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A Study of Instructional Methods on Fourth Grade Reading Achievement

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Abstract

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MA, Chestnut Hill College, 2008

BS, Temple University, 2000

Doctoral Study Submitted in Partial Fulfillment

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Abstract

According to the National Assessment of Educational Progress, a significant percent of 4th grade students read below the basic level. In one elementary school students participated in additional reading instruction as intervention for students scoring basic and below basic on the state standardized test. The purpose of this ex post facto non-experimental quantitative study was to determine the effectiveness of direct instruction versus fluency (repeated reading) instruction on the reading achievement of 4th grade students. This study is based on the theory of automatic information processing in reading and the theory of prosody. The overarching research question for this study examined if the reading achievement scores of 4th grade students improved with fluency instruction or direct instruction. Two separate years of archived data from the 2011-2012 (Group A) and 2012-2013 (Group B) school years were used to examine student reading levels using the Developmental Reading Assessment (DRA) test. Sample size for both Group A and Group B equaled 76 participants respectively. Use of an independent samples *t* test indicated there was a significant mean difference of reading achievement scores between student groups as measured by the DRA. Students who received fluency instruction achieved greater comprehension scores than students who did not receive fluency instruction . Findings from this study give indication of improvement in reading achievement with the implementation of fluency instruction. Implications for social change include changing the behavior, perceptions, and customs of teachers towards students in and urban public school and district through professional development and professional learning community sessions.

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Dedication

To my mother and father who always empower me to believe in my dreams and to attain them by setting goals. For this I thank you both and appreciate your love and sacrifices to propel me to greatness. To my sister for guiding me to the field of education. To my niece and nephews this is a small reminder of knowing that anything is possible if you believe. To my mother in love, thank you for your prayers and encouragement. Finally, to my husband Travon. To accomplish this journey of my life required all your support. I am forever grateful for every encouraging word, prayer, and wonderfully cooked meals. We did it!

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To my doctoral chair, Dr. Lucian Szlizewski and committee, heartfelt thanks. Thank you for taking on my research and leading me through the final stretch of completion. I appreciate your efforts, challenging questions, and commitment to my dissertation and research project. In memory, thank you to Dr. Bushman for starting this journey with me and you untiring efforts even through your life changes.

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Section 1: The Problem

Introduction

At the time of this ex post facto study much attention had been given to the number of schools not making adequate yearly progress (AYP). Improving student achievement was the impetus behind the No Child Left Behind Act (NCLB). It is noted that the NCLB Act is not the current standard of measure. The NCLB Act has since been replaced and updated on December 15, 2015 with Every Student Succeeds Act. Adequate yearly progress were parameters set by each state for schools to demonstrate annual improvement in student performance (U.S. Department of Education, 2004). Schools were required to show progress in the academic areas of reading and math. Achievement of proficiency was measured in the curricular areas of language arts, math, and science. Schools that did not meet their AYP goals were identified as schools in need of improvement. Three consecutive years of failure to meet improvement goals resulted in corrective actions, such as staff replacement or implementing a new curriculum (U.S. Department of Education, 2004).

The Center on Education Policy (CEP) is an independent nonprofit organization that has been monitoring AYP data nationally since 2005. The following information is a report of the preliminary estimates of the percentage of schools not making AYP. At the time of this study The Center on Education Policy (2011) reported:

- An estimated 38% of the nation's public schools did not make AYP in 2010. This marks an increase from 33% in 2009 and is the highest percentage since NCLB took effect.

- In 12 states and the District of Columbia (DC), at least half of the public schools did not make AYP in 2010. In a majority of the states, (39 and D.C.) at least one-fourth of the schools did not make AYP.
- The percentage of public schools not making AYP in 2010 varied greatly by state, from about 5% in Texas to about 91% in D.C.

School L is in an eastern state of the United State. In 2010 approximately 23% of schools in the state did not make AYP (Center on Education Policy, 2011). School L did not improve academic achievement data in reading and math for three consecutive years. During the timeframe of the analysis of the data the academic performance data of School L revealed a significant number of students scored at the lowest level on the state test in reading. In fact, only 37% of the population scored proficient on the reading and math state assessment (School L District, 2013). The problem of students not improving their academic achievement in reading is the problem at School L. Therefore, the school did not make the annual progress goal of the number of students who achieve proficiency on the state standardized reading assessment.

The Local Problem

The problem was embedded in the inability of School L to improve reading achievement for students in the fourth grade. A public elementary school, School L is situated in a large urban environment in the northeast corridor of the United States. This school provides instruction to students in kindergarten through fourth grade. The school also provides a pre-kindergarten program, before and after school child care programs and instruction in physical education, music, art, and computers. Additionally, School L

qualifies for a free and reduced lunch program that offers breakfast and lunch for all students. This school is considered to be a large elementary school based on its enrollment population of more than 1,000 students. The student body is comprised of 60.0% African American, 1.3% White, 19.0% Asian, 14.1% Latino, and 5.1% students of other ethnicities. Further, 76% of the students are economically disadvantaged (receive free or reduced lunch), 20.5% are English Learners (EL), and 9.2% of the students have an Individualized Education Program (IEP) plan (School L District, 2013). Given the diverse population of students enrolled in School L, administration and staff are seeking ways to meet the needs and increase the academic achievement of all students.

During this time of research, School L had undergone many changes including the addition of a new principal. The principal brought about a change in the dynamics of the school culture. Professional conversations with staff members have unveiled that the efforts to change the school culture has been widely accepted by most staff members (D. Best, personal communication, 2013). Changes to professional learning communities also occurred, involving being redesigned with a focus on data and utilizing interventions to improve reading comprehension. The inevitable staff reassignments involved the transitioning of teachers to be strategically placed into the third and fourth grade classrooms. These changes were an effort to provide a clear mission, shared vision, collective commitments, and goals to improve staff relations and student achievement (DuFour, DuFour, & Eaker, 2008). The restructuring of the school also created the collective engagement of teachers in collaboration through professional learning communities (PLCs). These changes allowed for PLCs to closely examine what

currently is working at School L and allowed the staff to identify changes that must be made for overall school improvement.

School L was in its third year of corrective action for not improving the reading achievement of students on standardized testing. During the period leading up to and during this research study, 2008 - 2011 test data indicated that School L had not shown improvement in student academic achievement. Particularly, the students in fourth grade had not shown significant recurring annual progress on the standardized state reading assessment. Students are assessed on the Pennsylvania Standardized State Assessment (PSSA). The 2011 District Annual Report of School L revealed it met only 13 of 27 targets (School L District, 2011). School L did not meet the district's recommended target for the percentage of students in the below basic reading category of the PSSA. The school district's target for the 2011 school year was for no more than 30.3% of students at School L to be in the below basic category. Instead, the actual percentage of students below basic was 37.6%. Ethnicity indicators also revealed further unmet targets for School L with sub-population groups in the below- basic reading category of the PSSA. The actual percentage of students in the below-basic category bring attention to the need for School L to make improvements for students not achieving academic standards in reading (School L District, 2011).

Table 1

School L fourth grade Target versus Actual Below Basic Percentiles

Ethnic Sub-Group Population	Target Percentages	Actual Percentages
Latino Students	27.35%	43.7%
English Language Learners	25.0%	35.5%
Special Education Students	7.0%	12.6%
African American Students	38.0%	41.0%

(Retrieved from: School L District, 2013)

Based on fourth grade Predictive Reading Test results, 196 fourth graders scored as follows: 13% advanced, 37% proficient, 21% basic, and 29% below basic (School L District, 2013). These percentages are a stark contrast to the state's report of 73% of students' statewide meeting at proficient or above. Another concern for School L included the number of fourth grade students that did not read on grade level at the beginning of the school year. This added concern was based on student scores on the Developmental Reading Assessment (DRA) administered throughout each school year. The DRA is a diagnostic tool used to determine reading achievement. During the time of this study, the reading level goal for all students is to be at a level 38 (DRA reading level N) or above on the reading assessment (School L District, 2013). Testing results further revealed that students entering fourth grade had DRA scores below grade level recommendations, being behind the developmentally appropriate reading level. The below level reading scores suggests that the students have difficulty with reading achievement. In an effort to improve student reading levels and PSSA scores, a school-

wide reading intervention, Reading Mastery (Reading Mastery/SRA/McGraw-Hill, 2006) was used during the first 4 months of the 2011 school year.

The Reading Mastery (RM) program had been in place during the 2008-2012 school years to improve the reading and comprehension levels of students. This intervention has been used by the school district in schools that are in corrective action and need intervention programs to improve reading achievement. Reading Mastery is a direct instruction program designed to provide explicit, systematic instruction in reading (Reading Mastery/SRA/McGraw-Hill, 2006). Stockard (2010) conducted a randomized controlled study of fourth graders and found a significant effect on students' ability to read words correctly. However, in 2006, What Works Clearinghouse (WWC) review of 173 studies of RM found potentially positive effects on reading fluency but no identifiable effects on comprehension in adolescent learners. School L had not identified a significant improvement in student comprehension of basic and below basic students with the usage of the RM program. In the fourth grade, teacher implementation of direct instruction occurred 45 minutes a day, 5 days a week, September through December. As a result, use of the RM program caused scheduling problems for teachers in order to implement the instruction of grammar, vocabulary, and fluency components of the Imagine It, SRA/McGraw-Hill Reading Program. After the four-month timeframe, in an effort to prepare for standardized state testing, the RM intervention time was allotted for additional teaching time to review concepts in math. Therefore, administration at School L gave the directive to discontinue Reading Mastery for a period of two months to prepare students for the state standardized assessment.

There is strong evidence that reading fluency is a critical factor in reading development (Mendes, 2011). When students learn to decode words rapidly and accurately, they will be able to achieve fluency, and their ability to construct meaning is better than the disfluent reader (Kuhn, et al., 2010). Kuhn, et al. (2010) also identified the complimentary relationship between fluency with reading comprehension. Therefore, because fourth grade students at School L were not achieving proficiency on the PSSA in reading, the proposed study investigated whether discontinuing RM and implementing fluency instruction would have an impact on reading achievement scores. This ex post facto study was completed to contribute to the understanding of how varying instructional methods impact student reading achievement.

The importance of this study is hinged on the implications from the findings. The findings were expected to provide information to assist the district in identifying instructional strategies to increase fourth grade reading comprehension scores. In this ex post facto study, the district provided DRA reading data. This assessment was the approved data used to determine student reading levels for the 2012 year as compared to the previous scores of students from the 2011 school year. This ex post facto study examined the 2011 instructional method of teachers who only taught with direct instruction versus students taught with repeated reading in 2012.

According to the National Assessment of Educational Progress (NAEP), 32% of fourth graders read below the basic level (U.S. Department of Education 2013). This percentage has not decreased significantly since the 2009 NAEP report of 33% of fourth grade students reading in the below basic reading category. U.S. Department of

Education (2015) reported the percentage of students in School L's district who performed at or above the NAEP Proficient level was 14% in 2015. This percentage was not significantly different from that in 2013 (14%) and in 2009 (11%). The percentage of students in the district who performed at or above the NAEP Basic level was 44 percent in 2015. This percentage was not significantly different from that in 2013 (44%) and in 2009 (39%).

Rationale

Evidence of the Problem at the Local Level

During this ex post facto study, students were not improving in their reading achievement. School L had not made improvement in student reading achievement. Standardized reading assessment revealed the following fourth grade reading achievement data seen in Table 2.

Table 2

School L fourth grade Standardized Reading Data

School Year	% Students scoring at Proficient or Advanced
2008-2009	46.6%
2009-2010	43.9%
2010-2011	41.6%
2012-2013	39.8%

(Retrieved from: School L District, 2013, 2016)

These reading data were below the school district average of 51.7% in the 2010 to 2011 school year for fourth grade students. Review of the local data also revealed proficiency

rates of only 32.6% for African American students, 38.8% for Latino students, and 29.9% for English Learners (EL).

As a result, state and district data revealed the need to improve scores for students in reading to meet annual targets. At the time this was occurring, to meet the Performance Measure required for AYP, schools and every measurable subgroup in the school must have at least 72% of the tested students achieve a proficient score or higher on the reading assessment based on the state recommendations.

During the time AYP was in place, AYP was required by the No Child Left Behind Act (2001). In "Making Valid and Reliable Decisions in Determining Adequate Yearly Progress" (Marion, et al., 2002), the Council of Chief State School Officers summarized AYP as follows:

> Each of at least 9 subgroups of students must reach proficient or advanced achievement levels in reading or language arts and mathematics by 2013-2014 (Uniform progress is required beginning in 2002-03.) AYP determinations are based solely on student achievement results on State assessments. At least 95% of the students in each subgroup must participate in the assessments and all must meet the State's performance target in another academic indicator as prescribed by the law (p. 5). Further, the NCLB Act requires States to determine the number of students in a group necessary to yield statistically reliable information as well as the number of students required to be in a group to ensure that the results will not reveal personally identifiable information about an individual student. (p. 12)

Accordingly, NCLB impacted how performance is measured by individual states. School L had not met the mandates set forth by the state of Pennsylvania. Particularly, they had not made progress in increasing the number of students in the proficient category in reading.

To meet the Performance Measure required for AYP at the time schools and every measurable subgroup in the school must have at least 72% of the tested students achieve a proficient score or higher on the reading assessment based on the state recommendations.

Evidence of the Problem from the Professional Literature

This study expounds on the concept of reading fluency and its impact on comprehension and reading achievement. The National Reading Panel (2000) identified five components of reading: phonemic awareness, phonics, reading fluency, vocabulary, and comprehension. Each component is intricate to the developing young reader. Reading fluency is generally acknowledged as a critical component to reading, yet it is often neglected in classroom instruction (National Reading Panel, 2009; Rasinski, 2013). Fluency, prosody, automaticity all take part in the reading development and achievement of students.

Fluency and reading development. Over the past three decades, the concept of fluency has evolved. Fluency is a critical component of reading development and has impacted fluency instruction and literacy curriculums (Kuhn, Schwanenfluegel, Meisinger, Levy, & Rasinski, 2010; Rasinski, Blachowicz, & Lems, 2012). Fluency is an integral part of oral reading for developing skilled readers (Reutzel, Fawson, & Smith,

2008). Despite the importance of reading fluency, it is often neglected as a part of core reading curricula (Carlisle, 2010). The literacy curriculum at School L does have a fluency component to the curriculum; however, School L does not require the implementation of this component of the curriculum.

Fluency has been defined in many ways. There is research that identifies accuracy, automaticity, and prosody as contributing factors to fluency development (Hudson, Pullen, Lane, & Torgesen, 2009; Rasinski, Reutzel, Chard, & Lane-Thompson, 2011). In particular, automaticity is the central idea of fluency and fluency's role in the comprehension of text (Rasinski, Blachowicz, & Lems, 2012). For this study, further examination of automaticity and prosody will be explored.

Automaticity and reading comprehension. The attributes of automaticity can be converged with the works of LaBerge and Samuels and their theory of automatic information processing: The theory of automaticity. The automatic processing of word recognition is a precursor to successful reading comprehension. The ability to read with automaticity allows readers to process sub-skills such as word recognition and decoding automatically without thought. The automatic processing of word recognition skills allows the reader freedom to read and simultaneously comprehend text (Kuhn, et al, 2010), which allows for the use of higher order thinking skills. The theory of automaticity suggests that readers move beyond conscious decoding to effortless automatic decoding and word recognition with speed and accuracy (Rasinski, Blachowicz, & Lems, 2012). Young and Rasinski (2009) noted that automaticity is "the ability of proficient readers to read the words in a text correctly and effortlessly so that

they may use their finite cognitive resources to attend the meaning while reading" (p. 4). Therefore, opportunities must be presented for students to improve their ability to identify words automatically in an effortless manner.

Kuhn, Schwanenflugel, and Meisinger (2010) contend that readers can benefit from automatic word recognition through consistent practice. As learners encounter clues through occurrences, a strong foundation is built and increases their knowledge. Learners are then better able to retrieve this information without a laborious process to determine what steps to take to find one's solution when encountering a problem. In time, readers are able to build their reading fluency, freedom from having problems with word identification, and improve their comprehension of texts with repetition. For readers who are struggling with decoding skills, automaticity is necessary to improve higher-level thinking skills. When the foundational aspects of reading are performed automatically comprehension, higher order thinking can occur simultaneously. The theory of automaticity plays an integral part in reading fluency and comprehension of text.

Prosody and reading comprehension. While automaticity is of major importance, literature suggests the role of prosody also as a contributing factor to reading comprehension (Kuhn, Schwanenflugel, & Meisinger, 2010). To read with prosody requires the reader to use appropriate expression and intonation, along with the appropriate phrasing of words to achieve meaningful reading (Miller & Schwanenflugel, 2008). Prosody emphasizes the appropriate use of phrasing and expressions. Prosody is a part of reading fluency, which demands the need for the reader to use phrasing and

expression while they are reading (Miller & Schwanenflugel, 2008). When readers apply appropriate phrasing and expression to the text while reading, they are able to interpret its meaning better (Rasinski, 2014). Therefore, the application of prosody in reading fluency is important in improving reading comprehension.

Reading fluency is seemingly a multi-dimensional task that involves the application of instruction that incorporates accuracy, fluency and prosody. Rasinski (2014) identified each dimension as interrelated and essential. Accuracy in word decoding, automatic recognition of text, and expressive and meaningful interpretation of the text create a meaningful reading experience, and hence all must be taught (Rasinski, 2014). The theory of automaticity and the theory of prosody accordingly are the driving forces behind this study to improve student comprehension at School L. By implementing a reading curriculum that incorporates repeated reading (fluency) and prosody instruction, School L will be able to determine if the need for a direct instruction program is beneficial for improving reading comprehension scores for below level students (No Child Left Behind [NCLB], 2002).

