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An Evaluation of Close Reading for Fourth Grade Students Receiving Tier 2 Responsiveness to Intervention Services

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AN EVALUATION OF CLOSE READING FOR FOURTH GRADE STUDENTS RECEIVING TIER 2 RESPONSIVENESS TO INTERVENTION SERVICES

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ABSTRACT

The primary purpose of the present study was to evaluate the effectiveness of a close reading instructional routine (also known as analytical reading decades ago) that has been described in the literature and promoted as a process to help students reading complex text independently and proficiently. A single subject alternating treatments design was implemented with six fourth grade students who had been identified as at risk for academic failure and were receiving supplemental, small-group instruction in their rural public school. The alternating treatments design allowed for a direct comparison of the close reading instructional routine and a validated reading comprehension strategy instruction intervention known as Collaborative Strategic Reading (CSR; Klingner, Vaughn, Dimino, Schumm, & Bryant, 2001) over a six-week intervention time frame. Dependent variables included general outcome measures of reading comprehension and writing expression. No clear patterns emerged as a result of visual analysis. Results appeared to favor CSR in terms of reading comprehension and neither intervention in relationship to written expression. Limitations, implications, and future research areas were discussed.

CHAPTER 1: INTRODUCTION

In the most functional United States public school systems today students at risk for academic failure receive preventive supports in what have been called responsiveness-to-intervention (RTI) systems (Fuchs, Mock, Morgan, & Young, 2003). The stated goal of RTI has been to provide appropriate academic and/or behavior services to the most students through a tiered or leveled system of supports (see Figure 1). Most all students receive the core instructional and/or behavioral program (i.e., Tier 1), with periodic assessment included to identify objective success or failure in meeting core expectations and allowances for classroom-level differentiation of instruction if the teacher believes that generally minor adjustments are warranted. Core instructional programs are generally research-based rather than validated because of the logistics and expense of demonstrating the effects of a curriculum on an entire student population (Fuchs, Fuchs, & Compton, 2012). In reading curricula, for example, program components likely consist of lessons targeting some combination of phonemic awareness, phonics, vocabulary, fluency, and comprehension development.

In functional RTI systems, students identified as failing in the core program are provided additional academic and/or behavioral intervention(s) in the area of identified need and their progress is monitored more frequently than their counterparts succeeding in the core curriculum in order to determine if the supplemental (i.e., Tier 2) efforts are working for them (i.e., moving them closer to being successful in the core curriculum without supports). Supplemental intervention efforts in Tier 2 are designed to be different from the core curriculum by incorporating empirically-validated interventions in the area of need (e.g., phonemic awareness; comprehension) and delivered to small groups of at-risk students for a

specified time frame. Progress monitoring takes place more frequently in Tier 2, with the assessment tools validated to serve the function of determining whether the combination of Tier 1 and 2 services are preventing additional academic and/or behavioral failure (Fuchs et al., 2012). Tier 2 programming was the target of the present inquiry.

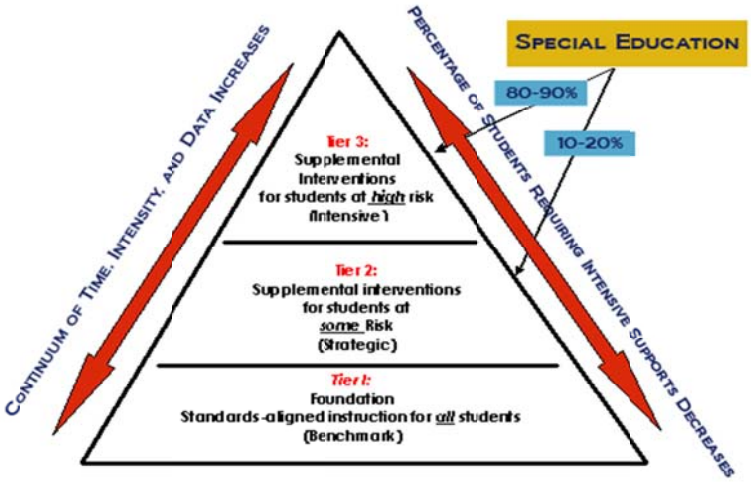


Figure 1. Tiered Instruction Framework (http://www.rtinetwork.org/essential/tieredinstruction/tiered-instruction-and-intervention-rti-model)

A third and final tier (i.e., Tier 3) is often the place where special education resides. Ongoing failure in Tier 2 intervention can lead to a referral for evaluation in order to determine special education eligibility. Placement in special education results in students receiving educational programming that is individualized, specialized, and designed to meet the unique needs determined as a result of the eligibility evaluation process. Individualized programming generally involves some combination of placement in general and special education classroom settings with a curriculum that is adapted from the core curriculum or completely modified to meet the goals of the special education plan developed for the student (Fuchs et al., 2012).

The implementation of RTI in schools has been but one relatively recent change to the instructional programming of students at risk for academic and/or behavioral failure. The ongoing implementation of the Common Core State Standards (CCSS) for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (ELA&L) has been another major adjustment (Coleman & Pimentel, 2012; National Governors Association Center for Best Practices/Council of Chief State School Officers [NGA/CCSSO], 2010). Proponents of CCSS indicated from the outset that newly-designed standards were designed to ensure that students graduating from high school are prepared to take college courses or enter the workforce (Coleman & Pimentel, 2012). Changes to the ELA&L curriculum have included emphases on (a) a deeper understanding of the content of challenging, or complex, texts, (b) literary (i.e., reading, writing, and speaking) tasks that demand documentation of text-based evidence, and (c) a greater emphasis on the reading of nonfiction or informational texts in ELA classrooms.

One literary practice that has been featured prominently in the promotion and implementation of the CCSS and an accompanying assessment (e.g., Partnership for Assessment of Readiness for College and Careers; PARCC) is close reading. Also described as analytical reading, close reading has been defined as an in-depth analysis of a short piece of complex (i.e., at or above grade level) text conducted over multiple readings or lessons that stresses attention to multiple textual aspects (Brown & Kappes, 2012). College and Career Readiness (CCR) Anchor Standard 1 in reading calls for students to "[r]ead closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text" (NGA/CCSSO, 2010, p.

10). According to Brown and Kappes, the call for close reading of complex text is repeated throughout the CCSS ELA&L standards. Moreover, literacy researchers/advocates have written extensively about the practice, prompting Fisher and Frey (2014-2015) to note, "[c]lose reading is hot; there is no doubt about it" (p. 277).

A considerable problem arises, however, when educators attempt to implement the very close reading practices that are included within the standards in RTI systems. The concern emanates from the fact that there have been virtually no studies published in the literature that systematically evaluate the efficacy of the instructional or intervention practice known as close reading (Fisher & Frey, 2015; Hinchman & Moore, 2013). Given RTI guidelines that require that research-based or validated instruction take place across all three tiers, the question of how educators incorporate close reading into their instructional programs arises. The present evaluation of close reading practices for students receiving Tier 2 supplemental services was designed in this context.

CHAPTER 2: LITERATURE REVIEW

In the introduction to the document outlining the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects (CCSS ELA&L; 2010), its authors wrote that the "next generation" (p. 3) K-12 standards were created "to help ensure that all students are college and career ready in literacy no later than the end of high school" (p. 3). The standards span areas of reading, writing, speaking, listening, language, and mathematics. The literacy-related standards (including all but those for mathematics) were designed in such a way that there are overarching or anchor standards in the areas of reading, writing, speaking, listening, and language. The college and career readiness anchor standards were further broken down into grade- and, for reading, content-specific standards. That is, there were reading, writing, speaking and listening, and language standards for each of the elementary grades. In reading, there were also separate standards for literature and informational text across grades in what the authors indicated was an effort to "ensure that students gain adequate exposure to a range of texts and tasks" (CCSS ELA&L, p. 11).

The present study focused on fourth grade students and included assessments of both reading comprehension and written expression skills for students receiving Tier 2 supplemental instructional services using science content. In the area of reading, the CCSS anchor standards are organized in terms of key ideas and details, craft and structure, integration of knowledge and ideas, and range of reading and level of text complexity. For informational text, for example, which the CCSS indicate include texts that teach about the physical, biological, or social world or people such as biographies, autobiographies, and memoirs, Grade 4 students are expected to demonstrate the following 10 reading tasks as a result of instruction: (1) refer to details and examples in a text when explaining what the text says explicitly and when

drawing inferences from the text; (2) determine the main idea of a text and explain how it is supported by key details; summarize the text; (3) explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text; (4) determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area; (5) describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text; (6) compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided; (7) interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears; (8) explain how an author uses reasons and evidence to support particular points in a text; (9) integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably; and (10) by the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range (CCSS ELA&L, 2010, p. 14). Tasks 1-3 are related to key ideas and details, 4-6 to craft and structure, 7-9 to integration of knowledge and ideas, and 10 to range of reading and level of text complexity.

For writing, the 10 fourth-grade standards were organized in terms of text types and purposes, production and distribution of writing, research to build and present knowledge, and range of writing. In the area of text types, the first 3 standards related to writing opinion,

informative/explanatory, and narrative works, with each of the writing types including specific components (e.g., introduction, reasons, and concluding statement for an opinion piece). Production and distribution of writing (Standards 4-6) involved communicating clearly and coherently and soliciting/receiving guidance from peers and adults. Standards 7-9 in the research area emphasized completing and compiling information through searches. Standard 10 involved demonstrating abilities to write on a variety of topics over both shorter and longer terms.

Close Reading and Literacy Practices

In developing the CCSS ELA&L across grade levels, authors of the CCSS emphasized close reading of text with the idea that teachers help students extract meaning from text (Brown & Kappes, 2012). The CCSS ELA&L indicated that students are required to understand text, make logical inferences when reading, and cite evidence for opinions expressed from text. The phrase "read closely," first mentioned in the first college and career readiness anchor reading standard, has promoted the practice of close, or analytical, reading across grades and subject areas. The close reading practice was evaluated in the present inquiry.

While the idea of and practice surrounding close reading has existed for more than 70 years (Phelan, 2015), recent literature on close reading suggests that the practice has yet to be clearly defined by researchers (Fisher & Frey, 2015). In their writings, Fisher and Frey (2015), who have written extensively on the topic in practitioner-oriented journals, have adopted the following definition provided by Brown and Kappes (2012) of the Aspen Institute:

> Close [r]eading of text involves an investigation of a short piece of text, with multiple readings done over multiple instructional lessons. Through text-based questions and discussion, students are guided to deeply analyze and appreciate various aspects of the text, such as key vocabulary and how its meaning is shaped by context; attention to

> form, tone, imagery, and/or rhetorical devices; the significance of word choice and syntax; and the discovery of different levels of meaning as passages are read multiple times (p. 2).

Brown and Kappes (2012), Fisher and Frey (2012; 2014b), and others (e.g., Boyles, 2012; Jones, Chang, Heritage, & Toiason, 2014; Shanahan, 2014) have described components of close reading that are similar in form and related to the Brown and Kappes definition. Their components have included teacher selection of short, complex texts, multiple student readings of complex text with an emphasis on having different purposes across each of the reads, teacher development of text-dependent questions that serve to promote discussion of complex texts during the students' multiple readings, teacher- and/or student-led discussions aimed at developing deeper understandings of the text than would likely be gained through single readings, and student annotations of text during multiple readings. Fisher and Frey (2012, 2014b) and Shanahan (2014) also include close reading components that involve limiting the pre-teaching of materials in the beginning of a close reading activity and incorporating writing elements during and following close reading lessons.

Close reading of complex narrative and information text is closely tied to the CCSS. Brown and Kappes (2012) claim that implementation of close reading practices, as part of a "comprehensive literacy framework" (p. 4), facilitates the CCSS expectation that all students "read increasingly complex texts proficiently and independently" (p. 1). In further promoting the practice, they note the following:

> Close [r]eading does more than advance reading development; it is a mechanism for teaching about logical arguments and critiquing the reasoning of others, for gleaning evidence from text and applying critical thinking skills. Close [r]eading is as much a way of thinking and processing text that is emphasized throughout the Common Core as it is about a way of reading a singular piece. Close [r]eading cannot be reserved for students who already are strong readers; it should be a vehicle through which all students

> grapple with advanced concepts and participate in engaging discussions regardless of their independent reading level (p. 2).

