

7-2-2013

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The Effects of Teaching Text Structures Through Social Studies Content on
Second Graders' Expository Reading Comprehension

By

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A Graduate Field Experience

Submitted in Partial Fulfillment of

Requirements for the Degree of

Master of Arts

Language and Literacy

At Cardinal Stritch University

Milwaukee, Wisconsin

2013

This Graduate Field Experience
for Rebecca A. Reichhart
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April 27, 2013

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Abstract

The purpose of the study was to determine the effect of explicitly teaching expository text structure on second graders' social studies reading comprehension. Participants were 18 second graders from a small Midwestern town. All students were part of the same treatment group. The researcher instructed students on how to identify and comprehend compare/contrast and cause/effect expository text structure. The instruction for the text structures occurred for three weeks each for a total of a six week study. The researcher instructed students with modeling, guided practice and independent practice through the use of graphic organizers. Findings suggested very little effect of treatment. Several strengths and limitations of the study are discussed, as well as implications for future research.

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CHAPTER ONE: INTRODUCTION

With increased pressures for students to achieve high levels of academic proficiency, there has been a push in education policy toward a curriculum that requires students to read and write more informational texts. As students progress from elementary school through high school and beyond, the amount of nonfiction they will be expected to comprehend will increase. By sixth grade, expository texts comprise more than 75% of reading in the classroom (Gill, 2009). Similarly, beginning in third and fourth grades, students are often asked to write formal reports in an expository mode (Read, 2005). This exposure to reading and writing expository texts would not be problematic if students were prepared for this type of reading and writing. However, it has been demonstrated that the small amount of attention devoted to reading comprehension instruction in the primary grades is focused on narrative text rather than expository text (Hall, Sabey, & McClellan, 2005; Philbrick, 2009; Romero, Paris & Brem, 2005). Consequently, the “fourth grade slump” occurs. This is a common decline in reading scores as children enter fourth grade (Best, Floyd, & McNamara, 2008; Philbrick, 2009; Williams, Hall, Lauer, Stafford, DeSisto, & deCani, 2005; Williams, Nubla-Kung, Pollini, Stafford, Garcia, & Snyder, 2007). Children are not adequately prepared to comprehend expository information, and thus their reading scores decline.

Another key influence behind the push for students to comprehend expository texts is the adoption of the Common Core State Standards by forty-five of the fifty states (2010). The standards provide a consistent, clear understanding of what students are expected to learn, so teachers understand what they need to teach. According to the Common Core English Language Arts Standards for Informational Text (2010), students as young as kindergarten are expected to read and comprehend informational, or expository, texts. Similarly, beginning in grade one,

students are expected to read and comprehend expository texts appropriately complex at their grade level. Beginning in grade two, students are expected to comprehend expository texts across the content areas of history/social studies and science, as well as technical texts.

Furthermore, beginning in second grade through high school, students are expected to compare and contrast the most important points presented by two texts on the same topic. Similar to the reading standards, there are standards for history and social studies as well. According to the Reading Standards for History/Social Studies from Grades 6-12 (2010), students are required to comprehend texts within the grades 6–8 text complexity band independently and proficiently by the end of eighth grade. For the majority of the United States, the Common Core State Standards outline student expectations and guide classroom instruction; therefore, it is imperative that teachers adequately prepare students to comprehend expository texts beginning in the elementary years.

Rationale

With the Common Core State Standards as a guide, educators need to prepare their students to comprehend expository text. According to Gill (2009), early exposure to the language of nonfiction can enhance children's understanding these types of text and prevent the difficulties many students will encounter in their later years of schooling. The earlier in the elementary years students are taught how to comprehend expository texts, the more successful they will be in middle school and beyond. Similarly, according to Williams (2005), classroom instruction that is designed to teach students to recognize nonfiction text structures improves comprehension. The research has also indicated that this is especially effective if the instruction is focused on a single text structure during reading comprehension lessons and content area instruction as well (Williams, 2005). For this reasons, teachers need to explicitly instruct

students in the area of expository text comprehension both during reading comprehension lessons as well as content area instruction.

Research Questions

Beginning in grade two, educators need to teach several key strategies to support students' comprehension of expository texts. Based on the expectations outlined in the Common Core State Standards, the researcher of this study formulated questions surrounding students' reading comprehension of expository texts. What factors influence students' comprehension of nonfiction text? What effect does embedding comprehension instruction into the content areas have on students' comprehension? What effect does explicit expository text structure instruction, specifically compare/contrast and cause/effect, have on the comprehension of elementary students? The Common Core State Standards as well as the three questions guided the design and implementation of this study.

Methodology

For the purpose of this study, the researcher focused on teaching expository text comprehension within one content area: Social Studies. The researcher chose two text structures to explore: compare/contrast and cause/effect. Eighteen students participated in the study including ten boys and eight girls. Sixteen students were Caucasian, one student was Asian and one student was Latino. The study took place in a second grade classroom in a small Midwestern town. Students participated in three 40-minute lessons per week, studying each type of text structure in isolation for three weeks each. The study occurred during a six week period. During week one of the study, the researcher modeled how to identify and comprehend the compare/contrast text structure. During week two, the researcher led the students in guided practice in understanding the compare/contrast text structure. Finally, during week three, the

students independently identified and comprehended compare/contrast texts. The researcher repeated the instructional design of these lessons for the next three weeks; however, students learned how to identify and comprehend the cause/effect text structure instead. Data was collected, analyzed and scored by the researcher.