Definition of Terms

Automaticity: Automaticity is the immediate recognition of words (Wise et al., 2010). It is the ability to quickly and accurately recognize letters, sounds, and words without hesitation (Vaughn & Linan-Thompson, 2004).

Common Core State Standards: 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 (National Governors Association, 2010).

Comprehension: Comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language (Shanahan, 2010).

Direct Instruction: Direction Instruction (DI) refers to (1) instructional approaches that are structured, sequenced, and led by teachers, and/or (2) the presentation of academic content to students by teachers, such as in a lecture or demonstration. In other words, teachers are "directing" the instructional process or instruction is being "directed" at students (Hidden Curriculum, 2014)

Fluency: Fluency is a composition of three elements: accuracy, automaticity, and prosody (Hudson, Pullen, Lane, & Torgesen, 2009).

Prosody: Prosody is the ability of a reader to read with appropriate expression that is implied by the text (Wise, et al., 2010).

Reading: Reading is the process of constructing meaning through the dynamic interaction among: the reader's existing knowledge, the information suggested by the text being read; and the context of the reading situation (Wixson, et al., 1987)

Repeated Reading: Repeated Reading (RR) is the process of reading text several times with feedback to develop speed and accuracy (Vaughn & Linan-Thompson, 2004). Repeated reading, initially known as multiple oral reading, involves multiple, successive encounters with the same visual material, the key being repetition–whether of the same

words, sentences, or connected discourse. An instructional technique designed originally for improving reading fluency in learners with reading disabilities (Han & Chen, 2010).

Significance of the Study

School district data support the need for School L to determine what barriers exist to improving student reading achievement. In particular, 2008-2010 local data revealed fourth grade students demonstrated lower reading scores in the area of comprehension of text on standardized assessments. Therefore, there is a need to closely examine current practices and identify factors to improve reading comprehension for fourth grade students. Specific attention was given to the development of reading fluency skills. Fluent readers are able to read words quickly, automatically, and accurately so they can focus on the meaning of the text (Vaughn & Linan-Thompson, 2004).

It is generally acknowledged that fluency is a critical component to reading, yet it is often neglected in classroom instruction (National Reading Panel, 2000). The purpose of this project study was to determine if student reading comprehension scores increased more when students were provided with reading fluency instruction rather than with the direct instruction intervention, Reading Mastery. This, seemingly, has not improved students' reading scores on the DRA test. This study investigated whether implementation of fluency instruction improved student reading comprehension levels. The reading curriculum, Imagine It, was used in totality to provide students consistent instruction in reading fluency instruction. Utilizing the reading curriculum will assist in determining whether the Reading Mastery program met the needs of the students at School L to improve reading fluency. The results of this project study are expected to

provide evidence to support the district efforts to improve student academic reading achievement.

Research Question and Hypotheses

An analysis of fourth grade students' reading levels from the 2011-2012 and 2012- 2013 school years were the foundation of the analysis. The guiding or research question for this project study was: Will the reading achievement scores of fourth grade students improve with fluency or direct instruction? In this study two student group were given instruction to improve their reading achievement. In particular, students were instructed in an effort to improve their ability to improve their reading comprehension of text. Students in Group A were instructed using direct instruction during the 2011-2012 school year. In comparison, students in Group B were instructed using the repeated reading fluency method of instruction during the 2012-2013 school year. To examine these varying methods of instruction and the impact on reading comprehension of students the following research question was asked:

RQ 1: Is there a difference in reading comprehension scores on the DRA assessment between fourth grade students reading below their fourth grade reading level that received additional reading intervention in the direct instruction (Group A) or fluency instruction (Group B) intervention methods during the 2011-2012 and 2012-2013 school years respectively?

H_o*:* There is no difference in reading comprehension scores on the DRA assessment between fourth grade students reading below their fourth grade reading level that received additional reading intervention in the direct instruction (Group A) or

fluency instruction (Group B) intervention methods during the 2011-2012 and 2012-2013 school years respectively?

H_a: There is a difference in reading comprehension scores on the DRA assessment between fourth grade students reading below their fourth grade reading level that received additional reading intervention in the direct instruction (Group A) or fluency instruction (Group B) intervention methods during the 2011-2012 and 2012-2013 school years respectively?

Review of the Literature

This section provides a review of literature. Topics searched for the review of literature included: fluency instruction and reading achievement, direct instruction and reading achievement, and repeated reading instruction. Search terms for this literature review: fluency, prosody, direct instruction, repeated reading, elementary students, English language learners, special education, technology, comprehension, qualitative, quantitative, and mixed methods. An exhaustive search was used through online research databases to find peer-reviewed articles. Databases through the Walden University library searched included: ERIC, SAGE publications, Education Research Complete, Academic Search Complete, The Journal of Educational Research and PsycINFO. Research for articles also included searches though google scholar and international reading association.

Based on the works of LaBerge and Samuel's (1974) theory of automatic information processing, the theory of automaticity was used to guide this study. Much research has been done to improve the reading ability of learners. LaBerge and

Samuels's theory explains the concept of identifying words accurately and automatically, which allows readers to focus their attention on the meaning of the text rather than the words in the text. The ability for a reader to read fluently has been found to have an impact on reading comprehension (Berninher, et al., 2010; Gorsuch & Taguchi, 2010). Improvement in fluency and comprehension has also been found to transfer to unpracticed passages. An observation of second grade classrooms found the use of fluency practice to be a common theme in instruction Pilonieta (2012). Pilonieta also noted the need for fluency instruction to be integrated as part of reading instruction for improvement of reading achievement. For the fourth grade students at School L, improvement in reading fluency is important. Therefore, implementing researched strategies to improve student reading fluency will be essential for School L.

School L used the SRA/McGraw-Hill Reading Mastery and Corrective Reading Direct Instruction program. All students in the school were placed into the program based on the school's performance on state standardized tests and the inability to make AYP. Direct Instruction (DI) took place in kindergarten through the fourth grade. Fourth grade students were grouped and given whole class instruction using the Corrective Reading Program. The delivery method started at the end of September and was postponed in January to prepare for standardized testing.

Direct Instruction and Reading Achievement

Direct Instruction (DI) is a method of explicit instruction that was developed based on the work of Englemann (1969). Englemann believed that learning would be achieved through lessons delivered by teachers that were systematic, clear, interactive,

and at a fast pace (Englemann, 1969, Engelmann, Becker, Carnine, & Gersten, 1988). DI lessons using Corrective Reading are scripted lessons. Each lesson provides teachers with a script of words that allows for the quick pacing through each lesson; the lessons are designed to become increasingly intricate and include ongoing assessments (Marchand-Martella, Martella, & Przychodzin-Havin, 2016). Through this method of instruction, students are engaged through the call-and-response lessons.

Direct instruction has been documented in research as having positive outcomes in literacy achievement. Studies have shown achievement in reading for students (Stockard, 2010; Stockard & Englemann, 2010). In a study of the impact of direct instruction on the reading achievement of fifth grade students, Stockard (2010) examined the reading achievement of students in the Baltimore County Public School System (BCPSS). In Stockard's study, students in first through fifth grade received reading instruction using DI to determine their reading achievement. Using descriptive statistics, paired t-tests, and analysis of covariance, student scores were used to examine the average change in scores. Stockard (2010) found that students from the end of first grade to the end of fifth grade had significantly greater gains than students using other curricula. These gains were seen in vocabulary and comprehension. Stockard's findings did not however, identify any impact on student fluency.

Studies have also shown that DI has an impact on students with disabilities. Ganz and Flores (2009) studied the impact of DI on reading comprehension of students with developmental delays and autism spectrum disorder (ASD). Four students from a small private school participated in a study that implemented DI as daily instruction to the

students. Researchers delivered instruction. Based on student participation in the DI routine, Ganz and Flores (2009) determined there was a "functional relationship" (p. 250) between DI and performance of the students. Three of the four students improved in their reading decoding and comprehension skills. Also, the students could stay engaged during instruction. Improvement in student performance after the treatment instruction was also identified. However, because of the small sample size, the findings of this study are limited in its ability to be generalized.

In recent research of RM, Stockard and Englemann (2010) found that students in rural districts who were exposed to RM from kindergarten to third grade had oral reading scores that were significantly higher. This finding contrasts the findings of Wiltz and Wilson (2005) who studied the use of RM in an urban district. Their case study findings revealed that RM improved word-decoding skills, but did not have a significant impact on reading comprehension and writing skills. While there have been both success and failure in DI, the literature also suggests that improvement in reading can be accomplished through the use of fluency instruction (Rasinski, 2014).

Fluency Instruction

The development of reading fluency is well supported in research and in the literature. Fluency is an indicator of a reader's ability to automatically process the information they are reading (Berninger, et al., 2010). While it is an important factor of any reading curriculum, fluency is often overlooked and devalued as an intricate component of reading instruction (Clark, Morrison, & Wilcox, 2009). Based on findings from The Nation's Report Card Study of fourth-Grade Students (2005), a direct

relationship between fluency and comprehension was indicated. The study noted there was a positive relationship between more-fluent readers who demonstrated higher comprehension scores (Daane, Campbell, Grigg, Goodman, & Oranje, 2005).

In the study of fluency, Rasinski (2012) noted the importance of fluency instruction. Fluency instruction impacts the reader's ability to read words automatically, rather than the identification of words only. Reading fluency instructed through the repeated reading method gives students the opportunity to complete a deep reading of the text to achieve improvement in word recognition accuracy, automaticity, comprehension, and attitude towards reading (Rasinski et al., 2011, Rasinski 2012). The use of repeated reading is impactful to students at the elementary, middle, and high School Levels. There is also documented evidence of the impact repeated reading has on students who are ESL or have disabilities. School L is impacted by many of these categories. If School L and their district understood the level of magnitude that fluency has in reading comprehension, perhaps more time would be allotted for this component of reading. To integrate fluency lessons, School L could perhaps utilize a research-based method of fluency instruction called repeated reading. The implementation of repeated reading would add to the understanding of the Automaticity Theory and how it could be beneficial to student reading achievement.

Repeated Reading Instructional Method. The theoretical foundation of repeated reading is the Automaticity Theory (LaBerge and Samuels, 1974; Samuels 2012), that contends that readers with automatic word recognition abilities can free themselves from focusing on word identification. Therefore, allowing the reader to give

more attention to higher-order thinking skills and comprehension processes. In a meta-analysis of the research the US National Reading Panel (2000) identified the reading procedure of repeated reading has a significant and positive impact on reading fluency and comprehension.

Evidence exists in the research that development in reading fluency is a result of an approach utilized by many researchers, which is repeated reading (Gorsuch & Taguchi, 2008). Repeated reading is an instructional method that gives learners the opportunity to revisit reading passages repetitively (Gorsuch & Taguchi, 2008). This approach allows readers to read leveled readers repeatedly to increase sight word recognition to develop automaticity, resulting in improved fluency and comprehension (Gorsuch & Taguchi, 2008). Therrien and Kubina (2006) agreed to the benefits that repeated reading has on students in first through third grade. Many studies revealed the positive impact repeated reading can have on automaticity, fluency, and comprehension.

Using the repeated reading method has shown improvement in reading fluency for students. Studies have shown that with repeated reading instruction, practice, and intervention significant improvement has been noted in the reading fluency of students. In the general education classroom, repeated reading as a tier one response to instruction intervention Kindergarten students have shown an increase in their reading speed and accuracy (van Gorp, Segers, Verhoeven, 2014). Students who are not below level also have shown improvement in components of reading (Jefferson, Grant, and Sander, 2017). The use of relevant texts can also be incorporated into repeated reading instruction with students to improve engagement and authenticity in learning (Paige, Rasinski, &

Magpuri-Lavell, 2012). In addition, research supports the importance of fluency instruction for adolescents (Guerin & Murphy, 2015). As a form of remediation repeated reading. Significant results have also improved reading fluency of students with learning disabilities (Hawkins et al., 2015). Esccarpio and Barbetta (2016) also added to the body of research to identify the impact repeated reading had on the improvement of reading fluency and comprehension for students with emotional and behavioral disorders.

Repeated reading and elementary students. Research on repeated reading (RR) has been conducted over the past ten years. There is noted evidence of the improvement of reading fluency for students engaged in repeated reading over time (Gellert, 2014). Young, Mohr, and Rasinski (2015) also show that reading expression, rate and overall reading scores can improve with the use of repeated reading as a part of a reading intervention fluency program. Likewise, Fisher and Frey's (2014) research the impact an intervention program that incorporated repeated reading had on students reading fluency Chard, et al. (2008) identified that fluency practiced through repeated reading is more pertinent to lower elementary school students. In their research, Chard, et al. (2008) found a stronger impact on fluency growth of students in the first and second grade versus the third grade. The integration of a repeated reading intervention has shown improvement in student fluency scores (oral reading fluency), which in turn had an impact on comprehension improvement (Keehn, Harmon, & Shoho, 2008; Morris & Gaffney, 2011; Neddenriep, Fritz, & Carrier, 2011; Snellings, Van der Leij, Jong, & Blok, 2009).

Nedderiep, Fritz, and Carrier (2011) studied fourth grade students who participated in a RR program. Five students in grade four anticipated in a 12-week after-school program (two days a week for 30 minutes) to receive fluency instruction. Participants were engaged in RR of sight passages and short passages with feedback, correction and instruction. Their study revealed an increase of word recognition per minute and an improvement in student reading comprehension for four out of five students. The one student who did not improve in reading comprehension did demonstrate an increase in reading fluency by 46%, but continued to read at the frustration level. Also, in a study of forty fourth and fifth grade public elementary school students, an 18-week repeated reading intervention was employed. Vandasy and Sanders (2008) found that the treatment significantly increased student fluency. The study also revealed the treatment group outperformed the control group in vocabulary, word comprehension and passage comprehension based on pre and posttest scores.

Therrien, Kirk, and Woods-Groves (2012), completed a two-level single factor pre- post- experiment to compare the effects of a repeated reading and non-repetitive reading on the reading achievement of students in the third through fifth grade. In this four- month study, mean averages were examined to determine the impact that reading intervention had on reading achievement. The results determined that a significant gain in reading fluency and achievement was seen from pre to post testing. This study also revealed the increase in fluency for students with the non-repetitive treatment. Although the inability to use a control group was a limitation of the study was identified, the

research also noted the use of a program with passage repetition has the potential to improve reading achievement.

In a study of oral reading fluency, Conderman and Strobel (2008) examined students who participated in a 6-week repeated reading intervention program. From this study, significant improvement was seen on student standardized test results post 1 year. Ritchey, et al. (2012) also completed a study of at-risk fourth grade students. In this randomized control trial, a 24-session intervention was implemented to determine its impact on reading comprehension of expository text. This intervention showed significant improvement in topic knowledge and comprehension strategy knowledge. There was no improvement in comprehension, word reading, or fluency. It must be noted that the intervention did not incorporate repeated reading alone. Repeated reading for this study was only incorporated for 5 to 7 minutes of the sessions. Repeated reading was only a portion of the multi-component intervention. Further research would be needed to determine the impact the implementation of a repeated reading program to improve comprehension of expository text would have on these students.

Swain, Leader-Janssen, and Conley (2013) completed a case study to further the research base on reading fluency interventions. A fifth grade student was enrolled in a 12-week intervention program in a Midwestern university's clinic for students in need of academic help. The single-subject study included the evaluation of interventions that were implemented each week. Of the three interventions, the RR intervention consisted of reading 350-400 word length passages and calculating mean scores of words met per minute. In addition, the participant received audio listening passage preview, hearing the

passage read aloud to improve fluency. The results, both immediate and after a five-month post-evaluation, showed an increase and maintained growth after the implementation of interventions. This study furthered the research of Begeney et al. (2009) and Sibler and Martens (2010). In a study of second grade students, small group intervention of RR and listening passage preview were found to be most effective in improving student reading fluency (Begeney, et al., 2009). Sibler and Martens (2010) also studied the effect RR had on oral reading fluency. In this study, 111 first and second grade students were participants in a pre and posttest experimental study. Results showed significant gains with RR and preview texts for participants.

In another study, Therrien and Hughes (2008) compared the effects of RR as compared to question generation on the reading fluency and comprehension skills of 32 students, which included 18 students with learning disabilities. Results revealed that after the RR conditions students in the RR group significantly increased their reading fluency. Students were also able to transfer these gains to unpracticed passages. Students in the RR group also outperformed the control group. Therrien, et al. (2010) also studied the effects a RR strategy had on to third to fifth grade students. Students were randomly assigned to the RR and non-RR groups. In this pre and posttest study significant gains were seen in oral fluency and reading achievement. However, it was noted the non-RR group scored better in fluency and reading achievement with no statistical significant differences.

Lo, Cooke, and Starling (2011) conducted a study of three second grade students. The study examined repeated readings to determine if students' oral reading rate would

improve with treatment. This study used multiple probe design. A multiple probe design is appropriate for measuring the same intervention across a variety of conditions including setting, intervention and participants (Gast & Ledford, 2010). This design is also used for the ability to generalize results back to a bigger population (Gast & Ledford, 2010). Lo, Cooke and Startling (2010) used this design to evaluate whether there was a functional relationship between the repeated reading intervention and oral reading fluency on reading passages. Weekly and daily probes were conducted throughout the study. They concluded an improvement in the reading fluency of students. Limitations to this study include the two-month time frame and limited number of sessions.