Fisher and Frey (2015) concurred with Brown and Kappes (2012) that close reading practices need to be integrated into a larger instructional framework. These researchers noted that the framework must also include high-quality instruction that in the elementary grades targets foundational reading skills such as phonemic awareness, phonics, fluency, vocabulary, and comprehension and includes teacher modeling and student involvement in collaborative problem solving and individual work (Fisher & Frey, 2015). Moreover, in the lower elementary grades, Fisher and Frey (2014b) suggested that close reading of complex informational text needs to be added to the corpus of instructional routines that include teacher read-alouds, guided small-group instruction, independent reading, and regular opportunities to complete evidence-based writing tasks. Comparing it to an individual's physical fitness plan, they asserted that close reading of informational text in the primary grades is necessary to emphasize reading "strength" (p. 223) or grappling with complex text while other instructional routines such as independent reading at school or home address reading "stamina" (p. 223).

Yet while the practice of close reading of complex text has been promoted as an essential element of the implementation of the CCSS ELA&L for all students, there remain concerns about how and why this strategy should be implemented. For example, Hinchman and Moore (2013), self-described "veteran literacy educators" (p. 443), offered two reasons why they were "surprised" (p. 443) with close reading's emphasis in the implementation of the CCSS ELA&L. First, Hinchman and Moore indicated that the practice of close reading had not been included in four recent and respected syntheses of literacy research (i.e., Carnegie Council on Advancing Adolescent Literacy, 2010; Duke, Pearson, Strachan, & Billman, 2011; Edmonds et

al., 2009; Kamil et al., 2008) and suggested that close reading was not deemed a research-based practice for developing students' comprehension skills by these authors. Second, they reported that their own review of the empirical research had uncovered no experimental studies of close reading practices with school-age students. Fisher and Frey (2015) echoed those sentiments in offering the following sobering summary statement of the present context of close reading strategies and implementation.

> Unfortunately, there isn't much agreement about the critical components of close reading lessons or if it even works. Some argue that close reading is untested, while others are concerned that close reading is not feasible for all students. After all, before adopting the standards, close reading was mostly used in college and with high school juniors and seniors enrolled in advanced coursework (p. 57).

A systematic review of the close reading literature for students at risk for academic failure provided a rationale for the present inquiry. A review of six education or psychology indexes (i.e., Academic Search Complete, Primary Search, Professional Development Collection, PsychARTICLES, Psychology and Behavioral Science Collection, and PsychINFO) indicated that as of January 1, 2015, there were three studies of close reading practices with public school students. Two involved qualitative methodology in which teachers observed and/or were observed implementing close reading practices and commented on implementation practices. A third article involved a quasi-experimental evaluation of close reading practices incorporated into an after-school tutoring program. An in-depth description of the three articles follows.

Citing a lack of inquiry on close reading implementation in elementary schools as a rationale for the study, Fisher and Frey (2012) conducted an observational study of close reading implementation in secondary school settings. The stated goals of the inquiry were to evaluate the appropriateness of the close reading instructional routine for use with elementary

school students and to “learn about modifications that might be necessary to effectively implement” (p. 180) close reading with students across kindergarten through grade 6. The study involved 14 elementary and 10 secondary school teachers. The elementary school teachers were recommended by a group of elementary school principals who were asked by the researchers to solicit “highly effective teachers who could collaborate” (p. 180) with the researchers in addressing the two research goals. Two teachers were chosen for each of the elementary grades. The secondary school teachers included five English teachers, three social studies teachers, and two science teachers, all of whom were credentialed and teaching in their appropriate disciplinary fields. The grades of the teachers were not reported. Chosen teachers were described as “demonstration teachers (who) were purposefully selected on the basis of their approach to teaching texts” (p. 180).

Observations of the secondary school teachers were conducted by small groups of at least six elementary grades teachers based on availability. Post-observation activities involved small group discussions among teachers and researchers surrounding aspects of close reading and potential modifications for application with elementary school students. Research findings were based on a review of researcher field notes collected during the observations of the 10 school teachers as well as the subsequent elementary grades teacher discussions of what they observed during close reading implementation. Fisher and Frey (2012) also collected field notes from observations of the 14 elementary grades teachers when they began implementing close reading in their own classrooms. No evidence was provided that described the fidelity of close reading implementation across the multiple classroom settings.

Fisher and Frey (2012) reported that their "key informants' perspective" (p. 180) findings supported the assertion that close reading practices were appropriate for elementary school settings. The researchers indicated that the observing elementary grades teachers agreed that use of short, varied, complex (at or above grade level) texts was an appropriate instructional routine in elementary classrooms as long as the texts were read multiple times and students were afforded opportunities to provide text-based responses to teacher or student inquiry. In response to the second research interest area related to necessary modifications of secondary grades instruction for elementary grades classrooms, Fisher and Frey (2012) indicated that changes could include the teacher (rather than only students) engaging in reading of text in certain incidences and the use of limited preteaching activities such as the preteaching of relevant but difficult vocabulary.

Fisher and Frey (2014c) used interviews of teachers and students involved in close reading practices to address three research questions: (a) how have teachers implemented close reading in their classrooms? (b) what are teachers' perspectives of the challenges and benefits of close reading instruction? and (c) what are students' perspectives of close reading? They interviewed 45 teachers across grades 4-12 who had been implementing close reading practices for at least six months based on input from their principals or instructional coaches. Separately interviewed in small focus group settings were 327 students from these schools who were selected by school principals on the basis of the students' willingness to share their instructional experiences. Fisher and Frey (2014c) organized their findings in terms of perspectives unique to teachers or students, as well as those shared by both.

As a result of their implementation of close reading practices, teachers reportedly questioned their own teaching abilities, struggled to locate texts, wondered about how the lack of preteaching impacted their students, and voiced optimism that the practice could help their students over time. Students, meanwhile, were said to express the view that the multiple readings of complex texts, complete with discussions and annotations, were "mentally exhausting" (Fisher & Fry, 2014c, p. 33). Both parties reportedly noted that the texts used were interesting, there was a focus on the right answers to questions, and the practice required strong effort on the part of all. Fisher and Frey (2014c) described three implications related to more widespread implementation of close reading practices based on the study's findings. First, they suggested that teachers must be supported as they locate texts that were sufficiently complex to facilitate meaningful instruction. This support, they asserted, can be provided globally by curriculum developers and publishers and locally by principals and district staff. Second, Fisher and Frey (2014c) proposed that there is a need for effective professional development targeting teacher abilities to craft effective text-dependent questions. Finally, Fisher and Frey (2014c) urged principals, central office staff, and colleges of education to reinforce teachers who were attempting to improve their close reading practices given the finding that teachers were questioning their own teaching abilities as a result of implementing close reading practices. Moreover, they urged administrators and teacher faculty to themselves be knowledgeable in areas such as text complexity, text-dependent questions, annotating, and facilitating meaningful discussions, so that meaningful feedback can be shared with teachers engaged in close reading implementation.

The third inquiry-oriented publication and lone experimental study (Fisher & Frey, 2014a) was directly aimed at students at risk for academic failure. Fisher and Frey (2014a) used a convenience sample in three middle schools in three districts in which the school's principal allowed close reading to be a major component of the intervention. Students were eligible to be included in the study if they scored in the bottom 40% on the annual state criterion-referenced test. Students identified as receiving special education services, however, were excluded. Across the three schools, 438 students in grades 7-8 met the inclusion criteria initially, with 100 of the total randomly assigned to one of five intervention classrooms. Of the original 100 experimental students, 20 were assigned to School 1, 40 to School 2, and 40 to School 3. By the end of the study, the experimental group had been reduced to 75 students, with 13 at School 1, 28 at School 2, and 34 at School 3. Reasons for the 25% attrition rate in the experimental group included student transfer out of the district (n = 23) and transportation problems (n = 2). An attrition rate of 27% (n = 91) was reported for the control group, which initially included 338 students.

The quasi-experimental design included an experimental and a control condition for the after-school reading intervention program that ran from October through May of an academic year 3 times weekly for 90 minutes per session with no more than 20 students per classroom. The experimental group received 40 to 55 minutes of close reading instruction each session with the remainder of the time devoted to independent reading and small-group teacher-led instruction in areas of instructional need related to vocabulary, comprehension, or fluency. The experimental group teachers were sixth grade teachers who received ongoing professional development in close reading practices throughout the year. Control group activities involved

implementation of the standard supplemental intervention program which consisted of 30 minutes each of computerized interventions, teacher-led small-group instruction, and independent reading. Control group teachers were chosen across grades 6-8 and received ongoing professional development related to the standard intervention, including computerized program operation, small-group guided instruction with guided texts, and independent reading group management. Efforts to determine whether activities in either condition were implemented as intended were not reported.

Dependent measures included attendance rates, reader self-perception survey scores, and student improvement rates on the statewide ELA achievement test. Pre-intervention findings revealed that all participants were performing below grade level in terms of vocabulary, comprehension, and fluency, with differences between the conditions that were not statistically significant. Reader self-perceptions across conditions were also described as depressed across the four identified factors (i.e., progress, observational comparisons, social feedback, and physiological states; Reader Self-Perception Scale-2; Melnick, Henk, & Marinak, 2009).

Three findings were reported. First, attendance rates across the two conditions were statistically significantly different at post-test ($p < .01$), with experimental students averaging 94% attendance versus 81% for control students for the optional program. Second, scores on the reader perception survey were statistically significantly different at post-test ($p < .001$), with an average of 186 for the experimental group on 47 Likert-type (1-5 scale) items, versus 99 for the average control group member. Fisher and Frey (2014a) indicated that the greatest area of difference between the groups came in the progress factor, which addressed the student's

comparison of past performance with current performance. Students in the experimental condition averaged 4.02 on the 5-point scale versus 2.31 for the control group. No data were reported to indicate how scores compared to pretest results or relevant norms. Third, significantly more experimental group members improved at least one level (e.g., far below basic to below basic or below basic to basic) on the state ELA criterion-referenced test than did control group members ($p < .001$), with proportional comparisons of 64% (i.e., 48 of 75) versus 12% (30 of 247), respectively (Fisher & Frey, 2014a).

Problem Statement

In spite of the advocacy by CCSS or close reading proponents in the professional literature for implementation of close reading practices across grades relative to informational text within CCSS practices, there is reason to proceed cautiously (Hinchman & Moore, 2013). An extensive review of the literature uncovered but one experimental study of close reading implementation in public school settings. That study (Fisher & Frey, 2014a) involved at-risk middle school students and was conducted as part of an after-school reading intervention program over the course of an academic school year with ongoing researcher professional development support of teachers engaged in close reading implementation. Findings from the study were noteworthy and positive, with average attendance rates, perceptions of reading ability, and student outcomes on statewide tests all statistically significantly stronger for experimental group participants than those in the comparison condition. Also noteworthy, however, was the lack of data regarding the fidelity of implementation of close reading or comparison condition practices, which makes it difficult to attribute the favorable findings to the close reading plus independent and need-based small-group reading intervention package.

Two other qualitative studies provided potentially supportive findings. The researchers and elementary teachers in Fisher and Frey (2012) expressed the belief that close reading practices could be appropriately adapted for implementation in kindergarten through sixth grade classrooms and across narrative and informational content and texts. Teachers and students interviewed by Fisher and Frey (2014c) expressed mixed sentiments regarding close reading implementation activities. While there was teacher optimism that the close reading practice could benefit students, that enthusiasm was tempered by teacher concerns with their own implementation effectiveness. The sentiments likely contributed to the authors recommending that comprehensive professional development efforts be undertaken that addressed not only teaching practice but also perception related instructional implementation.

In the present context of school-based personnel who are responsible for implementing CCSS and RTI, two major concerns emanate. First, the present body of evidence supporting implementation of close reading practices is lacking. Laws such as No Child Left Behind and the Individuals with Disabilities Education Act of 2004 require that teachers use evidenced-based practices (Kretlow & Blatz, 2011) in instruction. Favorable results from a single experimental study or small collection of qualitative and quantitative studies do not elevate any instructional practice, whether advocated or not, to the level of evidence-based practice as is the operational phrase used in the special education field or scientifically-based practice, the phrase included in No Child Left Behind (NCLB; 2004) and discussed in the fields of reading and, more broadly, education. In special education, a body of quality group-designed and/or single subject studies is necessary in order for a practice to be judged as evidence-based. In NCLB, emphasis was placed on meaningful results from randomized clinical trials of reading curricula

or interventions. The scant evidence supporting close reading practices can give educators pause before devoting significant time to planning, implementation, and evaluation of practices for students with or without academic risk of failure no matter how strong the support of professional advocates.

