needs to be used as such, it should always be the standards.” In contrast, TD2 referred to responses given to interview question 1 and 5 without further elaboration, “Guided reading.”

The aspect of professional development and student centered instruction was determined to be of importance to NS3, “We acquired a lot of our strengths through professional development; our overall strength is meeting the needs of individual students, not looking at the class as a whole but looking at each child individually.” On a strategic level,

we pair students with others who have the same needs or with upper level students with lower needs so they can kind of be a peer mentor. We also pair our 4th grade students with lower grade students to help with strategies in the morning or the start of school that has also been very beneficial.

Additionally, NS3 believes success in the K-2 reading program is compounded by implementing “peer help within the classroom where the teacher becomes more of a facilitator (teacher flexibility) that is definitely some of our strengths. Definitely keeping up with the times and making sure we are aware of the changes that are occurring within our state” are also seen as elements of success. In a like manner, NS4 offered insight to the benefits of professional development in reading program strength. “I think the strength of our program is definitely the explicit instruction and the LETRS background training, especially at our younger grades and we got that through professional development working with outside consultants.” Data also appeared a component of

strength, “I think another one of our strengths is being very data focused, teachers are looking at DIEBLS and progress monitoring. We put kids in interventions that are based on where their needs are right then.” Practitioner S5’s perception of reading program strength centered on:

“Our investment in the comprehensive core program and incorporating the big 5 and using a variety of genres...I think that's a part of it, we provide a lot of professional development for teachers focusing on models of student engagement and coaching”.

As mentioned by other superintendents, “Instruction is intensified through the RtII process.” S6 felt that the strength of the district K-2 reading program was the program itself, “The strength is the program itself (Super Kids)... it's just a beautiful program that is very engaging and systematic reported by the teachers that it is developmentally appropriate and they like the success.”

Strengths of C7’s methods originated “by the failure of another scripted reading program lacking the flexibility to account for readers along the success spectrum.” “We bought into this program without teacher input or study, we were looking for the magic solution to NCLB.” Subsequently,

the program did not allow for student movement up or down, and it demoralized some by separating students into reading groups without age or grade considerations. Therefore, if you have a fifth grader struggling, he may be placed in a third grade reading group.

Respondent C7 added that this program “was replaced after four years of ineffectiveness.” C8 believed that the strength of his/her reading program lied in “teacher

buy-in of the basal text and professional development.” Added later, “We formed a voluntary committee made up of all elementary schools, then we met with each book vendor to review material and products.” The staff had the opportunity to kick the tires and rate each program prior to purchase, we picked the program that met the needs of our district.”

Table 52

Strength of District Reading Program

Interviewee	PD	Big 5	Teacher Flexibility	Differentiated, Systematic, Explicit Instruction
TD1		X	X	X
TD2				
NS3	X		X	X
NS4	X	X		X
S5		X	X	
S6				X
C7	X			
C8	X			

In review of reading program strengths, the perceptions of superintendents orbited around teachers incorporating flexible tactics in regard to content and instruction. Additionally, the aspects of professional development, data usage, and ensuring content is relevant emerged as similar themes. Likewise, accountability both on teacher and student levels along with the implementation of small learning groups surfaced as program strengths. Teacher input into the decision making process also emerged as a successful tactic.

Finally, interview question 7 addressed superintendents’ perception of effective reading program instruction practices: “In regards to the teaching methods used in your district, describe your perceptions of effective reading instruction practices.” TD1

explained that monitoring of student progress and parent collaboration ranked high in methods used within the district, “I think monitoring every single student and partnering with parents is imperative to reading success.” TD1 continued,

...also engaging children in reading, trying to get across that reading is essential to move upward and to be successful in our society. Set a realistic goal for you and for every student and help them reach it and that's what I see happening and our elementary schools.

In a different light, TD2 relied on the foundation presented throughout the interview, “guided reading, it provides individual and small group instruction on personal reading levels.”

Expanding on this foundation, NS3 perceived differentiated instruction along with professional development as success mechanisms within the district,

I can't say enough about differentiated instruction is huge, we've all had professional development on multiple intelligences so we are teaching to the kinesthetic, verbal, and visual learners. Additionally, providing materials that coincide with that data on levels that students can grasp.

Along these lines, classroom structure plays an imperative role in perceived reading program effectiveness, “Having a variety of activities going on in the classroom that enable all children to learn and then providing additional time during the day where either interventions or enrichment occur.” Program maintenance also appeared to be of importance, “Keeping up with all the supplemental materials and newer information, any kind of webinar or professional development that our teachers want to go to we highly recommend and encourage them to do so.” Providing a platform for success through

scaffolding mentioned in Chapter II (Allington, 2015; Bruner, 1996; Moats & Tolman, 2009), flexibility, and personalization of instruction, NS4 continued,

I believe we're doing it the right way here, I still think we have work to do, don't get me wrong but as far as the decoding aspect I believe we became skill-based and doing very effective polished phonics lessons (Moats & Tolman, 2009; Step by Step Learning, Inc. , 2015). We always make sure we get to text with students, teaching comprehension skills.

“We do a lot of bridging with our basal text, we have found that the book itself, the sample readings aren't at the level that is now expected at this grade level, we are going to have to supplement with additional text.” On the personalization level, “We try to incorporate a few more novels, still being focused on what we want kids to be able to do, which is have a purpose for their reading.” Stated later, “I look at my part of effective instruction as being very explicit in the instruction and giving kids as much practice as possible, putting them in as much text as they can handle.”

Similar practices as mentioned above echoed in S5's response, “We do some combination practices of I do, you do, we do, throughout the lesson...we do scaffolding, then we're trying to gradually work to get to independent modeling.” “We are trying to align what we learned about the students to give them support and enrichment opportunities, I think that's what's working for us right now.” Moving to a teacher centered approach, S6 focus targeted teacher understanding of learning theory, “I think what makes a teacher effective is not just going through the motions, it's understanding reading development. Our teachers have gone through LETRS training and I've gone

through SuperKids training.” On this platform, staff professional development commitments have led to a stronger depth of knowledge for teachers,

They really understand the structure to the English language and that most English is decodable, they understand that comprehension rest very firmly on good oral comprehension skills. We work on oral language development while teaching coding skills, our teachers have a depth of understanding that helps students learn.

Interviewee C7’s perception of effective reading instruction included “meeting the needs of each student in the classroom.” We must differentiate instruction to meet the needs of all students, learning theory proves that this can be done for all students.” In addition, C7 continued, “the amount of resources available to teachers today is overwhelming, we strive to use those resources to advance our students reading ability.” “Our basal text publisher included PD in our purchase price, we found this to be priceless.” C8 agreed, “Being able to access and apply cutting edge professional development enhances student learning.” C8 also viewed teacher collaboration as an effective reading strategy, “We try to put our grade levels together during our in-service; they share strategies and success.”

Table 53

Effective Reading Instructional Practices

Interviewee	PD	Big 5	Teacher Flexibility	Scaffolding	Differentiated, Systematic, Explicit Instruction
TD1					X
TD2					
NS3	X		X	X	X
NS4		X	X		
S5		X		X	
S6	X				
C7	X				X
C8	X				

To sum, interview question 7, perceptions of superintendents varied regarding effective K-2 reading practices supplied by their respective districts. However, the practices mentioned demonstrated overlap among all interviewees. For example, common similarities included professional development, the inclusion of all or part of the Big 5 (phonics), and the ability to afford teachers flexibility to supplement instruction.

In closing, the qualitative portion of the study shed light on the perceptions superintendents have regarding effective and ineffective reading practices used within their districts. The foundational base for this position is built upon links between the quantitative and qualitative data. In research question 1, the Welch and Brown-Forsythe (Table 20) test indicated that within the scripted/non-scripted combined approach to teach reading a statistical significant difference existed between the number of years a school district engages this modality and increased PSSA scores for the 2012-13 school year. These data point can be linked to the qualitative responses to interview questions 1, 2, 3, 4, and 7. For example, overlap among responding superintendents were noticed in the utilization of differentiated, systematic and explicit instruction, use of small groups, use

of data, incorporating RtII, progress monitoring, professional development, and the use of the Big 5 in effective reading practices, all of which can be components of the scripted/non-scripted approach. Likewise, in research question 2, instructional methods used and quality of education for the 2012-13 school year can be linked to interview questions 1, 4, 5, and 6. The commonality of the qualitative and quantitative data rests within the perception that the utilization of small groups, use of data, incorporating RtII, progress monitoring, professional development, teacher flexibility, use the Big 5 in effective reading practices, and the refusal to accept that a student's background characteristics affect the learning process. Overlap of these characteristics were recorded throughout the interview process and were noted in narrative and table form.

Additionally, PSSA scores and student characteristics for the 2012-13 school year produced significant quantitative findings aligned to interview question 4. The common thread with this finding lies in the perception that regardless of a student's background characteristic, the learning process can happen and be effective. As a result the quantitative data revealed that those school leaders who do not believe a student's background characteristics hamper the learning process produced higher PSSA scores than those who do; data gathered from the qualitative interview process echoed this finding.

Research question 3 provided an array of school leader perceptions of both effective and ineffective practices in teaching reading. Along the lines of ineffective reading practices, overlap among interviewees was presented as heavy reliance on the basal text, lack of teacher flexibility, overuse of whole group instruction, and utilization of outdated materials as evidence of ineffective reading practices. As such, these

quantitative and qualitative findings allow the researcher to reject the null hypothesis that there are there are no perceived effective an ineffective practices used within different approaches to teaching reading comprehension as perceived by superintendents.

Summary

This two phase mixed-methods study incorporated three tools in an effort to reach conclusions: third grade PSSA scores for the school years 2011-12, 2012-13, and 2013-14 respectively, superintendent/designated other survey results, and telephone interview results of superintendents regarding their perceptions of effective and ineffective practices within the modalities of teaching reading. These conclusions were drawn in reference to the study's three research questions.

In reference to Research Question One; third grade PSSA data collected and analyzed did not indicate a statistical significant relationship between modality used to teach reading to K-2 grades students and 3rd grade proficient/advanced reading/ELA PSSA scores. The relationship was verified by the researcher's calculation of Independent Samples Test t-test, one-way ANOVA, and Robust Test of Equality of Means. However, as data analysis progressed, descriptive statistics determined that during the 2012-13 school year, a statistical significant difference existed between the utilization of a non-scripted/scripted combination modality to teach reading to K-2 grade students and the proficient/advanced reading/ELA PSSA scores of 3rd grade students. In addition, during the 2011-12 school year the Welch, Brown-Forsythe test allowed the researcher to determine a statistically significant difference between the use of a no-scripted/scripted combined modality to teach K-2 reading and proficient/advanced 3rd grade reading/ELA PSSA scores. Building upon this platform, during the 2012-13 school

year, both the Welch and Brown-Forsythe respectively allowed the researcher to determine a statistically significant difference in the use of a non-scripted/scripted combined modality to teach K-2 reading and proficient/advanced 3rd grade reading/ELA PSSA scores. These relationships were verified by the researcher's utilization of the descriptive statistics mentioned above and facilitated by Indiana University of Pennsylvania's Research Lab, and the SPSS program.

Next, Research Question Two focused on the quantitative perceptions of superintendents in regards to their district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students. Data suggested that the 22 perceptual questions targeted in the survey, very few statistically significant differences existed in regard to this research question. However, in the category of classroom size and PSSA results, a one-way ANOVA indicated for school years 2011-12 and 2013-14 a statistically significant difference between the number of student enrolled in a K-2 reading classroom and 3rd grade proficient/advanced reading/ELA scores on the PSSA. In a like manner, perceptions that 3rd grade scores on the PSSA accurately reflect the quality of education students have received in their respective districts revealed that during the during the 2012-13 school year, a statistically significant difference existed between superintendents' perception that their K-2 reading instructional methods used and 3rd grade proficient/advance reading/EAL PSSA score accurately reflect the quality of education students are receiving within their districts. This was verified through the employment of an Independent Sample Test.