Conclusion

The goal of the researcher was to determine if explicitly teaching students how to comprehend two different types of text structure during social studies lessons would improve the comprehension of second graders. During the six week study, the researcher explored the effectiveness of teaching the compare/contrast and cause/effect text structures on Social Studies reading comprehension. The researcher instructed second graders through modeling, guided practice and independent practice. All data were collected, analyzed and scored. With the emphasis from the Common Core State Standards on a more rigorous curriculum involving expository texts, the researcher formulated several questions regarding expository text instruction that led to the development of this study. The next chapter explores the research surrounding expository text comprehension at the elementary level across content areas.

CHAPTER TWO: LITERATURE REVIEW

Recent research has demonstrated that the small amount of attention devoted to reading comprehension instruction in the primary grades is focused on narrative text rather than expository text (Hall, Sabey, & McClellan, 2005; Philbrick, 2009; Romero, Paris & Brem, 2005). Many primary grade educators are neglecting expository texts in their classrooms while overemphasizing narrative texts. This becomes disconcerting since children entering upper elementary school are unprepared for increasing comprehension expectations. Also, as students enter fourth grade, this lack of exposure to expository text becomes problematic since much of the content students encounter switches from narrative to expository texts. Without adequate understanding of the structures of expository text and the strategies needed to comprehend the text, many students struggle with reading comprehension. Consequently, the “fourth grade slump” occurs, which is a common decline in reading scores as children enter fourth grade (Best, Floyd, & McNamara, 2008; Philbrick, 2009; Williams, Hall, Lauer, Stafford, DeSisto & deCani, 2005; Williams, Nubla-King, Pollini, Stafford, Garcia & Snyder, 2007; Westby, Culatta, Lawrence & Hall-Kenyon, 2010). The National Research Council recommends that primary grade students would benefit more from instruction in and exposure to expository text to enhance their abilities and prepare them for comprehension demands in the upper grades (Williams, Stafford, Lauer, Hall, & Pollini, 2009; Westby et al., 2010).

Expository texts depict abstract logical relationships, represent a variety of text structures in one text, and contain technical terms and content that is usually unfamiliar to students (Williams, 2005; William et al., 2005; Williams et al., 2007, Westby et al., 2010). Because of these characteristics, young children have difficulty comprehending expository texts. Recent research has indicated that instruction designed to teach students to recognize text structure

improves comprehension, especially if the instruction is focused on a single text structure (Williams, 2005). Researchers suggested that this instruction should not only transpire during reading comprehension lessons and but through content area instruction as well. Furthermore, this type of instruction can take place in a whole group or small group, and with regular education students or students with learning disabilities.

This chapter summarizes studies that addressed the important questions pertaining to this action research project: What factors influence students' comprehension of expository text? What effect does embedding comprehension instruction into the content areas have on students' comprehension? What effect does explicit expository text structure instruction, specifically compare/contrast and cause/effect structures, have on the comprehension elementary students? The first collection of research discusses both narrative and expository text comprehension as well as the factors that influence expository text comprehension. The second collection of research discusses comprehension acquisition within the context of content area instruction. The third collection of research discusses the effectiveness of explicitly teaching compare/contrast and cause/effect text structures on students' comprehension of expository text. Although the twelve studies differ from one another, all researchers explored expository text comprehension at the primary level.

Reading Comprehension of Narrative versus Expository Text

From the beginning of their elementary schooling, students are exposed to both narrative and expository texts. In fact, children are exposed to more expository texts than nonfiction throughout their schooling (Philbrick, 2009; Westby et al., 2010). However, children tend to exhibit better reading comprehension for narrative than expository texts according to formal assessments (Best et al., 2008; Romero et al., 2005). According to Best et al. (2008), reading

comprehension can be defined as the ability to obtain meaning from written text for some purpose. The fact that narrative text comprehension is better than expository text comprehension is alarming because students may be poorly prepared for secondary and postsecondary education in which expository texts play a larger role than they do at the primary and middle school levels (Romero et al., 2005). In this section, a number of researchers studied both narrative and expository text comprehension in order to better understand the influences on expository text comprehension. The first study conducted by Romero et al. (2005) compared and contrasted children's reading of narrative and expository texts at both the local and global levels. The second study conducted by Best et al. (2008) explored the influences of reading decoding skills and world knowledge on students' comprehension of narrative and expository texts. The third study by Kucer (2010) explored the impact of background knowledge and familiarity of text structure on the comprehension of narrative and expository texts. All three studies explored the factors that may influence narrative and expository text comprehension for elementary students. Romero et al. (2005) conducted a study to compare children's reading of narrative and expository texts using tasks that specifically address the issue of global versus local processing. The researchers defined local processing as reading at the level of phrases and sentences, whereas global processing requires readers to make meaning of the text as a whole. The researchers hypothesized that students' comprehension of narrative text would be better than their comprehension of expository text at both the local and global levels. Furthermore, the researchers hypothesized that the organization of narrative text would allow it to be better understood than the expository text. There was not a control group for this study. Rather, researchers individually instructed all students in the same manner. The dependent variables

consisted of a prior knowledge check, a preference survey, think-along passage questions, and retellings of the passages. Two independent raters scored all data using rubrics on a 0-2 scale.