Second, and equally concerning is the fact that an implementation protocol for close reading has yet to be settled upon (Fisher & Frey, 2015). In the research conducted by Fisher and Frey (2015) that was described herein, there were no checklists used and processes described to ascertain the degree to which all of the components of close reading (e.g., multiple readings, annotation, text-dependent questions) were implemented or not as well as whether or not the implementation was effective. Such data are important to ultimately determining whether or not a close reading intervention is a viable option for use in Tier 2 or 3 RTI frameworks, for example, given that interventions should be validated for particular purposes in Tier 2 and specialized, individualized, and research-based in Tier 3 programming. The appendix of the Fisher and Frey (2014c) teacher and student interview study included a close reading protocol (pp. 47-49). However, the protocol consisted of a definition of close reading that was similar to the Brown and Kappes (2012) definition ("a form of guided instruction that focuses on multiple readings and rich discussion about a complex piece of text"; p. 47) along with paragraph descriptions of important steps in the implementation process (e.g., selecting suitably complex text; establishing a purpose for reading). The protocol included 2 to 4 potential readings of the text, each with a different purpose. It also included performance tasks that can be conducted after close reading. While detailed, the protocol was not readily

available for use in objectively determining whether close reading was implemented as intended or how effectively.

These concerns were weighed against the reality that the CCSS ELA&L were being implemented in public schools and that a newer, national assessment addressing CCSS ELA&L (i.e., PARCC) was scheduled to be administered nationally for the first time in the Spring 2015. Concerns were also balanced by the positive potential of close, analytical reading practices (e.g., Fisher & Frey, 2014a) to provide students at risk with ever deeper understandings of complex informational and narrative text as well as any potential accompanying positive impact on students' college and career readiness. The study, outlined in Chapter 3, advanced the literature in the following ways:

- The study was conducted within a functioning RTI framework and specifically with students receiving Tier 2 supplemental instruction. Previously, research studies were conducted either in whole-class or after-school settings without mention of RTI status.
- It increased the number and variety of experimental studies evaluating close reading practices. Prior to the present study, a lone quasi-experimental study of close reading practices had been conducted. The present study incorporated a single subject, alternating treatments design.
- It allowed for a direct comparison of interventions, with close reading practices compared directly to a validated reading comprehension strategy instruction intervention known as Collaborative Strategic Reading (CSR; Klingner, Vaughn, Dimino, Schumm, & Bryant, 2001). Prior to the present study, the only other experimental study (Fisher & Frey, 2014a) involved an indirect comparison of close reading with a business-

as-usual treatment condition. That is, in a 90-minute intervention, close reading practices were reportedly implemented for 40 to 55 minutes with the remaining time devoted to small-group, teacher-led, and need-based reading and independent reading. The comparison condition was reportedly divided equally among computerized interventions, teacher-led small-group instruction, and independent reading. The CSR intervention is a reading comprehension strategy instruction intervention for students with, or at risk for, academic disabilities that has a strong body of empirical findings to support its use in developing reading comprehension skills (Bryant, Vaughn, Linan-Thompson, Ugel, Hamff, & Hougen, 2000; Boardman, Swanson, Klingner, & Vaughn, 2012; Hitchcock, Dimino, Kurki, Wilkins, & Gersten, 2011; Vaughn & Klinger, 1999; Klingner, Vaughn, & Schumm et al, 1998; Vaughn, Chard et al., 2000; Vaughn et al., 2011). Collaborative Strategic Reading teaches students to use four strategies while working collaboratively in groups. The goal of CSR is to improve comprehension skills. Students were taught in a soft-scripted body of lessons before, during, and after reading strategies related to predicting, monitoring, creating main ideas, and summarizing. A total of 17 lessons comprised the intervention and were taught in a scaffolded format, beginning with teacher modeling and then proceeding through guided and independent practice. In small group settings, students were also taught and expected to carry out collaborative roles, including leader, encourager, and main idea coach.

- The experimental design incorporated data collection concerning the fidelity of treatment implementation for close reading and CSR. Previously, such data had not been collected.
- The experimental study targeted elementary age (i.e., fourth grade) students. Previously, only middle school (i.e., seventh and eighth grade) students had been included in experimental research.
- The experimental study targeted informational text and science content only. Previously, the content area focus for the lone experimental study (Fisher & Frey, 2014a) was believed to be both narrative and informational text.
- The experimental study targeted reading and writing dependent measures. Previously, the dependent measures targeted attendance, reading perceptions, and statewide achievement test levels.

Research Questions

The present study's three research question were as follows:

1. What were the effects on fourth grade student reading comprehension achievement of implementation of close reading and CSR implementation in RTI Tier 2 programming utilizing science content instruction?
2. What were the effects on fourth grade student written expression achievement of implementation of close reading and CSR implementation in RTI Tier 2 programming utilizing science content instruction?

3. What do students like and dislike about close reading and CSR interventions following implementation in an RTI Tier 2 programming utilizing science content instruction?

CHAPTER 3: METHOD

The purpose of the present study was to evaluate the effectiveness of a reading comprehension instructional strategy known as close reading. An alternating treatments single subject experimental design was used to answer research questions related to the efficacy of a close reading practice that included three readings over three days with each reading conducted for a different purpose. Visual analysis was utilized to evaluate implementation efficacy across two dependent measures, one an index of reading comprehension performance and the other an indicator of written expression performance. Additionally, descriptive statistics were used to evaluate the social validity of the experimental conditions, which included the close reading treatment and reading comprehension strategy intervention comparison condition. The target students were six fourth graders receiving Tier 2 supplemental reading intervention services in addition to core Tier 1 general classroom instruction. Fourth grade science materials served as content for the inquiry, which consisted of three one-hour intervention sessions per week over six weeks in the fall semester of a public school academic year. The researcher was the intervention agent. Independent observations of treatment implementation fidelity were conducted by a trained graduate student.

Setting

The setting was a south Louisiana elementary school that, according to the October 2014 school enrollment summary, served 227 students spanning grades prekindergarten through sixth grade. Students in the school were predominantly African American (*n* = 223; 99%). Ninety-five percent of the school population qualified for free/reduced lunch according to district data. In October 2014, the school was assigned a School Performance Score of 52.4

by the Louisiana Department of Education, which earned a letter grade of D (Louisiana Department of Education; LDE, 2014). The Louisiana Department of Education determines school performance scores for all public schools based on student achievement data from standardized tests using a pre-determined formula (LDE, 2014). For comparison purposes, school performance scores were as follows: A (150-100), B (99.9-85), C (84.9-70), D (69.9-50), and F (49.9-0). The elementary school at which this research was conducted was 1 of 35 schools located in a district that in 2013 educated nearly 15,000 preschool through 12th grade students.

Participants

Participants were initially six fourth grade boys and one girl that were recommended by their classroom teacher due to risk of academic failure. All were African American and met Title I eligibility criteria for free/reduced lunch status. Students were chosen for the study based on scores that indicated they had difficulty with reading by scoring in the at-risk range (i.e., scoring less than 70 words correct per minute on grade-level oral reading fluency [ORF] probes for the fall benchmarking period) which was administered by the school interventionist by the end of the first six weeks of school. Additionally, all students were receiving Tier 2 supplemental reading intervention at the time of the study. Previous teacher recommendations, standardized state achievement test scores, and reading benchmark scores were used as a guide when determining which students benefited most from Tier 2 remediation. The seven students came from the two fourth grade classes within the same school. Once the study began, one male student was dropped from the research group because of excessive absences,

leaving a total of five males and one female to complete the study. Table 1 provides demographic and pre-experimental condition academic data on the participants.

Table 1. Participant Information

	Ethnicity	Gender	2013 iLeap		Pre-Test CCM	Pre-Test Daze	Free/ Reduced Lunch
			ELA	Science			
Student 1	African American	Male	276	253	5	9	Yes
Student 2	African American	Male	253	271	10	15	Yes
Student 3	African American	Male	271	265	12	18	Yes
Student 4	African American	Male	199	271	6	7	Yes
Student 5	African American	Female	299	271	12	20	Yes
Student 6	African American	Male	286	303	13	19	Yes

CCM- Criticial Content Monitoring Range 0- 40 Daze-31 is end of year benchmark goal

Independent Variables

Two independent variables were compared in the present study: (a) close reading, and (b) CSR. The two treatments were implemented on alternate weeks and in a random order as

part of the school's Tier 2 supplemental intervention program. The school's Tier 2 program included 60 minutes of supplemental services daily and was taught by a certified teacher who held a master's degree. Students received supplemental instruction in place of their regular physical education class. The Tier 2 curriculum used was the Harcourt Storytown Strategic Intervention program (Harcourt Publishers, 2009) that was supplemented by a computer-aided reading intervention. The Harcourt program was used and lessons were selected to reinforce what was being taught in their reading class. The four components that were targeted during intervention were phonics/phonemic awareness, comprehension, vocabulary, and fluency. In a typical Tier 2 intervention session, students began by engaging in vocabulary word exercises. Students read a story and completed fill in the blank activities using the vocabulary words. They answered two questions at the end of the exercise and then shared their answers with the teacher. Next, students were guided through the comprehension task of drawing conclusions. A student volunteer read the passage and the teacher asked questions. The teacher guided students through the use of a graphic organizer to promote comprehension. Students targeted decoding/spelling skills using words with suffixes. Before wrapping up the lesson, students participated in fluency practice where they were instructed to read words in a column from their text aloud to each other. They then practiced reading the column of words to their partners. Two days out of the week, students were given the opportunity to substitute a computer-aided reading intervention in place of the Harcourt program. The students worked on this computer-aided reading intervention for 20 to 30 minutes per session. Occasionally on Fridays, students participated in half a session of intervention or progress monitoring then went on to participate in the remainder of the physical education class.

During the experiment, however, 30 minutes of three of the five days of supplemental intervention were replaced with one of the experimental conditions. Over six weeks, students received close reading intervention programming three times and CSR programming three times. The order of presentation of the intervention was determined randomly via a flip of a coin. If close reading was selected as a result of the coin flip, then CSR would be implemented the following week. The random choice of treatment implementation was utilized to reduce any effects that would result from one treatment being implemented before another. Table 2 provided the order of implementation across the study.

Table 2. Alternating Treatments Assigned by Week

Week	Treatment	Topic Covered
1 (Week of Oct. 30)	Close Reading	Science of Inquiry
2 (Week of Nov. 7)	Collaborative Strategic Reading *Overview, Preview & Predict, Brainstorm	Electricity
3 (Week of Nov. 14)	Collaborative Strategic Reading *Click &Clunk	Batteries
4 (Week of Nov. 19)	Close Reading	Seeds
5 (Week of Dec. 5)	Close Reading	Honeybees
6 (Week of Dec. 11)	Collaborative Strategic Reading *Get the Gist	Venus Flytrap

*Collaborative Strategic Reading Components taught

Close Reading

Students read a single informational passage three times per week with one reading taking place per session. Following the reading of the passage, discussion took place between the students and researcher regarding the text. The selected science passage was chosen to align with the current topic of study in class. On day one, students read the passage with the researcher's assistance and discussed the overall message of the passage. On day two, students re-read the same passage and annotated words or terms as instructed by the researcher. After this second reading, students completed the question set that accompanied the second reading, which was related to how the text was organized and highlighted critical vocabulary words in the passage. On the third day, after taking turns reading the text orally, students compared the text they read to texts they had previously read in class for similarities and/or differences.

Collaborative Strategic Reading

As with CR, when CSR was implemented students read a single informational passage three times per week with one reading taking place per session. During the first week of CSR, preview, brainstorming, and "clicks and clunks" were introduced. Students were given a science text to as a group. Prior to reading, students brainstormed what they may already know about the topic and predicted what they may learn after reading the article. Students used pictures and infographics as part of the process also. Students took turns reading aloud and were encouraged to highlight words or terms that were "clunks" or unfamiliar to them. During the second week of CSR, the fix-up strategies of "clunks" were continued. Students were taught annotate or take notes when they come to clunks to help them understand what they

read. The final week of CSR, students were introduced to the "get the gist" strategy while continuing to implement preview/brainstorming and clicks and clunks.