Lastly, Research Question Three targeted the qualitative perceptions superintendents have in regard to effective and ineffective practices used within different

approaches to teaching reading comprehension. The data were collected through a telephone interview protocol. Results indicated that, superintendents perceptions varied regarding effective K-2 reading practices utilized by their respective districts. However, the practices mentioned demonstrated overlap among all interviewees. For example, common similarities included professional development, the inclusion of all or part of the Big 5 (e.g. phonics, vocabulary, fluency, comprehension, and phonemic awareness), and the ability to afford teachers flexibility to supplement instruction to meet student needs. At the other end of the spectrum, similarities as to ineffective practices included reliance on the basal text, refusal to change with “Common Core” initiatives, failure to embrace and accept the premise that all students can learn regardless of background characteristics, outdated materials, and lack of teacher flexibility to instruct. Chapter five will discuss the conclusions, recommendations, and summary of the study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The drive to produce students who are college and/or career ready has challenged the American educational public school system as of late. Both American industry and higher education professionals have noted this fall from prominence. Subsequently, the ability for America to sustain and build upon its global competitiveness through its human capital investments has been challenged (Freidman, 2007). At the foundational level of national and global prominence is the ability to read prior to the third grade. No other skill taught in school and learned by school children is more important than reading. It is the gateway to all other knowledge. If children do not learn to read efficiently, the path is blocked to every subject they encounter in their school years (Kame'enui, Adams, & Lyon, 2014; O'Neill, 2004). As such, this race to produce measurable increased literacy through state assessments has spawned numerous commercialized reading programs targeting the reading comprehension accountability component of the public education system. Therefore, this two-phased mixed-methods study was strongly related to reading comprehension. The study sought to investigate the relationship between four modalities (teacher-developed, non-scripted, scripted, and scripted/non-scripted combination) of teaching reading to K-2 grade students, and its impact on 3rd grade proficient/advanced reading/ELA scores on the PSSA over a three year period, 2011-12, 2012-13, and 2013-14 school years respectively. Data gathered for quantitative variables was through archived Pennsylvania Department of Education (PDE) public disclosure of PSSA scores and an online “superintendent survey,” while

qualitative measures were obtained through superintendent/researcher telephone interviews.

Results of this research study can be used to expand the knowledge base of practitioners seeking to improve 3rd grade proficient/advanced reading/ELA scores through the use of varied approaches to teach reading comprehension. Reading is the gateway to all other knowledge. At the foundational level of this vexing issue is the inability of America's public education system to produce proficient readers by the third grade (Education, 2003; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). Results of this study may assist school leaders in the development, implementation, delivery, and analysis of reading programs that meet the needs of elementary school aged students.

Summary of Findings

The previous chapter presented quantitative and qualitative results stemming from a superintendent survey targeting the relationship between four modalities of teaching reading to K-2 grade students, and its impact on 3rd grade proficient/advanced reading/ELA scores on the PSSA over a three-year period. As such, this chapter will present conclusions of the study by addressing the research questions:

1. Is there a significant difference between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading?
2. Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?

3. What are the perceived effective and ineffective practices used within different approaches to teaching reading comprehension, as determined by superintendents?

Conclusions

The following discussion of the research findings summarize the conclusions drawn from superintendent responses to the survey and archived PSSA scores.

Aforementioned literature provides a foundation for this chapter; it is organized and presented according to the three foundational research questions the researcher sought to answer. Summaries are presented in response to the first two quantitative research questions followed by the qualitative interview question summary.

Research Question 1: *Is there a significant difference between the reading/ELA PSSA scores of 3rd grade students and different approaches to teaching reading?*

Results of this study indicated that no statistically significant difference existed between individual modality used to teach reading and PSSA scores of 3rd grade students. However, when the researcher analyzed a scripted/non-scripted reading program combination, a statistical significant difference existed. During the 2012-13 school year, both the Welch (.000) and Brown-Forsythe (.027) data analysis resulted in a statistically significant difference in the use of a non-scripted/scripted combined modality to teach K-2 reading and proficient/advanced 3rd grade reading/ELA PSSA scores (Table 20). In short, districts that can stay the course and remain committed to this approach may realize continued success in PSSA scores. This balanced approach recognized the need to use a variety of strategies, often crafted by the teacher, that match each student's learning style on an individual basis, such strategies might include use of basal, phonics, trade

books, or all three combined (Archer, 2004). This theory aligns with current best practice strategies founded on the research of many experts (Allington, 2015; Bruner, 1996; Clay, 1975; Gardner, 1999; Hasbrouck, 2010; Kame'enui, Adams, & Lyon, 2014; Robb, 2012; Moats & Tolman, 2009). By connecting and threading the resources of one modality with another, reading success may be realized. In summary, in unlocking the phenomena associated within the scripted/non-scripted combined approach, it appears that when teachers are doing well, they stay with it. As the data showed, putting in time equated to progressively increased PSSA scores; however, practitioners can expect one year of decreased scoring. Data indicated that after the scoring decrease PSSA score rose significantly.

Throughout this study, it has been documented that each modality used to teach reading has produced positive results. In the teacher-developed realm, research discussed in Chapter II showed that empowering the teacher to develop and employ the combined resources of the teacher and district basal text, successes are common in reading gains (Balkiewicz, 1991; O'Neill, 2004). Therefore, results may mirror reading theorists and researchers in regard to the teacher being a catalyst for reading success, not the reading program (Allington, 2015; Bruner, 1996; Clay, 1975; Gardner, 1999; Houghton-Mifflin-Harcourt, 2015). Aligning to this theory, data presented in Chapter IV suggested that the teacher-developed (Table 9) approach to teaching reading produced the most advanced 3rd grade PSSA scores when compared to the other modalities for the three years studied, 81%, 80%, and 81% respectively. Caution must be given to the data presented due to the small population of respondents. These results may indicate that the longer a district engages the teacher-developed modality; increases in PSSA scores may be realized. As

mentioned in Chapter II, the theories of Howard Gardner's (1999) Multiple Intelligences may help educators adapt instruction and curriculum to meet the educational needs of students (Gardner, 1999; Papalia, Sterns, Feldman, & Camp, 2002). Adding to this platform, Gonzales' (2012) study indicated that when teachers develop pedagogy through researching themselves and finding their identity, they can teach differences within a society and apprentice the students to be critical of their educational role in the future. One may conclude that through this methodology, time within a reading program enhances the students' chances for reading success. However, as mentioned earlier, due to the small population studied, caution should be given prior to venturing into this approach.

Studies targeting the scripted (SBSL) modality armed teachers with the tools necessary to produce positive reading results. Staff learn, practice, and then apply the systematic process for analysis for their students' (Step by Step Learning, Inc., 2015). Due to the private nature of a scripted reading program, in-depth coaching of staff is geared towards success. For example, practitioners are exposed to a SBSL instructor explaining and modeling relevant instructional interventions with students in the classroom, participants practice systematic and explicit instructional interventions with the coach, a conference and debrief completes the visit (Step by Step Learning, Inc., 2015). ANOVA data presented in Table 17 indicated that no statistical significant difference existed between school districts utilizing the scripted modality to teach reading and the number of years each district utilized the scripted approach. In fact, data showed that in the 2011-12 and 2013-14 school years, mean PSSA scores declined the longer a district utilized this approach. Thus, this program alone may not be an effective

mechanism for reading comprehension; however, if paired with another modality, results may be realized.

Non-scripted modalities have also yielded positive results. For example Riordan and Noyce (2001) examined the impact of a non-scripted curriculum on student achievement, relative to "traditional" instructional programs, and found statistically significant differences that favored the non-scripted curriculum in nearly all dimensions of instruction. Furthermore, a non-scripted modality series showed that third grade classes made more than twice the growth of a national comparison control group on the Reading Comprehension Subtest and on the Reading Score as measured by the Stanford Achievement Tests (SAT), 9th edition 2001-2002 (Miller, 2008). These findings echo Frequency Distribution Data presented in earlier in Table 12. For example, those districts utilizing the non-scripted modality for 4-6 years yielded the highest scores for all three years examined. In contrast, this trend seemed to deteriorate after 4-6 years of use. Data indicated that during the 7-9 year range PSSA scores dropped, followed by a PSSA score increase during the 10 plus year of utilization.

Coinciding with 3rd grade PSSA scores and approaches to teaching reading, this study also sought to determine if a significant difference existed between the perceptions superintendents have regarding third-grade performance on PSSA and different approaches to teaching reading in K-2 students:

Research Question 2: *Is there a significant difference in the superintendent's perception of the district's third-grade performance on the reading/ELA section of the PSSA and the different approaches to teaching reading in K-2 students?*

Embedded within the survey were perceptual questions seeking to provide a quantitative basis linking K-2 modality used to teach reading to proficient/advanced PSSA scores. The survey consisted primarily of questions relating to modality used to teach reading and its relationship to PSSA scores. A Likert response scale was used for most of the items to assess intensity of perception; superintendents' were asked to indicate a response of "strongly agree," "agree," "disagree," or "strongly disagree." In addition, "yes" and "no" along with "very similar," "somewhat similar," "somewhat dissimilar," "dissimilar," and number of years engaged in a reading modality were also utilized to gauge perceptual intensity of the respondents. In regard to Research Question Two, the survey sought to address the following data points:

- Modality used to teach reading and PSSA similarity;
- Classroom size and PSSA results;
- District texts and materials comparability to what the PSSA measures;
- Daily K-2 reading instruction compatibility to PSSA content;
- Accuracy of the PSSA comparable to teachers' judgment;
- 3rd grade PSSA score compatibility to quality of education received;
- 3rd grade PSSA score as a reflection of student characteristics or school effectiveness;
- PSSA's ability to effect teachers' to teach in ways that contradict their own ideas of good educational practice;

When addressing the similarity of content and PSSA, superintendents perceived this link to be significant within their respective districts, ANOVA results presented in Table 25 indicated no statistical significance existed to provide a foundation for their

positions. This position aligns to the research presented in Chapter II. For example, it has long been accepted that students who fall behind in reading prior to the third grade will struggle throughout their public education cycle if not addressed. While the more skilled readers in the class learn knowledge and new words from context, poor readers, out of frustration, begin to avoid reading (Wennersten, 2013). Therefore, adhering to the misconception, that those school leaders who perceive their reading programs are aligned to state standard tests are in actuality not. Morris (2015) suggested that this failure may be a result of built-in disadvantages such as stilted language, uninteresting stories, and insufficient repetition of high-frequency words.

Next, when discussing the average class size of a K-2 reading classroom and the average PSSA score of third-graders, ANOVA results indicated that during the 2011-12 and 2012-13 school years, the variable of class size did not show a statistically significant difference in relation to proficient/advanced PSSA scores (Table 29). In short, it appeared that K-2 reading class size had no bearing on proficient/advanced reading/ELA PSSA scores of 3rd grade students. In fact, the data indicated no more than a 3 percentage point difference of district content within reading modality and its relationship to the content of the PSSA, Frequency Distribution data presented in Table 24 indicated that 63 of the 70 respondents perceived that the modality used to teach K-2 reading in their district was “very similar” to “somewhat similar” to the content presented in the PSSA. For the 2011-12 and 2012-13 school years, the data also indicated that those superintendents who perceived their districts’ reading content was “Dissimilar” to the content of the PSSA received mean PSSA scores higher than those who did. Point variance in PSSA score for the school years cited (Table 27). In contrast, most educators would argue, smaller class

size results in increased leaning. Adding to this argument, research presented in Chapter II echoes this sentiment. For example, the benefits of explicit instruction, flexible grouping, and small RtII groups have been presented as effective tools in increasing knowledge and test scores (Allington, 2015; Durkin, 1993; Hasbrouck, 2010; Moats & Tolman, 2009). However, it is not known if those respondents who have large classroom size, incorporate small learning groups within the instructional day. Mean PSSA scores for all respondents were noteworthy regardless of class size.