Ari (2011) examined the impact repeated reading would have on developmental readers. Using repeated reading as an intervention, Ari wanted to determine if improvement in reading fluency would be achieved. During a 3-week study, readers were seen three times a week for 25-minute sessions. The study noted significant improvement gains in silent reading rates. Reference was also made to improvement in the fluency skills of the developmental readers. Limitations, no data was presented in the peer-reviewed article. To improve the oral reading fluency of 3 fourth-grade low-achieving non fluent readers, Musti-Rao, Hawkins, and Barkley (2009) used passages at second-grade or third-grade instructional levels during their peer-mediated repeated reading intervention. Results on the fourth-grade level fluency assessments indicated that the intervention had a large effect size for all three students' oral reading rates (*ES* = 1.40, 1.90, and 2.00) on transfer passages. This effect size would account for the small number of participants for their study.

Turner (2010) examined an ethnically diverse sample, such as School L, on the effectiveness of Fluency-Oriented Reading Instruction (FORI) on improving reading fluency. Turner identified FORI as a method that incorporates the repeated reading of a grade-level text over the course of an academic week. Results indicated that FORI is a useful method for reading instruction with a diverse second-grade student population. The study indicated an improvement of reading fluency in Asian, Black, Latino, and White second-grade students. Turner (2012) also studied the effectiveness of reading fluency programs on second grade African American and Latino students. Participants included 142 students from nine classrooms. Students received repeated reading instructional methods or instruction based on the curriculum. Pre and post ANOVA test results ($p<.001$) revealed a significant improvement in word recognition abilities of students. Further discussion also noted the importance fluency based instruction using repeated readings had on African American and Latino students. Hudson, et al. (2011) compared methods to improve the decoding and reading fluency of struggling readers. Second grade students were assigned to two intervention groups for reading improvement. Results indicated a significant difference in the decoding skills of students in the group involving automaticity practice. Schisler, Joseph, Konrad, Alber-Morgan (2010), completed a study of repeated reading with third grade students. In their study, findings revealed third grade students' accuracy in answering reading comprehension performance questions was better under retelling conditions than the passage review condition. The study also noted the oral retell of stories along with repeated reading drills had the most impact on students' ability to answer comprehension questions correctly.

Ates (2013) explored the impact a repeated reading fluency intervention would have on a student. The participant was a 10-year-old student in country of Turkey. The repeated reading fluency intervention was given for a total of 38 hours. The intervention included feedback for words read correctly and miscues. Results revealed a positive improvement in the student's word recognition accuracy. Calo, Woolard-Ferguson, & Koitz (2013) examined 23 children enrolled in a reading clinic. Participants were reading at least one grade below the district's benchmark. They received fluency intervention 4 days a week for 6 weeks. Data was collected using a Multidimensional Fluency Scale (MDFS). The MDFS is a tool used to measure student fluency (Rasinski, 2013). Results revealed an increase in MDFS scores from an average of 8.0 to 10.5. It was also reported that repeated readings seemed to be particularly helpful.

Spencer and Manis (2010) investigated the impact fluency intervention would have on the decoding and reading comprehension skills of 60 middle school students with reading delays. In this experimental design, participants were randomly assigned to either the control or experimental group. Groups participated in fluency practice. , the experimental group took part in a reading program that fluctuated in degrees of difficulty for fluency practice that focused on sounds, single words, short phrases and whole passages. Pre and posttest results indicated a significant progress in fluency ($p < .001$). Results also revealed no gains in comprehension for these middle school students.

Using repeated reading for learning disabilities. The use of RR has also shown improvement in reading skills of students identified with reading disabilities. Staudt

(2009) completed a study of two learning disabled students who received one year of RR. The students previously received three years of intensive instruction in phonics alone, similar to the students at School L, but were still reading two years below their grade level. Pre- and post-tests were utilized to determine the impact that RR had on student comprehension levels. Staudt (2009) makes known that student improvement was a result of both phonics instruction and repeated reading. Based on research findings, it would seem that the use of the repeated reading approach to reading instruction at School L might increase reading achievement for fourth grade students.

Research has also shown the impact RR has on students with a learning disability and emotional and behavior concern. In their study of the effects of RR on students with learning disability Lee and Yoon (2017) found the implementation of a RR intervention program improved the reading fluency of elementary students. To find the impact of RR on students with behavior and emotional concerns, Escarpio and Barbetta (2016) also reported the benefits of RR on students who were below level in reading. Students in this study were in the sixth grade reading below level. After the implementation of a RR students improved in reading fluency and reduced the number of reading errors. Escarpio and Barbetta (2016) also noted the improvement in the ability of students to answer comprehension questions.

Morris and Gaffney (2011) completed a case study of an eighth grade student reading on a fourth grade level. The student was placed in a summer program for four weeks and then received tutoring twice a week for one school year using the RR approach. Significant increase in the students reading fluency (oral reading rate

increased 33%) was found. Also, there was an improvement in the students' ability to identify words and phrases. Researchers revealed the impact repeated reading could have on improving reading fluency. However, this study does not report information on the impact RR had on the student's reading comprehension level. Morris and Gaffney (2011) did note that the students were able to read fourth grade material at 100 words per minutes, which they identified as a rate that supports comprehension. Research has also been completed with students at the middle School Level.

Vaughn, et al. (2009) noted the need for general and special education teachers to improve fluency development for readers who are not making progressive achievements in a manner that is targeted and focused. In a study of second grade students, random selection was completed to determine the effect a reading intervention would have on student achievement. Marr, Algozzine, Nicholson, and Dugan (2010) found statistically significant gains in student oral reading fluency. Literary assessments were used as a dependent variable to determine the correlation with comprehension. Mean, standard deviations, and correlations were statistically significant ($p < .01$). Coleman and Heller (2010) examined the effects of a repeated reading with computer modeling on oral reading fluency, accuracy, and comprehension for students with orthopedic impairments (students with physical disability with intellectual functioning in the mild range of mental retardation or higher). The four participants selected for this study were third to fifth grade students who ranked in the 40th percentile or lower on oral reading fluency measures. Post treatment results revealed student gains in reading fluency and accuracy. There were also positive non-transfer effects in the area of comprehension. Positive non-

transfer effects show student's ability to their reading speed, accuracy and comprehension of texts (Coleman & Heller, 2010).

Swanson and Vaughn (2010) completed a study on determining best practices of reading instruction for special education students. Participants included ten special education teachers and twenty-two students at the 3.8 grade level. This mixed methods design included both observation and pre and posttest assessment evaluation. From this research Swanson and Vaughn (2010) reported reading instruction was composed of phonics/word study (31.9% of reading instruction), fluency (8.9%), comprehension activities (25.6%) and vocabulary (9.6%). Fluency instruction involved repeated reading intervention. Academic progress was noted for all students in oral reading fluency and reading comprehension. The discussion noted the need for reading to be impactful through the use of all reading components observed. Soriano, et al. (2011) examined the effect a reading program would have on reading fluency and comprehension of children with reading disabilities in Spain. Participants were 22 secondary students. Two groups were created for this study. The experimental group received a reading intervention that incorporated 40 repeated reading sessions. The results indicated an improvement in reading fluency, but did not show a significant improvement comprehension. Their research noted the difference in the impact repeated reading has on secondary students versus elementary students and suggested further research.

Wanzek, Vaughn, Roberts, and Fletcher (2011) completed a one-year experimental study on the effects of a reading intervention on sixty-five middle school students' reading fluency and comprehension abilities. The population of students was

identified with learning disabilities. They were compared to a control group of fifty-five students who did not receive the reading intervention. The results of their study suggested a significant improved in sight word recognition, fluency, and automaticity for the treatment group. The treatment was not associated with a statistically significant higher outcome in passage comprehension. It is important to note this study had limitations of increased remedial instruction for the comparison group, large group size during intervention of ten to twelve students, and comprehension measures were only of word level inferences rather than higher order skills of identification of the main idea and summarization.

Kubina, et al. (2008) completed a study on the effect repeated reading has on the fluency retention of three third grade students. Students were engaged in repeated measures to meet a required fluency criterion. Results revealed that two of the learning disabled students were able to maintain fluency gains for all post-intervention sessions. Only one student showed a decay of fluency over time. Kistewicz and Kubina (2010) compared the effects of repeated reading on fluency of three elementary students. The intervention of repeated reading was administered until a fluency threshold of two hundred words per minute was met. A procedure of interval sprinting where the participants read a portion of the passage and then read each part two consecutives quickly was also used. Results indicated that the one student with a learning disability increased his reading fluency in both conditions. Otto, et al. (2010) evaluated the effects of peer-mediated repeated reading on the fluency and comprehension of students in the fourth grade. Results indicated an improvement in all 4 students reading fluency and

comprehension. Box-and-whisker plots show an improvement for the overall class. There were greater gains in both ready and comprehension after 4 weeks of intervention. After 8 weeks of intervention students maintained the growth seen post 4 weeks with no additional growth noted.

Wexler, Vaughn, Roberts, and Denton (2010) conducted an experimental study on students with severe reading disabilities. Ninety-six high school students in grades 9-12 were randomly assigned to a repeated reading treatment. The 10-week treatment examined comprehension, fluency, and word reading abilities. Using various reading strategy approaches, including repeated reading, no strategy made significant improvements in students' reading comprehension, fluency, and word reading abilities. The authors noted the findings of this study contrasted the findings of improvements in phonological awareness, word recognition and fluency seen at the lower educational levels versus high school. Denton, et al. (2011) compared the effects of reading interventions on first grade students. They hypothesized that students that received an increased amount of intervention time would result in better reading outcomes. Results did not show any significance in oral reading fluency. However, limitations to the study include modification of the reading program that reduced phonemic awareness and fluency instruction, no comparison group, and the inability to generalize results. Denton, et al. (2013) studied the effects an intervention would have on students. Participants included students from the second grade in need of intensive small group intervention. The study revealed that intensive individualized supplemental reading intervention can be beneficial for students with decoding difficulties and in need of comprehension support.

There was significant improvement in decoding and short paragraph comprehension of text. However, the findings revealed limited reading fluency and comprehension that could be due to limited automaticity of basic reading skills.

In a comparison of the effects of two various strategies on reading comprehension and fluency, students were exposed to repeated reading, repeated reading and vocabulary previewing strategies, and no intervention conditions. Students included six high school students with reading between fourth and eighth grade reading levels. Hawkins, Hale, Sheely, and Ling (2011) found that the repeated reading strategies with vocabulary preview led to increases in reading fluency, comprehension, and oral reading comprehension rate.

A study to determine if repeated reading instruction would increase oral reading rate and comprehension by Savaiano and Hatton (2013), an experimental design, indicated that there was a relation between oral reading rate and repeated reading for two of the three participants. Each participant was diagnosed with a visual impairment and ranged in grades from third to sixth. This experimental design indicated that there was a relation between oral reading rate and repeated reading for two of the three participants. There was also a relationship noted for all three participants between repeated reading and comprehension. In another quasi-experimental study of third, fifth, and sixth grade deaf and hard of hearing readers, pre and post measure of fluency intervention was examined. Students were participants of a repeated reading intervention. Schirmer, Schaffer, Therrien, and Schimer (2012) reported improvements in students reading fluency and comprehension abilities after participation in the eight-week intervention.

Pre and post data were analyzed using a *t* test. Significant results were found in all areas (fluency, reading vocabulary, word identification, running records) at $p < .01$ making it unlikely for the correlations to have occurred by chance (Lodico, Spaulding, & Voegtle, 2010). Although there is a limitation of generalizing the results, this study further extends the research on the strategy of repeated reading to improve reading fluency and comprehension. Schirmer, et al. (2016) also studied the effects of RR fluency intervention of deaf middle school and high school students. There was a consistent improvement in reading fluently and comprehension during the intervention session. Statistical significance was seen for reading comprehension of the high school students and not the middle school students. However, there was no statistical significance for reading fluency for neither the middle school nor high school student participants.

Repeated reading and English as a Second Language students. Repeated reading has impacted the reading fluency and comprehension of ESL students (Landa & Barbetta, 2017). There is also noted improvement in language acquisition for ESL students (Liu & Todd, 2016). Studies of ESL students further the research of repeated reading and its impact on reading fluency. Webb and Chang (2012) conducted a study of RR. Students in Taiwan were given RR and assisted RR treatments. The results demonstrated that EL learners had an improvement in students acquiring vocabulary learning. Assisted RR lead to a significant understanding of vocabulary knowledge. This study draws from the research of Taguchi and Gorsuch (2008) who administered a RR treatment with students in Vietnam. This study found that the RR condition added to the participants reading comprehension as compared to students in a non-reading treatment.

After a 16-week treatment period the experimental group outperformed the control group on comprehension measures (Gorsuch & Taguchi, 2008). Similar findings also occurred with Landa and Barbetta (2017) study of RR with ESL Hispanic students. Their study also found gains observed in the reading of untaught passages after the implementation of RR with students.

In a longitudinal study by Gorsuch and Taguchi (2010), with 30 EL students, pre- and post-test results revealed a significant increase in learners' comprehension. Students commented on their improvement in reading speed and comprehension. Gorsuch and Taguchi (2010) noted that the comments of the students are attributed to their participation in the repeated reading (RR) treatment.

Repeated reading has also had an impact on the reading achievement of adult ESL learners as well. Research has shown an improvement in reading rate (Chang, 2012) and decoding and comprehension (Gorsuch, Etsuo, & Hiroaki, 2015). Taguchi, Gorsuch, Takayasu-Maass, and Snipp (2012) studied the process of RR and what it would have on an advanced EL learner. Their study revealed positive effects on reading speed throughout the entire RR treatment. Pre and post tests revealed an improvement in the comprehension score. In another study, Han and Chen (2010) employed a 23-day RR treatment of a Mandarin speaking participant. Their findings indicated that RR treatment allowed the participant to read beyond her independent reading level, as well as, an increase in vocabulary acquisition was noted.

Tsou (2011) used a mixed-methods approach to determine if Readers Theater (RT) would improve student fluency and reading comprehension. RT is a form of

repeated oral reading used to improve reading fluency (Reutzel, 2009) and comprehension. The quantitative results identified more improvement in the RT group than the control group in reading accuracy and fluency, but not in comprehension. The qualitative results support the idea of student interaction with peers and enjoyment in student learning.

Chang and Millet (2013), studied the impact RR had on college students in Taiwan. The RR method was a part of a three-hour English course. Student participation was voluntary. Students were scored based on reading repeatedly as well as reading unpracticed passages. Pre and post test score data indicated the RR group and non-RR group comprehended about 51% and 49% respectively for the practiced passages, but slightly lower, 49% and 44%, for reading the unpracticed passage. After the treatment, the results indicated that students who received RR intervention improved their comprehension levels much more than those who did not. The findings from the research also indicated the transfer of comprehension skills to unpracticed passages by the RR group.

Xianhua and Farrie (2011), examined the impact RR would have on EL students in China. Specifically, paired repeated reading (PRR) was used to determine the effectiveness on reading fluency in English for Chinese EL in fifth grade. PRR involves students taking turns reading short passages one to another aloud. Participants were 101 students in 2 classrooms. One classroom received the treatment. ANCOVA analysis examined the means between both groups. Findings revealed gain scores in reading fluency for the PRR intervention group.

Ardoin, Morena, Foster, and Binder (2013), measured the effect repeated reading had on reading prosody. Participants included 38 third- and 38 fourth-grade students. Students underwent RR of texts. Results of this study indicated that RR had a positive effect on the reading prosody of older, more fluent readers. Ardoin, Morena, Foster, and Binder (2013) note the study extended previous research that suggests RR improves student's reading fluency. These studies reveal the impact RR can have on both the beginner and advanced EL learner. This is important to School L, which has a significant population of EL learners.

Repeated Reading and Technology. In an effort to improve reading fluency and comprehension, the use of technology has been incorporated into instruction. Use of repeated reading support by technology has been indicated in research to increase student automaticity and fluency (Papadima-Sophocieous and Charalambous, 2014). In an experimental study of 16,143 students in fourth through tenth grade, a computer-based reading fluency and comprehension program was integrated into instruction. The overall objective was to improve silent reading comprehension and overall reading achievement (Rasinski, Samuel, Hiebert, Petscher, & Feller, 2011). Achievement was based on standardized test results in reading. Results indicted students in the treatment group (n=5,758) made significantly greater gains on the standardized test. These gains were for all subpopulations, although there was no positive effect on fourth through eighth grade students in the EL subpopulation.

Gibson, Cartledge, and Keyes (2011), implemented a computer-assisted reading program for first grade students. The overall aim was to determine if improvement

would be seen in reading fluency and comprehension of students. In their study, eight first grade students who demonstrated problems in reading fluency and/or comprehension were selected as participants. Students participated in the use of a computer-assisted reading program with fluency targets for each participant. Although this study lacked a control group, the results are still valuable in our assessment of integrating fluency into reading instruction. Pre and posttest scores gains were observed in both reading fluency and comprehension for all students. Keys, et al. (2016) extended the research of Gibson (2011) to further the study on the effects of computer assisted technology. This research showed the improved of oral reading fluency of participants. In a study to extend the research from 2016, Keys, et. Al. (2017) studied the effects of computer assisted repeated reading on second grade students. The implementation of this intervention also showed an improvement in oral reading fluency of students.

Vansinda (2011), completed a study of second and third grade students. Research on repeated reading through podcasts was examined. Pretest data of initial grade-level–equivalent reading scores for the 35 struggling students had a mean of 1.09. After 10 weeks of repeated reading, recording, podcasting, and listening to their own voice recordings, the post-intervention grade-equivalent reading score mean was 2.22. The grade-level equivalency gain for the struggling readers as a group was 1.13 years after this 10-week intervention. Gains for individual students ranged from one semester's growth to three years' growth. Measurement of growth was measure by the Developmental Reading Assessment (DRA) and the Comprehensive Reading Inventory (CRI) assessment

Other Research on Repeated Reading. Research has shown improvement in reading fluency for students at the elementary level. Although, School L does not service the middle school population, it is also important to note the research seen on the impact repeated reading had on the middle school student. Denton, Wexler, Vaughn, and Bryan (2008) found no significant growth in the fluency or comprehension for below-level middle school readers who practice repeated reading. Paige (2011) also indicated after implementing RR on sixth grade students there were non-significant changes in comprehension of both groups tested. This research further supports the importance of implementing a repeated reading intervention at the elementary level.