Dependent Variables

There were two measures used as dependent variables in this study: (a) Daze (Dynamic Measurement Group, 2011); (b) Curriculum Based Measurement (CBM) written expression (WE) incorporating AIMSweb norms (Powell-Smith & Shinn, 2004); and (c) critical content monitoring (Mooney, McCarter, Russo, & Blackwood, 2013). Daze and CBM-WE were administered weekly throughout the intervention, while critical content monitoring was administered at pre- and post-testing.

Daze

Daze is a group-administered measure of reading comprehension in which students were asked to read a passage silently. In the passage, approximately every seventh word is removed and replaced with three choices, one of which is correct. Daze requires students to choose the correct word as they read the passage. Students were given three minutes to work on this task. The score was the number of correct words circled minus one-half of the number of incorrect words the student circled. Daze was selected as a dependent measure because it assesses reading fluency and reading comprehension. Daze has demonstrated reliability and validity (Marcotte & Hintze, 2009; Wayman et al., 2007).

Curriculum-Based Measurement-Written Expression

The writing measure had students respond to a writing prompt that asked them to report what they had learned about the science content of the week. Student writing samples collected were scored in terms of the number of total words written. No technical adequacy

data for CBM-WE were available at the AIMSweb website. The National Center on Student Progress Monitoring indicated that AIMSweb CBM-WE met foundational psychometric standards for reliability but not validity as a progress-monitoring tool. Findings by McMaster and Espin (2007) suggested that CBM-WE scores are related to scores from a statewide test of writing proficiency.

Critical Content Monitoring

Critical content monitoring is an online timed general outcome measure of content knowledge. Students were expected to read a stem/question then select the best answer by placing a mark beside the correct choice. A timer was located on the top of each student's screen of their iPad counting down from 5 minutes and automatically stopping the assessment if the student used the full amount of time. Scores consisted of the number of correct choices in the time frame. Correct score totals were provided to students in the form of a fraction (such as 6 out of 20) at the completion of testing. Mooney, McCarter, Russo, and Blackwood (2013; 2014) reported moderately strong criterion validity findings for the measure when compared against content tests of the statewide accountability test. For the present study, critical content monitoring passages were the same at pre- and post-testing. Critical content monitoring was included to assess learning over the course of the experimental time frame.

Treatment Fidelity

Treatment implementation fidelity observations were scheduled to be conducted once weekly over the course of the six-week study for a total of 33% of the 18 sessions. Each intervention was to be observed three times by a university doctoral student who was familiar with both interventions. Researcher-developed checklists were completed by the graduate

student during the observations. Each checklist contained a specific number of intervention components that were marked in terms of whether or not the component was implemented during the intervention session. The close reading checklist included 12 components that could be observed during a close reading implementation. The CSR checklist included different forms to account for the four comprehension strategies that were implemented over the course of the experiment. Data were reported for each observation as the proportion of components observed.

Social Validity

Social validity surveys were administered to all students at posttesting. Social validity relates to the participants' satisfaction or acceptability of the program or procedure they participated in (Alberto & Troutman, 2006). To assess social validity for this project, a brief survey was developed by the researcher so that students could rate their experiences from 1 (not at all) to 9 (liked very much) for 10 items. For item 11, students were asked to circle the strategy they preferred, close reading or CSR. For item 12, students were asked to circle the strategy in which they learned the most science content: Close reading, CSR, or both.

Procedures

Parent consent for all seven students was secured prior to initiation of the intervention. Each of the students was also asked to assent to participate. (Original consent and assent forms were included in the appendices.) The first experimental activity was administration of the dependent measures for pretesting. Then, the intervention order of presentation was determined. Each treatment was implemented once every two weeks over the six-week time

frame. A coin was flipped to determine which intervention was first, with the other intervention implemented the next week.

When the intervention began, students were pulled for the first 30 minutes of their scheduled Tier 2 intervention time three days a week for length of the experiment. The intervention took place in an empty classroom. On the first day of interventions, students selected their seating positions at a large table, remaining in those seats for all of the subsequent sessions. At the end of each week of implementation, students completed the Daze and CBM-WE measures. Once the intervention component of the experiment was complete, students completed post-testing and the social validity survey.

Pre-post and within intervention assessments were scored independently by the researcher and one or two individuals who had extensive experience in administering and scoring the assessments chosen for the study. Interscorer reliability comparisons were made for all dependent measures and students, with researcher-scored totals compared to those of the graduate student who also conducted the treatment fidelity observations. Total scores for both parties were compared. If the interscorer reliability scores were determined to be greater than 80%, then the researcher's scores were utilized for graphing purposes.

Design

A small-*N*, single subject research alternating treatments design was utilized in the present study. According to Alberto and Troutman (2006), the first step to setting up an alternating treatments design was to select the target behavior and two or more potential treatments. By using an alternating treatments design, a direct comparison of the effectiveness between close reading and CSR was made on the students' reading and writing performance.

An advantage of alternating treatments design is that this design can provide teachers with timely feedback about comparative effectiveness of various teaching techniques (Alberto & Troutman, 2006). Therefore this design was an efficient way to determine whether there were differential effects on student achievement for the interventions.

Visual analysis according to Gast (2014) is to assist in organizing data during the data collection process and it also provides a detailed numerical summary and description of behavior "which allows the reader to analyze the relation between independent and dependent variables" (loc. 5200). The graph is a vehicle Gast explains for efficiently organizing and summarizing a participant's behavior over time. These line graphs are considered a dynamic process that are collected repeatedly, graphed regularly, and analyzed frequently. This process allows an educator to make decisions during the project. According to Gast (2014) the four basic principles that help graphs communicate information to readers are clarity, simplicity, explicitness and good design. He shared three basic types of graphs displays used by researchers: line graphs, bar graphs, and cumulative graphs. Line graphs were chosen for this study since as Gast points out it is most familiar to readers and most easily understood.

Gast (2014) pointed out seven advantages for educators, therapists, and other direct service personnel who used the visual analysis approach to analyze data. First, it can be to evaluate an individual or a small group. Second, visual analysis requires data to be repeatedly collected, graphed regularly, and analyzed often. Third, when the researcher plots the data on the graph, you are able to make data-based decisions throughout the study. Fourth, visual analysis focuses on individual data patterns facilitating individualization. Fifth, it permits discovery of interesting findings that may not be directly related to the original research

question or program objective. Gast referred to these as serendipitous findings that occurred as a result of the collection of primary data that is graphed and analyzed regularly. The sixth advantage of visual analysis is that the graphic display of the data allows others to judge for themselves whether an intervention was valid and reliable. Seventh, by graphing and analyzing the data of all participants the researcher can neither over estimate nor under estimate the effectiveness of the intervention according to Gast (2014).

Training

The researcher has over 15 years' experience as a special educator working with children who struggle with reading and math skills. Prior to beginning the study, the researcher participated in 14 hours of close reading training in the Fall of 2014. Half of these contact hours included a presentation by Dr. Timothy Shanahan, national presenter on issues related to close reading and past International Reading Association President while the other 7 hours where acquired locally by reading instructors or instructional specialists. The researcher learned how to administer CSR during a summer graduate school course.

The researcher received one hour of training by a university professor in how to administer and score the dependent measures. The researcher was provided sample copies of the three dependent measures and provided direct instruction in administration and scoring procedures.

The graduate student was provided two hours of training by a university professor in terms of scoring the dependent measures and conducting treatment fidelity observations. The professor explained the steps in scoring the assessments and completing the fidelity checklists and talked through a variety of scenarios that could occur as the two sets of tasks were

completed. Mastery of implementation was determined through completion of an oral quiz of application tasks related to scoring assessments and observing lessons. The graduate student successfully answered all questions.

CHAPTER 4: RESULTS

The present chapter provides results for the single subject study, addressing each of the three research questions previously stated. Visual analysis of six separate lines graphs will be utilized in addressing the first two questions related to the efficacy of the two reading interventions. Descriptive analysis of students' survey responses will be used to answer the social validity questions. The section begins with data related to interscorer reliability and treatment fidelity.

Interscorer Reliability

The writing-CBM and Daze student response protocols were each scored by independent parties and their respective total scores compared. For writing-CBM, inter-scorer agreement was 86.1%, with 31 of 36 scores in agreement across parties. For Daze, agreement was 100%. Since researcher score agreement with an independent scorer was greater than 80% for both measures, scores of the researcher were graphed.

Treatment Fidelity

A total of five intervention sessions, 27.8% of the 18 total sessions, were observed by a graduate student familiar with both interventions and independent of the research study. For the two interventions, CSR received three observations and close reading two. For CSR, fidelity ranges on separate checklists related to three independent reading comprehension strategies ranged from 60% for both of the during reading strategies (i.e., get the gist; click and clunk) 100% for the preview (before reading) strategy. The overall average across three observations was 75.6%. For close reading, the average rating across two observations using the same 10-

item checklist was 95%, with 19 of 20 intervention components observed across the two sessions.

Research Question 1: Effects on Reading Comprehension Achievement

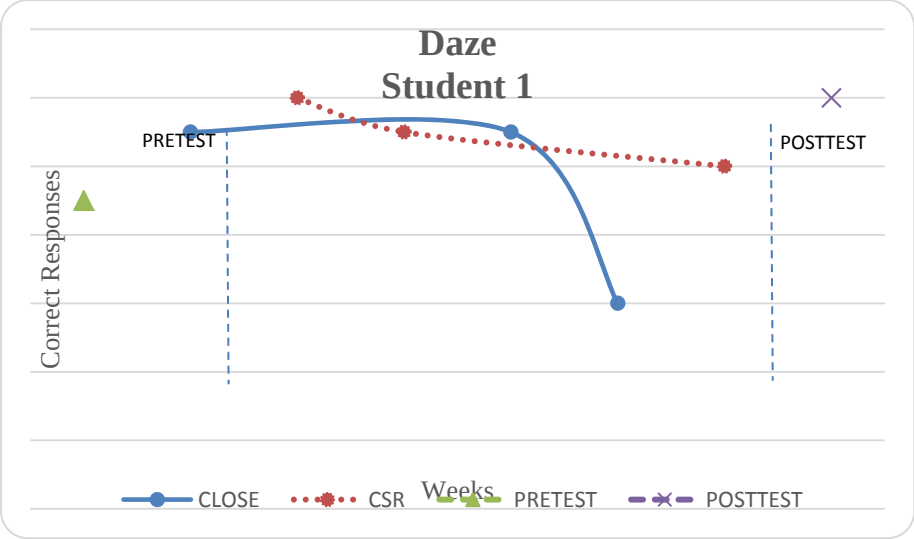
Visual analysis was utilized to determine the findings related to reading comprehension achievement as determined by scores on Daze and incorporating an alternating treatments design (see Figure 1). A look at the six individual graphs indicated that in three of the six cases, for Students 4, 5, and 6, there was no overlap between treatment conditions. In all three cases, the higher scores were for CSR. The graphs of Students 1, 2, and 3 showed no clear evidence of one treatment favoring better than another. For close reading, three of the six participants (i.e., Students 3, 4, and 6) increased their Daze scores from pretest to post test. Four of the six students showed positive trends (i.e., Students 2, 3, 5, and 6). The slopes of Students 2 and 3 were just slightly above no trend, however. Immediate improvement over pretest data was noted for three participants (i.e., Students 1, 4, and 6). Variability, defined as greater than a 5-point difference between the low and high scores, was visible in the patterns of Students 4 and 5, with Student 4's trend negative and Student 5's positive.

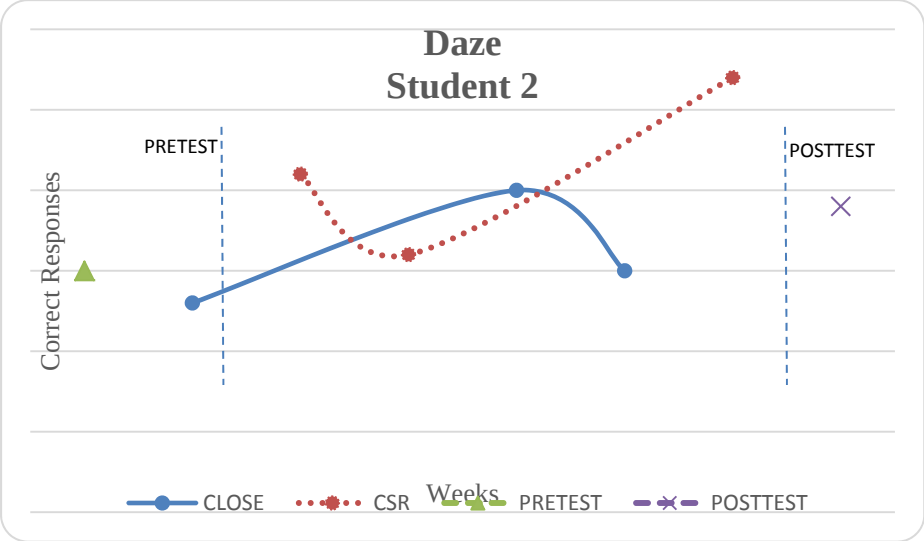
For CSR, all six participants showed gains from pretest to posttest. The slopes were positive in five of six cases. In five of six cases, for all but Student 3, there appeared to be immediate effects of treatment. Variability was evident in two of six cases, for Students 2 and 5, with both trends positive.