The examination of superintendent perceptions regarding their reading program daily K-2 instruction being comparable to the PSSA through the lens of an Independent Samples Test (Table 32), resulted in no statistically significant difference. Results showed 52 respondents answering “yes” and 17 answering “no.” Data presented in Table 31 indicated that those school leaders who responded “yes” received mean PSSA scores higher than those who responded “no” for all years examined. Results indicated that those superintendents who responded “yes” had up to 5 percentage point increases in mean PSSA scores as compared to those who answered “no.” This foundation coincides with research presented in Chapter II regarding the importance of reading development prior to the third grade. Research suggested that if a student has successfully demonstrated the ability to read by the third grade, his/her chances for success in future grades and obtaining a productive and self-fulfilling career are greatly enhanced (Fiester, 2013; Julian & Kominski, 2011; Reardon, Valentino, & Shores, 2012). In contrast, research has suggested that those students who encounter difficulty establishing basic reading skills at an early age are prone to drop out of school, experience social problems, engage in criminal activities and face possible incarceration (Cunningham & Stanovich, 2001;

Fiester, 2010; Fiester, 2013; Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009, Robinson, 2014). On a monetary level, the return on investment (ROI) in programs that align to sound reading practices has been shown. Fiester (2013) reported that improvement in education outcomes produced a long-term return on investment of \$8.24 for every \$1 invested in early literacy education of students 4-6 years old.

It has been documented that when school districts align curriculum to standards, increases in learning are the result (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; National Reading Panel, 2000; Pearson-Scott-Foresman, 2015). A by-product of the alignment endeavor can be increased scores on state assessments as presented in Table 31. Organizing the curriculum to reflect sound alignment strategies can assist in learning and assessment outcomes (Archer, 2004). In addition, alignment should take place and be implanted early in the educational cycle. Success within the task of reading during the primary grades (K-2) is imperative. In fact, studies have suggested that the single most important year of an individual's academic career is third grade (Wennersten, 2013). The reason attributed to this finding is that third grade is the year in which students transition from learning to read, decoding words using their knowledge of the alphabet, to reading to learn (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013).

As instructional leaders in the classroom, teachers possess a surmountable amount of influence in the learning arena. Their judgment to the capacity of student learning is valuable. Superintendents were asked to respond "yes" or "no" if they perceive the PSSA as an accurate measure of student reading achievement as the teacher's judgment? Group statistic results (Table 33) indicated that 21 superintendents answered "yes" and 48

responded “no.” The Independent Samples t-test revealed that no statistically significant difference existed between the perception that the PSSA is an accurate measure of reading achievement as the teacher’s judgment (Table 34). In contrast, all of the literature presented in this study lean toward the teacher as the instructional leader in the classroom. The teacher’s judgment of a student’s progress and level of understanding within the content is supported by many (Adler, 2001; Allington, 2015; Reading Recovery Council of North America, 2015). Research presented in Chapter II runs opposite of this study’s findings. For example, in the scripted modality vein, the teacher is prepared to adequately analyze student data to determine which students should receive a specified diagnostic, use data to identify areas of individual student needs and whole group needs, discuss the components of a Preventative Model, navigate the reports using technology, share the current status of their students achieving benchmark and a plan for moving students towards benchmark, and construct a schedule for progress monitoring (Clay, 1975; Step by Step Learning, Inc., 2015). Adding to this foundation, as presented earlier, being a 21st century teacher not only requires teachers to move away from a teaching methodology that sets limitations for learning, but to also remove boundaries around their own professional learning to develop a more critical, reflective, transformative pedagogy created through self-exploration (Balkiewicz, 1991; Gonzales, 2012; O’Neill, 2004). Studies in the non-scripted sphere have similar findings, a review of ten research papers on the impact of teacher quality found that teacher effectiveness impacted student achievement by 0.08-0.11 standard deviations (Chingos & Whitehurst, 2012). Finally, experts within the scripted/non-scripted approach demonstrated that instructional strategies utilizing a blended approach infused with teacher supplied

pedagogy can often produce greater gains in student reading ability than the stand-alone basal text (Balkiewicz, 1991; O'Neill, 2004). Therefore, the findings of this study run contrary to common thought and practice.

Texts and materials play a valuable role in the development of reading ability. School districts are often unique in delivery, application, and assessment. As presented earlier, at different stages of life humans are able to analyze and synthesize multiple stimuli (Cunningham & Stanovich, 2001; Papalia, Sterns, Feldman, & Camp, 2002). Reading effectively requires the brain to translate visual symbols into words, and words into meaning (All Kinds of Minds, 2014). Therefore, the alignment of reading texts and materials is imperative to reading success. In an effort to examine the perceptions of superintendents in regard to texts and material compatibility to PSSA, results of this study indicated, that 47 respondents answered “yes” that their instructional texts and materials were comparable to the what the PSSA measures and 19 responded “no.” Independent Samples Test (Table 36) results showed that no statistically significant difference existed between superintendents’ perception that their reading texts and material are comparable to what the PSSA measures. These findings run contrary to common beliefs and practices presented earlier in Chapter II; some feel that regardless of reading modality and texts and materials used, 75-80% of students learn how to read (Morris, 2015). However, in most cases, aligning texts and materials to existing standards produces quality learning results. This concept is currently being utilized by book publishers and school districts in attempts to produce proficient learners (Houghton-Mifflin-Harcourt, 2015).

Next, superintendents were asked to respond “yes” or “no” if they perceive that in regard to the K-2 reading instructional methods used in their district, do you perceive the 3rd grade score on the PSSA accurately reflect the quality of education students have received; 18 superintendents responded “yes” and 51 responded “no” for all three years analyzed. As such, the data indicated that for all three years studied, those superintendents who responded “yes” produced PSSA scores higher than those who do not. Variances were noted during the 2012-13 school year. An Independent Samples t-test indicated a statistically significant difference for the 2012-13 school year (Table 38). In contrast, no statistically significant difference was revealed for the other two school years analyzed.

These findings coincide with the research presented in Chapter II. For example, all modalities studied have research supporting the findings during the 2012-13 school year. Quality of reading programs and scores on standardized assessments walk hand-in-hand with accepted reading theory. On the scripted plane, similar success has been attributed to a professional development model that includes ongoing coaching and mentoring support, Step By Step Learning, Inc., crafts a unique implementation strategy for each local district utilizing the “Response to Intervention” model as a vehicle for delivery (Step by Step Learning, Inc., 2015). Instructional strategies utilizing a blended approach infused with teacher supplied pedagogy can often produce greater gains in student reading ability than the stand-alone basal text; thereby building a quality reading program (Balkiewicz, 1991; O'Neill, 2004) as recognized slightly in the teacher-developed modality and more significantly in the scripted/non-scripted combined approach. As documented in the non-scripted arena, quality reading programs have been

attributed sound choice of instructional materials. One study suggested that this component has large effects on student learning, effects that rival teacher effectiveness (Houghton-Mifflin-Harcourt, 2015). All modalities or a combination thereof, possess the ability to produce a quality reading education program for its students. Subsequently, if delivered correctly, positive scores on state assessment may be a result.

In a similar manner, the researcher sought to analyze superintendent perceptions that differences on the 3rd grade proficient/advanced reading/ELA PSSA score reflect changes in student characteristics rather than changes in school effectiveness. Superintendents were asked to respond “yes” or “no” if they perceive their 3rd grade score on the PSSA reflect changes in student characteristics rather than changes in school effectiveness. Results of the study showed that for the 2011-12, 2012-13, and 2013-14 school years, 40 superintendents responded “yes” and 30 superintendents responded “no.” Due to the dynamics of ESL, socio-economic, and social evolution, the process by which students learn to read may be affected (Evans & Waring, 2011; Galluzzo, 2010; National Assessment Governing Board, 2012; Simon, 2011). Data revealed that during the 2012-13 school year, a statistically significant difference existed regarding this perception (Table 40). In contrast, the 2011-12 and 2013-14 school years did not reveal a statistically significant difference in 3rd grade proficient/advanced reading/ELA PSSA mean scores. The data indicated that those superintendents who responded “no” to the survey question had higher PSSA scores than those who answered “yes” (Table 39), which adds strength to the argument that student background and environmental status may not be barriers to learning. Consequently, the increased PSSA scores of those who responded “no,” may be a result of school leaders refusing to let background

characteristics of their students hamper the learning process and/or the teacher's personal expectancy that all students can learn regardless of background. This concept has received much attention over the years. It has been an accepted conclusion that all students can learn regardless of background. Others mentioned in Chapter II agree, studies have suggested that all but 2-5 percent of children can learn basic reading skills by the first grade, even in populations where the socioeconomic environment may appear to be a barrier (Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009). Research suggested that if a student has successfully demonstrated the ability to read by the third grade, his/her chances for success in future grades and obtaining a productive and self-fulfilling career are greatly enhanced (Fiester, 2013; Julian & Kominski, 2011; Reardon, Valentino, & Shores, 2012). In contrast, some have suggested and/or claim that reading deficiencies are predisposed to certain socio-economic classes (Bowey, 1995). The success of the nation and student is dependent on the ability to read. Data presented in this study and others provide a firm foundation that background characteristics of students may not interfere with the learning process. It appears that educators who expect students to learn, regardless of reading approach utilized, are performing better than those who perceive the background characteristics of the student as a barrier to learning, data supporting this platform is cited in Tables 39 and 40.

When analyzing data targeting superintendent perceptions that the PSSA leads teachers to teach in ways that contradict their own idea of good practice, 55 superintendents responded "yes" and 15 superintendents responded "no." Group statistics (Table 41) obtained from this study revealed that those superintendents who responded "yes" (55) to the interview question had lower PSSA scores than those who responded

“no” (15). Therefore providing a controversial position in regard to effective instructional techniques. However, results obtained from an Independent Samples Test (Table 42) suggested that during the 2011-12, 2012-13, and 2013-14 school years respectively, no statistically significant difference existed between superintendents’ perception that their K-2 reading instructional methods used in conjunction with 3rd grade proficient/advance reading/ELA PSSA score leads some teachers to teach in manners that contradict their own ideas of good educational practice. Throughout this study, it has been documented that each modality of teaching reading builds some reading success. Within each modality, teachers have opportunities to build upon existing pedagogical knowledge. Thus, as mentioned in Chapter II, by adding to an existing foundation, skill level and ability to reach students on cognitive levels may increase (Allington, 2015; Clay, 1975; Hasbrouck, 2010; Houghton-Mifflin-Harcourt, 2015; Step by Step Learning, Inc., 2015). Due to the increased accountability of the education profession, teachers may be targeting success on the PSSA and not focusing on what they consider sound instructional technique (Freidman, 2007; Freidman & Mandelbaum, 2011; Pennsylvania Department of Education, 2014). Regardless, although no statistical significance was observed within this data point, results of the elevated mean PSSA scores obtained through the group statistics is noteworthy.

Finally, data results targeting superintendent perceptions that their modality of teaching reading aligns with what the PSSA measures on the data points of: a) texts and materials are comparable to the reading/ELA portion of the PSSA; b) 3rd grade PSSA scores are positively influenced by their K-2 reading program; c) average students within

a reading class; and d) similarity of reading content to PSSA content, within each modality of teaching reading were analyzed.