Incorporation of Fluency and Prosody

Other methods to improve reading fluency have also been explored. The use of Reader's Theatre is an instructional approach used to improve reading fluency and comprehension. Typically, a story or text is converted to a script. Students learn parts of the script and rehearse repeatedly until they are highly fluent, then they perform in front of an audience (Vaughn & Thompson, 2004). Student comprehension scores have improved with the use of RT (Keehn, Harmon, & Shoho, 2008; Young & Rasinski, 2009).

Keehn, Harmon, and Soho (2008), conducted a six-week study to determine if Reader's Theatre (RT) had an impact on student reading fluency and prosodic aspects of fluency (Keehn, Harmon & Soho, 2008). Participants included 36 eighth grade students. The experimental and control classroom both included students reading below grade level. To maintain significance between the groups, a Levene's (1960) test of equality

was used. The same teacher taught both groups. The results of this study found that students in the experimental RT group did significantly better than the comparison control group in reading fluency and expression. Student interviews revealed that students enjoyed RT because the approach allowed them to engage in a social, interesting and fun activity (Keehn, Harmon & Soho, 2008). The results of this study revealed not only the importance of fluency practice, but also the value of reading with prosody. Young and Rasinski (2009) also saw improvement gains in work accuracy, recognition, reading rate and prosody when used as part of a balanced literacy program. This study supports Rasinki's (2003) idea that practicing short passages three to five times per week will develop the ability for students to read with automaticity and expression. Mraz, et al. (2013), also investigated the impact RT would have on developing fluency. In a study of 19 third grade students, pre and post data scores were examined. Repeated readings using RT revealed a significant improvement in word recognition accuracy, word recognition automaticity, oral reading fluency, prosody and comprehension. Readers Theatre has shown significant significance in improving the expression, volume, and pace of readers (Young, Valadez, & Gandara 2016).

Much of the research I have reviewed provided some evidence that when repeated reading is incorporated with prosody instruction comprehension abilities of students will improve. For School L, removing the repeated reading program and implementing the Imagine It Reading program in totality is expected to show a significant improvement in students' DRA reading comprehension score levels.

Implications

Current research of fluency and repeated reading suggest the need for teachers to understand the implications on student improvement in reading achievement. Fluency is a critical component of reading development. To improve reading achievement professional development on repeated reading and fluency for teachers would be warranted. To achieve this, a project of professional development training was developed. The training incorporated teaching of what automaticity and fluency are and how they can be embedded in reading instruction.

Summary

At the time of this study, School L did not make significant progress to improve the reading achievement of students. Approximately half of the fourth grade population is reading at the basic and below basic levels. In an effort to improve the reading achievement of the students Reading Mastery, a direct instruction program, was implemented during the 2011-2012 school year. During the 2012-2013 school year the Imagine It! reading curriculum that incorporated fluency (repeated reading) and prosody instruction was implemented. There is strong evidence from the research that fluency plays a major role in reading development (Reutzel, Fawson, & Smith, 2008).

Research has shown the impact that repeated reading has on the reading achievement of elementary, special education, middle school, EL, and high school students. LaBerge and Samuels (1974) theory of automatic information processing, the theory of automaticity, was the driving force of most studies. Their theory proposed the concept that readers that identify words automatically and accurately can focus more of

their attention on the comprehension of text rather than decoding words in the text. Berninher, et al. (2010) and Gorsuch and Taguchi (2010), found a significant impact on the use of repeated reading on the improvement of reading fluency and comprehension. Findings from this past research is what guides the project study to examine the impact of repeated reading on the reading achievement of fourth grade students at School L.

Findings based on the analysis of this data directed the project for professional development for teachers and administration on understanding repeated reading and the application of this instructional method to improve reading achievement. Section 2 provides a comprehensive discussion of the methodology for this study. Section 2 also contains descriptions of the research design and approach, setting and sample, instrumentation and materials, data collection and analysis procedures, limitations, and final evaluations. Section 3 includes a discussion of the project based upon the findings and the results presented in section 2. An analysis of the problem and project proposal will occur in Section 3. Reflections, recommendations, and implications for future research will conclude the research in Section 4.

Section 2: The Methodology

Introduction

There is strong evidence that reading fluency is a critical factor in reading development (Mendes, 2011). When students learn to decode words rapidly and accurately, they will be able to achieve fluency, and their ability to construct meaning is better than the disfluent reader (Kuhn, et al., 2010). Kuhn, et al. (2010) also identified the complimentary relationship between fluency with reading comprehension. Therefore, because fourth grade students at School L are not achieving proficiency on the PSSA in the area of reading, this study investigated whether discontinuing RM and implementing fluency instruction had an impact on reading achievement scores. The findings from this study contribute to School L and the school district's understanding of how fluency instruction impacts reading comprehension.

Section 2 provides a description of the research methodology for this project study. This section discusses the research design, population, sampling, setting, instrumentation, data collection, and data analysis procedures. This section also discusses protection of human participants, the role of the researcher, and threats to validity.

I used an ex post facto comparative research design to examine if fluency (repeated reading) and prosody are effective instructional strategies to increase the reading achievement of fourth grade students. An analysis of fourth grade students reading levels from the 2011-2012 and 2012-2013 school years were the foundation of the analysis. In this study, I compared test scores of two student groups that have

undergone different methods of instruction: Group A, fourth grade students who were not reading on grade level during the 2011-2012 school year who received instruction using the Reading Mastery direct instruction reading intervention and Group B, fourth grade students who were not reading on grade level during the 2012-2013 school year who received instruction using the Imagine It! Curriculum. The Imagine It! Curriculum incorporates fluency (repeated reading) instruction during small group instruction.

The analysis of data addressed the following research question, null and alternative hypotheses for this study:

RQ 1: Is there a difference in reading achievement among fourth grade students who were instructed during the 2012-2013 school year with fluency versus students who were instructed during 2011-2012 using the direct instruction method?

H_o*:* There is no difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students receiving fluency instruction during the 2012-2013 school year versus direct instruction during the 2011-2012 school year.

H_a: There is a difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students during the 2012-2013 school year receiving fluency instruction versus direct instruction during the 2011- 2012 school year.

The information obtained from this study may assist school administrators in deciding if providing instruction that incorporates repeated reading (and prosody) into

reading instruction is effective in helping students achieve grade level reading standards and improves their achievement on the on the DRA reading test.

Research Design and Approach

An ex post facto non-experimental research design was used to investigate the effectiveness fluency (repeated reading) instruction has on the comprehension of fourth grade students. In this design, an independent variable was identified and used to determine if it influences a dependent variable (McMillan, 2004). Salkind (2010) identified ex post facto research as research done after the fact. Therefore, there was no manipulation of variables or measurement before the study (Salkind, 2010). The groups in this an ex post facto research study already differed on a variable, instructional method, in attempt to identify a major factor that generated the disparity between the two groups (Gay, Mills, & Airasian, 2010).

In the case of School L, an ex post facto, non-experimental design was employed to determine if there were differences in reading achievement, dependent variable, as measured by the DRA between two fourth grade student groups, Group A and Group B, who experienced different interventions to improve reading comprehension. The varying independent variable for each grade group (instructional method) was examined. The use of an ex-post facto design was also based on the non-manipulation of variables (Lodico et al, 2010; McMillan, 2004). The impracticality of randomly assigning students to treatment groups was taken into consideration. Student groups already preexist at School L and students could not be reorganized for random assignment (Lodico et al, 2010; McMillan 2004; Millsap & Maydeu-Olivares, 2009). For these reasons, an experimental

study could not be used at School L. Accordingly, the ex post facto study allowed for the examination of fourth grade student reading achievement at School L. A retrospective view was taken to examine the impact that fluency instruction had on reading achievement scores (Gay, Mills, & Airasian, 2010).

The use of both qualitative and mixed methods designs was also considered for this study. Qualitative research often seeks to understand actions, narratives, and how they interact with each other (Glesne, 2011). Data are collected through observations, interviews, and analysis of documents (Lodico, Spaulding, & Voegtle, 2006). Mixed-methods research combines both quantitative and qualitative approaches. Mixed-methods research collects both forms of data in an effort to give a more complete understanding of an educational problem (Lodico, Spaulding, & Voegtle, 2006). Understanding the purpose of these research methods assures the use of an ex post facto research design. The use of a qualitative study would not produce data of what happens when a change in an instructional method are used on a standardized test. A mixed methods approach would not be appropriate now, but could be used for a future study to gain a deeper understanding of the impact of the intervention. Therefore, the qualitative and mixed methods designs were rejected because the goal of this study was to determine a probable cause and effect relationship. Therefore, I used an ex post facto non-experimental research design to determine which method of instruction at School L was effective in increasing fourth grade students reading achievement.

Setting and Sample

School L was selected as the site for this project study. School L is a public elementary school situated in a large urban environment in an eastern state. The school provides instruction to students in kindergarten through fourth grade. The school is considered a large school with a population of over 1,000 students. Enrollment at School L consists of predominantly African American students (60%). The remainder of the student population is comprised of White (1.3%), Asian (19.0%), Latino (14.15), and other ethnicity (5.1%) students. The number of students who receive free and reduced lunch is approximately 76%. English language learners make up 20.5% of the population. Additionally, 9.2% of the students have an Individualized Education Plan (IEP). Test data indicated that School L did not show improvement in academic growth. In particular, students in fourth grade have not shown significant progress on the state's standardized reading assessment. Within School L, a sample of fourth grade students from the total population of students was drawn.

Sampling

During the 2011-2012 and 2012-2013 school years there were a total of seven fourth grade classrooms at School L. Each classroom had approximately 29-32 students per class. The daily attendance roster generally was consistent with 180-230 children, considering the highly transient population. The most common method in causal comparative research is to choose participants who already belong to groups (Schenker & Rumrill, 2004). I used simple-random sampling to select participants for each group. Random sampling ensures that everyone in the population has an equal likely chance of

selection (Gay, Mills, & Airasian, 2010; Lodico et al, 2010; UC Davis, 2012). Random sampling is the most rigorous form of sampling methods because it allows for the generalization of results to the population (Creswell, 2012). The samples selected for this study were two independent groups that included participants from the 2011-2012 school year (Group A) and 2012-2013 school year (Group B). Simple random sampling was completed through the assignment of a number to each student in the population and selecting participants using a random numbers table (Creswell, 2012) using Research Randomizer (Urbaniak & Plous, 2011). To ensure an adequate sample size was used, a sample size based on population size was applied. The adequate sample size was formed using the Krejcie and Morgan's calculation of sample size (Appendix C). The table and formula assumes a standard of error = .05. This table was created to develop an easy reference from the formula created by the National Education Association (Krejcie & Morgan, 1970). Krejcie and Morgan suggest the use of the table to determine sample size of a known population.

Using the Krejcie and Morgan's method for determining sample size, data were used for students in both Group A (2011-2012) and Group B (2012-2013) for this evaluation. The sample size for Group A, 76, included all students who scored in the below-basic and basic categories of the PSSA, excluding students who scored Proficient and Advanced. The sample of 76 students for Group B included students who received the Reading Mastery reading intervention or fluency (repeated reading) instruction to improve reading achievement.

The sample of students originated from the total population of fourth grade students enrolled at School L during the 2011-2012 (Group A) and 2012-2013 (Group B) school years. The total populations during these years were; 230 in 2011-2012 and 180 in 2012-2013. From these populations, there were students who scored in the basic and below-basic categories on the PSSA before entering the fourth grade. Students who scored in these categories are the source from which the sample was be drawn. Sample size utilized for groups were 76 students. Since fourth grade student groups preexist at School L, experimental manipulation of groups cannot be justified, furthering the rationale for using the causal-comparative design (Lodico et al, 2010).

Instrumentation and Materials

The instrument used for this study was the Developmental Reading Assessment (DRA). The DRA is a standardized reading test. The test used in a one-to-one format, testing students individually. The DRA is a diagnostic literature-based reading program that directs instruction for students based on baseline and benchmark data in grades K-8 (Dyson, 2008). The tool is also used to determine student's instructional reading level. The district of School L utilizes this tool to capture ongoing data for students throughout the district. The standards assessed by the DRA include reading accuracy, fluency, and comprehension components of reading achievement. The DRA can be used as a screening tool to identify students with comprehension and/or reading vocabulary difficulties. Based on the data captured by School L's district, the DRA is the allowable and approved data that can be used for this study.

Instrument Overview

The DRA consists of a series of leveled books and recording sheets designed to give teachers a determination of student reading accuracy, fluency, and comprehension levels. The scores resulting from the DRA are translated into reading levels and determine Interventional, Instructional, Independent, and Advanced levels (Jarrett, Evans, Dai, Williams, Rogers, 2010). Levels of accuracy are based on percentages. The 90-94% range represents a student's instructional level. Given 95-100% accuracy identifies a student's independent reading level; this student has an ability to ready with precise accuracy and fluency to fully comprehend the reading. Relative to a student's grade level, this assessment determines whether students are below, near, at, or above grade reading level status. The instrument is given individually to each student in a 1:1 format. School L's school district utilizes this instrument for students in the fourth grade to determine reading achievement levels and therefore used the pre- and post- test scores from the DRA of fourth grade students.

Reliability and Validity

Reliability and validity are two criteria used to determine the value of a pre-established test (Lodico et al., 2010). Reliability and validity are essential for an instrument to have value. Reliability is the tests' ability to produce scores that are free from error (McMillan, 2004). Validity answers the question of whether an instrument is measuring what it is intended to measure (Creswell, 2010). Lodico et al. (2010) noted that reliability and validity are essential for an instrument to have value.

Reliability is the consistency of scores for an individual over repeated testing occurrences (McMillan, 2004). Reliability of an instrument is based on the instrument's ability to produce scores that are stable and consistent (Creswell, 2012). When a test is administered multiple times and at different times, the scores should be nearly the same (Creswell, 2012). For the DRA, there is convincing evidence of its test reliability. The reliability of the DRA was determined by measuring Cronbach's alpha. Cronbach's alpha is a numerical coefficient of reliability. Computation of alpha is based on the reliability of a test relative to other tests with same number of items, and measuring the same construct of interest. Using this measure, internal consistency was to be quite strong (Cronbach's alpha = 0.98). The Alpha coefficient is expressed in value from 0 to 1 (Takako & Dennick, 2011). The higher the score, the more reliable the generated scale is. It has been indicated that 0.7 - 0.9 to be an acceptable reliability coefficient Tavakol & Dennick, 2011). The literature also notes, the closer a coefficient is to 1.00 the stronger the reliability of the test (UCLA: Statistical Consulting Group, 2015).

Instruments can be very reliable but not valid on a consistent basis (Lodico, Spaulding, &Voegtle, 2010). Validity of an instrument is also necessary. Validity is defined as the ability of an instrument to measure what it is supposed to measure (McMillan, 2004). Both Creswell (2010) and McMillan (2004) insist the validity of an instrument can be determined by the valid inferences that can be made from the testing instrument. Criterion-related validity correlations between the DRA and other reading assessments were established. This form of validity examines the relationship between two instruments and the correlation between tested measures (Lodico et al, 2010). To

assess the validity of the DRA, the Pearson's product-moment correlation coefficient was completed. The coefficient examines the strength of the correlation between two variables. In this case, the strength between two assessments is seen based on a positive correlation coefficient of 0.5 – 1.0 was strong (Lund & Lund, 2013). Rouse and Fantuzzo (2006) reported that criterion-related construct validity has also been established, with coefficients ranging from .65 to .84 when compared to scores on other nationally standardized measure of early reading ability.

Therefore, test results of fourth grade students from the 2011-2012 and 2012-2013 school years from the DRA reading test to determine if there is a difference in reading achievement among fourth grade students who received intervention in reading with direct instruction or repeated reading (fluency) instructional methods.

Data Collection

Approval for this study went through the Institutional Review Board (IRB) of Walden University. The Walden IRB process involved the review of this study by a panel of experts. The IRB assessed the potential risks and potential benefits of this study to determine if the potential benefits outweigh the potential risks. Through this review process this study was approved before data collection. The Walden IRB approval number is 05-29-15-0186306. The approval for data collection also included the submission of a proposal completed by the researcher for the contributing school district. The proposal was submitted to the school district's Office of Research and Evaluation. The school district granted permission through a Research Data Agreement to access this data on July 24, 2015 (Appendix B). The principal of School L also granted permission

to conduct the study (Appendix B). Upon approval, archival reading achievement data from the DRA and PSSA of fourth grade students at School L was obtained from the Office of Research and Evaluation. The data included results from fourth grade students in Group A (2011-2012) and Group B (2012-2013). The reading comprehension records included reading data from both the 2011-2012 and 2012-2013 school years. The data include the DRA results. PSSA data were also examined to identify student basic, below basic, proficient, or advanced designation at the start of the school year.

District personnel extracted the data of each group year and shared the de-identified data with me. The school district's Office of Research and Evaluation department de-identified all data by assigning each student from School L with a numerical code and removed any other identifiers prior to my receipt of these data. To retrieve the data a time sensitive user name and password was given to me to access a school district encrypted web site to download the data. The research office informed me via email to call for the password to access the data set. After calling the school district's research department, I downloaded and printed the data. The archived data were secured in a locked file cabinet and password protected flash drive. Following completion of the study, all data will be retained for 5 years and then destroyed.