The final graph in Figure 1 displayed participant averages for each testing session over the course of the project. The overall pattern appeared to favor CSR, with no overlap noted in data points. The trend for CSR was positive, whereas the trend for close reading was uncertain.

An immediacy effect appeared evident for both treatments, with the first data points higher than the 14.67 pretest average score.

Figure 2. Daze Scores for Close Reading and Collaborative Strategic Reading





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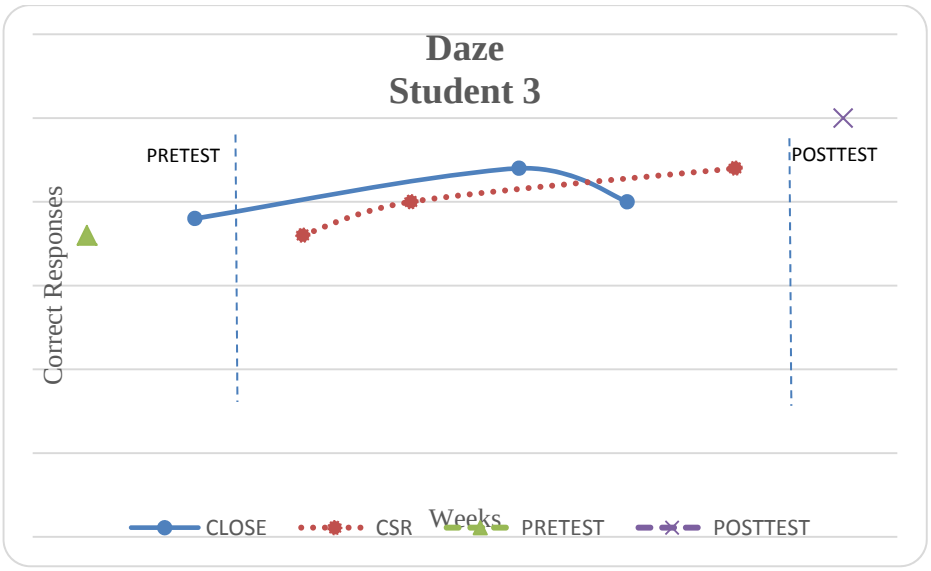

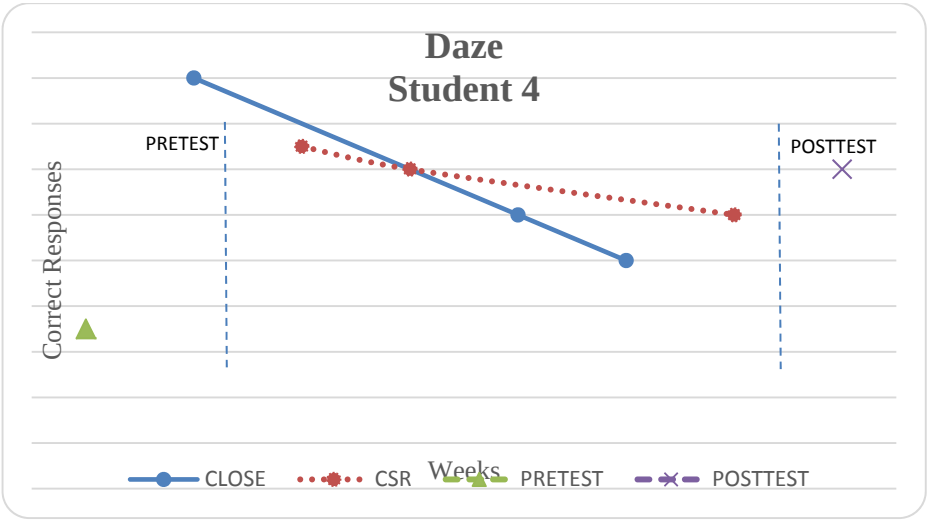

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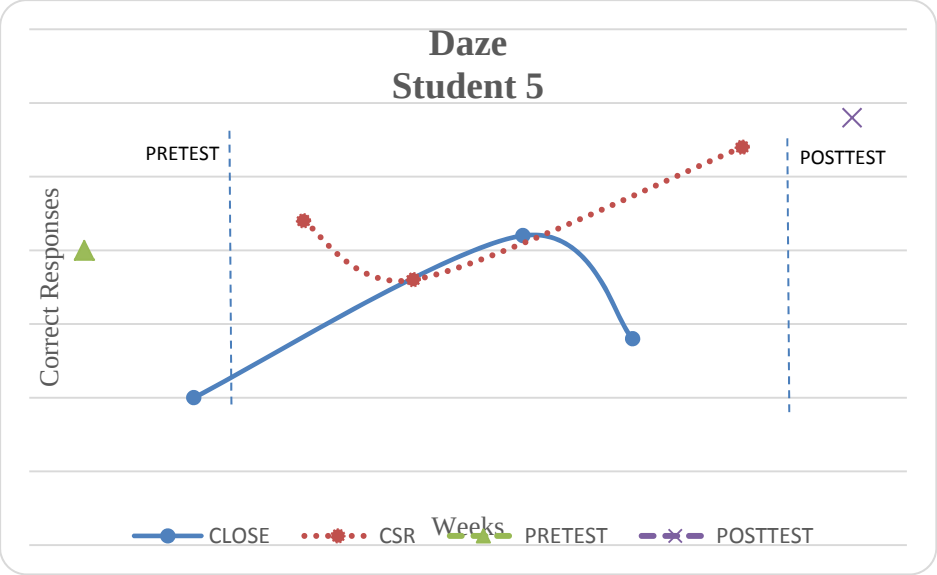

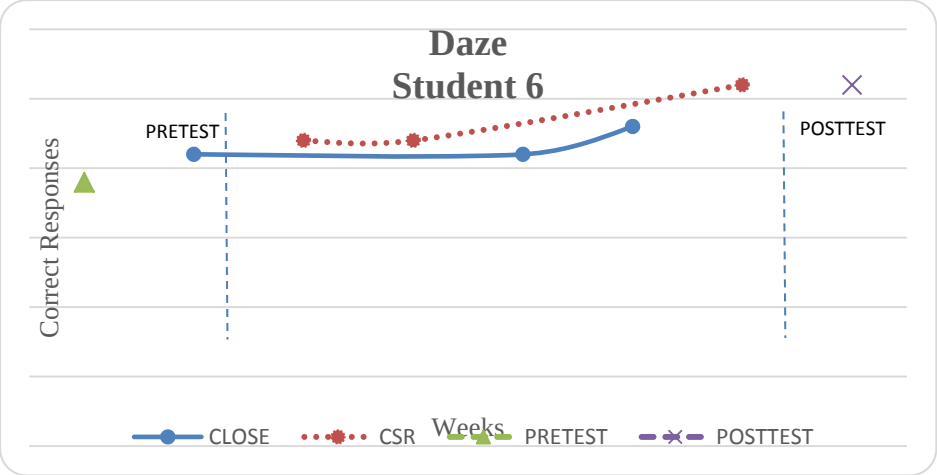

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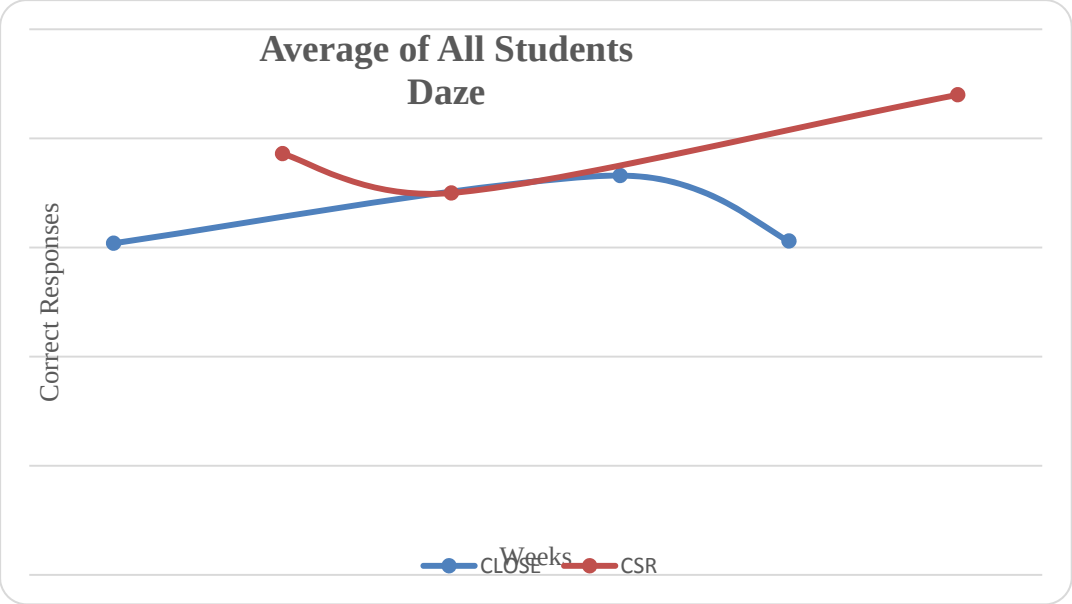
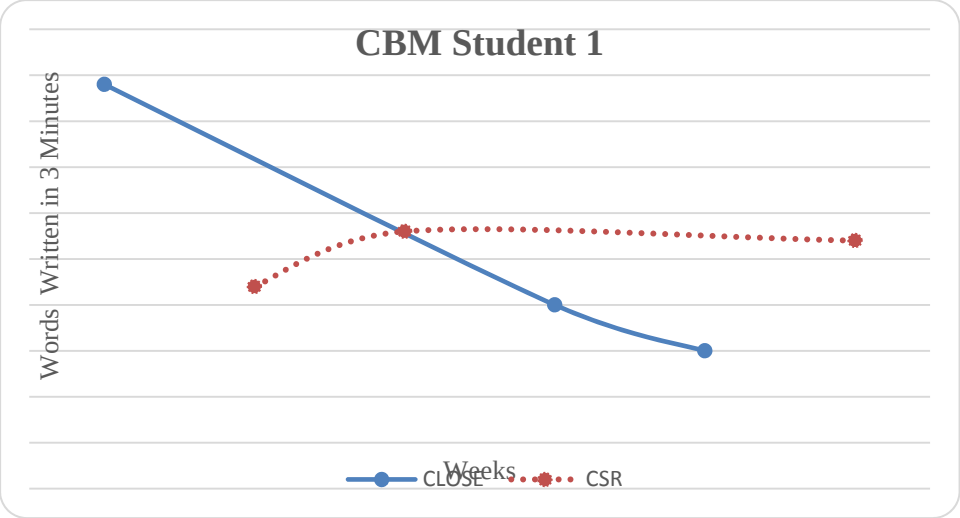


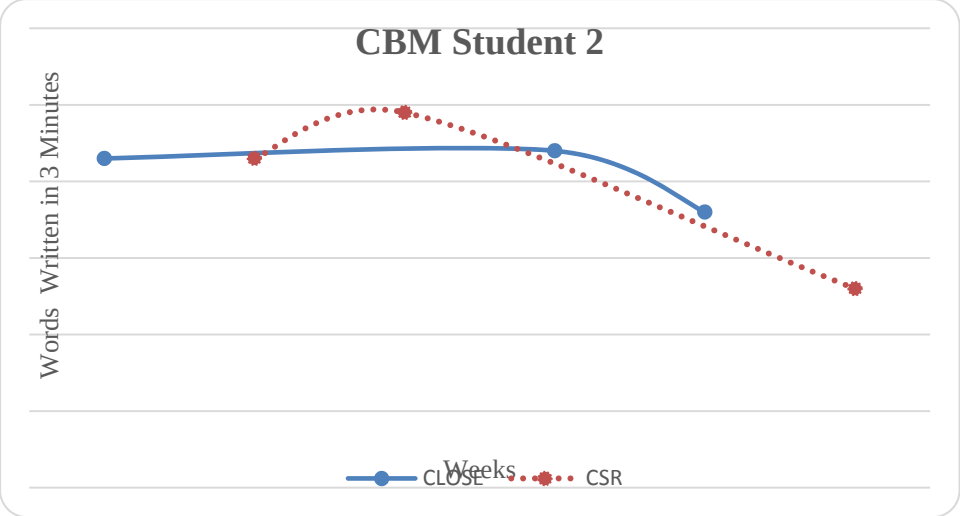
(Figure 2 continued.)