Data indicated that for all three years examined the teacher-developed approach yielded the highest PSSA scores in all three categories (Table 43). As mentioned earlier the responding population for this indicator was small; therefore, caution is recommended when analyzing and/or assessing this perception. Adding to this platform, Table 45 demonstrated that through the application of Robust Tests of Equality of Means no statistically significant difference existed between the data points listed and the approaches to teaching reading. The important finding of this study targets the positive effects of the scripted/non-scripted combined approach to teach reading, when implemented data suggested that proficient/advanced 3rd grade PSSA scores are the result. Consequently, research mentioned in Chapter II offers an array of options to find reading modality success that coincides with these findings. Chapter II provided a foundation for the scripted/non-scripted combined approach through a Johns Hopkins University comprehensive study listing of commercialized reading programs currently being utilized in the United States (Slavin, Lake, Chambers, & Cheung, 2009). Within this study, overall, 63 experimental-control comparisons met the inclusion criteria, of which 19 used random assignment to treatments. Results indicated that a Combined Curriculum and Instructional Process Programs (Curr & IP) that combine innovative phonetic materials with extensive professional development for teachers found positive effects overall (Slavin, Lake, Chambers, & Cheung, 2009). No modality of teaching reading surfaced as a frontrunner. There is no “silver bullet” reading program currently marketed that demonstrates a statically significant impact on K-2 reading ability.

However, when combined with other reading programs increased success has been noted. In fact, literature presented in this study supports successes in all K-2 modalities used to teach reading comprehension. It is the researcher's opinion that this success is a result of the teacher employing sound instructional technique within a modality that breeds success, not the modality itself.

In an effort to provide increased understanding, deeper meaning, and richer context to the study, and support the results of the quantitative data, the researcher utilized an interview protocol to accomplish this qualitative goal. Embedded within the survey was an area to agree to a telephone interview consisting of the interview questions presented in order in Chapter III. Two respondents from each modality of teaching reading were randomly selected to participate in the interview:

Research Question 3: *What are the perceived effective and ineffective practices used within different approaches to teaching reading comprehension, as determined by superintendents?*

The interview protocol allowed the researcher to link the quantitative results with rich, deep, and personal reflections of effective and ineffective practices within each modality of teaching reading. It became clear that within each approach to teach reading to K-2 students' central ideas and themes were threaded into the fabric of all.

In reference to the interview question: What are your perceptions of effective K-2 reading practices in your school district and in general? Data presented in Table 47 resulted in perceived effective reading practice responses to be, small flexible instructional groups (2), use of data (2), utilization of the RtII model (4), use of progress monitoring (2), use of Big 5 (4), and professional development (2). All practices

mentioned are utilized in the surveyed population. Results from Table 24 indicate a contradiction of quantitative and qualitative data presented in this study. Those superintendents who perceive their K-2 reading content is “Dissimilar” to the PSSA received higher PSSA scores than those who perceive their content is “similar.” Consequently, these concepts align with research presented in Chapter II. For example, all four modalities incorporate the concepts alluded to by superintendents. Within the teacher-developed modality, studies suggested that practitioners may rely on commercially produced, school district purchased text, as a resource or guide in the teaching of reading (Ladnier-Hicks, 2010; Lawrence, 2010). In addition, the scripted (SBSL) modality utilizes the Big 5, progress monitoring, small groups, use of data, and the RtII model to teach reading. Likewise, the non-scripted modality also incorporates flexible instructional groupings, RtII instructional groups, and benchmarking to increase K-2 student reading outcomes (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Pearson-Scott-Foresman, 2015).

Conclusions for the interview question: What are perceptions of ineffective K-2 reading practices in your school district and in general? Responses to this question were demonstrated in Table 48 and produced a resounding number of superintendents perceiving that within their respective districts no ineffective practices existed (8), or if ineffective practices were present when they arrived as superintendent, they have done away with them. Additionally, ineffective practice perceptions included heavy reliance on basal (4), lack of flexibility (5), whole group (2), and outdated materials (5). An Independent Samples Test (Table 40) indicated that that the ineffective practice of allowing a student’s background characteristics influence learning opportunities resulted

in lower PSSA scores than those superintendents who do not. This theme may be reflected in the ineffective practices cited. Consequently, this train of thought aligns with the research presented in Chapter II. Moats and Tolman (2009) and Houghton-Mifflin-Harcourt (2015) speak to the value of threading reading instruction with other modalities to increase reading success. There was a consensus that districts that are not aligning their reading programs to the Core will experience difficulty in assessments. As cited earlier, all of the scripted (SBSL) and non-scripted reading modalities are currently aligned to the Common Core.

Conclusions for the interview question asking: In regard to K-2 reading instructional methods used in your district, what is your perception that the 3rd grade reading/ELA portion of the PSSA measures high standards of achievement? Why? Responses to this question fluctuated, some respondents drifted off into other avenues not associated with the question, and some chose to offer a limited answer. However, those who offered a response seemed to base their perceived notions of high achievement and the 3rd grade reading/ELA portion of the PSSA as a result of the reading by third grade conception. During the interview process 50% of the respondents were familiar with research and findings supporting the ability to read by third grade. “Research over the past 20 years, claiming 3rd grade as the magical year for some reason, if a kid doesn’t have it then, you’re not going to get it”. Adding, “I know grade level reading by the end of third grade and certainly by 4th grade is critical for future success.” As noted by The National Institute of Child Health and Human Development (1990) and confirmed by (Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013), “Inadequate reading skills are characteristic of approximately 38 percent of fourth-grade

students nationally and up to 70 percent of poor students.” Therefore, the presence of high stakes testing has influenced the decisions and practices of school leaders when addressing high achievement in reading instruction. Additionally, the respondents perceived various practices within their modality of teaching reading that contribute to high achievement. For example, a common thread included the utilization of small groups within RtII, benchmarking, progress monitoring, and the use of multiple assessments to gauge student learning. Consequently, the concept of progress monitoring is widely used in some fashion in most reading programs (Allington, 2015; Pearson-Scott-Foresman, 2015; Step by Step Learning, Inc., 2015).

Conclusions to the interview question: In regard to K-2 reading instructional methods used in your district, do you perceive differences among schools scores on the 3rd grade PSSA are more a reflection of students’ background characteristics than of school effectiveness? Interviewee group statistics resulted in an even split among superintendents, four perceived a student’s background as a factor in learning and four did not. As mentioned earlier in this chapter, quantitative results for this question revealed a statistical significant finding for the 2012-13 school year (Table 40). Group statistics cited in Table 39 indicated that those superintendents who believe that a student’s background characteristics play a role in learning to read received lower PSSA scores than those who do not. However, when presented as an interview question, perceptions varied widely. For example, one superintendent stated, “There’s no way you can take out poverty of the in the equation, and I say that sadly because when people talk about education and the shortcomings of our educational system they are afraid to talk about this real factor.” Of note, the interviewee who responded in this manner received

the second lowest PSSA score of the group for the three years examined. In contrast, research presented has echoed the former. Studies support the link between reading deficiencies and broader social consequences such as poverty, social disparity, and future earning potential (Fiester, 2013; Haywoode, 2013; Kame'enui, Adams, & Lyon, 2014; Lesnick, Smithgall, & Gwynne, 2010; The Campaign for Grade-Level Reading, 2014; Wennersten, 2013). In a similar manner, research suggested high residential mobility (HRM) families, homelessness, and the increasing population of students who qualify for free and reduced lunch are all obstacles to one's ability to read (Herbers et al., 2012). These characteristics presented in Chapter II were paralleled by the interviewees. Adding to this platform, another interviewee responded "Yes, I think there's a huge difference due to background." Of note, this school leader's PSSA scores were the third lowest of the group. Based on responses to the interview question, it appears that school leaders perceive a student's background as a determining factor in learning to read. However, data presented in this study runs contrary to this belief.

Conclusions for the interview question: In regard to the teaching methods used in your district, what are the reading strategies you believe are most effective in teaching reading? Describe how they impact teacher behavior and student learning. Perceptual responses to this question provided a variety of data. Data indicated that superintendents perceive professional development (2), teacher flexibility (2), use of small groups (3), and differentiated, explicit, systematic instruction as effective reading strategies (5). Consequently, data cited in research questions 1 and 2 align with these perceptions. Table 9 depicts mean PSSA scores for all modalities; thus, within each approach research cited has established the components listed above as breeding reading success. For example,

the component of differentiated, explicit and, systematic instruction consists of knowing where students are in the learning process and allows for increased learning, “I think the most important thing is knowing where students are, and assessing them where they are to determine a starting point.” This concept added strength to the platform built in Chapter II in regard to all reading modalities (McGraw Hill, 2015; Step by Step Learning, Inc. , 2015). Additionally, the use of small flexible student groups, and teacher flexibility in the development and supplementation of instructional materials surfaced as an effective reading strategy. One superintendent responded, “we let teachers develop their own resources, what I want to know is when you're hitting standards and what resources you are using to get to the standards.” Other effective strategies included the use of learning centers, explicit systematic instruction, and collaboration. Of note, the utilization of differentiated, explicit and systematic instruction is a component utilized in all modalities (Houghton-Mifflin-Harcourt, 2015; Jeong, 2009; Step by Step Learning, Inc. , 2015).

When analyzing the interview question: In regard to the teaching methods used in your district, what is the strength of your reading program and how did you acquire those strengths? Data presented in Table 52 indicated superintendent perceptions of effective reading strengths as, professional development (5), use of the Big 5 (3), teacher flexibility (3), and the implementation of differentiated, systematic and explicit instruction (4). As one superintendent stated, “I think our strength is not having a defined plan and not being militaristic...we are going to find the resources to help the learner.” This methodology parallels that of research presented in this study supporting all four modalities of teaching reading. Group statistics (Table 43) for mean PSSA scores for all modalities resulted in

PSSA scores ranging from 68% (scripted) to 81% (teacher-developed). Research has suggested that the perceived differences mentioned above are effective strengths of reading programs. For example, Valencia and Sulzby (1991) agreed, when engaged in a teacher-developed modality, bringing outside professional development and resources offered by the basal text can increase the ability of teachers to deliver strong instruction. In addition, research established in the study aligned with superintendents' perceptions in regard to explicit and systematic instruction. Numerous reading theorists and research within all modalities cite the benefits of this methodology of instruction (Cribbs, 2013; Gardner, 1999; Moats & Tolman, 2009). The scripted/non-scripted combined approach to teach reading can utilize all of the strengths mentioned in building an effective reading program. Consequently, the Welch, Brown and Forsythe test presented earlier determined a statistically significant finding in the use of this modality. "We acquired a lot of our strengths through professional development; our overall strength is meeting the needs of individual students, not looking at the class as a whole but looking at each child individually."

Lastly, conclusions regarding the interview question: In regard to the teaching methods used in your district, describe your perceptions of effective reading instruction practices. Data presented in Table 53 determined that the interviewees perceived effective reading instruction practices to include professional development (4), use of the Big 5 (2), teacher flexibility (2), scaffolding (2), and the implementation of differentiated, systematic and explicit instruction (3). As such, the relationship to PSSA scores can be linked to these perceived instructional practices. For example, all perceived instructional practices listed overlap within the four modalities of teaching reading. Measures of

central tendency statistics presented in this study determined a statistical significant link between PSSA scores of the scripted/non-scripted modality and number of years used. Research has suggested that the perceived effective practices cited have a positive impact on reading ability. Practices cited are implemented in the SBSL program (Step by Step Learning, Inc., 2015). In the teacher-developed arena, Archer (2001), poised, it is reasonable to conclude that implementing a balanced approach to reading, spearheaded by the practitioner may yield positive reading results. Therefore, teacher flexibility falls within this perception.