Data Analysis

I used the Statistical Package for the Social Sciences (SPSS) version 21 to run the statistics. Inferential data included means, standard deviations, range of scores for each group in each year and the differences between group means for the direct instruction group and repeated reading (fluency) group over two consecutive years on the DRA

reading test. For this study one independent variable, instructional method, and one dependent variable, DRA scores was analyzed. Analysis of the data included the use of descriptive and inferential tests. Descriptive statistics are used to determine overall trends and distribution of the data (Creswell, 2012). General tendencies of reading comprehension scores materialized through determining mean, mode, and median of student results on standardized reading assessment. Parametric inferential statistics were used to determine if the means reported were significantly different from each other (Lodico et al, 2010). The *t*-test was used to compare the means of student reading achievement scores on the DRA from the 2011-2012 and 2012-2013 school years. Data were analyzed through the use of the Statistical Package for the Social Sciences (SPSS) statistical software. SPSS is a statistical program used to conduct analyses of variables (Green & Salkind, 2011). Statistical significance for the main effects was determined using ($p < .05$). Significant results of statistical tests determined whether to accept or reject the null hypothesis, of improved reading comprehension scores with the implementation of repeated reading.

Assumptions, Limitations, Scope, and Delimitations

Several limitations exist in this research that analyzed archival data based on the ex post facto design. The use of the ex post facto design is a result of school inquiry of an event that occurred to determine future method of instruction. The limiting factor of this design is that the study was limited to fourth grade students at School L. Therefore, the findings could not be generalized to any other school or to any other school district.

The use of archival data limited the information on participants. Given the dates of the archival data retrieved, limits the generalizability of the results of this study to other fourth grade students. The demographics of the participants for the fourth grade class were provided; however, ethnicity, gender, and other comparisons were not included nor made for consideration of the research questions. The research focused on the comparison of the instructional method and its impact on reading achievement.

Internal validity was considered for this study. A limiting factor was the inability to monitor the implementation of the reading instructional methods by teachers and the assessment of students for reading comprehension scores. It can be noted that teachers were trained and monitored by reading specialists for the implementation of direct instruction, fluency practice, and the DRA test (D. Runner, personal communication, 2013).

The findings from this study cannot be applicable to similar schools in an urban district. Given the length of time since data was collected, the findings cannot be generalized to fourth grade students with similar resources and materials that address improving reading comprehension. In addition, this research allowed for the following assumption and limitation to be plausible: the DRA has adequate validity to assess reading achievement. Other limiting factors examined include lack of randomization, manipulation, and control of groups. To ensure equality of groups the use of random assignment as previously noted was utilized.

Ethical Protection of Participants

Measures were taken to ensure the ethical protection of the participants. The concern of ethics provides safeguards that protect the rights of the participants (Lodico et al, 2010). This study had no intent to do harm physically or psychologically to participants. Efforts to enhance confidentiality extended from the sampling process of coding students numerically, rather than by name. Consent was established through the principal and the school district's Office of Research and Evaluation department to obtain and receive archived de-identified data. This ex post facto design allowed me to be detached from the participants. I did not have any knowledge of identifying factors that can be applied to the participants. My role in this study was to analyze the archived data. Therefore, it is to be understood that the participants operated independently from the researcher. Data collected from the study will be stored in a locked file cabinet accessible only by me. Data will be retained for 5 years.

Data Analysis Results

Standardized treatment of fourth grade reading DRA data were analyzed by performing an independent samples t-test with the Statistical Package of Social Sciences software program. The research question examined whether there is a difference in fourth grade reading achievement scores as measured by the DRA between students during the 2012-2013 school year receiving fluency instruction (Group B) versus direct instruction (Group A) during the 2011-2012 school year. To answer this question, I coded and entered de-identified data from Group A and Group B into the SPSS software. Data were coded based on students receiving DI or non-direct instruction (repeated

reading) instruction. Students receiving DI, Group A, were coded as 1. Students not receiving DI, Group B, were coded as 2. The dependent variable of student achievement was coded and entered into SPSS. Data were coded based on the data released from the school district's Office of Research and Evaluation. Student DRA scores reported as intensive was coded as 1, strategic as 2, and target as 3. To provide accurate analysis, I first determined if there were any outliers in the data set. According to Shamoo and Resnick (2003) a common challenge in maintaining research integrity includes exclusion of outliers. For this data set, there were no outliers in the data, as assessed by inspection of the boxplot. Engagement scores were then evaluated. Engagement scores were normally distributed for both Group A and Group B, as assessed by visual inspection of Normal Q-Q Plots. In addition, engagement scores were normally distributed for Group A with a skewness of 0.562 (*SE* = 0.276) and kurtosis of -0.581 (*SE* = 0.545) and for Group B with a skewness of 0.260 (*SE* = 0.276) and kurtosis of -1.294 (*SE* = 0.545).

An independent-samples t-test was conducted in SPSS to evaluate the research question: Is there a difference in reading achievement among fourth grade students who were instructed during the 2012-2013 school year with fluency versus students who were instructed during 2011-2012 using the direct instruction method? Descriptive statistics reveal the non-direct instruction was more impactful than direct instruction on reading achievement. The fluency instruction was more impactful to group B participants (*M = 1.85, SD = 0.59*) than direct instruction to Group A participants (*M = 1.55, SD =0.06*).

The independent samples t-test was run in SPSS using a 95% confidence interval (Table 3) to determine if there was significant difference in reading achievement between

Group A and Group B. There was homogeneity of variances, as assessed by Levene's test for equality of variances (*p =0.06)*. Group B mean engagement score was -0.30, CI 95% [-0.53 to -0.08] higher than the Group A mean engagement score.

Table 3

Independent Samples t-Test for Equality of Means

	t	df	Sig. (2-tailed)	Mean difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variance assumed	-2.689	150	.008	-0.30	0.11	-0.52	-0.08
Equal variance not assumed	-2.689	140.65	.008	-0.30	0.11	-0.52	-0.08

The independent samples t-test also indicated statistical significance. To determine if the mean difference is significantly different I examined the p-value. There was a significant difference in the engagement between Group A (76 participants) and Group B (76 participants) was -0.03 with 95% confidence intervals (95% CI) for the mean difference in engagement of -0.53 to -0.08, $t(150) = -2.689$, $p = 0.008$. Based on these findings, there was a statistically significant difference between means ($p < .05$), and therefore, the null hypothesis is rejected and the alternative hypotheses is accepted. There is a significant difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students during the 2012-2013

school year receiving fluency instruction versus direct instruction during the 2011-2011 school year. Students who received fluency instruction achieved greater comprehension scores than students who did not receive fluency instruction.

Conclusion

The purpose of this ex post facto project study was to determine the effectiveness of direct instruction versus fluency (repeated reading) instruction on the reading achievement scores of fourth grade students. The data for this study derived from archived scores from the DRA reading assessment for the 2011-2012 and 2012-2013 school years for fourth grade students at School L. The setting of this study and participants was in a large urban district of an eastern state. Academic growth was not seen in fourth grade reading achievement based on the PSSA. The analysis of student data was based on participants who already belong to groups. Simple random sampling provided a database of data to be that was analyzed. Data from the DRA were analyzed using descriptive statistic and displayed in charts and tables. Data analysis included the use of a *t*-test. Interpretation of the data rejected the null hypothesis and provided acceptance of the alternative hypothesis. There was a significant difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students during the 2012-2013 school year (Group B) receiving fluency instruction versus direct instruction (Group A) during the 2011 to 2011 school year.

Findings indicated alignment to the theory of automatic information processing's idea that the automatic processing of word recognition is a precursor to successful

reading comprehension. The use of fluency practices proved to be a determining factor in the improvement of reading achievement for students. The results of this research data, in turn, prompt the need for informing school personnel at the school and district level about the research completed, findings, and implications for instruction. Thus, the need for the project of developing professional development (PD) through PD workshop and subsequent professional learning communities was designed.

Section 3: The Project

Introduction

To provide an opportunity to discuss the findings of this study and to discuss the impact, importance, and methods possible for incorporating fluency instruction to improve reading achievement, it was a priority to develop a project that would inform school leadership and teachers across grade levels. To achieve this, I developed a professional development training series that would be delivered first as a whole school professional development session followed-up by professional learning community (PLC) sessions for teachers of first through fourth grade students. Use of professional development will incorporate evidenced-based strategies that will support educators' transfer of new knowledge and skills to their work. The primary focus would be on the concept of reading fluency and methods to incorporate reading fluency to improve reading achievement of students upon entering the third and fourth grade. This professional development session would be purposed to improve the pedagogical practices of teachers to improve the overall fluency and reading achievement of students.

To foster collaborative practices and engage all teacher learners the PLC model was chosen. Facilitating this model will create an environment where true collaboration and development of fluency practices to be used in classrooms. In addition, using the PLC model will provide a platform for each teacher to be shared stakeholder in the development of a planning and scheduling timeline for implementation of additional fluency practice using existing school-based resources.

Description

The project consists of a three-day professional development session and PLC meeting sessions for grade groups. The professional development occurs first. The professional development session is a platform to share the process of the study, discuss the findings and identify the proposal idea of using professional learning communities to create a plan for creating fluency instruction utilizing the existing resources at the study's site. The professional development session is in the form of a presentation, with collaboration, conversation, and reading included in the session. The professional development is for all school staff at the site where the study took place.

The professional development session is then followed by the first of two professional learning community sessions. The PLC first session identifies the types of fluency practices and to determine available resources. The second PLC session is used for group planning to create a framework for embedding fluency practice into daily instruction. Each PLC session is grouped based on grade level. Grouping by grade level often allows for the collaboration of colleagues to plan and dialogue based on the common theme of grade level instruction that exists between teachers. By doing this it is hoped that teachers will be able to leave the second PLC session with a plan of action to initiate and utilize in their respective classrooms and support each other overtime after the learning and planning session has concluded. Providing ongoing support will allow for further collaboration of teachers on the plans they have created.

Goals

The goals for the project are to conduct a professional development session followed by professional learning community sessions to develop a plan for embedding fluency instruction into weekly instruction for students to improve reading fluency and reading achievement. The professional development session is purposed with the goal of shedding light on the instructional practices that occurred at the research site and the results of instruction on reading achievement. Through the PLC sessions following the professional development session the end goal is to identify fluency practices, what they involve and how to management them. In addition, the PLC session will provide space for the development of plans. Plans that are developed by the teachers that will be a framework for embedding fluency practices into their instruction.

Rationale

The rationale for this project was emanates from the problem stated in the research. The problem of students not making significant gains in reading achievement scores. Specifically, the school was not making annual yearly progress (AYP) and reading data on the standardized state assessment demonstrated a lack of significant proficiency among all students. The findings of this study indicated that there was a statistically significant difference between means ($p < .05$) of the analysis of two student groups reading scores. There was a difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students during the 2012-2013 school year receiving fluency instruction versus direct instruction during the 2011 to 2011 school year. To disseminate finding at the local level gives credence to

the development of professional development to impact the whole school understanding of the research data and then through professional leaning communities to impact teacher instruction and reflection in the classroom. Developing professional development and creating professional learning community opportunities will address the need to further teacher understanding of delivering a fluency instructional method to improve reading achievement for students within their school. DuFour, DuFour, and Eaker (2008) note that a PLC involves collaborative teams working to achieve a common goal, with the shared purpose of to help students learn. Creating PLC sessions will further the goals of School L to improve reading achievement of all students.

Review of the Literature

Theories and frameworks from the literature were used to develop the professional development and PLC sessions. Using databases from Walden University's library textbooks and peer-reviewed articles were searched to find information relevant to PD and PLC. Databases included ProQuest, EBSCO, ERIC, Academic Search Complete, and Thoreau. Key search terms included professional development, professional learning, professional learning communities, fluency, comprehension, and reading achievement.

The adult learning theory is the underpinning for the project chosen for data review, understanding, and application at School L. Knowles, Holton, and Swanson (2005) identify hat adults must know the reason why they are undertaking a learning experience. To transfer the research findings development of a professional development session along with follow-up professional learning community sessions will provide a

platform to disseminate the information. PD and PLC provide a safe collaborative medium for teachers to not only learn information but also be a strategic member of catalyst change in the practices of others. Knowles, Holton, and Swanson (2005) identify in their study of andragogy that adult learners engage in learning that improves the quality of their lives or performance. The research for this project was based on a search conducted of peer-reviewed scholarly articles through the Walden online library and books.

Prior to Knowles, Holton and Swanson, several theorists examined how adults learn. Gibb (1960) developed what is referred to as the functional theory of adult learning. He noted that learning centered around problems and experience should be experienced by adult learners. Later, Knox (1977) also added to adult learning by contending that adults learned continually and made adjustments and adaptations as conditions and roles changed in their life. Knowles (1990) then followed these theorists by further adding to the study of adults and learning. Knowles research furthered the andragogical theory of adult learning. He noted that there were five keep assumptions about adult learners. Knowles (2005) assumptions were then added to as years progressed to the following six assumptions:

- Learners have a need to know why they need to learn something before taking on new learning.
- Adults have a self-concept of being responsible for making decisions.
- Adults come to training with a varying amount of information based on past experiences.

- There is a readiness to learn by adults for what they need to know.
- Adults are life-centered, task-centered, or problem-centered learners. They are motivated to learn information that will assist them in dealing with tasks or problems.
- Adult learners are impacted by external, but more importantly, internal desires to achieve better.

Therefore, implementation of a PD and professional learning community (PLC) experiences will uphold this concept of adult learners valuing learning that improves their pedagogical practice, allows for the self-analysis of ways to improve their performance, and experiencing real experiences that allow for the discovery of improving gaps within their practice (Knowles, Holton, & Swanson, 2005). The implementation of professional development and PLC will provide learning for teachers that should include ownership, conversation, deep understanding, and be goal-oriented (Martin et al., 2014).

Professional Development

Professional development has been shown to improve teacher efficacy, implementation, knowledge and skills. Throughout the literature there is evidence of how professional development has an impact on improving teachers. Effective professional development must change the mindset of teachers with pre-existing beliefs and practices. Thompson and Zeuli (1999) argue that teacher must have time to work through change with discussions, readings, and writings that will change their beliefs and practices in their classroom.

In a study of teacher efficacy Shaha, Glassett, and Copas (2015) analyzed the impact of observations with professional development on the student performance. The study analyzed 292 schools in 27 states in the United States. Teachers engaged in online internet based professional development. After participation in observations and professional development there was noted a significant improvement on student achievement in reading and math on standardized assessments. In a previous study Shaha and Ellsworth (2013) studied 734 schools in 39 states in the United States on the effect of structured online professional development. Results indicated schools with higher engagement in professional development significantly outperformed lower engagement schools. Results reported a close in the performance gap for reading and math as well as a rate of improvement of 18% ($p<.001$). Karimi (2011) also studied the impact of professional development on teacher efficacy. Through a pre and post test survey Karimi (2011) completed a study on teacher efficacy. Two groups of teachers were administered a pretest on teacher efficacy. Teachers then received courses and professional development. Following the study, the post-test survey was conducted. Results indicated a significant higher efficacy score of teachers in the treatment group. Epstein and Willhite (2015) also studied the impact of professional development on teacher efficacy. After experiencing over 100 hours of PD time with mentor teachers, results indicated an improvement in teacher efficacy with regards to instruction, management, and collaboration.

Research points to the impact professional development has on teacher implementation. Professional development has been proven to be an effective way of

teachers receiving current instructional practices (Lumpe, Czeiak, Haney & Beltyukova, 2012). Saleem, Masrur, and Afzal (2014) investigated the effect of training on the levels of knowledge and pedagogical skills of 469 university teachers before and after attending professional development training sessions in Pakistan. Data analysis indicated that post test participant scores were two standard deviations higher as compared to the pre test.

In a study of science teachers Donnelly and Argyle (2012) studied the impact professional development would have on science teachers. Training revealed a need for teachers needing to improve their nature of science instruction. Their research of previous studies noted that teachers engaged in professional development in this area improved instructional practice. To further this research professional development was conducted. Research revealed an increase implementation of classroom instruction practice with the participation in science based professional development activities. Pre and post views of teachers revealed a significant improvement in teacher understanding. Li (2016) also studied the impact professional development had on female participants' implementation of technology in the classroom. Before professional development sessions the standardized mean score for female teachers was -0.03 as compared to 0.006 after receiving training. Li (2016) reported an increase in the level of integrating technology in the classroom after teacher participation in professional development sessions. Zelenak (2015) completed a study to examine professional development's impact on teacher practices and implementation. Findings revealed that participants used technology more than non-participants ($p < 0.001$) based on the completion of an online survey.

Shafer and Thomas-Brown (2015) completed a study on the impact professional development had on the success of students in special education. They examined the engagement of teachers in a co-teaching model with embedded professional development and its impact on the pedagogical practices of the teacher. The qualitative study found that there was an increase in feelings of support from teachers. One teacher reported feelings of increased learning and being more reflective of their teaching implementation.

Professional Learning Communities

Professional Learning Communities are important for teacher collaboration. There is research that provides strong support regarding the importance of teacher relationships to build social capital and improving public schools (Johnson, Lustick, & Kim, 2011). Christiansen and Robey (2015) note the importance of professional learning communities to provide accountability by all teachers for all students. In a study of teachers engaged in collaborative learning teachers identified a change in their instructional methods (Mintzes, Marcum, Messerschimidt-Yates, & Mark, 2013). Participants noted the emotional benefits of participated in a PLC. There was also reported changes in instruction, moving from a textbook centered to inquiry style of teaching. The study also noted increase in teacher knowledge based on information presented at PLC meetings.