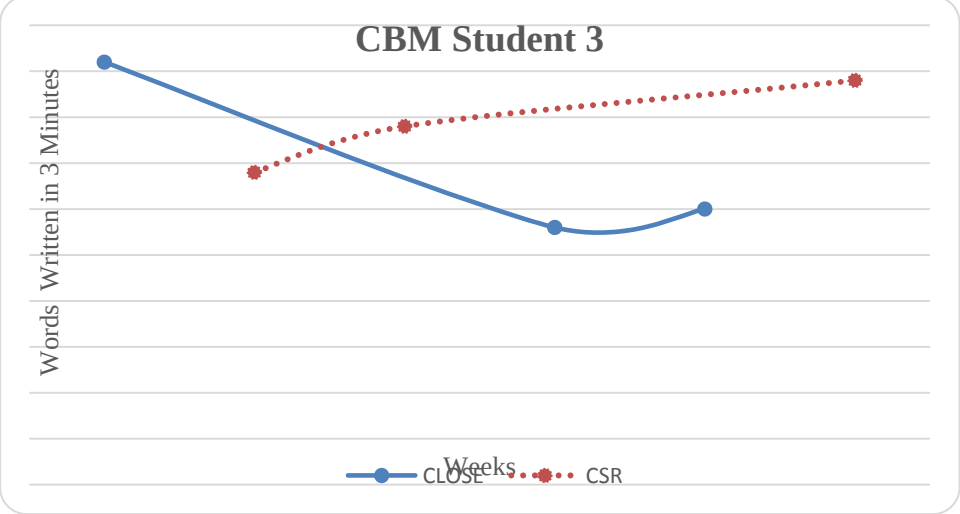
Research Question 2: Effects on Written Expression Achievement

With no pretest scores having been collected, visual analysis focused on the patterns of scores collected during the intervention. At posttest, four of the six scores favored close reading, with Students 2, 4, 5, and 6 all demonstrating higher total words written in response to a prompt during the close reading intervention than during CSR. Generally the trend was a declining probe, as was most easily evidenced in the final graph, which included an average of all six students' scores. Individually, five of six students saw declining trends in the close reading condition, with three of six evidencing declining trend lines for CSR. Students 2, 4, and 5 all scored higher at pretest than posttest across both conditions. The CSR condition was the only condition in which increasing trends were evident. Students 1, 3, and 6 saw increasing trends over the course of the study.

Figure 3. Writing-CBM Scores for Close Reading and Collaborative Strategic Reading







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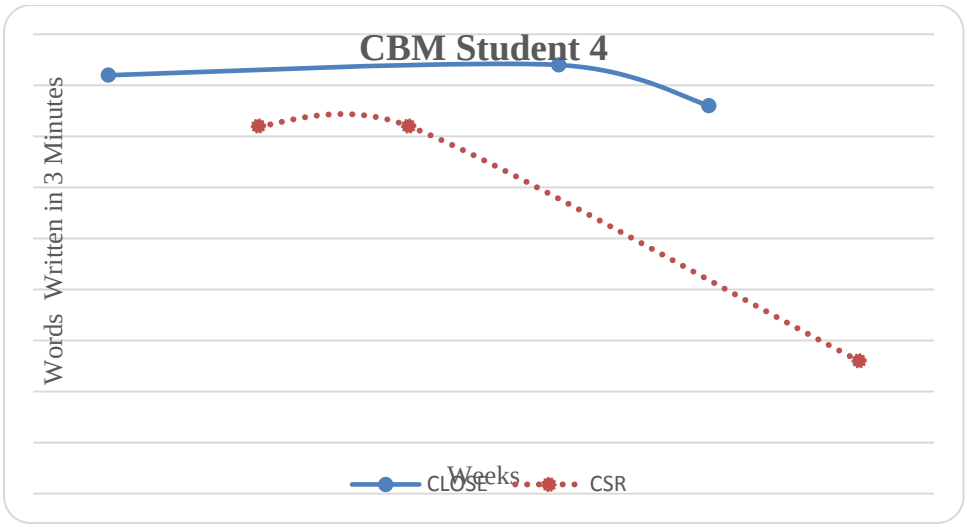

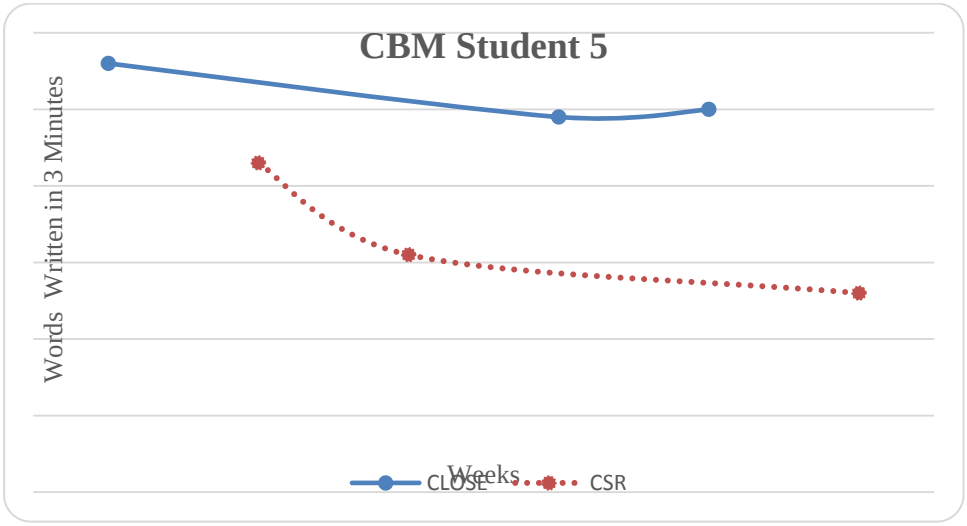

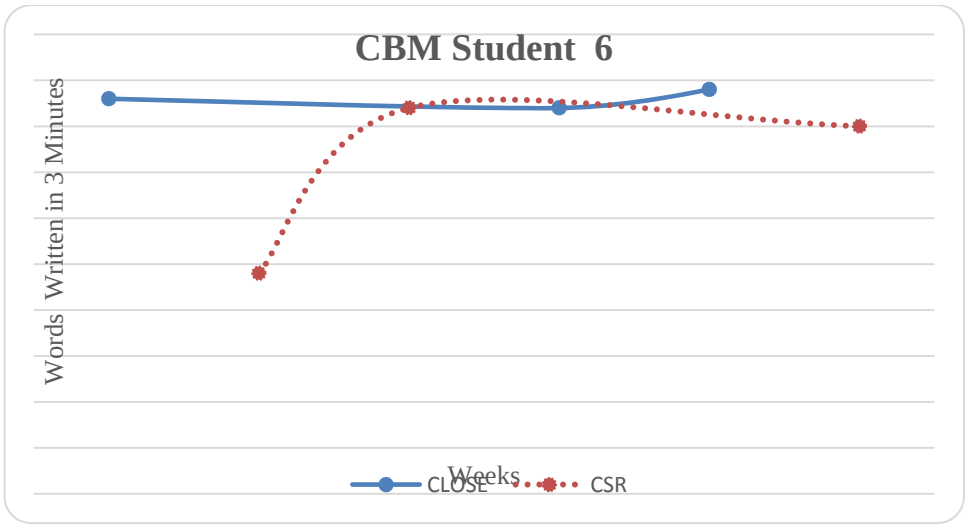

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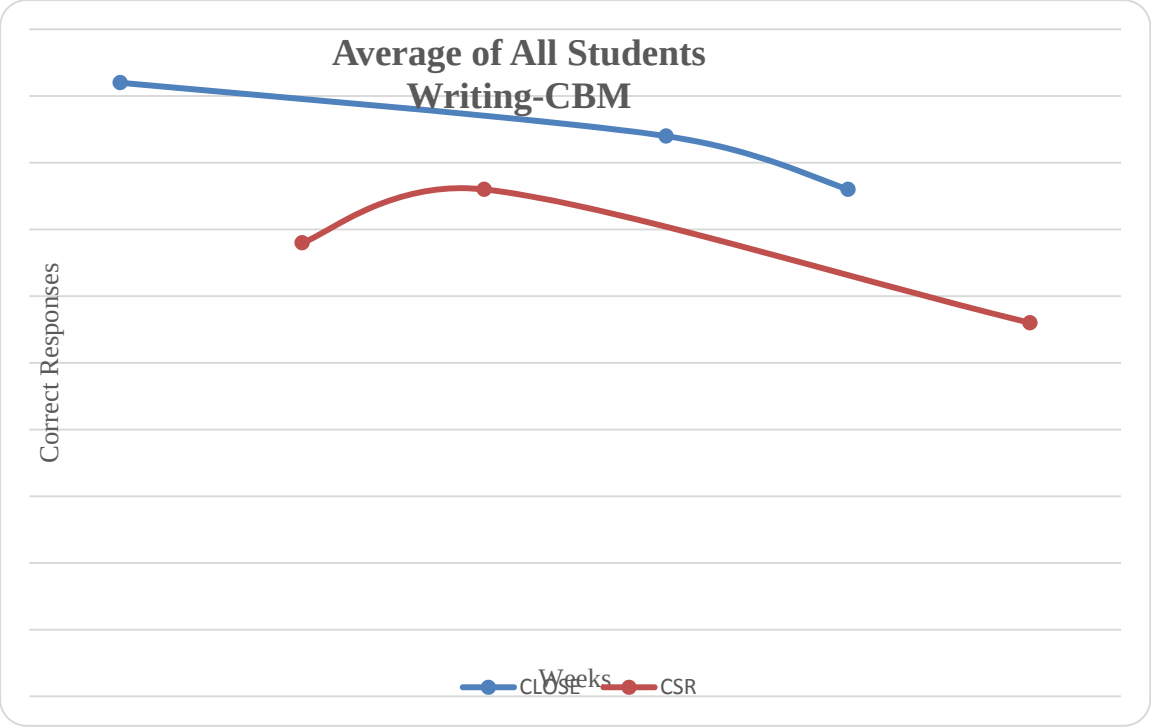

(Figure 3 Continued.)

With science content serving as the vehicle to determine the effectiveness of the two interventions, pre- and post-testing using a general outcome measure of grade-level science content was utilized to evaluate the effectiveness of the supplemental intervention time. Figure 4 displays the critical content monitoring scores. Across six students, four improved their scores from beginning to end. A fifth student showed no growth and a sixth had a higher pretest than posttest score. For the four students that showed improvement there was an average improvement of 28%, from an average of 10.25 to an average of 14.25. Student 5 demonstrated the growth rate, doubling his pretest score of six at posttest.