Recommendations

As a result of this study, Pennsylvania public school superintendents should understand that there is no “silver bullet” in regard to the utilization of a teacher-developed, scripted (SBSL), non-scripted or scripted/non-scripted combination reading program, and 3rd grade proficient/advanced reading/ELA PSSA scores. In contrast, the Welch and Brown-Forsythe test results indicated a statistically significant difference in the use of a non-scripted/scripted combined modality to teach K-2 reading and proficient/advanced 3rd grade reading/ELA PSSA scores; the longer the modality is used. Therefore, consideration should be given to “sticking” with a reading modality long enough to reap positive results. Likewise, an Independent Samples Test revealed that a statistically significant difference existed in the perception that those school leaders who do not perceive a student’s background as a determining factor in the learning process realize greater PSSA scores than those who do. In sum, the perception that all students can learn regardless of that student’s background produces higher standardized reading scores than those who do not.

The research indicated central themes and common threads on qualitative planes. Superintendents perceived the use of data, collaboration, RtII, teacher flexibility to supplement instruction, professional development, use of the Big 5, differentiated, systematic/explicit instruction, and the use of multiple resources as avenues to success in the reading world. Therefore, on a local level when school districts begin searching to update, augment, or replace an existing reading modality, the inclusion of teachers in the decision making process, and district research of various reading programs that complement each other, may prove to assist in increasing state assessment scores, student understanding, and application of reading goals.

Likewise, on a national level, the research presented may assist school leaders in the search for reading programs that will boost their respective curriculum and instructional techniques. The similarities and themes documented in this study are universal to learning methodology. For example, the concepts of Allington (2011), Clay (1975), Perkins (1993), Gardner (1999), Sulzby (1990), Teal (1983), Hansbrok (2010), Moats and Tolman (2009) have been tried and tested to be successful. Data from this study indicated that success in the reading arena can be realized by coupling a modality and time spent within that modality long enough to allow sound reading principles to take root; as indicated slightly in the teacher-developed approach and more significantly in the scripted/non-scripted combined approach. Data showed that school leaders who embrace the concept that all students can learn regardless of their backgrounds, produce higher tests scores than those who do not share this train of thought. The race to address current learning accountability and teacher evaluation standards coupled with the financial challenges of shrinking school budgets has pushed the learning envelope to the

brink of failure (Freidman, 2007; Haywoode, 2013; Lesnick, Smithgall, & Gwynne, 2010; Wennersten, 2013). The theories supporting successful reading instruction reach far and wide on the reading spectrum. Therefore, school leaders can couple the results of this study with teacher collaboration and input, prior to implementation, a preferred reading program modality change or upgrade.

Colleges and universities can view these results as a way to develop future teachers who are lifelong learners possessing the capacity to motivate and augment instruction to meet individual students' needs. As mentioned in the study, the ability to differentiate and individualize instruction to each student within a class is considered best/next practice (Houghton-Mifflin-Harcourt, 2015; McGraw Hill, 2015; Pearson-Scott-Foresman, 2015; Step by Step Learning, Inc. , 2015). In addition, through the university research and development departments, resources should be attributed to studies focused on combining teacher instructional technique and various modalities used to teach reading.

Future Research

Next, based on the results of this study, the researcher offers the following considerations for future research:

Based on the results of Table 9 and 20, this study can be augmented to reflect a deeper understanding of the impact of years a school district engages in a particular reading modality and the success rate of proficient/advanced scores on the state assessment. Emphasis should target the possible indicators of success within the teacher-developed approach. As mentioned earlier, challenges within this study are small sample

size, and the amount of time engaged within the scripted/non-scripted combined approach to realize positive results.

This study can be replicated to gain a better understanding of the effects of combined modalities used to teach reading to elementary aged students. Research presented in Chapter II sheds light on the success of combined approaches to teach reading. Likewise, data from this study indicated that mean scores showed some increases; however, not significant unless tested by themselves.

Further research is needed to fully understand the impact and possible phenomena why reading success was observed in 1-6 years of use for school districts who employ a particular modality, but dropped for years 7-9, and increased again after 10 years or more of engagement. As presented in Chapter II, possible causes may include, decreases in school budgets (both local and state), teacher turnover, school board changes, or superintendent turnover to name a few. These issues are represented fully in Table 10 and 12.

Additional research is needed in the area of aligning the PSSA to effective instructional strategies as noted in Table 37. A majority of school leaders perceive that what the PSSA measures is not an accurate reflection of the quality of education students are receiving. Greater success may be realized by aligning the content of state assessments with content and instructional practices within the classroom.

Further study is needed to determine the effects of students' background characteristics and their ability to learn. Within this study, both quantitative and qualitative results suggested a disconnect in current theory and practice. Further study

may assist in unlocking the true correlation of learning and its association, or lack thereof to a student's background characteristics, such as socio-economic status.

Study Limitations

Several limitations may have been present in this study. First, the study itself was centralized to the Commonwealth of Pennsylvania. Results may have revealed a different perspective if a broader range of participants was utilized encompassing multiple states or the nation as a whole.

Only the perceptions of one group (superintendents) and one set of archived assessments (PSSA) were surveyed and analyzed. As such, the inclusion of teachers and possibly students coupled with multiple assessments may have produced varying results.

As mentioned above, when analyzing data for this study, the researcher only utilized the perceptions, and not actual observations of superintendents. Results may have been different if actual classroom observations were conducted and reported for this study.

In addition, survey responses to all questions varied. For example, unequal responses were noted in each modality, resulting in small sample sizes. As such, data may have been impacted by the lack of quantifiable responses. Adding to this platform, variance errors were noted in the data set. These errors may have impacted the data results.

Next, the survey was administered during the latter part of July and into the first three weeks of August. The timing may have overlapped with superintendents preparing for the upcoming school year. Therefore, results may have been abbreviated, rushed through, or handed to a designee to complete.

Finally, due to the sensitive nature of state standardized tests, those school districts who felt that their scores were not within the range of acceptance may have not completed the survey. Data indicated that mean PSSA scores of survey participants (Table 9) were in the higher range of state scoring. Therefore, vital participants may not have participated.

Importance to the Field of Study

Data presented in this study is important to the field of study on many levels. First, a common theme throughout the educational arena is the mindset that all students can learn regardless of background characteristics. However, results of this study indicated that not all school leaders believe the student background concept to be of value. With this in mind, an Independent Samples Test (Table 39) indicated that those superintendents, who do perceive a student's background characteristics as a barrier to learning, receive lower standardized test scores than those who do not. Barriers to learning are present within the scope of many students; however, research suggested that refusing to allow outside factors to influence the quality of education delivered, all students can and do learn. Consequently, studies have suggested that all but 2-5 percent of children can learn basic reading skills by the first grade, even in populations where the socioeconomic environment may appear to be a barrier (Kame'enui, Adams, & Lyon, 2014; Moats & Tolman, 2009).

As mentioned in Chapters I and II, the importance of learning to read impacts the success of the individual and the nation (Adler, 2001; Barra, 2007; Friedman & Mandelbaum, 2011). The current pool of qualified high school graduates is neither large enough nor skilled enough to supply our nation's workforce, higher education, leadership

and national security needs (Fiester, 2010; Haywoode, 2013; Wennersten, 2013). In an increasing global and technical economy, the United States is struggling to find qualified workers. Additionally, higher education is expending large amounts of resources and time offering remedial courses to those students who possess a high school diploma but are unprepared for college level work (Fiester, 2010; Friedman, 2007; Friedman & Mandelbaum, 2011; Lesnick, Smithgall, & Gwynne, 2010). The ability to read enhances the success rate of the individual and country. It has been suggested by some that the third grade represents a transition from learning to read literary and informational text to reading to learn content. (Wennersten, 2013). Research cited earlier regarding the successful engagement of reading strategies that target this focus have been shown to yield positive returns on the investment. For example, Fiester (2013) reported that improvement in educational outcomes produced a long-term return on investment of \$8.24 for every \$1 invested in early literacy education of students 4-6 years old. The field of education requires its practitioners to operate in manners that are conducive the learning goal.

Second, data presented in this study suggested that by combining different modalities to teach reading, success in reading comprehension can be achieved. In relation to the field of education, school leaders need to allot time and resources to determining what combination of reading approaches fits best for their respective district. Results of this study indicated that once this decision is made, greatest success is realized after approximately 10 years of use. Important to the field of study would be avenues to shorten the success timeline. Research has suggested that by the third grade, students should have a firm grasp on reading skills. The third grade represents a transition from

learning to read literary and informational text to reading to learn content. While the more skilled readers in the class learn knowledge and new words from context, poor readers, out of frustration, begin to avoid reading (Wennersten, 2013). Compounding the issue, content classes such as science, social studies, and math, rely more on textual analysis, so that struggling readers begin to fall behind in these subjects, as well. In this way, they fall further and further behind in school, dropping out at a much higher rate than their peers (Kame'enui, Adams, & Lyon, 2014; Wennersten, 2013). Research has suggested that combining reading modalities, produces reading comprehension results. Research showed that employing the combined resources of the teacher and district basal text, successes are common in reading gains (Balkiewicz, 1991; O'Neill, 2004). A combination of approaches to instruction is essential since students vary in their needs and learning styles (Archer, 2004; Allington, 2002; Bruner, 1996; Gunn, Simmons, & Kameenui, 1995; Moats & Tolman, 2009; National Reading Panel, 2000). Most specifically, the combined resources of the scripted/non-scripted approach appeared to produce the most promising results.

Lastly, important to the field of study is the aspect of the teacher. As indicated in Table 10, the teacher-developed approach to teach reading produced respectable PSSA scores of the study population. The importance of this finding lies in the affect the teacher has on the learning process regardless of the modality used to teach reading. Research has shown that when coupled with other modalities, the teacher-developed approach produces reading results. Being a 21st century teacher not only requires teachers to move away from a teaching methodology that sets limitations for learning, but to also remove boundaries around their own professional learning to develop a more critical, reflective,

transformative pedagogy created through self-exploration (Balkiewicz, 1991; Gonzales, 2012; O'Neill, 2004). By structuring the learning to fit the multiple needs of all students; teacher are action researchers who experiment with multiple instructional strategies, flexible groupings of children, and various reading and writing materials/themes (Balkiewicz, 1991; Bruner, 1996; Clay, 1975; Durkin, 1993; Gardner, 1999; International Center for Leadership in Education, 2014; Moats & Tolman, 2009; National Reading Panel, 2000). As such, Archer's (2004) research postulated that America's educational school system relies on efficient teachers to provide the most effective, successful reading instruction to improve students' education.

Results of an ANOVA indicated that no statistically significant difference existed between classroom size and 3rd grade proficient/advance reading/ELA PSSA scores (Table 29). In sum, the data indicated that contrary to common thought and practice, lower classroom size did not produced significant differences in PSSA scores. Again, the key to successful reading skills may fall upon the effectiveness of the teacher.

In closing, it is the opinion of the researcher that the teacher holds the capacity to further the learning ability of students. However, this ability is burdened by the many distractions associated with the learning process. For example, the creative process that teachers possess may be suppressed by the pressure and stress associated with the state assessment process and budgetary constraints. In short, mechanisms unrelated to the learning process are the barriers to learning, not the learning process or modality itself. It is the opinion of the researcher that a motivated and caring teacher can be successful in teaching reading comprehension within any modality of teaching reading; furthermore, a motivated teacher usually results in motivated students. That said, it has been the

experience of the researcher that classroom size, background characteristics, and other distractions to learning often dissipate and fall when confronted with a motivated teacher and school leadership.

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Appendix A

Pedulla Survey

NBETPP



The National Board on Educational Testing and Public Policy

TEACHER SURVEY ON THE IMPACT OF STATE-MANDATED TESTING PROGRAMS

**National Board on Educational Testing and Public Policy
Boston College**

Instructions for completing the questionnaire: The purpose of this questionnaire is to gather information about state-mandated testing and its impact on classroom instruction and student learning from teachers in elementary, middle, and high schools. These issues are particularly important for the education reform efforts that are currently taking place.