The effectiveness of PLC work was examined by Wells and Feun (2013). In their study, a survey was developed to assess the effectiveness of PLCs. They based their survey on five domains of PLCs: supportive and shared leadership, collective creativity, shared vision and values, supportive conditions, and shared personal practice. Data

revealed sharing was a major benefit of working in a PLC. The study also found that what was shared differed between District A and District B, where one district was more successful in establishing an environment where the sharing and analysis of student learning occurred.

In a study of effective teacher network in Philadelphia, a mixed methods study indicated the value of teachers was having a space to share best practices and resources (Schiff, Herzon, Farley-Ripple, & Iannuccilli, 2015). Being able to hear ideas perspective from others was seen as valuable. In a case study of PLCs, Owen (2014) explored the experiences of teachers in Australia and teams involved in PLCs. Interviews and focus groups revealed teaching practices were changed as a result of PLC processes of planning, observing, and having time for collegial work.

For a study of social workers in urban social settings and the impact PLCs had on their practice. A survey was given to 58 social workers to determine if participation in a PLC had a positive impact on their social work practice. The research indicated that participants completed a self-assessment survey before and after participating in a PLC. Carpener-Aeby and Mozingo (2011) found a statistical significance between the pre and posttest (p =.000) scores. Social workers were positively impacted when collaborative efforts and shared goals were understood by PLC participants. In a similar study on PLCs, Sompong, Erawan, and Dharm-tad-sa-na-non (2015) completed a study on the role of professional learning communities in primary schools in Taiwan. Their study aimed to identify the need for developing professional learning communities (PLCs) in primary schools, develop a model for PLCs, and to study the findings of implementing PLCs.

Using surveys, the research indicated that teachers could collaborate on instruction, methods of teaching, and share ideas every day in small group and experience sharing every week. Their research noted that when teachers had to opportunities to collaborate they developed different ideas and colleagues helped in their ability to improve their instructional practice. In a ten-year study of faculty members at three universities Sheehy, Bohler, Richardson, and Gallo (2015) researched the impact of learning communities on educators. In this study teachers worked collaboratively in learning communities called communities of practice (CoPs). Findings revealed the impact the group leverage played in supporting the group to improve all aspects of each members academic teaching, research and service. The collaborative grouping allowed for ongoing, collaborative development and professional learning. The research also noted a common challenge for collaborative communities is sustainability.

PLCs also has been studied to determine impact on student achievement. Williams (2012) completed a causal comparative study on the impact professional learning communities had on urban students' reading achievement. There were 76 participating schools and 35 teacher interviewees sampled for research. Teams of reading teachers collaborated weekly in professional learning communities for learning, planning, and problem solving. ANOVA results indicated a significant growth rate ($p<.05$) occurred after PLCs were established. Qualitative data indicated that teachers perceived that professional learning communities had a positive impact on teaching practices and student achievement. In another study, O'Hara, Pritchard, and Pella (2013) studied the impact PLCs has on the academic achievement of English language learners.

In this yearlong study, elementary teachers took part in sessions to improve their understanding of technology to increase the academic vocabulary of students. Teacher reflections, classroom observations, and pre and post scores for teachers revealed significant changes in the teachers' knowledge and ability to implement technology and develop lessons for improving academic language. District benchmark assessments showed positive outcomes for students in their classrooms.

Hands, Guzar, and Rodrigue (2015) completed a study to identify the characteristics of facilitating transformative professional learning communities. Their research revealed the characteristics that promote practices of deep thinking to analyze and transform teacher practice and student achievement. A major factor in creating communities of transformative practice was trust. This element was indicated as a major determining factor between the facilitator and members of the learning community for growth to occur. Chiou-hui (2011) completed a qualitative study of elementary teachers completing action research while participating in professional learning communities. The study revealed that teachers involved in the PLC were provided a platform for collaboration, interaction, and exchange of ideas based on teacher practices. The research also ted that the role of collaboration should be underlined in PLCs.

Professional learning communities offer a learning model in which new strategies and ideas develop. The research also indicates there are challenges with PLCs. Relational trust is important in professional learning communities (Cranston, 2011; Maloney and Konza, 2011). For PLCs to be successful during the development and sustaining stages relationship barriers must be overcome. Teachers, principals, coaches,

must develop relationships through communication that is ongoing to build and maintain relational trust.

Based on the scholarly research presented, the preparation of a professional development and professional learning community for this research will allow for practitioners to take part in learning that will impact student achievement. This project aligns with the idea of adult learners participating in learning that will improve their pedagogical practice, allow for self-analysis of ways to improve their performance, and experience collaboration that allows for the discovery of improving gaps within their practice.

Project Description

The professional development and subsequent professional learning community meetings can be conducted by a facilitator. Resources and materials will be needed. In addition, proper planning for potential barriers to success must be addressed. A potential timeline must be developed. This section provides information on the proposed project if I were to implement this proposed project.

Materials

Materials needed for this proposed project include smart board and projector technology for presenting a power point and a space to meet to present the proposed project. These technology materials and meeting location currently exist at the research site. Approval will be requested in advance for access to utilize the technology equipment and meeting space. For the professional development handouts of the presentation, articles on reading fluency, markers, post it notes, pencils and chart paper

will be utilized. For the professional learning communities, materials for analysis such as Reader's Theater scripts, poetry, leveled readers from my personal collection of materials, blank lesson plan templates, and handouts of the presentation is required. In addition, teachers will bring with them leveled readers from their current reading curriculum and examples of lesson plans previously developed.

Potential Barriers and Solutions

A potential barrier to the successful implementation of the proposed project is time. For the research site time is a valuable commodity. Teachers have time set aside for professional learning communities and professional development days embedded in the district school calendar. A solution to this possible barrier is scheduling with the school principal. A meeting will occur with the principal to discuss a timeline for when professional development and PLCs. During this meeting times, dates, and locations will be determined, as well as, materials needing access to for the determined dates and times. Another barrier could also include notification to teachers of the upcoming PD and PLC meetings. This could also be solved through the posting of dates and times in the weekly bulletin used by the principal to inform teachers of upcoming events and reminders. It will be the responsibility of the principal to post the dates and times in the weekly bulletin to ensure all staff is knowledgeable and well informed. This bulletin will need to not only posted in the school but also through email notification from the principal to the staff.

Proposal for Implementation and Timetable

To implement the proposed project, agreed upon dates and times with the principal of the research site is established. Each school year there are professional development days built into the school year. At the beginning of the school year there is a three-day professional development schedule. The goal would be to obtain one of the professional development days to present the findings of my research for this proposed project. Thereafter, two PLC meeting days for the collaborative practice to further teachers understanding and improve in-class instructional practices will occur. School L currently has a schedule that allows for same grade level professional learning community meetings to occur throughout the year. The goal would be for the scheduling of facilitating a professional learning community meetings one at the beginning of the year in an effort to further the building of relationship trust, promote learning through social engagement, and front loading learning that will impact teacher instruction for the remainder of the school year. For the second session, it would occur 1 month after the first session to engage teachers in reflection and collegial collaboration for future planning.

In addition to approval from the research site, approval from the school district's research and evaluation department director will need to be completed for this proposed project. This is accomplished through the scheduled meeting to discuss the research, findings and the training sessions. The proposed timetable for implementation for this project is presented in Table 4.

Table 4

Timetable for Implementing Professional Development Training

Activity	Date
Meeting with Director of Research and Evaluation to obtain approval for professional development and PD evaluation tool.	August 2017
Meeting with school principal to schedule training dates and identify training location.	August 2017
Send email invitation to teachers to attend PD session 1 and Session 2	September 2017 and October 2017
Send reminder invitation to teachers to attend PD Session 3	October 2017
Facilitate training sessions	September 2017, October 2017, and November 2017

Training Schedule

Session 1 of the training will focus on delivering the research and findings. The participants will discuss the theory of automaticity to review or build background knowledge. Then participants will take part in identifying direct instruction and fluency

instructional methods. Finally, participants will review the data to identify the themes and results of the study. This training will then end with suggestions for instruction based on the finding and current research. This full day PD will then be follow-up with professional development sessions in grade level professional learning communities.

Session 2 of this proposed training will allow participants to review the baseline data from the previous school year. Participants will be able to identify current reading levels of students and group students based on their instructional reading levels. Participants will then review what fluency instruction is and methods of implementation. Participants will take part in reviewing different methods for implementing fluency instruction. The training will end with teachers being able to co-plan for literacy instruction with support from the facilitator. Teachers will develop fluency lesson plans for students who are reading below level. Teachers will leave this session with plans for implementation in their respective classrooms and times to meet for collaboration before Session 3.

Session 3 of the training will provide participants the opportunity to review mid-year data from the current teaching year if approved. Participants will identify the current reading levels of students who were reading below level and determine growth or lack thereof of students. Participants will discuss what is working and answer the question of how they know. Participants will review what methods they implemented in their classrooms to improve the reading achievement of students. Teachers will also identify what concerns they had. Finally, they will determine next steps for instruction for students. As a group, teachers will leave the session with a working lesson plan for

instruction and goals to meet before their next PLC meeting after our three professional development training sessions.

Roles and Responsibilities

The facilitation of the professional development and PLCs will be the facilitator's responsibility. For Session 1, the facilitator will identify objectives for the participants to (1) identify research theory of reading and automaticity, (2) identify the difference between direct instruction and reading fluency instruction, (3) review the research data findings, and (4) identify methods for implementation in the classroom. For session 2, the facilitator will identify the objectives for participants to (1) review baseline data for reading, (2) review what fluency instruction is, (3) identify methods of fluency instruction, and (4) plan for differentiated instruction. For session 3, the facilitator will identify the objectives for participants to (1) review current reading levels, (2) identify what is working, and (3) co-plan for determining next steps in reading instruction. Throughout each session, the facilitator's responsibility is to maintain sessions that are focused on student learning and student outcomes (Wei, et al., 2009). In addition, the facilitator will be in charge of maintaining time to reach all objectives. The responsibility of the administrative team and teachers will be to be active participants during each session through questioning, collaboration, communications, and sharing ideas. During PLCs the role of the teachers will be to bring required curricular materials they currently use for instruction in reading f co-planning during Sessions 2 and 3. Teachers will also be asked to be active participants who engage in conversation and reflective of instructional practices. Overall, the goal is to disseminate data from the research, identify

research based strategies to improve reading achievement of students, and application of learned information into daily instructional practice.

Project Evaluation Plan

To determine if the professional development session achieved the purpose of informing the teachers and administration at School L formative assessment will be utilized. Guskey (2002) noted that successful evaluation of professional development should examine participants' reactions, participants learning, organization support and change, participants' use of new knowledge and skills, and student learning outcomes. This model for evaluating professional development indicates that each of the five levels is important. Information that is gathered at each level provides data for improving the quality of the professional development session (Guskey, 2002). Following the professional development session, a questionnaire (Appendix A) will be utilized to determine participant reaction to session and suggestions for future sessions. Questionnaires will be handed out at the end of each session. The questionnaire includes open ended questions.

To evaluate the professional learning community sessions formative and summative data will be utilized. Following the first PLC meeting a questionnaire will be used to determine the acquiring of learning goals. Guskey (2002) notes that measures must show attainment of specific learning goals and information gained from this data becomes the basis for improving the content and format of recurring sessions. Based on the learning outcomes participants will complete a questionnaire that will allow me to understand teacher ownership of learning and the need of how to further support teachers

until the second PLC meeting. Following the second PLC summative data will be collected to determine if reading achievement is improving through the implementation of fluency instruction. The data source will be student DRA scores collected by teacher assessment of reading. The overall goal is to examine if the overall reading achievement of students are impacted by the implementation of instructional strategies learned through the professional learning community.

The overall goals of the PD and PLC evaluations are to determine if the sessions were effective and allowed teachers to gain an understanding of research based instructional strategies that can be implemented to improve reading achievement of students at School L. The goal is also for the key stakeholders, teacher and administration at School L, to gain an understanding of the role professional development and learning communities play in teacher development, collaboration, data evaluation and student achievement.

Project Implications

The project will provide focused sessions for administration, teachers, students and all stakeholders to benefit. For local and district administration, the project is a tool for disseminating information on research that aligns to districts action plan for improving student achievement.

School Level Implications

At the School Level for teachers and administration, the project provides an opportunity for discussion, collaboration, and development of instructional practices aimed at improving student reading achievement. The project is also a way for teachers

and staff to take a retrospective look at instructional practices and make research based decisions that will impact the local school and potentially other schools in the district with similar concerns. Examining instructional practices includes reviewing the use of repeated reading and direct instructional methods for improving reading achievement of students in the fourth grade. To improve instruction implementing reflection practice will allow for teachers to review data and instruction previously implemented and then backward design to improve their instruction of current students. Wiggins and McTighe (2006) notes that with backward design one starts with the end, the desired results, and then plans the curriculum from the evidence of learning called for by the standard and the teaching needed to promote learning experiences.

For the students, the project will allow for ongoing examination of student reading achievement and teacher implementation of reading lessons that will best meet the needs of each student individually.

District Level Implications

The current action plan of the district includes the goal of improving student achievement in literacy. Along with that is the goal of schools providing collaborative interactions with principals and teachers to improve instruction and using data to drive instruction. This district approved research will further the district's goal of using data to drive instruction. The development of professional development sessions will further the district goals of creating meaningful and purposeful opportunities for collaboration and learning. Through this research and project, I will be able to further the action plan goals of the school district.

Social Change Implications

Overall, the participation in professional development sessions may increase teacher and administrators understanding about improving reading achievement. Revisiting research data with all stakeholders will allow for students to receive differentiated instruction tailored to their needs. Thus, resulting in student-centered instruction that reduces behavioral concerns, increases student engagement, and improved reading fluency and comprehension for students. By empowering students as readers this project may further the development of instruction by teachers to improve reading fluency and success.

Conclusion

This section described the proposed project based on the findings of the research. The project was developed based on the androgogical theory of learning for how adults learn. The goal for the project was to shed light on the research through professional development and professional learning communities. The goal for the project was to also facilitate sessions that would shed light on the power of learning that is collaborative, reflective, and goal oriented for future sessions teachers would facilitate or participate in. The project will allow participants to identify what the data said about reading development of students at School L, what the research noted about improving reading achievement, and to identify fluency instructional practices that can be utilized for instruction of students. It is projected that the success of the project will be based on presentation of meaningful data that directly impacts instructional practices.

Section 4: Reflections and Conclusions

This project study was developed and designed based on a current problem. The goal was to address the problem concerning reading achievement of fourth grade students. In particular, fourth grade students were no meeting local city and state standards for reading comprehension scores. The study included an ex post facto analysis of data from two years of instruction to determine the effectiveness of reading instructional methods. Two years of archived data was used to examine the reading levels of students receiving either direct instruction or fluency instruction. The *t*-test was used to compare the means of reading achievement of students who received direct instruction as compared to students who received fluency instruction to improve reading achievement. Interpretation of the data rejected the null hypothesis and provided acceptance of the alternative hypothesis, there was a significant difference in fourth grade reading achievement scores as measured by the Developmental Reading Assessment between students receiving fluency instruction versus direct instruction.

Project Strengths and Limitations

Development of the project for this study was based on the determining who needed to be informed, the best format to accomplish dissemination of the research, and time considerations of all key stakeholders to be informed. Taking all things into consideration the best format for the project deliverable was the development of professional development that is also embedded in professional learning communities to reach all stakeholders during the school year. The following identifies the strengths and limitations of the project.

Project Strengths

There are several implications for implementation of this project. Utilizing professional development (PD) will allow for the transfer of knowledge to teacher and staff. This was accomplished in one session to disseminate information to all staff members in a common setting. Professional development provides a platform for transfer of knowledge to occur in this work environment that is often laden with time constraints. By utilizing time wisely, implementing this project in conjunction with the school calendar and schedule strengthens the thought for the delivery method. Mizell (2010) notes the purpose of PD is to strengthen the effectiveness of educators by focusing on their need to impact the needs of their students. Therefore, providing teachers and staff new knowledge on a topic that changes their instructional behavior to consequently improve student achievement is essential and a strength of using a professional development session.

Delivering professional development based on data is another strength of this project. Data were supplied to the researcher from the school district. Therefore, use of that data in the project deliverable makes the session applicable and relevant for all stakeholders. In addition, using data assisted in determining the professional learning priorities for continuous professional growth. Which lead to the development of professional development sessions through professional learning communities (PLCs) for this project.

Including professional development through professional learning community (PLC) sessions is a strong point of this project. PLCs provide an opportunity for

professionals to share knowledge and collaborate (DuFour, DuFour, and Eaker, 2008). Building PLC sessions allows participants to focus on student data, learning, and sharing knowledge to improve instruction and student achievement. There is also strength in the shared collaboration that occurs among teachers during the sessions. Having time to collaborate furthers the shared mission under which teachers work. Having a shared vision motivates people and develops a focus on instruction. In addition, it provides empowerment for teachers within an organization to have a clear sense of purpose as they set goals and revisit them to determine next steps for progress monitoring all students. Furthermore, the PLC sessions will turn the focus on all students in the school rather than each teacher focusing on their classroom.

Project Limitations

Professional development should be based on a collaborative analysis of student data, goals for student learning and the differences between them (Hawley, 2007). To achieve an ongoing collaborative analysis time to do so is imperative. A limitation of this project is the amount of time give for teachers to collaborate specifically on reading achievement data and to set ongoing goals for students. The project only utilizes 3 sessions at the beginning of the school year. The project does not maximize the amount of time that a school year offers for collaboration. With timing constraints teachers are not given the opportunity to fully vet the new information acquired.