Critical Content Monitoring Results for Science Content

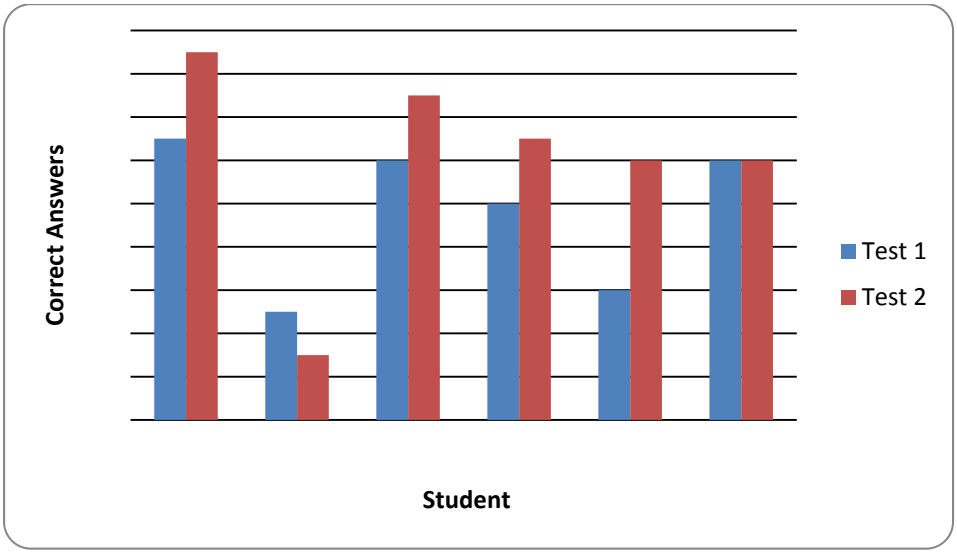

Figure 4. Critical Content Monitoring Pretest-Posttest Score Comparison

Research Question 3: Likes and Dislikes of the Interventions

Table 3 provides social validity data collected from the participants following the implementation of close reading and CSR. Participants responded favorably to both interventions. In terms of rating each intervention as a whole, close reading received a slightly higher mean score than CSR, with all participants rating the intervention in the highest third of the nine-item Likert scale. However, the close reading components were viewed less favorably than were CSR elements. The highest mean score of 9.0 came for the CSR click and clunk comprehension monitoring strategy. The lowest mean score (i.e., 5.5) related to the annotating/note taking component of the close reading intervention. In fact, the three lowest-rated items were related to close reading components. If students were given the opportunity to select the intervention, 4 out of 6 selected CSR over close reading. Yet when students were

asked which intervention helped them learn more science content five students felt that both interventions prepared them equally well.

Table 3. Social Validity Data (n=6). Scores can range from 1 (low) to 9 (high)

Question	Mean	Median	Range
1. I liked the close reading intervention.	8.5	9	7-9
2. I liked the re-reading to gain new meaning component of the close reading intervention.	6.67	7.5	5-9
3. I liked the annotating/note taking component of the close reading intervention.	5.5	5	1-9
4. I liked the different questions for each reading component of the close reading intervention.	7.66	7	5-9
5. I liked the Collaborative Strategic Reading intervention.	8	9	5-9
6. I liked the preview strategy of the Collaborative Strategic Reading intervention.	8.33	9	5-9
7. I liked the click and clunk strategy of the Collaborative Strategic Reading intervention.	9	9	9
8. I liked the get the gist strategy of the Collaborative Strategic Reading intervention.	8.33	9	7-9
9. It was easy to learn the close reading intervention.	8.33	9	7-9
10. It was easy to learn the Collaborative Strategic Reading intervention.	8.83	9	8-9
11. If I could choose the intervention to use during my tutoring group, it would be:	2 CR	4 CSR	
12. I learned the most science content with:	1 CSR	5 equally well	

CHAPTER 5: DISCUSSION

Close, analytical reading is a promoted and potentially promising instructional practice that, to date, lacks an evidence base of empirical support to match the promotion and promise that emanates from the professional literature. Areas wherein evidence supporting close reading's efficacy is deficient are extensive. For purposes of the present study they include contexts with elementary school students, students at risk for academic failure, and informational text. This inquiry was designed to add to the empirical literature in an area of ongoing concern for educators, that being interventions for students at risk for academic failure. The inquiry targeted fourth grade students receiving RTI supplemental intervention (i.e., Tier 2) services and implemented a single-subject, alternating treatments design to compare the effectiveness of close reading with a validated reading comprehension strategy instruction intervention and relative to grade-level science content. The lone previous quasi-experimental study (Fisher & Frey, 2014a) evaluated close reading in comparison to a "business-as-usual" condition that included a computer-led intervention, teacher-led small group work, and student independent reading. The study also did not have a singular focus on informational text. What follows is a summary of the findings from the study and how they fit within the larger literature, a description of the study's limitations, a presentation of implications emanating from the findings, and, finally, a reporting of future research needs.

Summary of Research Findings

The close reading literature previously described has generally been supportive of the instructional routine advocated for CCSS ELA&L use. Two studies involving observational and interview methodologies (Fisher & Frey, 2012, 2014c) reported that while teachers and

students found the instructional routine difficult to engage in for varying reasons, they saw its value, particularly elementary teachers who noted that more efforts to incorporate pre-teaching activities than what close teaching proponents suggest was warranted. The lone quasi-experimental study (Fisher & Frey, 2014a) also generated positive findings in an after-school tutoring program for middle school students, including greater student attendance and improved student passage rate proportions on a state-level achievement test for an experimental condition that essentially replaced a computerized instruction component with close reading routines. Present results temper some of the professional enthusiasm for the instructional routine while leaving room for professional intrigue. The present design allowed for a direct comparison of close reading with an evidence-based reading comprehension intervention, a comparison that had yet to be included in the professional literature. The direct comparison lent itself to an interpretation of data from multiple viewpoints. Three research perspectives are described, the first lending some support for close reading, a second providing favorable evidence for CSR, and a third suggesting concern with the use of both interventions in the present context.

One interpretation of the findings lends support to the notion that close reading instructional routines are warranted for RTI Tier 2 instructional programming. Three reasons are offered for this viewpoint. First, for the primary dependent measure related to reading comprehension performance (i.e., Daze), there did not appear to be clear separation between the two treatments in terms of students' performance. Visual analysis of the six student graphs indicated that were equal numbers of cases in which it could be argued that separation was and was not evident. Without separation, a case can be made that the close reading performed as

well in this context as did an evidence-based intervention (i.e., CSR) that was designed to improve at-risk students' comprehension of informational text. Admittedly, this argument appears less viable than other interpretations when one notes that the "all students" graph in Figure 2 shows a static growth trend for close reading and a positive trend line for CSR.

A second argument for close reading performance arises from a review of results from the pre- and posttesting involving critical content monitoring. These findings support the assertion that students made academic gains during the intervention, something that is vital for educational stakeholders to evidence given the fact that at-risk students are intervention targets and their school schedules have been rearranged to increase the exposure to academic content in the hopes of catching students up. Four of the six students in the study improved their scores on a general outcome measure of science content.

Critical content monitoring is an indicator of content comprehension and designed to provide teachers and students with an efficient and technically adequate measure of student performance at a point in time and progress over time. In the sciences, moderately strong correlations have been reported with standardized content achievement tests as well as criterion-reference statewide tests (e.g., Mooney, Lastrapes, Marcotte & Matthews, 2015). In the present context, while the reported growth in students' science knowledge cannot be easily attributed to either close reading or CSR, such growth does lend support to the notion that instructional routines such as close reading may have a place in supplemental programming for students at academic risk of failure since growth in this case was indicated following implementation of both treatments. Such a consideration is bolstered by the results of the experimental study conducted by Fisher and Frey (2014a) in which close reading instructional

routines were a major component of a 90-minute after-school tutoring condition that resulted in positive academic and behavioral outcomes.

Finally, as in Fisher and Frey (2014c), students indicated overall support for the instructional routine when asked. In the present findings, students were strongly supportive of close reading as a whole. The median score on a researcher-created survey question asking students if they liked close reading was a 9 on a 1-9 scale, with all scores in the upper third of the ranking. Moreover, two students chose close reading over CSR when asked which instructional practice they would like to use in their tutoring program. Fisher and Frey (2014c) reported similar supportive sentiments expressed by students in elementary, middle, and high school classrooms that were exposed to close reading during instruction and who were interviewed in focus groups.

A second perspective on the study's outcomes lends support to the choice of CSR for supplemental programming for at-risk students. That was particularly true when it came to the measurement of reading comprehension development. That is, in the area of reading comprehension, all six students saw their Daze number of correct matches in three minutes increase from pretest to posttest as a result of the three weekly installments of CSR, a circumstance that occurred in only one-half the cases involving close reading. In five of six cases, trend data ascertained by looking at the experimental data points alone indicated positive trend lines, a situation that also was observed regularly (i.e., 4 of 6 times) during close reading intervention weeks. And, as noted previously, the "all students" growth in Figure 2 evidenced a clearly positive trend line for CSR as well as higher average performance scores on the reading dependent measure. While clear separation and choice of treatment could be

argued either way, what is clear is that the placement of the CSR line sits above that of close reading. Findings add to a strong evidence base supporting CSR for use with at-risk students, including students with disabilities and those who are second-language learners (e.g., Bryant et al., 2000; Boardman et al., 2013; Hitchcock et al., 2011; Vaughn et al., 2011). The favorable findings for CSR were also noteworthy in the present study because only three of the four comprehension strategies were taught to the participants. That is, the experiment ended before the summarization and question-asking/answering strategy known as wrap up was introduced.

Student social validity responses also seemed to favor CSR. While the mean score on a 9-point Likert scale was strongly favorable for both interventions and slightly favored close reading, indicating a like for both reading interventions, participants favored CSR twice as much as close reading and believed that CSR was the easier to learn of the two interventions. Moreover, likeability ratings for the CSR strategies were higher than those for the close reading components. Students particularly liked the click and clunk strategy and terminology, rating it the highest of all of the intervention components. Qualitative observations from implementation affirmed the social validity findings. That is, on multiple occasions, students asked the researcher/implementer to allow them to practice the click and clunk strategy during treatment. The requests occurred across conditions, meaning that students wanted to practice the particular comprehension monitoring strategy during close reading intervention time as well.

A third perspective on the study's findings leaves open questions about the use of either close reading or CSR in supplemental intervention programming. Such concern is especially

acute if direct efforts are not instituted to provide student support for written expression development. Analysis of the final graph in Figure 3 provides the impetus for the unease. That is, written expression scores for the participants appeared to regress throughout the present study, in direct contrast to improvements indicated in science content and reading comprehension. While close reading and CSR are interventions targeting comprehension development, both, especially close reading, have writing components incorporated within them. Close reading practices generally involve annotation during the instructional interactions and written products afterward whereas CSR involves completing learning logs that include recording predictions and main idea statements and generating questions that students think teachers will ask them on tests and correct answers to those questions. Only two of six students showed improvement from pre- to posttesting in response to the CSR intervention, with just one of six students improving as a result of close reading intervention. None of the six students showed growth in writing-CBM scores across both conditions. With reading and writing achievement improvement not evident in the present context, an argument can be made for the need for multi-element interventions, those targeting reading and writing component improvement, in supplemental intervention/Tier 2 programming at the elementary level. Vaughn et al. (2010) have previously made the case for multi-element, intensive reading interventions for middle-school students demonstrating risk for academic failure.

Limitations

A number of limitations should contribute to caution being employed to results interpretation for the present study. First, the length of the study was short and may not have allowed for a clear pattern to develop in terms of separation between the two interventions.

Academic interventions do not always allow for immediacy of treatment effects to be evident, although there was evidence of immediacy in the present study. Patterns of growth may also take time to be noticed as practice of the components is routinized. The present study was allowed to go forward by school administrators under the provision that it be completed by the end of the first semester, so those conditions were abided by. Longer studies, such as the yearlong study by Fisher and Frey (2014a), may yield different patterns for the treatment conditions. Inclusion of the wrap up strategy in the CSR implementation, for example, may have allowed for improved findings for that intervention and, possibly, a clearer separation of trend lines.

Second, there was no pretest score for writing-CBM which contributed to comparison of the first and third weeks' scores rather than pretest to the trend of all three intervention data points. Third, interpretations for alternating treatments designs are considered weak until experimental control is determined following a successful implementation of the treatment of choice following the alternating treatments application. That implementation component to the design did not take place in this case. Fourth, the fact that critical content monitoring was not implemented weekly did not allow for an evaluation of whether close reading or CSR contributed more to the pre- to posttest growth in content achievement scores. Finally, the low treatment implementation proportions for CSR may have influenced the weekly Daze scores that were collected from participants. Previous research (Klingner et al., 2004) indicated that there were differences in outcomes for implementations that favored high versus low treatment fidelity percentages. In the present study, with only three weeks and 90 minutes total of intervention time devoted to CSR implementation, not all of the components of the 17

lessons were adequately addressed. An implementation of CSR that included a higher adherence to all of the intervention's components may have resulted in a different pattern of findings.