The sample consisted of 32 middle-class, Anglo-American fourth grade students at a public school in a small Midwestern city. There were equal numbers of male and female participants, and all students had at least a fourth grade level of reading as reported by their teachers. None of the participants were identified as having learning disabilities, and all students were monolingual English speakers. The researchers asked students about their prior knowledge and experience with the passage content before students began the tasks. Then, students were randomly assigned to read two texts. Each student read two books and completed all tasks during a single one-on-one session at the participant's school in a quiet room.

The researchers created four texts (two narrative and two expository) with approximately the same number of words for the purpose of this study. All four texts featured nonfictional events regarding the protection of endangered mountain gorillas or rescuing ocean birds after oil spills. After reading each text, the participants completed two tasks, one that assessed their ability to comprehend the story at the local level and one at the global level. Local level comprehension was assessed with think-along passage questions, which required the children to answer two questions immediately after reading a page of the book for a total of 10 questions. To assess global processing and comprehension, researchers directed students to retell the story once the students were finished. The passage questions required information to only be held in memory for the length of the page, whereas the retellings required information to be held in memory until the end of the story. Once the retellings concluded, participants were asked to compare the two books using five cognitive and five affective items in a Preference Survey

designed by the researchers. For example, students were asked which passage was more difficult, which book they liked more and which one was more interesting.

The results of the study, as indicated by the think-along passage answers and retelling results, show that students scored higher with retelling narrative texts than expository texts. Students performed similarly on both types of texts when the tasks required local levels of processing (answering two questions at the end of each page). However, the results indicated that their performance with narrative text was stronger when the task required a global level of processing (retelling). According to the Preference Survey results, the researchers did not find evidence that students preferred narrative over expository texts. The results suggest that structural differences may have contributed to differences in students' reading performances. The authors concluded that the problems students encounter with expository text may not stem from lack of comprehension or interest, but rather from the less evident and useful structure of the text. Romero et al. (2005) ultimately concluded that students should be explicitly taught expository text structure in order to better understand expository text.

Similar to Romero et al. (2005), Best et al. (2008) also researched both narrative and expository text comprehension at the primary level. Instead of examining local versus global comprehension, Best et al. (2008) explored the influences of reading decoding skills and world knowledge on third graders' comprehension of narrative and expository texts. Based on recent research, the researchers hypothesized that children's comprehension of narrative text would be superior to their comprehension of expository text. The researchers also hypothesized that comprehension of both narrative and expository texts would be related to decoding skills and world knowledge. There was not a control group for this study. Rather, students were individually instructed in the same manner. The dependent variables were recall tasks and

multiple-choice questions, and two tests from a standardized reading test. The recall tasks and multiple choice questions were analyzed and coded by a trained graduate student and were given 0, 0.5, or 1 possible points.

The sample consisted of 61 third graders enrolled in two public schools in a large metropolitan school district. Girls formed 52% of the sample, and boys formed 48%. Fifty-seven of the children were African-American, 28% were White, 7% were biracial, and 3% were Asian-Pacific Islanders. Children in this sample demonstrated reading comprehension skills and vocabulary knowledge that were average for their age based on two screening measures. These results verified that participating children displayed an age appropriate range of reading abilities and competencies. Testing was then completed within one-hour testing sessions four times a month for three months until all students had been individually tested.

To test their hypotheses, Best et al. (2008) developed a program in which students read a text, answered free and cued recall tasks and 12 multiple choice questions. The researchers carefully selected narrative and expository texts from a pool of texts obtained from basal readers and science textbooks. To begin the testing session, students read one text silently within a five minute period. Then, the text was removed from view. At this time, children were asked to recall main ideas and details from the passage without any directive questions from the researchers. This was known as free recall. Next, children were asked to respond to three questions to assess text comprehension that essentially covered the entire text. This was known as cued recall. Both free and cued recall responses were recorded on an audiotape and later transcribed. Following the recall tasks, students then vocalized their answers to twelve multiple-choice questions regarding the text. Each question and three answers were presented orally and visually by the researchers. Six questions were text-based and six questions were inferential, and

the questions were asked in a random order. Once the students completed these tasks with one text, the process was repeated in the same manner with the second text.

To obtain the results of the study, recall tasks were coded and analyzed and ANOVAS were used to further analyze the results. The results of the study indicated that, across comprehension measures, children's scores were notably higher for the narrative text than for the expository text. The researchers determined that children's text comprehension was affected by text genre, narrative or expository. For both the narrative and expository texts, all comprehension measures, with the exception of the free recall, were significantly and moderately correlated with both world knowledge and decoding skills. Thus, the researchers determined that there was a strong positive correlation between world knowledge and decoding skills. This means that the better decoding skills and world knowledge a student has, the better they will comprehend a text. Overall, Best et al. (2008) concluded that narrative texts are comprehended more successfully than expository texts and world knowledge and decoding skills have differential importance during text comprehension from different genres.

Similar to the first two studies, Kucer (2010) also researched both narrative and expository text comprehension at the primary level. However, contrary to the studies by Romero et al. (2005) and Best et al. (2008), Kucer examined what retellings of narrative and expository texts indicate about a student's comprehension and if the comprehension matches the intended purpose of the author. Based on recent research in this area, Kucer hypothesized that reader background knowledge would facilitate comprehension of both expository and narrative texts. There was not a control group for this study. Rather, one group of students read a narrative text and one group of students read an expository text. Both groups were tested individually by a researcher. The dependent variables consisted of miscue analyses of the students' audiotaped

reading and an analysis of the retelling of the text. Each audiotaped reading was analyzed and miscues were marked on a typed copy of the text. Furthermore, researchers analyzed the content of the retelling to determine results.