A key term should be defined as it is used in the questionnaire: **state-mandated tests** are those standardized tests that your state requires of its schools at specific grade levels (such as a statewide basic skills test or a test required for high school graduation).

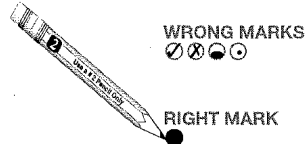
We are interested in your candid beliefs and practices about important issues related to these tests. Your individual responses will be kept strictly confidential and will not be provided to any other person or group. Since you have been selected as part of a national sample, your responses are extremely important if we are to represent accurately what teachers across the United States think about these issues.

If you currently teach more than one class, **respond about the class with which you last met before completing this questionnaire.** Think only of this class and/or subject as you complete this survey.

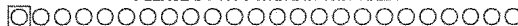
Some of the questions may not be relevant to what takes place in your class, school district, or state. In that case, please skip the question and continue completing the survey. **Please return the completed questionnaire in the enclosed self-addressed stamped envelope within the next week.** We thank you in advance for participating in this important study.

IMPORTANT MARKING INSTRUCTIONS

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the circle completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.
- Do not fold, tear, or mutilate this form.



PLEASE DO NOT WRITE IN THIS AREA



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	Strongly Agree	Agree	Disagree	Strongly Disagree
24. Many low scoring students will do better on the state-mandated test if they receive specific preparation for it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Score differences from year to year on the state-mandated test reflect changes in the characteristics of students rather than changes in school effectiveness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Student morale is high in my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. If I teach to the state standards or frameworks, students will do well on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Many students in my class feel that, no matter how hard they try, they will still do poorly on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. The state-mandated test measures high standards of achievement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Media coverage of state-mandated testing issues has been unfair to teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. The state-mandated test is NOT an accurate measure of what students who are acquiring English as a second language know and can do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. The majority of my students try their best on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Many students are extremely anxious about taking the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Teachers have high expectations for the in-class academic performance of students in my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Differences among schools on the state-mandated test are more a reflection of students' background characteristics than of school effectiveness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. My school has an atmosphere conducive to learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Teachers feel pressure from parents to raise scores on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Media coverage of state-mandated testing issues adequately reflects the complexity of teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. There is so much pressure for high scores on the state-mandated test that teachers have little time to teach anything not on the test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. The state-mandated test has brought much needed attention to education issues in my district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Students are under intense pressure to perform well on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. My tests are in the same format as the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Teachers in my school want to transfer out of the grades where the state-mandated test is administered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. The state-mandated testing program leads some teachers in my school to teach in ways that contradict their own ideas of good educational practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Teachers in my school have found ways to raise state-mandated test scores without really improving student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. State-mandated testing has caused many students in my district to drop out of high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Teachers feel pressure from the building principal to raise scores on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. State-mandated test results have led to many students being retained in grade in my district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Administrators in my school believe students' state-mandated test scores reflect the quality of teachers' instruction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. My tests have the same content as the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Many students in my school cheat on the state-mandated test.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you teach more than one class, please respond about the class with which you last met when answering questions 52 through 59.

- 52. Are students placed in the class based on their achievement (i.e., tracked)? Yes No
- 53. Which one of the following categories best describes the ability/achievement level of this class?
 - High ability or achievement
 - Low ability or achievement
 - Average ability or achievement
 - Mixed ability or achievement
- 54. How many students are in this class? 1-15 16-20 21-25 26-30 31+

PLEASE DO NOT WRITE IN THIS AREA

61. The following is a list of ways in which state-mandated test results are used. For each item please indicate how appropriate you feel the specific use is. Please rate each use with the following scale.

	Very Appropriate	Moderately Appropriate	Moderately Inappropriate	Very Inappropriate
Place students in gifted and talented/honors programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Place students in special education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remediate students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote or retain students in grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduate students from high school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group students by ability in a grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate teacher or administrator performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Award teachers or administrators financial bonuses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reward schools financially	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hold schools accountable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hold the district accountable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rank schools publicly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire faculty/staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Award school accreditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Place public schools in receivership/state takeover	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate charter schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate voucher programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

62. In what ways, if any, has the amount of time spent on each of the following activities changed in your school in order to prepare students for the state-mandated testing program? Please skip to question #63 if you are a first year teacher.

	Decreased a Great Deal	Moderately Decreased	Stayed About the Same	Moderately Increased	Increased a Great Deal
Instruction in tested areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in areas not covered by the state-mandated test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in tested areas with high stakes attached (e.g., promotion, graduation, teacher rewards)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in tested areas without high stakes attached	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in the fine arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in physical education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in foreign language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instruction in industrial/vocational education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student free time (e.g., recess, lunch)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Field trips (e.g., museum tour, hospital tour)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Class trips (e.g., circus, amusement park)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student choice time (e.g., games, computer work)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organized play (e.g., games with other classes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enrichment school assemblies (e.g., professional choral group performances)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administrative school assemblies (e.g., awards ceremonies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classroom enrichment activities (e.g., guest speakers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student performance (e.g., class plays)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parental contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

303-5316
Part

71. Using the following scale, indicate the extent of your agreement with the statements below regarding the state-mandated test results.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Have Never Seen the Report
The <i>individual</i> student reports on test performance are easy to interpret.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The <i>individual</i> student reports on test performance provide useful information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The <i>school</i> reports on student performance are easy to interpret.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The <i>school</i> reports on student performance provide useful information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The <i>district</i> reports on student performance are easy to interpret.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The <i>district</i> reports on student performance provide useful information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

72. Do YOU use the results of the state-mandated test for any of the following activities? Mark ALL that apply.

- | | |
|--|---|
| <input type="radio"/> Group students within my class | <input type="radio"/> Give feedback to students |
| <input type="radio"/> Evaluate student progress | <input type="radio"/> Give feedback to parents |
| <input type="radio"/> Assess my teaching effectiveness | <input type="radio"/> Determine student grades (in whole or in part) |
| <input type="radio"/> Select instructional materials | <input type="radio"/> Do not get the results back in time to use them |
| <input type="radio"/> Plan my instruction | <input type="radio"/> None of the above |
| <input type="radio"/> Plan curriculum | |

73. Are the results from the state-mandated test used in your DISTRICT to make decisions about the following? Please mark ALL that apply.

- | | |
|---|---|
| <input type="radio"/> Place students in gifted and talented/honors programs | <input type="radio"/> Hold the district accountable |
| <input type="radio"/> Place students in special education | <input type="radio"/> Rank schools publicly |
| <input type="radio"/> Remediate students | <input type="radio"/> Fire faculty/staff |
| <input type="radio"/> Promote or retain students in grade | <input type="radio"/> Award school accreditation |
| <input type="radio"/> Graduate students from high school | <input type="radio"/> Place public schools in receivership/state takeover |
| <input type="radio"/> Group students by ability in a grade | <input type="radio"/> Evaluate charter schools |
| <input type="radio"/> Evaluate teacher or administrator performance | <input type="radio"/> Evaluate voucher programs |
| <input type="radio"/> Award teachers or administrators financial bonuses | <input type="radio"/> None of the above |
| <input type="radio"/> Reward schools financially | <input type="radio"/> Other: _____ |
| <input type="radio"/> Hold schools accountable | |

74. Is there at least one person at your school that teachers can turn to for accurate information about the state-mandated testing program?

- Yes No

75. How adequate has professional development in the following areas been in preparing teachers in your district to implement the state-mandated testing program?

	Very Adequate	Adequate	Inadequate	Very Inadequate	No Professional Development
Knowledge of state curriculum standards or frameworks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alignment of the classroom curriculum to the state curriculum standards/frameworks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alignment of the classroom curriculum to the state-mandated test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Test preparation strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administration of the state-mandated test	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpretation of the test results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of test results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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63. Approximately how many class hours PER YEAR do you spend preparing students specifically for the state-mandated test (e.g., teaching test-taking skills)?
- None
 - 1-10
 - 11-20
 - 21-30
 - More than 30

64. When were most of the test preparation activities you conducted specifically for the state-mandated test carried out?
- No specific preparation
 - The day before
 - Throughout the week before
 - Throughout the two weeks before
 - Throughout the month before
 - Throughout the year

65. How similar is the content of the test preparation materials you use to the content of the state-mandated test?
- Very similar
 - Somewhat similar
 - Somewhat dissimilar
 - Very dissimilar

66. One test preparation strategy is to target specific groups of students. Please mark ALL that apply related to your state-mandated test.
- I do not target test preparation at specific groups of students
 - I target test preparation at LEP or ESL students
 - I target test preparation at Special Education (SPED) students
 - I target test preparation at students on the border of passing the state-mandated test
 - I target test preparation at students who are on the border of moving to the next performance level.

67. Have you heard of any of the following activities taking place during the state-mandated test administration at your school?

Have any teachers at your school ...

- given students hints about answers?
- pointed out mismarked items to students?
- given some students more than the allowed time?
- provided instruction during the test?
- changed student answers on the test?

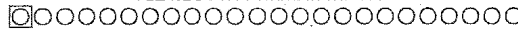
Yes	No
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

68. Does your school rely on any of the following strategies to influence students to do their best work on the state-mandated test? Mark ALL that apply.
- Discussing the importance to the school of good performance on the test
 - Holding student assemblies to motivate students
 - Publicly recognizing students for good performance
 - Scheduling special activities (e.g., pizza parties, field trips)
 - Providing free time as a reward to students
 - Linking performance to eligibility for participation in extra curricular activities (e.g., athletics, clubs)
 - Giving prizes to reward students
 - Requiring/recommending summer school
 - Retaining students in grade
 - Using scores for assigning report card grades
 - Placing students in classes (e.g., honors, remedial)
 - Exempting students who do well from required course work

69. How often do your SCHOOL'S results on the state-mandated test influence your own teaching? Mark *only* one response.
- Daily
 - A few times a week
 - A few times a month
 - A few times a year
 - Never
 - I did not receive the school's test results in time to use them
 - I teach a grade and/or subject that does not receive the school's test results
 - I teach a grade and/or subject that should get results but did not receive them

70. How often do your own STUDENT'S results on the state-mandated test influence your teaching? Mark *only* one response.
- Daily
 - A few times a week
 - A few times a month
 - A few times a year
 - Never
 - I did not receive students' test results in time to use them
 - I teach a grade and/or subject that does not receive students' test results
 - I teach a grade and/or subject that should get students' results but did not receive them

PLEASE DO NOT WRITE IN THIS AREA



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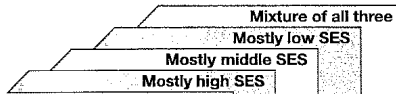
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If you teach more than one class, please respond about the class with which you last met when answering questions 55 through 59.

For questions 55 and 56, mark the response that most closely estimates the percent of your total class that each group falls into. Since a student may fall into more than one category, the percents need NOT total 100%.

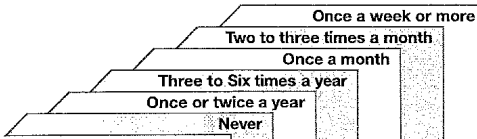
	0%	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
55. African-American	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
American Indian or Alaskan Native	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asian or Pacific Islander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hispanic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Limited English Proficiency (LEP)/English as a Second Language (ESL)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Special Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	0%	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
57. Which response best describes the socio-economic status (SES) of most of the students in each group? Please mark the appropriate column for each group of students.											
Groups											
Students in your class											
Students in your school											
Students in your district											



	0%	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
58. What percent of your students ...											
have a computer at home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
prefer to write first drafts using a computer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
can keyboard moderately well (20 words per minute or more)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	0%	1-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
59. About how often do you typically use assessments of the following types?											
Multiple-choice questions											
Open response (short answer)											
Extended response (essay)											
Performance assessment (e.g., debates, experiments, portfolios)											
Group work yielding an individual product											
Group work yielding a group product											



60. How do you prepare your students for your state-mandated test? Mark ALL that apply:
- I do no special test preparation.
 - I teach test-taking skills.
 - I encourage students to work hard and prepare.
 - I provide rewards for test completion.
 - I teach the standards or frameworks known to be on the test.
 - I provide students with items similar to those on the test.
 - I provide test-specific preparation materials developed commercially or by the state.
 - I provide students with released items from the state-mandated test.