Collaborative problem solving can occur in the form of leadership, grade level, interdisciplinary, critique or curriculum development, study, and collaborative action groups (Hawley, 2007). Another limitation of the project is the use of only one form of

problem solving group after Session 1. Problem solving, planning, and goal setting only occurs at the grade level. This can limit the possibility of including the collaboration of teachers from varied backgrounds of teaching. In addition, the one method of collaboration does not provide a variety of learning options for learning.

Recommendations for Alternative Approaches

An alternative approach to this study

In order to allow teachers various methods of learning and feedback I would recommend the additional support of providing a feedback session during implementation of the fluency instruction. The use of feedback will allow for teachers to modify, adjust, or continue instructional practices. This will also give teachers in the moment support from another practitioner or expert in the area of reading instruction. I would suggest the feedback be it the form of literacy coach who would be able to provide before, during and after sessions with teachers to ensure implementation is effecting student achievement.

Also, to further the understanding of administrative personnel I recommend ongoing professional development for principals and building leadership. By providing professional development for principals will further the dissemination of the research completed. This professional development will allow for principals to see the close connection between the district action plan goals and what it means for the student. It will also support the ongoing question of how to close the achievement gap between students. Job-embedded learning promotes motivation to learn and engage in school change especially when ties to improving daily practice (Hawley, 2007). Including this

addendum to the project would create sense of motivation to learn a research based practice for instruction that would improve the over-arching goal for the district.

An alternate definition of the problem would be lack of understanding of reading fluency and how to differentiate instruction for reading achievement. To solve this problem, I would recommend developing a study group. The goal of this group would be to provide a further time for teachers and administrative staff to fully understand the research and practices associated with improving reading fluency and achievement. A study group will also promote collaboration and problem solving within the group. Stanley (2011) notes that teachers who work with skilled colleagues to identify and understand the depth of a topic may become confident and apt to further their learning and share what they have learned. This essentially will provide a session that will allow participants to turn around their learning in another learning community.

Scholarship, Project Development and Evaluation, and Leadership and Change

The process of completing this research was enlightening and challenging all at the same time. I learned that research is inevitably a strong tool to modify ones thinking about instruction and how to improve student academic achievement. The expertise of my fellow researchers has heightened my level of respect for research and what researchers do to answer a question that adds to the body of knowledge. Specific to this research I learned that reading is an area of challenge for students in under-served inner city areas. I learned that schools that are not making AYP within three years do need high support to improve student academic success. There is no time to waste on student achieving and being able to read and comprehend text successfully. This process allowed

me to see how the works of LaBerge and Samuel added much value to the works of understanding that reading requires practice that will move readers from word identification to automaticity and fluency in reading. Rasinski's work on reading fluency also added to my understanding that reading fluency practice can be applied to the general education, special education, and English as a second language students. It is with this understanding that prompted me to develop a project that would further the work of all educational professionals by disseminating information from the literature and my research of current applicable data.

Regarding the project, I found that developing professional development is essential for practitioners to grow their practice and apply the knowledge gained to immediately apply in the classroom through instruction. Professional development affects student achievement in many ways. Professional development enhances teacher knowledge and skills, which improves teaching that raises student achievement (Yoon, et al., 2007). From the works of researchers such as Hawley (2007), I found that effective schools provide collaborative models for teachers to grow and impact student achievement. Professional development should be driven by what students need, what teacher must know, and how to address the specific needs of students (Hawley, 2007). Implementing professional development will essentially augment and improve teacher instructional application in the classroom. Promoting reflection of teacher pedagogy, application of acquired information, reflection of instruction and close examination of ongoing student data will foster an ongoing cycle of instructional improvement.

Reflection on Importance of the Work

Reading development for elementary students is essential for the academic development of all scholars. In particular, it is necessary for students in city epicenters that are underserved to be able to read and comprehend text. Understanding how to unlock the words on a page is key for students to access the world around them. With this in mind, the work of understanding reading fluency to achieve comprehension is paramount for the field of education and the education institutions that serve children. Completing research on this topic adds to the growing body of research on the topic of reading achievement. This research also brings to light further understanding of how to improve students' ability to read and comprehend. The research presented in this dissertation points to our understanding that students who are able to read fluently are also able to comprehend the texts they engage in reading. By engaging in repeated learning experiences through fluency practice students will in turn improve their comprehension.

The development of the project allowed for the progress towards a practical plan beyond the research. Teachers and administrators who take part in the professional development training session can improve their application of the acquired skills in the instruction and observation of students in reading instruction. By participating in professional development, a school culture of learning is created and it also supports teacher efforts to address student learning concerns (Mizell, 2010). Changing the culture of learning about improving reading achievement will further the overarching goal of student academic achievement. By creating and presenting visible data and research

provides all stakeholders a clear understanding of the role fluency instruction has on reading comprehension.

Implications, Applications, and Directions for Future Research

The implication of this project applies to all stakeholders within the school and the district. Particularly, the stakeholders include the teachers, administrators, and parents at School L. Impact of this research is applicable to district level administrators who have set the action plan goals of the school district. The significance of this project is to increase teacher understanding of reading fluency. This would in turn impact the possible improvement in the reading achievement scores on standardized test score in reading comprehension. This change could be seen at each level differently.

At the School Level, there may be an increase in the implementation of repeated reading practice with students to improve reading achievement. At the district level an increase in the reporting of students reading at the proficient and advance levels of reading may be reported. At the parent level, there may also be an increase in students' engagement in and enjoyment of reading at home, as well as satisfaction in seeing an improvement of their child's reading scores reported on quarterly report card cycles. The potential impact on the dynamics of reading and reading instruction in the schools may also change how teachers reflect on their instruction and make modification to differentiate instruction for all learners. The impact on principals and administrators will improve also how they support reading instruction and provide appropriate resources for teachers to heighten their instruction and for students apply their newly acquired reading strategies independently.

Recommendations for future research include replication of this ex post facto study at different schools within the district. This study was limited to the study of one school within a school district. For the future, I would recommend expanding the sample to further the generalizability of the study results. I would also recommend the use of a qualitative research methodology to examine the thoughts, perceptions and feelings of teachers applying the reading fluency instructional method and the impact on teacher efficacy. Application of a survey method design will allow for the compilation of data based on the thoughts of teachers will also develop the precursor for a possible hypothesis to be developed and quantitative study to be researched.

Additional research could also include taking a look at the implementation of fluency practice at the lower elementary levels of students in the first and second grades which this research did not examine. To further determine the effects of fluency instruction on students who are reading below proficiency levels. This research could be expanded by not only looking at quantitative data but also simultaneously using surveys of teachers and students together in a mixed methods study. By completing this form of research there is the gaining of more information and knowledge of the problem. In addition, the data set will be in rich in information. In turn, this will improve the reliability of the results though triangulation which lends the results to be more generalized to a bigger population.

Conclusion

Reading is an essential and critical component of life. It is through reading we can understand and comprehend a thought, idea, or fact that is being communicated in

written form. The inability to read for understanding and enjoyment is devastating for students not reading at their full potential. Students must be able to transition from learning to read to reading to learn. The body of research supports the need for fluency instruction for students to improve their ability to comprehend text. Embedding this ideology is imperative for students to become better at unlocking the text and feature of texts to further connect and comprehend what is being communicated to them as the reader. The purpose of this ex post facto non-experimental quantitative study was to determine the effectiveness of direct instruction versus fluency (repeated reading) instruction on the reading achievement of fourth grade students. The local school data showed that students were not making annual yearly progress which begged one to question the reasons why. This research and project furthered my understanding of the theory of automaticity and fluency how they are applied to our application of teaching reading strategies for students to learn and become better readers. By providing the best instructional practices will further the necessity to raise our level of expectation of what defines academic reading success for our students.

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Appendix A: The Project

Professional Development Training

Overarching Purpose:
The purpose of this professional development is to inform stakeholders within a school on what instructional modalities are important in the improvement of reading academic achievement. This will be accomplished through professional development sessions that will first inform stakeholders of the research completed. Followed by dissemination of what the data and current research purports and applying the research to current practice.

Overall PD Training Goal:
Increase teacher and administrator knowledge of implementing reading fluency practice in the classroom for student achievement.

Target Audience:
The target audience for this PD is the elementary teachers and administrators at the school where my study was conducted. There are 46 teachers and 2 administrators within the school.

Professional Development Agenda Session 1

Objectives:
At the end of this professional development session each practitioner will be able to:

Part 1 (8:00-11:00AM)
Identify the goals of reading
Define the characteristics and concerns of reading achievement
Identify and understand the theory of automaticity

Part 2 (12:00-3:00PM)
Examine the research completed at the school
Examine the data of reading achievement for their school
Identify the trends of reading achievement of students (previous and current)
Determine next steps for instruction in reading

Hourly Agenda:

8:00-8:30 AM – Introduction, review of training goals and objectives, Ice Breaker Activity.
Facilitator will review the objectives for the session:
Participants will identify the goals of reading
Participants will define the characteristics and concerns of reading achievement
Participants will identify and understand the theory of automaticity
Participants will complete a “getting to know you” activity.

8:30-9:15 AM - Defining and Determining Reading Achievement
Participants will complete a turn and talk activity to discuss the phrase "reading is the key to learning"
Participants will share their ideas through collaboration
Participants will determine a definition for reading.
Participants will identify how reading is defined and compare and contrast definitions.

9:15-10:00 AM– Defining and Determining Characteristics of Successful Readers
Participants will work in groups to complete collaborative work.
Participants will identify characteristics of what a good reader can do.

10:00-10:15 AM
15-minute break

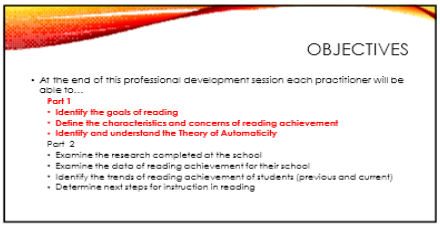
10:15-11:00 AM – Determining Characteristic of Struggling Readers
Participants will use professional literature to identify concerns for struggling readers.
Participants will identify the theory of automaticity.
Participants will identify methods for improving reading success in struggling readers.

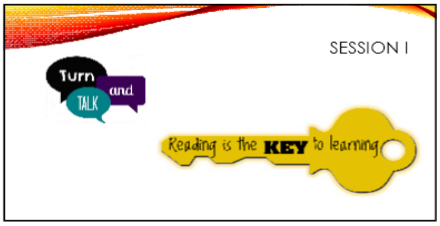
11:00-12:00 PM– Lunch

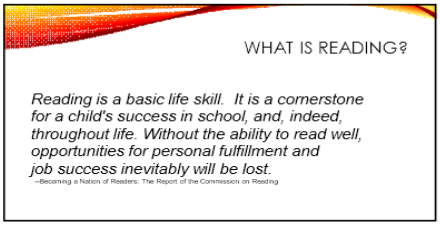
12:00-3:00 PM

Participants will be able to examine the research completed at the school.
Participants will be able to identify the results of the research completed at the school.
Participants will be able to examine the data of reading achievement for their school.
Participants will be able to identify the trends of reading achievement of students (previous and current).
Participants will be able to determine next steps for instruction in reading through collaboration.

Professional Development Training Slides
Session1







READING ACHIEVEMENT

- What can a good reader do?

READING ACHIEVEMENT

- Concerns for the struggling reader
- Article:

"Delivering Supportive Fluency Instruction Especially for Students Who Struggle" by: Timothy Rasinski

RESEARCH

The Theory of Automaticity

- According to LaBerge & Samuels (1974), automaticity is a developmental process that begins with letter discrimination and finally evolves in the unitization of words.
- Once students can automatically decode words, then they can focus their attention on employing the various strategies that will enable them to read with fluency and to comprehend what they read.
- Automaticity, however, occurs over time with appropriate and repeated opportunities for practice and/or training.

CLASSROOM IMPLICATIONS

How can the Theory of Automaticity be applicable to reading achievement in the classroom?

What does it look like for teacher instruction?

- Repeated Readings

BREAK TIME…

SESSION 2

Implications for ***practice?***

Is this the right sub-title?

OBJECTIVES

- At the end of this professional development session each practitioner will be able to…
  - Part 1
    - Identify the goals of reading
    - Define the characteristics and concerns of reading achievement
    - Identify and understand the Theory of Automaticity
  - **Part 2**
    - **Examine the research completed at the school**
    - **Examine the data of reading achievement for their school**
    - **Identify the trends of reading achievement of students (previous and current)**
    - **Determine next steps for instruction in reading**

THE RESEARCH

Problem:

School L not making AYP

School L was in its third year of corrective action.

Test data over the past 3 years indicated that School L had not shown improvement in student academic achievement.

Particularly, the students in 4th grade had not shown significant recurring annual progress on the standardized state reading assessment.

THE RESEARCH

4th Grade Standardized Reading Data

(Retrieved from: Philadelphia School District, 2013)

School Year	% Students scoring at Proficient or Advanced
2008-2009	46.6%
2009-2010	43.9%
2010-2011	47.6%

THE RESEARCH

Taking a look at instruction.

- An improvement in students' performance on the DRA reading test will be used as an indicator to determine what students' reading levels are for the 2012 year as compared to the previous scores of students from the 2011 school year.
- In 2011, teachers only taught with direct instruction.
- In 2012, students were taught with repeated reading.
- In 2013 and 2014 students were not receiving either (only whole group instruction).

THE RESEARCH

Research Question

Is there a difference in reading achievement among 4th grade students who were instructed during the 2012 to 2013 school year with fluency versus students who were instructed during 2011 to 2012 using the direct instruction method?

THE RESEARCH

Instrumentation and Materials

- The instrument used for this study was the Developmental Reading Assessment (DRA).
- The district of School L utilizes this tool to capture ongoing data for students throughout the district.
- The standards assessed by the DRA include reading accuracy, fluency, and comprehension components of reading achievement.
- Based on the data captured by School L's district, the DRA is the allowable and approved data that can be used for this study.

THE RESEARCH

Data Set

- The data included results from 4th grade students in Group A (2011 to 2012) and Group B (2012 to 2013).
- The reading comprehension records included reading data from both the 2011 to 2012 and 2012 to 2013 school years.
- The data include the DRA results.
- PSSA data was also examined to identify student basic, below basic, proficient, or advance designation at the start of the school year.

THE RESEARCH

Descriptive Statistics

Instruction	Number	Mean	Std. Dev	Std. Error Mean
Group A	76	1.55	0.59	0.06
Group B	76	1.66	0.77	0.08

THE RESEARCH

Research Findings

- Alignment to the Theory of Automaticity.
- The use of fluency practices proved to be a determining factor in the improvement of reading achievement for students.

IMPLICATIONS FOR INSTRUCTION

Think-Pair-Share

- What does this mean for instruction at our school?

NEXT STEPS…

- Session 3 and Session 4
  Professional Development Sessions:
  - Current data analysis
  - Methods of instruction for implementation
  - Analysis of mid-year data

THANK YOU FOR BEING HERE!

Session 2

Objectives:
At the end of this professional development session each practitioner will be able to:

Part 1 (8:00-11:00AM)
Review classroom and grade level baseline data of students in reading
Review baseline data of students in reading (grade level)
Review the methods and components of fluency instruction

Part 2 (12:00-3:00PM)
Co-plan for literacy instruction with professional learning community
Develop fluency lesson plans
Plan with professional learning community upcoming dates/times for collaboration

Hourly Agenda:
8:00-8:30 AM – Introduction, review of training goals and objectives, Ice Breaker Activity.
Facilitator will review the objectives for the session:
Participants will review classroom and grade level baseline data of students in reading.
Participants will review baseline data of students in reading at the grade level.
Participants will review the methods and components of fluency instruction.
Participants will complete a "getting to know you" activity.

8:30-9:15 AM – Reviewing classroom and all grade level baseline data of students in reading.
Participants will use data compiled from Session 1 to identify baseline reading levels.
Participants will use current reading assessments to identify instructional reading levels.
Participants will group students based on their current reading level in preparation for planning for instruction in reading.
Participants will complete a turn and talk to identify the trends in their classroom.

9:15-10:00 AM– Reviewing baseline data of students in reading at the grade level.
Participants will complete a turn and talk activity to determine grade level trends of instructional reading level data
Participants will work as a group to determine grade level percentages of students reading below, on and above standard grade reading level.
Participants will create a visual display of data for their data wall.

10:00-10:15 AM
15-minute break

10:15-11:00 AM– Review the methods and components of fluency instruction.
Participants will identify methods of fluency instruction

Participants will observe and analyze fluency instruction lessons
Participants will complete a think, pair, and share activity to compare and contrast fluency lessons observed

11:00-12:00 PM– Lunch

12:00-3:00 PM
Participants will develop fluency lesson plans for students
Participants will develop a planning timeline for implementation
Participants will identify and prepare necessary resources for immediate implementation

Professional Development Training Slides
Session2

Baseline Data

- Identify the current reading levels of students in your classroom.
- What trends do you see within your classroom data?
  - Number of students on, below, above
  - Number of students reading on which DRA level
  - Number of students that have seen growth since the beginning of the year

5 *

Baseline Data

- Review Grade Level baseline data
- What are the grade level reading percentages?
  - Below, On, and Above level
- Create a visual graphic display of this data as a team.

6 *

Time for a Break!

7 *

Fluency Instruction

- Methods of instruction for improving below level readers
  - Repeated Reading
    - Echo reading
    - Partner reading
    - Choral reading

8 *

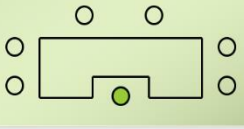
Echo Reading

9 *

Echo Reading

- Echo reading begins with a strong teacher model.
- It maximizes practice time since children read simultaneously.
- Children's reading is fairly synchronous (That is, they read in near-perfect unison.)
- Teachers should encourage children to finger-point as they read. Doing so encourages children to look at words as they say them. It also avoids the tendency of some children to over-rely on their short-term memory of what they have just heard the teacher say.
- Echo reading may make it difficult for the teacher to monitor a specific child because of other children's voices.