The sample consisted of two groups of highly proficient fourth-grade readers from two middle class schools in the Pacific Northwest. Thirty-four fourth graders were randomly selected to read a narrative text. Of these students, 19 were female and 15 were male. Thirty-five fourth graders were randomly selected to read the expository text. Nineteen of these students were boys and 16 were girls. Most of the participants were reading one or more years above grade level. Before orally reading the expository text, students were asked by the researchers if they had any prior knowledge of the passage content. Most students indicated that they did have prior knowledge. Researchers hypothesized that students were familiar with the narrative text topic, so they did not ask if students had prior knowledge before the oral reading began.

To begin the study, students were instructed to read aloud their respective text as naturally as possible without assistance. Prior to the study, researchers encouraged students to use their best reading strategies. Students were told to read for meaning and they would be asked to give a retelling of the text without looking back upon completion of the reading. Students who read the narrative text individually read aloud the first chapter. Students who read the expository text individually read aloud the first three sections. If readers came to unknown words, assistance was not given on behalf of the researchers. Following the reading, readers retold all they could remember without looking back into the text. Also, the researchers asked probing questions based on what had been retold, along with requests for elaboration or clarification. A miscue analysis of the reading, including markings for substitutions, omissions,

insertions, pauses, corrections, attempts to correct, abandonment of correct responses and repetitions was conducted. Also, researchers conducted an analysis of the retelling on the clause level. They determined if each clause was a match, substitution, addition, summary, conflict, rearrangement or omission. Readings were first analyzed by one researcher, and then analyzed by a second researcher. Differences were resolved during a data analysis meeting.

To obtain the results of the study, researchers used a *t*-test to statistically analyze the processing and the comprehension of the text. For processing behaviors, researchers analyzed mean percentages for clauses with no miscues, incorrect miscues, meaning maintaining clauses and words read per minute. For comprehension behaviors, researchers analyzed means or mean percentages for a retold clause, matching clauses, nature of nonmatching clauses, and rearrangement of nonmatching clauses. Results indicated that expository readers were significantly more likely to substitute information, add nonmatching information, or retell nonmatching summaries. Also, comprehension of narrative text proved to be more accurate than the comprehension of the expository text. It was hypothesized that this may be due to a lack of familiarity of the expository text content and structure. Kucer also concluded that familiarity with a text type and background knowledge may have contributed to more accurate retellings (which matched the author's intended purpose) of narrative texts versus expository texts. Furthermore, the researcher concluded that the construction of information may vary for different types of text involving different types of content and text structure. Overall, Kucer suggests that teachers should help students develop background knowledge of a topic, especially expository texts, to enhance text comprehension.

The three studies in this section provided insight about both narrative and expository text comprehension and the influences on expository text comprehension at the elementary level.

The first study by Romero et al. (2005) confirmed that the structure of expository texts can inhibit text comprehension, and expository texts are not comprehended as well as narrative texts. The second study by Best et al. (2008) confirmed that world knowledge and decoding skills can affect the comprehension of expository texts. The third study by Kucer (2010) indicated that the lack of background knowledge and familiarity of text structure may affect the comprehension of expository texts. The researchers of all three studies confirmed that narrative texts are better comprehended than expository texts for a variety of reasons. Furthermore, elementary students should be taught how to comprehend expository texts so that they are better prepared for middle school and beyond. Recent research suggests that this can transpire through reading strategy instruction using expository texts during content area classes. In the following section, the effectiveness of embedding the teaching of expository text structure instruction into the content areas is discussed.

Content Area Literacy

Due to the increased demands to improve students' literacy proficiency in the United States, the amount of instruction time given to the content areas has decreased in the primary grades (Williams et al., 2007). As a result, students are unable to access and comprehend the information that is presented in content area lessons, specifically science and social studies. Recent research has suggested that teachers need to blend the communication arts processes with subject content to help students learn content more effectively and increase ability to understand expository text (Philbrick, 2009). In fact, teaching expository text comprehension within the context of content area instruction is one of the recommendations of the National Reading Panel (2000). Despite the fact that authors of social studies and science curricula recently increased the amount of reading and writing activities, the goal of these programs is still content acquisition

and not comprehension (William et al., 2009). Since expository text is the most common type of text that students encounter during schooling, this lack of comprehension is problematic.

However, there is evidence that through explicit instruction in text structure embedded in content area lessons, students can comprehend expository text without detracting from the amount of content acquired (Williams et al. 2007). In this section, a number of researchers examined reading comprehension in the content areas, specifically in the areas of science and social studies. The first study by Philbrick (2009) examined the effects of explicitly teaching students metacognitive reading strategies within the context of their regular social studies class to determine the effects on comprehension. The second study by Williams et al. (2009) explored the effects of a comprehension program embedded in an elementary content area. The third study by Simmons, Hairrell, Edmonds, Vaughn, Larsen, Willson, Rupley and Byrns (2010) examined the effects of two multi-strategy approaches on fourth-grade social studies instructional practices. The fourth study by McCoss-Yergian and Krepps (2010) examined the impact that teachers' beliefs about content area literacy had on their explicit teaching of reading strategies in their classrooms. The researchers of all four studies confirmed that teachers need to implement reading comprehension strategy instruction effectively within the content areas. Philbrick (2009) examined the effects of explicitly teaching students metacognitive reading strategies within the context of their regular social studies class to determine if this instruction would (1) improve understanding, (2) foster active processing and engagement, and (3) encourage independent use of the strategies. The researcher hypothesized that teaching students metacognitive reading strategies during social studies class should help students to better understand how to read and think about social studies and improve their comprehension of content. The independent variable was the type of instructional group: combined strategy group

versus strategies only group versus the no program group. The dependent variables were a pretest determining comprehension of social studies passages using a teacher-created instrument, a standardized reading awareness assessment, and a post-test using the same instruments as in the pretest.