367-3310e
part

1. In what state do you currently teach? Indicate by marking next to the appropriate state abbreviation.

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="radio"/> AL | <input type="radio"/> HI | <input type="radio"/> MA | <input type="radio"/> NM | <input type="radio"/> SD |
| <input type="radio"/> AK | <input type="radio"/> ID | <input type="radio"/> MI | <input type="radio"/> NY | <input type="radio"/> TN |
| <input type="radio"/> AZ | <input type="radio"/> IL | <input type="radio"/> MN | <input type="radio"/> NC | <input type="radio"/> TX |
| <input type="radio"/> AR | <input type="radio"/> IN | <input type="radio"/> MS | <input type="radio"/> ND | <input type="radio"/> UT |
| <input type="radio"/> CA | <input type="radio"/> IA | <input type="radio"/> MO | <input type="radio"/> OH | <input type="radio"/> VT |
| <input type="radio"/> CO | <input type="radio"/> KS | <input type="radio"/> MT | <input type="radio"/> OK | <input type="radio"/> VA |
| <input type="radio"/> CT | <input type="radio"/> KY | <input type="radio"/> NE | <input type="radio"/> OR | <input type="radio"/> WA |
| <input type="radio"/> DE | <input type="radio"/> LA | <input type="radio"/> NV | <input type="radio"/> PA | <input type="radio"/> WV |
| <input type="radio"/> DC | <input type="radio"/> ME | <input type="radio"/> NH | <input type="radio"/> RI | <input type="radio"/> WI |
| <input type="radio"/> FL | <input type="radio"/> MD | <input type="radio"/> NJ | <input type="radio"/> SC | <input type="radio"/> WY |
| <input type="radio"/> GA | | | | |

2. What subject(s) do you teach? Please mark ALL that apply.

- | | |
|--|---|
| <input type="radio"/> All (Elementary Education) | <input type="radio"/> Social Studies |
| <input type="radio"/> English | <input type="radio"/> Special Education |
| <input type="radio"/> Math | <input type="radio"/> Other: _____ |
| <input type="radio"/> Science | |

3. What grade level(s) do you currently teach? Please mark ALL that apply.

- | | | | |
|------------------------------------|-------------------------|-------------------------|--------------------------|
| <input type="radio"/> Kindergarten | <input type="radio"/> 4 | <input type="radio"/> 7 | <input type="radio"/> 10 |
| <input type="radio"/> 1 | <input type="radio"/> 5 | <input type="radio"/> 8 | <input type="radio"/> 11 |
| <input type="radio"/> 2 | <input type="radio"/> 6 | <input type="radio"/> 9 | <input type="radio"/> 12 |
| <input type="radio"/> 3 | | | |

4. Which category best describes your school?

- Urban
 Suburban
 Rural

5. How do your school's results on the state-mandated test compare to those of other schools in your state?

- Above average
 Average
 Below average

Please indicate the extent to which you agree with each of the following statements by filling in the circle that corresponds with your response.

6. Teachers in my school do NOT use computers when teaching writing because the state-mandated writing test is handwritten.
7. The state-mandated test is compatible with my daily instruction.
8. The state-mandated test is as accurate a measure of student achievement as a teacher's judgement.
9. My district's curriculum is aligned with the state-mandated testing program.
10. The state-mandated test is based on a curriculum framework that ALL teachers in my state should follow.
11. Overall, the benefits of the state-mandated testing program are worth the investment of time and money.
12. What the state-mandated test measures is about the same as what any commercially available standardized achievement test (e.g., Stanford 9, ITBS, CAT) measures.
13. Teacher morale is high in my school.
14. The instructional texts and materials that the district requires me to use are compatible with the state-mandated test.
15. Scores on the state-mandated test accurately reflect the quality of education students have received.
16. The state-mandated testing program is just another fad.
17. Teachers have high expectations for the performance of all students on the state-mandated test.
18. My school's (district's) policy forbids using computers when teaching writing because it does NOT match the format of the state-mandated writing test.
19. Performance differences between minority and nonminority students are smaller on the state-mandated test than on commercially available standardized achievement tests (e.g., Stanford 9, ITBS, CAT).
20. The state-mandated test motivates previously unmotivated students to learn.
21. Teachers feel pressure from the district superintendent to raise scores on the state-mandated test.
22. The state-mandated test is NOT an accurate measure of what minority students know and can do.
23. Media coverage of state-mandated test results accurately reflects the quality of education in my state.

	Strongly Agree	Agree	Disagree	Strongly Disagree
6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

308-9386


Appendix B

3rd Grade Proficient/Advanced PSSA Scores

Survey Participants

	12-13	13-14	11-12
Brentwood Borough SD	81	75	83
Chartiers Valley SD	78	82	76
Deer Lakes SD	79	77	79
Elizabeth Forward SD	89	82	87
Montour SD	88	83	87
North Hills SD	84	83	88
West Jefferson Hills SD	92	88	88
Aliquippa SD	47	54	59
Blackhawk SD	87	84	85
Hopewell Area SD	82	83	81
New Brighton Area SD	74	78	84
Bedford Area SD	76	73	79
Wilson SD	88	88	88
Spring Cove SD	65	71	82
Quakertown Community SD	85	80	86
Mars Area SD	90	93	92
Seneca Valley SD	85	85	89
Blacklick Valley SD	72	64	86
Conemaugh Valley SD	70	70	83
Crawford Central SD	71	62	78
Mechanicsburg Area SD	82	84	80
Central Dauphin SD	78	73	78
Derry Township SD	84	71	82
Upper Dauphin Area SD	81	71	82
Chichester SD	72	60	78
Haverford Township SD	88	90	89
William Penn SD	49	46	57
Saint Marys Area SD	84	78	86

Corry Area SD	71	65	70
Harbor Creek SD	88	88	87
Iroquois SD	76	71	80
Albert Gallatin Area SD	63	67	73
Brownsville Area SD	59	55	71
Frazier SD	74	80	81
Uniontown Area SD	74	60	64
Carmichaels Area SD	67	60	62
Southeastern Greene SD	70	78	69
West Greene SD	75	65	61
Juniata Valley SD	85	76	80
Blairsville-Saltsburg SD	79	69	79
Homer-Center SD	76	72	77
Brookville Area SD	84	76	83
Juniata County SD	68	63	72
Lakeland SD	75	68	88
Old Forge SD	70	77	66
Penn Manor SD	70	84	78
Annville-Cleona SD	84	82	80
Crestwood SD	84	83	85
Pittston Area SD	76	69	76
Otto-Eldred SD	75	65	84
Port Allegany SD	83	65	64
Jamestown Area SD	77	78	78
Sharpsville Area SD	79	85	73
East Stroudsburg Area SD	78	77	76
Jenkintown SD	90	95	80
Upper Merion Area SD	87	83	86
Upper Perkiomen SD	83	77	87
Saucon Valley SD	84	78	83
Austin Area SD	 77	93	67
Shanksville-Stonycreek SD	86	91	92
Somerset Area SD	71	67	75

Montrose Area SD	72	74	73
Cranberry Area SD	82	80	73
Oil City	71	70	78
Bentworth SD	77	82	70
Burgettstown Area SD	72	74	71
California Area SD	76	75	71
Charleroi SD	80	70	78
Chartiers-Houston SD	91	76	85
Fort Cherry SD	 81	86	83
McGuffey SD	65	80	78
Peters Township SD	95	94	94
Trinity Area SD	87	83	80
Washington SD	69	56	71
Monessen City SD	62	53	65
Yough SD	71	76	79
Dover Area SD	78	74	74
Northeastern York SD	78	76	81
Spring Grove Area SD	85	80	76
West York Area SD	75	76	78
York Suburban SD	88	83	94
Carbondale Area SD	59	58	74
Wilkes-Barre Area SD	51	48	60
Pleasant Valley SD	81	73	82
Bangor Area SD	75	71	77
Mifflinburg Area SD	85	77	73
Bethlehem-Center SD	77	72	67
Dubois Area SD	78	78	75
Wilson Area SD	78	77	80
Shenandoah Valley SD	65	63	68

Appendix C

Pontillo Interview Questions

Georgina Pontillo

the researcher. They were refined through the assistance of a group of administrators and classroom teachers. Piloting questions also aided in their refinement.

1. Describe those strategies you believe are most effective in teaching. Describe how they impact your teaching behavior and student learning.
2. Describe your teaching strengths and how you acquired them.
3. Describe your perception of effective teaching behaviors. Describe the process involved in becoming an effective teacher?
4. Describe how you have changed, grown, and evolved as a teacher over the years. Describe what have been the most important variables in contributing to your professional growth as an effective teacher.
5. Describe the culture and educational climate of your school and the impact of climate upon your professional growth as a teacher.
6. Describe one individual who has had a significant impact upon your professional growth. Describe one or two incidents that had a positive impact upon your professional growth.
7. Describe your perception of what a school would be like where collaboration and support permeate the building?
8. Describe the factors that have contributed the most to your professional growth as a teacher.
9. Describe your perception of an outstanding school. Describe your perception of how such an organization should design an effective professional development program.
10. Over the years you have participated in at least one professional development program. Describe the specific strengths of the program(s). Describe how this

program(s) may be improved.

11. What are the attributes of effective school leadership?
12. What is the central most important goal of effective school leadership?
13. Some educators suggest that schools have become too complex to be effectively run by a single administrator. Issues such as building management, discipline, curriculum development, assessment, and staff training may add to the impossible complexity of administering a school. Educators suggest that distributing leadership among teachers would benefit the effectiveness of the building. In what ways could teachers fit into these leadership roles?
14. Describe your perception of the kinds of behaviors exhibited by a teacher leader?
15. How do teachers in your building demonstrate leadership roles?
16. Do these teacher leaders change from person to person? If so, what affects this transition?
17. In what ways do organizational needs, a vision, a mission, or necessary outcomes have in relation to those people who appear as teacher leaders in your building?
18. Explain what it takes to be perceived as a teacher leader. How do you feel you may fit into this description?

Members of the primary staff were mailed informed consent forms. Those responding positively were scheduled for interviews. Interview sessions were recorded and transcribed. Transcriptions of interviews were made from taped recordings utilizing Dragon's Naturally Speaking speech recognition software. The researcher used the work of Elmore, Diamond, Spillane, Guskey, and Sparks to reach conclusions as to the role of distributed leadership in effective staff development. The researcher also used the

Appendix D

Welcome Letter/Request to Participate

Dear Superintendent,

My name is Jesse Wallace; a doctoral candidate at Indiana University of Pennsylvania, I am currently engaged in writing my dissertation, the “The Effects of a K-2 Commercialized Reading Program on 3rd Grade Reading Mastery as Measured by the Pennsylvania System of School Assessment (PSSA).” Consequently, I am also the Superintendent of the Laurel Highlands School District, located in Uniontown Pennsylvania. That said, I am keenly aware that your time is limited and valuable.

I respectfully request your (or designee’s) participation in a short ten (10) item survey regarding the type of reading program currently utilized in your district’s K-2 learning environment. There is no right or wrong answers. I anticipate no more than ten (10) minutes to complete the survey. Your involvement will greatly assist me in documenting the necessary data needed to complete my dissertation.