10 *



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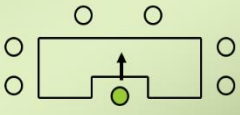

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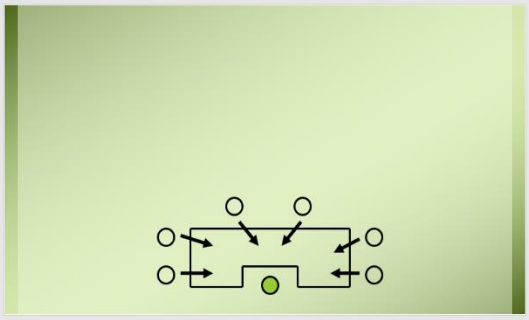


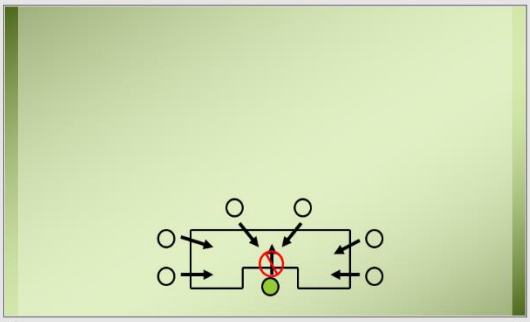
13 *

14 *

Whisper Reading

- Like echo reading, whisper reading maximizes practice time since children read simultaneously.
- Like echo reading, whisper reading may make it difficult for the teacher to monitor a specific child. In fact, in whisper reading, children are discouraged from reading loudly enough to permit effective monitoring.
- Like echo reading, whisper reading is usually done asynchronously. (This is inevitable since the children can scarcely hear one another.)
- Sometimes "whisper phones" are used to encourage self-monitoring and softer voices (Hudson, Lane, & Pullen, 2005).

15 *



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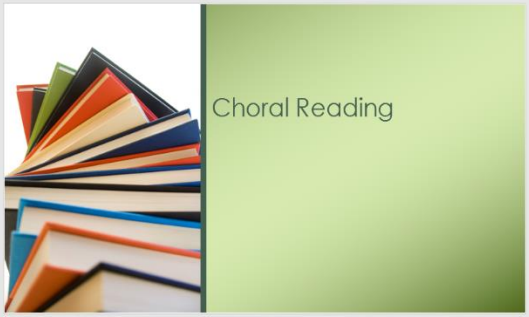
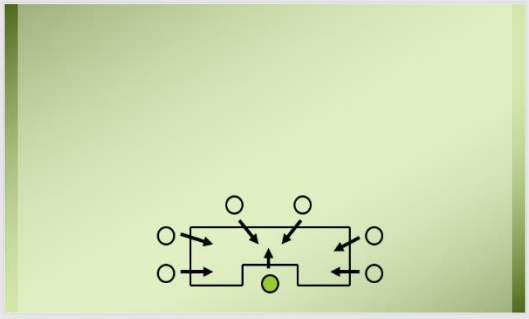


17 *

Choral Reading

- Teacher modeling accompanies student reading, so it provides less support to students.
- Like echo reading, it maximizes practice time since children read simultaneously.
- Like echo reading, choral reading may make it difficult for the teacher to monitor a specific child. In fact, it is even more difficult, since the teacher must attend to her or his own oral reading.
- Like echo reading, choral reading is usually done synchronously. (That is, children try to follow the teacher closely.)

18 *



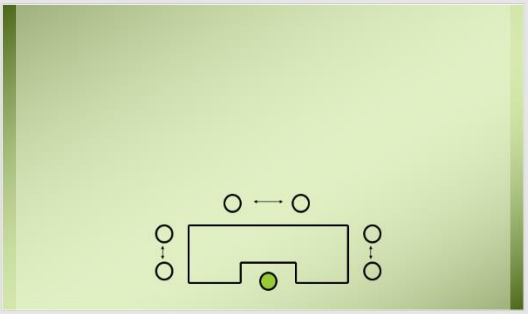
19 *

20 *

Partner Reading

- Typically, pairs of children take turns reading aloud to each other.
- Partner reading provides less practice time than echo or choral reading, but far more than round-robin oral reading.
- The teacher can monitor by attending to individual children.
- Partner reading is sometimes linked to repeated reading. The abler partner reads a sentence or more, and the less-able partner then reads the same segment. (This is actually a form of echo reading.)
- Sometimes partner reading occurs during center time, which makes monitoring more difficult.

21 ★



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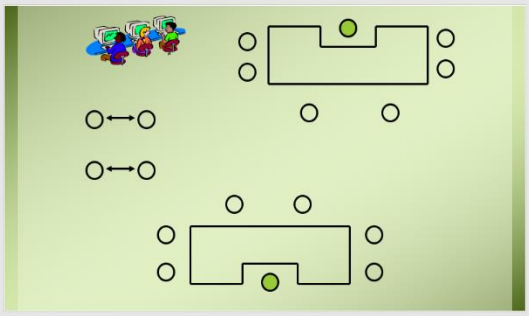

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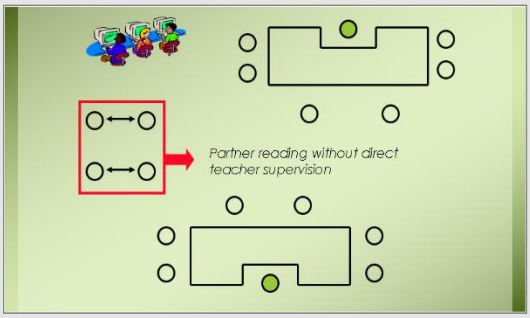


24 ★

Basic Approaches to Fluency

- ☺ Echo Reading
- ☺ Whisper Reading
- ☺ Choral Reading
- ☺ Partner Reading

Work with a partner to rank these approaches from least to most teacher support. (Do not include round-robin oral reading.)

Take Two

25 ★

Here's Our Take!

Most support ↓ Least support	Echo reading	The teacher reads a sentence and then the group rereads it aloud.
	Choral reading	The teacher leads the entire group reading aloud in unison.
	Partner reading	Pairs of readers alternate reading aloud by following a specific turn-taking procedure.
	Whisper reading	Each child reads aloud (but not in unison) in a quiet voice.

– Walpole & McKenna (2007, p. 73)

26 ★

27 ★

Part 2: Planning for instruction

- Develop a plan for implementing fluency instruction for below level students.
  - What are our resources?
  - What do we need?

Development a timeline for implementation.

28 ★

Summary

- Discuss topics covered
- Review plan for instruction
- Review timeline

29 ★

Professional Development Agenda
Session 3

Objectives:
At the end of this professional development session each practitioner will be able to:

Part 1 (8:00-11:00AM)
Review reading levels of students
Compare baseline and current reading levels
Review and identify methods of fluency instruction

Part 2 (12:00-3:00PM)
Plan for differentiated reading instruction
Plan for ongoing assessment and data review

Hourly Agenda:
8:00-8:30 AM – Introduction, review of training goals and objectives, and reflection.
Participants will identify the goals and objectives for the training session
Participants will discuss what is currently going on in their classroom for reflection (i.e. What is working? What is going well? What successes are you having?).

8:30-10:00 AM – Determining reading comprehension baseline and current data for students.
Participants will work as team to identify reading levels for all students.
Participants will work as a team to group students based on reading levels.
Participants will compare baseline data and current data to determine areas of growth and digression.
Participants will chart data for all students.
Participants will complete a think, pair, share activity to discuss trends in data and the process to determine reading trends

10:00-10:15 AM – Break
15-minute break

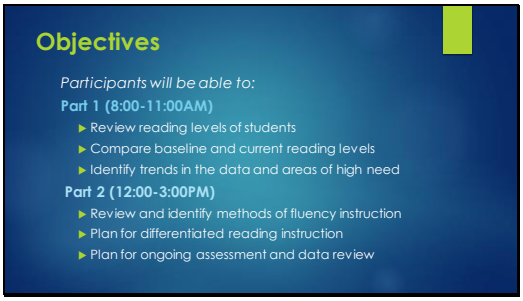
10:15-11:00 AM – Determining Characteristic of Struggling Readers
Participants will complete a reflection a reflection wheel to finalize their thoughts on the data and to identify next steps throughout this 45 minutes block of the professional development.
Participants will identify methods for improving reading success in struggling readers.

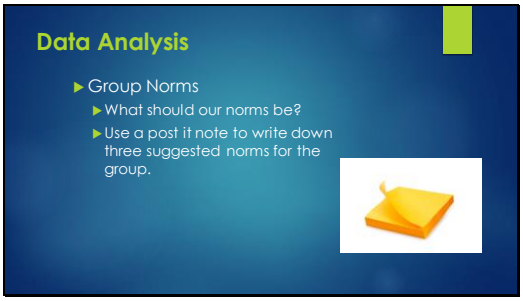
11:00-12:00 PM– Lunch

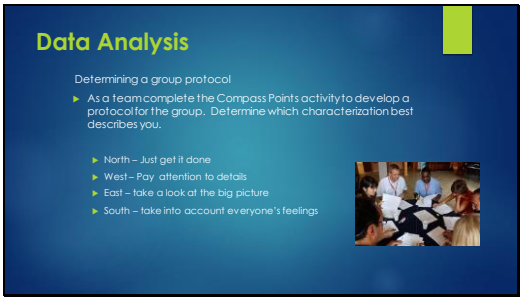
12:00-3:00 PM – Planning for instruction.
Participants will observe various methods of fluency instruction.

Participants will develop lesson plans for differentiated instruction using resources and materials in the school.
Participants will identify methods of assessment and develop an individual assessment calendar.

Professional Development Power Point
Session 3







Data Analysis

- Guided Question: Where are students?

1. Group students based on their reading level at the beginning of the school year.
2. Group students based on their current reading level.
3. Identify the percentage of students that are at each level.
4. Identify the change in percentage of students in each reading level "group" by creating a t-chart using the chart paper.

Data Analysis

Determining the Trends

What percentage of students are:

"failing"
"needs improvement"
"proficient"
"advanced"

Data Analysis

- What students do we need to support?
- What students have not made progress?
- Using the existing data:
  1. Highlight students that have made improvements in green.
  2. Highlight students that have no made improvements in red.

Reflection

Use the **Reflection Wheel** worksheet to write down your thoughts.

Objectives

- Review and identify methods of fluency instruction
- Plan for differentiated reading instruction
- Plan for ongoing assessment and data review

Implication for instruction

- What did we learn from the data?
- What did we learn from the research?

The research

Research Findings

- Alignment to the Theory of Automaticity.
- The use of fluency practices proved to be a determining factor in the improvement of reading achievement for students.

Planning for instruction

- Taking a look at the data:
  - Identify what students have made progress
  - Identify what students have not made progress

Methods of Fluency Instruction

Planning for instruction

- Group work – Identify the following in 2 groups
  - Resources available
  - Strategies to implement
  - Timeline for implementation
- Then – complete a intervention plan that incorporates the above for students that are below-basic and failing.

Review, Questions, & Closing

THANK YOU FOR BEING A GREAT THOUGHT PARTNER TODAY!

References

- Boudett, City, & Murnane (2008). *Data Wise*. Cambridge, MA: Harvard Education Press.

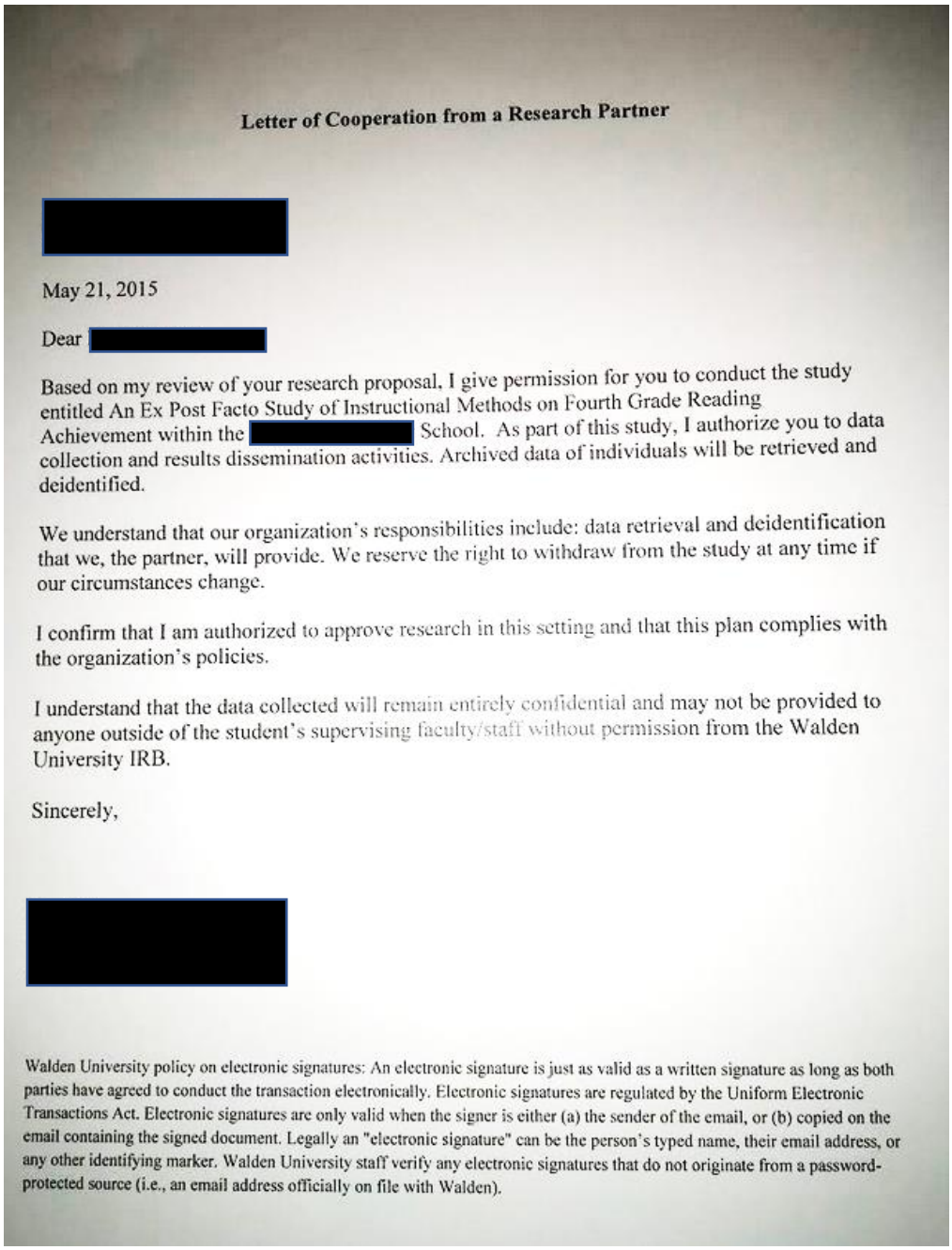
Professional Development Evaluation Form

Thank you for participation in today's collaborative professional development session! Please complete the evaluation below. Your feedback will help me in the further development of sessions that are specific, thoughtful, and engaging.

Date:	
Grade :	Presenter:
Topic of Workshop: _____ The presentation was (*check all that apply*): Hands-on _____ Questions and Answers_____ Seminar_____ Other_____	
How would you use this learning experience in your classroom or current position?	
What part of the workshop helped you the most?	
What improvement would you like to see for this workshop?	
Any further questions? Please list	
Suggestions for future training on this topic:	
Your Name (optional):	

THANK YOU FOR YOU PARTICIPATION!

Appendix B: Letter of Cooperation from a Research Partner



Letter of Cooperation from a Research Partner

[redacted]

May 21, 2015

Dear [redacted]

Based on my review of your research proposal, I give permission for you to conduct the study entitled An Ex Post Facto Study of Instructional Methods on Fourth Grade Reading Achievement within the [redacted] School. As part of this study, I authorize you to data collection and results dissemination activities. Archived data of individuals will be retrieved and deidentified.

We understand that our organization's responsibilities include: data retrieval and deidentification that we, the partner, will provide. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

[redacted]

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden).

Appendix B: Research Data Agreement

Research Data Agreement

Date: July 24, 2015

Name(s): [redacted]

[redacted]

Organization: Walden University

Address: [redacted]

Proposal Title: *An Ex Post Facto Study of Instruction on Fourth Grade Reading Achievement*

I. Data you requested:

Requesting the following data for each student during the 2011-12 and 2012-13

1) De-identified student ID number

2) PSSA level (i.e. basic, below basic, proficient, advance) at the start of each student's school year (2011 for the 2011-12 school year; 2012 for the 2012-13 school year)

3) DRA reading levels (i.e. intensive intervention, strategic intervention, target) for each report card cycle (student progression throughout the entire school year)

II. Data we can provide you:

For fourth grade students enrolled in [redacted] during the 2011-2012 and 2012-2013 school years: de-identified student ID number, school year, DRA reading level, PSSA level for 2011 and 2012.

III. **Estimated cost:**

[redacted]

If you agree with the description of the "data we can provide" above in (II) and would like to request this data, please review the District's *Standard Terms for Research Data License Agreements* [redacted] Your signature below indicates that you have read the District's *Standard Terms for Research Data License Agreements* and agree to abide by the policies and procedures set forth in that document. Further, you agree to only use the data for the purposes detailed above and in research proposal (#). Please return the signed document to: [redacted]

[redacted]