The sample consisted of 131 students from six fifth grade classes in a rural southwest Missouri school. Ninety percent of the students were Caucasian and 10% of the students were Hispanic. Most of the students were from working class families. The six classrooms were randomly selected to receive one of the three instructional programs. Two classes received reading strategy within the context of social studies instruction, two classes learned identical strategies in their reading classes, and two served as the control group, which received the same social studies content but no additional reading strategies.

In three separate whole group settings, students received two 45-minute lessons each week for the duration of eleven weeks. All three groups of students received instruction regarding the same social studies content. The basic lesson plan included a schema activation activity followed by an explicit explanation of the appropriate use and importance of the strategy. Next, modeling of the process on a piece of text using a think-aloud technique occurred followed by whole-group practice guided by the teacher. Finally, small-group practice with monitoring and feedback occurred followed by individual practice using classroom materials. In the combined strategy, students learned how to think-aloud during the reading, summarize a passage, make predictions, and question themselves and the author using the social studies text and other materials. They also learned about text structures and organizational patterns relevant to their social studies text. The strategies only group learned the same four comprehension strategies during their language arts class and practiced them in the same manner. However, this

group applied the strategies to a young adult novel. The control, or no strategies group, did not receive any additional reading strategy instruction. Rather, students received instruction that was already taught in the regular curriculum.

To obtain results from the study, the researcher not only analyzed pre and post assessment results but also calculated ANCOVAS to further analyze results. The results indicated that the combined strategy group performed significantly better than the strategies only and the no strategies group in the ability to comprehend social studies text. Both the combined strategies group and the strategies-only group exhibited significant gains in their understanding of strategic reading, while the group who did not receive strategies did not demonstrate a significant gain. Furthermore, results suggested that students who had more difficulty in the beginning found the strategies just as beneficial as the more effective readers. The researcher concluded that strategy instruction in the context of content classes provides less effective readers with the skills necessary to be more successful in their comprehension of informational text. Furthermore, the researcher determined that lessons in reading expository text as well as strategies for active processing of the text can enhance the learning of both the reading strategies and the social studies content.

Similar to Philbrick (2009), Williams et al. (2009) explored the effectiveness of a comprehension program embedded in a content area. Unlike Philbrick (2009), Williams et al. (2009) included instruction about the structure of compare/contrast expository text with an emphasis on clue words, generic comprehension questions, graphic organizers and close analysis of well-structured texts. The researchers hypothesized that second graders could benefit from explicit comprehension instruction in compare/contrast text structure of expository text embedded in science lessons. The independent variable was the type of instructional program:

text structure program versus content program versus no-instruction program. The dependent variables were various comprehension, strategy and content outcome measures assessing key program components.

The sample consisted of 215 second-grade students from four elementary schools in a metropolitan area. The total enrollment across the schools included 61% Hispanic, 37% African-American, 1% Caucasian, and 1% Asian/other. Ninety percent of the students received free or reduced lunch, and 6% of the students were enrolled in either part-time or full-time special education services. Researchers randomly assigned students to one of three programs. Students in the text structure and content programs received treatment, whereas students in the no-instruction program served as the control group and did not receive any treatment.

The text structure program contained 12 lessons. The lessons focused on compare/contrast text structure and the acquisition of animal classification content. At the beginning of each lesson, teachers discussed the lesson's purpose and introduced clue words such as *but*, *however* and *compare*. Students determined the meaning of the word by generating sentences with the teacher. During the next part of the lesson, teachers read information aloud about two targeted animals from an encyclopedia and/or trade books followed by a discussion to heighten students' interest. Next, teachers introduced vocabulary concepts related to the critical features of animal classification, such as *warm-blooded*, *scales* and *feathers*. Students generated sentences using these words as well. During the next portion of the lesson, students read the target paragraph twice. They read it once silently, and then listened as the teacher reread the paragraph. Following the reading, students circled compare/contrast clue words, and orally generated sentences about the similarities and differences between the animals. Then, students used matrices (grids) to organize the paragraph's content, followed by organizing and writing

statements from the matrices about the animals. Finally, students used the matrices and a paragraph frame to write a summary about the text. At the end of each lesson, the teacher and students reviewed the clue words, vocabulary, matrices, and compare/contrast questions. Similar to the text structure program, the content program contained 12 lessons. The students in this program received the same content as the students in the text structure program, but they did not receive instruction in the compare/contrast text structure. At the beginning each lesson, teachers gave a brief introduction to the lesson that provided background knowledge about the two animals to be introduced. Next, the teacher read from an encyclopedia and/or trade books, asked questions, and led a discussion to spark students' interest. Followed by the discussion, students organized the content from the reading into information webs. Then, teachers explained vocabulary concepts, discussed examples, and help students generate sentences using vocabulary words. Students then read a compare/contrast paragraph silently, followed by a rereading of the text by the teacher. Students did not analyze the structure of the text, but they did share their information webs with others. Students then wrote a paragraph with the support of a paragraph frame as well as a fact book about what they learned about each animal. Finally, the lesson concluded with a review of vocabulary concepts, and information about each animal.