No personal or sensitive information will be asked. No one will be able to identify you or your information, and at no time will responses be linked with any identifying information. Pseudonyms will be used to as a method of keeping information confidential in accordance with federal guidelines. There are no foreseeable personal or professional risks associated with completing this survey or participating in the study. This study has been approved by the Institutional Review Board (IRB) of Indiana University of Pennsylvania.

Your participation in this study is voluntary and you may exit the survey or study at any time. By completing this survey, you are giving your consent to participate in this study.

If you agree to participate, please follow the link to the survey:

I appreciate your consideration to participate in this endeavor. If you have additional questions or concerns regarding this study, please contact Jesse T. Wallace, III (Principal Investigator) or Dr. David Piper (Dissertation Chair) as indicated below.

Respectfully,

Jesse T. Wallace, III
Doctoral Candidate, Indiana University of Pennsylvania
j.t.wallace@iup.edu
724-437-2821
304 Bailey Avenue, Uniontown, PA 15401

Dr. David Piper
Dissertation Chair, IUP
dpiper@iup.edu
724-357-4471

This study has been approved by the Institutional Review Board (IRB) of Indiana University of Pennsylvania for the protection of human subjects (Phone 724.357.7730).

Appendix E

IRB Approval

287

Appendix E

IRB Approval



Indiana University of Pennsylvania
www.iup.edu

Institutional Review Board for the
Protection of Human Subjects
School of Graduate Studies and Research
Sright Hall, Room 113
210 South Tenth Street
Indiana, Pennsylvania 15705-1048

P 724-357-7730
F 724-357-2715
irb-research@iup.edu
www.iup.edu/irb

July 6, 2015



Dear Mr. Wallace:

Your proposed research project, "The Effects of a K-2 Commercialized Reading Program on 3rd Grade Reading Mastery as Measured by the Pennsylvania System of School Assessment (PSSA)," (Log No. 15-15B) has been reviewed by the IRB and is approved as an expedited review for the period of June 30, 2015 to June 30, 2016. This approval does not supersede or obviate compliance with any other University requirements, including, but not limited to, enrollment, degree completion deadlines, topic approval, and conduct of university-affiliated activities.

You should read all of this letter, as it contains important information about conducting your study.

Now that your project has been approved by the IRB, there are elements of the Federal Regulations to which you must attend. IUP adheres to these regulations strictly:

1. You must conduct your study exactly as it was approved by the IRB.
2. Any additions or changes in procedures must be approved by the IRB before they are implemented.
3. You must notify the IRB promptly of any events that affect the safety or well-being of subjects.
4. You must notify the IRB promptly of any modifications of your study or other responses that are necessitated by any events reported in items 2 or 3.

Should you need to continue your research beyond June 30, 2016 you will need to file additional information for continuing review. Please contact the IRB office at irb-research@iup.edu or 724-357-7730 for further information.

The IRB may review or audit your project at random or for cause. In accordance with IUP Policy and Federal Regulation (45CFR46.113), the Board may suspend or terminate your project if your project has not been conducted as approved or if other difficulties are detected.

Although your human subjects review process is complete, the School of Graduate Studies and Research requires submission and approval of a Research

IRB to Jesse T. Wallace, III, July 6, 2015

Topic Approval Form (RTAF) before you can begin your research. If you have not yet submitted your RTAF, the form can be found at <http://www.iup.edu/page.aspx?id=91683>.

While not under the purview of the IRB, researchers are responsible for adhering to US copyright law when using existing scales, survey items, or other works in the conduct of research. Information regarding copyright law and compliance at IUP, including links to sample permission request letters, can be found at <http://www.iup.edu/page.aspx?id=165526>.

I wish you success as you pursue this important endeavor.

Sincerely,

A handwritten signature in cursive script that reads "Jen Roberts".

Jennifer Roberts, Ph.D.
Chairperson, Institutional Review Board for the Protection of Human Subjects
Professor of Criminology

JLR:jeb

Cc: Dr. David Piper, Dissertation Advisor
Dr. Robert Millward, Graduate Coordinator
Ms. Brenda Boal, Secretary

Appendix F

Follow-Up Reading Interview Questions

- 1) What are your perceptions of effective K-2 reading practices in your school district and in general?
- 2) What are perceptions of ineffective K-2 reading practices in your school district and in general?
- 3) In regards to K-2 reading instructional methods used in your district, what is your perception that the 3rd grade reading/ELA portion of the PSSA measures high standards of achievement? Why? (Pedulla #29 modified)
- 4) In regards to K-2 reading instructional methods used in your district, do you perceive differences among schools on the 3rd grade PSSA are more a reflection of students' background characteristics than of school effectiveness? (Pedulla #35 modified)
- 5) In regards to the teaching methods used in your district, what are the reading strategies you believe are most effective in teaching reading? Describe how they impact teacher behavior and student learning. (Pontillo #1 modified)
- 6) In regards to the teaching methods used in your district, what is the strength of your reading program and how did you acquire those strengths? (Pontillo #2 modified)
- 7) In regards to the teaching methods used in your district, describe your perceptions of effective reading instruction practices. (Pontillo #3 modified)

Appendix G

Superintendent Reading Program Survey

1. Does your school district utilize one of the following modalities for teaching reading at the elementary K-2 level? Please select yes or no.
 - a) **Teacher Developed**- The teacher develops his/her curriculum and instructional plan for reading independently of a basal published text or commercialized reading vendor.
1. YES NO
 - b) **Use of non-scripted commercialized reading program**- Teacher engages in the development and implementation of instruction based on use of the district supplied basal text. Examples are but not limited to, McGraw-Hill, Houghton-Mifflin-Harcourt, or Pearson-Scott Foresman
YES NO
Please name: _____
 - c) **Use of scripted commercialized reading program integrated with district basal text or teacher-developed reading program**- Examples are, but not limited to Step by Step Learning, Inc., Success For All, or Reading Recovery. YES NO
Please name: _____
 - d) **Other**- Please explain

2. Which category best describes your school? (Pedulla # 4)
 Urban
 Suburban
 Rural
3. Does your district's modality of teaching reading align with what the PSSA measures? (Pedulla #12 modified)
 Strongly Agree
 Agree
 Disagree
 Strongly Disagree
4. The instructional texts and materials the district utilizes to teach reading are comparable with the reading/ELA portion of the PSSA? (Pedulla #14 modified)
 Strongly Agree
 Agree
 Disagree
 Strongly Disagree

5. To what degree do you feel that your third grade PSSA scores are positively influenced by your K-2 reading program?
- Strongly Agree
 - Agree
 - Disagree
 - Strongly disagree
6. For how many years have you been engaged in using your current reading K-2 grade reading modality? Please circle correct years.
- a. **Teacher Developed**- 1-3 years, 4-6 years, 7-9 years, 10 + years
 - b. **Non-Scripted Commercialized**- 1-3 years, 4-6 years, 7-9 years, 10 + years
 - c. **Scripted Commercialized**- 1-3 years, 4-6 years, 7-9 years, 10 + years
 - d. **Other**: Please explain _____
7. How do your school's results of the reading portion of the PSSA compare to schools within your County/City? (Pedulla #5 modified)
- Top
 - Above average
 - Average
 - Below average
8. How many K-2 students do you average in a reading class? (Pedulla #54 modified)
- 1-15
 - 16-20
 - 21-25
 - 26-30
 - 31+
9. How similar is the content of the reading program you use to the content of the PSSA? (Pedulla #65 modified)
- Very Similar
 - Somewhat similar
 - Somewhat dissimilar
 - Very Dissimilar
10. In regards to K-2 reading instructional methods used in your district, do you perceive your reading program daily instruction compatible with the PSSA? (Pedulla #7 modified)
- a. Yes
 - b. No

11. In regards to K-2 reading instructional methods used in your district, do you perceive the PSSA an accurate measure of student reading achievement as the teachers judgment? (Pedulla # 8 modified)
- a. Yes
 - b. No
12. In regards to K-2 reading instructional methods used in your district, do you perceive the instructional texts and materials used to teach reading are compatible with the PSSA? (Pedulla #14 modified)
- a. Yes
 - b. No
13. In regards to K-2 reading instructional methods used in your district, do you perceive 3rd grade score on the PSSA accurately reflect the quality of education students have received? (Pedulla #15 modified)
- a. Yes
 - b. No
14. In regards to K-2 reading instructional methods used in your district, do you perceive score differences on the 3rd grade PSSA reflect changes in the characteristics of students rather than changes in school effectiveness? (Pedulla #25 modified)
- a. Yes
 - b. No
15. In regards to K-2 reading instructional methods used in your district, do you perceive that the PSSA leads some teachers to teach in ways that contradict their own ideas of good educational practice? (Pedulla # 44 modified)
- a. Yes
 - b. No
16. Would you or a designee agree to a ten question follow-up phone interview to discuss the perceived effective and ineffective practices associated with your district's modality to teach reading to K-2 students?
- a. YES
 - b. NO
- Name: _____
- Phone: _____
- Email: _____

Appendix H
Pedulla Permission

Page 1 of 1

Jesse Wallace - Re: Survey

From: Jesse Wallace
To: joseph.pedulla@bc.edu
Subject: Re: Survey

Dr. Pedulla,

Thank you very much, I will forward my results to you once complete.

Thanks,

>>> Joseph Pedulla <joseph.pedulla@bc.edu> 4/13/2015 10:12 AM >>>
Hi Jesse,

You have my permission to use the survey in part on in its entirety. I would ask that you give appropriate attribution and that you share your findings with me on completion of your study.

Sincerely,
J. Pedulla

On Mon, Apr 13, 2015 at 9:15 AM, Jesse Wallace <WALLACEJ@lhsd.org> wrote:

Hello Dr. Pedulla,
My name is Jesse Wallace, I am a doctoral student at Indiana University of Pennsylvania. I am currently working on my doctoral dissertation: "The effects of K-2 commercialized reading programs on 3rd grade reading mastery." During my research I have located your survey **Perceived Effects of State-Mandated Testing Programs on Teaching and Learning: Findings from a National Survey of Teachers**. As such, many of the survey questions are applicable to my study. I would like to respectfully request permission to use your survey in its entirety or in portions to advance my research. Thank you for consideration.

Respectfully,
Jesse T. Wallace, III
Superintendent
wallacej@lhsd.org
[724-437-2821](tel:724-437-2821)
Laurel Highlands School District
304 Bailey Avenue
Uniontown, PA 15401

Appendix I

Pontillo Permission

Page 1 of 1

Jesse Wallace - Re: Dissertation

From: carmine pontillo <carminepontillonyc@gmail.com>
To: Jesse Wallace <WALLACEJ@lhsd.org>
Date: 4/20/2015 8:42 PM
Subject: Re: Dissertation

Dear Mr. Wallace:

You have my permission to use the interview questions utilized in my doctoral dissertation. I hope they prove useful in facilitating your qualitative research. Please inform me upon completion of your work. I would be interested in reading your dissertation. Good luck!

Sincerely,
Dr. Carmine Pontillo

P.S. If you need this in writing let me know and I will mail a letter to the address indicated above.

On Mon, Apr 20, 2015 at 1:09 PM, Jesse Wallace <WALLACEJ@lhsd.org> wrote:

Hello Dr. Pontillo,
Per our conversation, I am currently working on my doctoral dissertation at Indiana University of Pennsylvania, the focus of my study is the "Effects of commercialized K-2 reading programs on 3rd grade reading mastery." I respectfully request the use of your interview questions in whole or in part utilized in your doctoral dissertation.
Thank you for consideration,
Jesse T. Wallace, III
Superintendent
wallacej@lhsd.org
[724-437-2821](tel:724-437-2821)
Laurel Highlands School District
304 Bailey Avenue
Uniontown, PA 15401