Implications

With the study results and limitations noted, the takeaway points about to be elaborated upon all revolve around a central theme, which is that research rather than advocacy needs to drive the discussion of how close reading practices are to be implemented in elementary schools and content courses and with students at risk for academic failure. That does not seem to have taken place to date. A starting place might very well be with the implementation of the CCSS. Noted researcher Lynn Fuchs was recently quoted as saying that the CCSS initiative:

> "is a trajectory of learning that has no empirical basis. We don't know yet whether it makes sense to have this particular set of standards. We don't know if it produces something better or even different from what it was before" (Phillips, 2014, p. 9).

Douglas Fuchs added the following: "Common Core mandates what, but not how. Common Core makes the point of not dictating the instructional methods by which this will be achieved. They're just saying what you have to produce" (Phillips, p. 11).

One of the reported aims of CCSS is for schools to develop students' skills in reading complex texts proficiently and independently. Proponents such as Brown and Kappes (2012) have suggested that a close reading instructional routine is a mechanism for developing these skills, going so far as to write, as noted previously, that close reading "is as much a way of thinking and processing text that is emphasized throughout the Common Core as it is about a way of reading a singular piece" (p. 2). But just as Fuchs noted with CCSS, the advocacy cart

seems to have come before the empirical horse in the implementation of close reading. The need for caution in moving forward in the implementation of close reading that was expressed by Hinchman and Moore (2013) and Fisher and Frey (2015) is warranted, particularly as it relates to the elementary grades, elementary students, and informational texts. At this point, there are two experimental studies that could be used to support the efficacy of close reading, with results from the present study being one of the two studies and the only study to involve elementary students.

A principal starting point for systematic inquiry has to be the development of an operational checklist that clearly outlines a testable close reading instructional routine. Much has been written about the components of close reading for implementation in elementary and secondary schools and with informational or narrative content. These descriptions generally outline a process that includes multiple readings with differing purposes for each read, the use of complex texts, the development of text-dependent questions to facilitate discussion, much teacher- and student-generated discussion, and annotation of text. Still, differences in close reading component descriptions are noteworthy and make it difficult to know if there is clear agreement on what a close reading instructional routine looks like and how it is implemented in classrooms. Such a need for clarity is evident going forward so that a systematic investigation of the practice can be undertaken. The development and investigation of an operationalized protocol will greatly increase the likelihood that a clear instructional routine can be implemented in schools and a meaningful instructional program can be developed to train teachers in how to implement close reads with fidelity. Protocols included in this study and in Fisher and Frey (2014a) can only be starting points, however. Both list and/or describe what

are believed to be essential components to be observed during a close reading observation, but neither describes how to go about implementing the components or what the differences are between effective and ineffective implementations of the process.

In spite of the scant evidence supporting a close reading instructional routine, the development and testing of a protocol to facilitate its implementation appears warranted for two reasons. First, the descriptions of how it can be implemented seemingly fit well within an evidence-based effective instruction paradigm. Rosenshine (2012) described 10 research-based practices in which teachers who effectively facilitated student learning engaged. The practices were gleaned from research in cognitive science, on cognitive supports to help students learn complex tasks, and on the classroom practices of master teachers. Practices included presenting new material in small steps and practicing after each step, asking a large number of questions and checking for all students' understanding, providing models, guiding student practice, and obtaining high student success rates. All of the practices engaged students in a manner that was not overwhelming. The close reading instructional routine that has been described in the literature allows for similar types of supports, at least in theory, as students are exposed and involved with complex texts. Text-dependent questions can guide discussions, with teachers supporting students' efforts to find answers to text-dependent questions in texts. Text-dependent questions can help students gain a deeper understanding of text as they re-read materials with different purposes in mind, such as finding main details, understanding text structure, and relating text-based learning to background knowledge or learning from other text-based resources. Annotation also allows for student engagement in informational text, with students responding to text by taking notes, asking questions, and/or indicating areas

where confusion arise. Teacher-student and student-student discussions further set the stage for the guidance and support that master teachers and cognitive science indicates are necessary to facilitate student learning of difficult content (Rosenshine, 2012). Still, all of these actions might more accurately be described as effective instructional practice rather than implementation of a close reading instructional routine in the absence of an operational protocol that guides teacher action.

Second, and directly tied to the present study, a product in the form of a validated intervention is necessary if a close reading instructional routine is to be included in the prototypical RTI Tier 2 system. Again, all students receive Tier 1 programming in the RTI systems that have been conceptualized and described in the professional literature (e.g., Fuchs et al., 2012). Tier 1 core programs are research-informed but likely not research-validated. In reading, for example, core programs likely include instructional elements targeting phonemic awareness, phonics, vocabulary, fluency, and comprehension (National Institute of Child Health, 2000) in the elementary grades. But the proportions of emphasis and the specific strategies suggested to teach each of the five elements may differ across curricular program. However, Tier 2 programming incorporates research-validated practices that presumably target areas of student weakness and are delivered in small group settings in addition to the core instructional program. Experimental studies need to have been conducted which include findings indicating positive effects for an accurate implementation of the clearly described treatment in comparison to a similar intervention or business-as-usual condition. Therefore, in order for what could be considered a research-informed close reading instructional practice to be implemented in Tier 2 (and 3) settings with students at risk for academic failure as well as

students receiving special education services, there needs to be a clearly outlined and validated instructional practice or protocol that has been validated for the setting and student served in Tier 2 (or 3) programs.

Future Research

The implications highlighted herein provide the roadmap for future research. If close reading is going to be placed within the context of RTI frameworks, then it will be necessary to conduct research to determine what and where it is most relevant. Fisher and Frey (2015) noted that in spite of its promotion as a critical component of the CCSS initiative that its present placement in K-12 educational contexts has up until recently been in late high school advanced course content. Fisher and Frey (2012), among others (e.g., Brown & Kappes, 2012; Shanahan, 2014), have nonetheless advocated for its implementation in elementary settings and across student populations and course contents. In RTI terms, that means across Tiers 1, 2, and 3. Still, in order for placement to occur in the more restrictive tiers, there needs to be considerably more experimental research done to determine the efficacy of the close reading instructional routine. That begins with the development of a protocol or a manual, like CSR has, so that it can be evaluated and shaped in a direction that data determine to be effective for at-risk students and students with verified disabilities.

That also means, as Fisher and Frey (2014c) point out, that time and effort need to be directed toward enhancement and implementation of relevant professional development for use not only in public schools for practicing teachers, administrators, and specialists, but in schools of education as well. Because since close reading has been previously isolated in advanced high school coursework settings and has not been included in major reviews of the

reading research across the elementary and secondary grades (e.g., Hinchman & Moore, 2013), it is likely that the practice is unknown to the vast majority of teachers and teacher educators, particularly those who do not read publications such as *The Reading Teacher* regularly, where a considerable amount of practice suggestions and descriptions have been published. A tremendous amount of systematic inquiry appears warranted if the evidence is to match the advocacy and promotion to date.

Concluding Remarks

The present dissertation outlined the components of a close reading instructional routine that has been promoted as a practice to facilitate students' exposure to complex text within the context of the CCSS ELA&L. Also described was a small body of qualitative and quantitative research that in recent years has produced findings are generally supportive of implementation of the close reading instructional routine in schools. Description of a research study followed whose primary purpose was to evaluate the effectiveness of close reading in a Tier 2 RTI context. An alternating treatments, single subject design was implemented to make a direct comparison between the close reading and CSR interventions with reading and writing general outcome measures serving as dependent variables. The present findings demonstrated growth in tested student science content and reading comprehension achievement and no growth for writing achievement for a Tier 2 supplemental program that included a close reading instructional routine and a validated reading comprehension strategy instruction intervention (i.e., CSR) as principal elements during an intervention phases that lasted six weeks. In the area of reading comprehension most directly tied to the reading interventions evaluated, the direct comparison of close reading and CSR provided a visual pattern of performance across six

fourth-graders receiving supplemental instruction using science content that seemingly favored CSR. Implications of the findings and areas for future research were delineated, with a major emphasis on the need to develop and investigate a close reading protocol. Development of the protocol would provide teachers and educational stakeholders with clear direction on how to implement the instructional routine in public school settings. Systematic inquiry of the protocol would help educational stakeholders determine whether and where the instructional routine was warranted. Such information is critical for educators tasked with utilizing complex texts to teach across elementary grades, at-risk student populations, and informational content coursework.

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APPENDIX A: PARENT CONSENT FORM

College of Human Sciences & Education
School of Education

Parent Consent Form

Project Director: Marcy Boudreaux-Johnson, Ed.S., 337-280-8223 mrcb92@aol.com;
Paul Mooney, Ph.D., 225-578-2360 pmooney@lsu.edu

IRB Information: This study has been approved by the LSU IRB. For questions concerning participant rights, please contact the IRB Chair, Dr. Dennis Landin, 578-8692, or irb@lsu.edu.

Purpose: The study aims to examine the impact of close reading on student achievement.

Participants: Louisiana public school 4th grade students.

Research Procedures: The researcher will conduct small group reading pull-out sessions during non-core class time. The pull-out activities will take place over eight weeks with three 30-minute sessions taking place per week.

Potential risks: There are no apparent risks to any participants.

Potential Benefits: There are no direct benefits for any participants during the study. Indirectly, each participant will contribute to advancement in reading research in fourth grade. At study completion, participating youth will be rewarded with an on-campus pizza party.

Participation: You are free to choose to not have your youth participate in the study. Also, your youth can quit the study at any time without penalty. You or your youth's relationship with the school, investigators, or Louisiana State University will not be damaged in any way if you choose not to participate in the study or if your youth decides at any time to quit.

Confidentiality: The confidentiality of your youth's reply will be ensured. Names will only be released to research team members (i.e. investigators). Data will be kept in a locked file cabinet when not being gathered.
Financial Information: There will be no financial compensation for participating.

Signature: "I have been fully informed of the above-described procedure, its possible benefits and risks, and I give my permission for my youth to participate in the study."

_____ _____

Parent Signature/ Date Youth's Name (Please Print)

Louisiana State University
223 Peabody Hall
Baton Rouge, LA 70803

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LIVE GOLD

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F 225-578-9135
www.lsu.edu/education

APPENDIX B: YOUTH ASSENT FORM

College of Human Sciences & Education
School of Education

Youth Assent form

I have talked to my parent(s) and teacher(s) about the study. I know that I am contributing to research in reading. **I agree to be in the reading study.** My teacher has told all about this study, which will involve participating in small group reading activities. I agree to do all the activities of the study that I was told about. I know that I can talk to my parents or teachers if I have any concerns. I know that I can quit the study at any time without penalty. I know that my completed reading activities will be provided to both my teacher and my parent(s), if requested.

Print Your Name _____

Provide Your Signature_____
Date:_____

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223 Peabody Hall
Baton Rouge, LA 70803

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APPENDIX C: IRB

ACTION ON EXEMPTION APPROVAL REQUEST

Institutional Review Board
Dr. Dennis Landin, Chair
130 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.5983
irb@lsu.edu | lsu.edu/irb

TO: Marcy Boudreaux-Johnson
Education

FROM: Dennis Landin
Chair, Institutional Review Board

DATE: October 28, 2014

RE: **IRB#** E8941

TITLE: Close reading in a content course: A study of struggling students in a high poverty school

New Protocol/Modification/Continuation: Modification

Brief Modification Description: Videotaping lessons

Review date: 10/27/2014

Approved ___X___ **Disapproved** _____

Approval Date: 10/27/2014 **Approval Expiration Date:** 9/24/2017

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable): _____

Protocol Matches Scope of Work in Grant proposal: (if applicable) _____

By: Dennis Landin, Chairman _____

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. SPECIAL NOTE:

**All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb*

VITA

Marcy Boudreaux-Johnson, a native of Ville Platte, Louisiana, received her bachelor's degree at the University of Louisiana at Lafayette in 1997. After teaching kindergarten inclusion in Iberia Parish, she pursued a Master's degree from the University of Louisiana at Lafayette in 2002. She decided to move to St. Landry Parish to be closer to her roots. While in St. Landry Parish, Marcy taught as a classroom based and itinerant early childhood special educator. She earned National Board Certification in the area of Exceptional Needs Specialist early on in her career. Marcy was honored as the Louisiana Council for Exceptional Children Teacher of the Year, St. Landry Parish Teach of the Year, and Louisiana's American Legion Teacher of the Year. She anticipates completing her doctoral degree in August 2015, then will be relocating to Oklahoma.