In order to obtain results of the study, the researchers used a template they had constructed to score responses. Furthermore, the researchers used ANOVAS to determine correlations within the study. The results indicated that the text structure group scored significantly higher than the content and no-instruction group in the following areas: written summary of compare/contrast paragraphs, pro-con paragraph comprehension, and recalling compare/contrast words and questions. In addition, the text structure group scored significantly higher than the content and no instruction groups in the areas of using a matrix graphic

organizer, and locating pro-con clue words. The text structure group performed higher on authentic text comprehension, although the results were not significant. All three content measures indicated that there was an effect of treatment regarding knowledge of animal classification, vocabulary concepts, as well as additional content information. There was not an effect of treatment on the use of an information web organizer. As a result of the outcome measures, Williams et al. (2009) concluded that explicit comprehension instruction at the primary level can be effective in content area lessons without a loss in the amount of content acquired.

Similar to the first two studies, Simmons et al. (2010) studied the effects of teaching reading comprehension during content area learning. However, unlike the first two studies of this section, Simmons et al. (2010) compared the effects of two multi-strategy approaches (content area comprehension and vocabulary) on fourth-grade social studies instructional practices. Based on recent research in this area, the researchers hypothesized that students' comprehension of social studies content would be enhanced if teachers teach explicit comprehension or vocabulary strategies during content area instruction. The independent variable was the type of instructional group: comprehension group, content vocabulary group, and a typical practice group (control group). The dependent variables were a standardized reading test, a social studies vocabulary test, a vocabulary assessment, a reading fluency test, and a social studies content test.

The subjects included 903 fourth graders from 15 schools within two medium-sized school districts in central Texas. High proportions of the children were from low-socioeconomic households. In one district, 77% of the students qualified for free or reduced lunch and 65% of students in the second district qualified. Of the 903 students, 16% were African American, 70%

were Hispanic, 13% were European Americans, and 1% was other. Students averaged 9.7 years of age. Students were assigned through stratified random assignment to one of the three groups. Several pre-tests were administered before the study began. Depending on the test, they were administered by the researchers either individually or in a whole group setting. The study was divided into three six-week units that occurred for four months during regularly scheduled social studies periods. Teachers of all three groups embedded either three 30 minute lesson per week or two 45 minute lessons per week. Students in the content comprehension group learned various reading strategies that emphasized the content, text structure and purpose for reading the informational text. Teachers modeled the strategies, and then progressed into guided practice followed by independent practice. The content vocabulary group was explicitly taught content vocabulary specific to the social studies curriculum. Teachers also activated background knowledge and taught an independent word learning strategy for contextualized and decontextualized vocabulary throughout the 18 weeks. In the control group, the typical practice group, teachers maintained their customary social studies instructional practices. This involved reading the district social studies textbook with the students and answering questions. After the study was completed, students were administered the same tests that they took as pre-test to determine growth.

The researchers of this study concluded several findings. Results indicated that both the comprehension and vocabulary groups significantly outperformed the typical practice group on the social studies content test. Students in the vocabulary group mastered on average five words more than students in the comprehension and typical practice groups. Findings also indicated that students in the comprehension and vocabulary groups learned more content than the typical practice group. The students in the comprehension and content vocabulary groups did not

outperform the typical practice group in general comprehension or vocabulary. Rather, there was an important impact on social studies vocabulary acquisition. The researchers ultimately concluded that allocating a portion of instructional time to comprehension or vocabulary strategies that are embedded in social studies texts will enhance students' comprehension of expository texts.

Similar to the first three studies, McCoss-Yergian et al. (2010) studied reading comprehension in the content areas. However, rather than studying a group of elementary student similar to the first studies, McCoss-Yergian et al. (2010) studied a group of content area teachers. The researchers examined the effect of how teacher attitudes towards content area literacy affected their implementation of content area reading strategies in their classrooms. Based on recent research in this area, the researchers hypothesized that teacher attitudes would predict how effectively he or she implements content area reading strategies into the curriculum. The independent variable was a group of teachers from two schools who were interviewed individually by the researchers. The dependent variables were scaled survey responses and open-ended interview responses.

The sample included 39 teachers from a school district located in a rural city identified as middle and upper class. The district received recognition from the state for distinction in performance for the past eight consecutive years. Thirteen males and 26 females participated. Subjects were chosen from various middle and high school within the district. Fourteen teachers were middle school teachers and 25 were high school teachers. A total of 72% of the total population of the district ultimately participated in the study. Teachers who met the criteria included content area teachers who did not teach reading, language arts, English or literature courses.

Researchers worked individually with each participant to administer the survey and open-ended interview questions. To begin, researchers administered a scaled survey to teachers. The scale consisted of 15 attitude statements about teaching reading in the content areas. The responses were scored on a seven point scale: strongly agree, agree, tend to agree, neutral, tend to disagree, disagree and strongly disagree. Next, an open-ended interview occurred. The five areas of discussion included content literacy, scheduling restrictions, attitude toward familiarity and training, perceived duties of content area teachers and insufficiency of explicit government edict. Teachers' opinions regarding teaching literacy strategies in content area classrooms were measured utilizing individual item responses from both the scaled survey and the open-ended interview.

Several conclusions were derived by comparing the survey data with the information collected from the interviews. First, 74% of teachers believed that coverage of content material would be compromised if they implemented reading strategy instruction in their classrooms. Second, participants believed that they lack knowledge and confidence in implementing specific reading strategies. Finally, 67% of the participants indicated that they do not spend time providing reading strategy instruction in typical lessons within their content area classroom. According to the researchers, these findings were disconcerting because prior research indicates that instruction using content area reading strategies was the most effective way of increasing students' comprehension and developing skilled readers (McCoss-Yergian et al., 2010). McCoss-Yergian et al. (2010) concluded that poor attitude toward teaching reading strategies in the content areas due to lack of confidence, experience and time inhibited teachers from teaching expository text effectively; therefore, students would continue to lack the strategies to help them

comprehend what they read. The researchers suggested that teaching reading strategies in the content areas needs to be implemented in order for students' comprehension to improve.

The four studies in this section provided insight about reading comprehension in the content areas, specifically in the areas of science and social studies. The first study by Philbrick (2009) confirmed that reading comprehension in the content areas is most effectively learned when reading strategies are taught during the content area classes. The second study by Williams et al. (2009) confirmed that comprehension instruction can be taught at the primary level without the loss in the amount of content acquired in the content areas. The third study by Simmons et al. (2010) concluded that allocating a portion of instructional time to teach comprehension or vocabulary strategies using social studies texts will enhance students' comprehension. The fourth study by McCoss-Yergian et al. (2010) concluded that poor teacher attitudes toward teaching reading strategies within the content areas will negatively impact student comprehension. The researchers of all four studies confirmed that teachers need to implement reading comprehension strategy instruction effectively within the content areas to maximize student success.

The researchers of all four studies confirmed that reading comprehension strategy instruction should not occur separately from the content areas at all times. Reading comprehension strategy instruction should not only take place during language arts class, but during content area classes as well at the elementary level. Furthermore, the researchers of all four studies agreed that learning and the context in which the learning occurs are linked to one another (Philbrick, 2009; Williams et al., 2009). In the following section, more specific ways to teach expository text comprehension in the content areas are addressed.

Expository Text Structure

Readers who understand a text's organizational structure typically indicate greater success in identifying important information and relationships between ideas (Hall et al., 2005). If a student understands the text structure and the way it is organized, the student's comprehension of the text can improve. Expository text, however, is more difficult to understand than narrative text. It requires completely different types of strategies than reading of stories. For example, technical, language, unfamiliar formats, strange organizational patterns, and the lack of depth may hinder a student's comprehension (Philbrick, 2009; Westby et al., 2010). Because much of the material that students read in school is nonfiction, the ability to read expository text is critical to a child's success in school. In this section, a number of researchers studied the effects of explicitly teaching two different types of text structures to improve elementary students' comprehension of expository text. The two text structures are compare/contrast and cause/effect. The researchers also studied the effects of text structure instruction on content acquisition. The first study conducted by Hall et al. (2005) investigated the effectiveness of an instructional program designed to teach comprehension through the compare/contrast text structure in a small group setting. The second study conducted by Williams et al. (2005) investigated the effectiveness of an instructional program designed to teach primary students how to comprehend compare/contrast expository text in a whole group setting. The third study conducted by Williams (2005) incorporated previous research to investigate the effectiveness of an instructional program designed to teach compare/contrast text structure to students who are at-risk for academic failure. The fourth study by Williams et al. (2007) determined if cause/effect text structure instruction can improve comprehension on both oral and written tasks while increasing social studies content acquisition. The fifth study by Westby et al. (2010) examined the effect of teaching various text structures has on the

microstructure and macrostructure in written summaries of expository texts. All researchers examined the effectiveness of implementing explicit text structure instruction in to the elementary curriculum.

Hall et al. (2005) conducted a study to explore the effectiveness of an instructional program intended to teach expository text comprehension during small group guided reading. The main focus of the instructional program was text structure awareness. The researchers believed that readers who understand a text's organizational structure succeed more often in understanding information. Based on recent research conducted in this area in a whole group setting, the researchers hypothesized that the program would be successful in a small group since individual students' needs can be met more effectively. The independent variable was the type of instructional program: text structure program versus content program versus no program. The dependent variables were results of a standardized reading assessment, and results from nine measures that assessed written summaries, use of clue words, vocabulary recall, and use of a specifically designed matrix.

The sample consisted of 72 second graders from five classrooms in a Title 1 suburban school. Forty-six percent of the students received free or reduced-rate lunch, and 12% of the student body had limited English proficiency. The population of the school was 87% Caucasian, 11% Hispanic, 1% Pacific Islander, and 1% Asian/other. The researchers randomly divided students into 20 small guided-reading groups. The eight sections of students in the text structure program received compare/contrast text structure instruction. The four sections of students in the content program received instruction focused on factual information rather than text structure. The last eight sections of students did not receive instruction in either text structure or specific content, and served as the control group. All children were administered pre-assessments which

included a standardized reading assessment, and four pre-assessments specifically designed to assess particular aspects of the program (clue words, summary of a compare/contrast text, matrix and vocabulary.) The post-assessments included the same four measures, plus five additional assessments designed to evaluate particular aspects of the program (three summaries of compare/contrast text, summary of unstructured text, recall and use of clue words, matrix, vocabulary, and conceptual understanding of compare/contrast.)

The text structure program consisted of the following main activities: introducing the text to the students, reading the text, and discussing and revisiting the text. The focus of this program was to highlight the structure of the text for facilitating comprehension. In the text structure program, teachers introduced the children to specific content, vocabulary, and clue words, such as *both*, *similar*, and *different*. Students used the clue words in sentences and were reminded to use the clue words in other situations as well. In the content program, the same procedures were followed, with the exception of an explanation of clue words. The main focus of this program was regarding factual information about animal classification and vocabulary concepts related to the content. For the next portion of the program (reading the text), the text structure program teachers listened as students “mumble read” the text aloud. Teachers identified clue words, helped with vocabulary words, and assisted with any other word difficulties. In the content program, the teachers followed the same procedures once again, with the exception of identifying clue words. Finally, for the last section of the programs, teachers in the text structure program discussed and revisited the text by discussing and reviewing vocabulary words and concepts. Students completed graphic organizers, reiterated the comparisons they found in the text, completed up to four matrices, and wrote a text summary. In the content program group,

teachers discussed and revisited the text by reviewing target vocabulary words and visiting major concepts. The students also created a graphic organizer and wrote a summary of the text.

Two scorers chosen by the researchers analyzed the results of the study. Depending on what was measured, the scorers ranked student responses anywhere on scales from 0-2 to 0-9. The results of the study indicated that students in the text structure program scored significantly higher than students in the content and no-instruction programs in the following areas: summarizing compare/contrast paragraphs about instructional content, recalling and using clue words, using a matrix, and conceptually understanding the compare/contrast structure. In addition, students in the text structure program wrote well-structured summaries of greater quality than those who received content instruction or no instruction at all. There was no overall effect of treatment regarding summarizing compare/contrast paragraphs unrelated to instruction or unstructured text. The researchers concluded that compare/contrast text structure instruction is an effective strategy to improve second graders' comprehension of expository texts. Hall et al. (2005) determined that the strategy is crucial in order to organize information in expository texts and ultimately create meaning without detracting from the amount of content acquired.

Similar to the first study that focused on the compare/contrast expository text structure, Williams et al. (2005) conducted a study to explore the effectiveness of an instructional program to teach compare/contrast text comprehension. However, Williams et al. (2005) implemented the program in a whole group setting as opposed to a small group setting. The researchers hypothesized that comprehension of expository text would improve based on compare/contrast text structure instruction. Furthermore, the researchers believed that this instruction would not detract from the amount of content knowledge acquired. The independent variable was the type of instruction: text structure versus content versus no instruction. The dependent variables

consisted of the written and oral results of the graphic organizer, recall of clue words, written summaries, ability to transfer knowledge, and vocabulary concepts.

The sample consisted of 128 second-graders from three elementary schools in an urban city. Similar demographics spanned across the three schools: 57% of students were Hispanic, 41% were African-American, 1% was Caucasian, and 1% was Asian/other. Of those 128 students, 6% were enrolled in special education services, and 88% received free or reduced-rate lunch. The researchers administered pretests that consisted of written and oral responses regarding knowledge of clue words, graphic organizers, compare/contrast questions, vocabulary, and knowledge transfer. Criteria for judging whether a response was correct, how many points it was given were determined by two of the researchers, who also constructed a scoring template. Following the pretests, researchers randomly divided students into three groups. The text structure group focused on text structure instruction and content acquisition, whereas the content group focused solely on content acquisition. The group without instruction did not receive either treatment.

The goal of the text structure program was to teach children how to classify animals according to four basic features through compare/contrast text structure instruction. First, teachers introduced clue words and read stories about targeted animals followed by a discussion. Next, teachers introduced vocabulary words related to the animals followed by students reading a compare/contrast paragraph silently. Then, students labeled the similarities and differences between the animals in the paragraphs and circled clue words. Once these tasks were completed, students organized the content using a graphic organizer. Students then made comparative statements about the animals before the teacher introduced three compare/contrast questions to

help students organize statements. Finally, students wrote summaries about the text within a provided text frame.

Contrary to the focus of the text structure program, the content program focused solely on content acquisition. Teachers began each lesson with activating students' background knowledge regarding the two animals to be studied. Next, the teacher read books about the animals, led a discussion, and answered students' questions. Following these activities, students organized the content from the texts into an information web followed by learning a list of vocabulary concepts. Students then read a compare/contrast paragraph. The students looked back at their information webs and paragraphs and shared with each other what interesting facts they learned. Finally, students used the information web, paragraph, and class discussion to complete a paragraph frame that described what they learned about the two animals.

Two scorers chosen by the researchers analyzed the results of the study. Depending on what was measured, the scorers ranked student responses anywhere on scales from 0-2 to 0-9. The results of the study indicated that students in the text structure group significantly outperformed the other two groups in most areas. These areas included recall and location of clue words, oral and written versions of the matrix graphic organizer, knowledge transfer, and vocabulary concepts. In the areas of the recall of compare/contrast questions and the web graphic organizer, there was no effect of treatment. The authors concluded that students who received the text structure program not only comprehended expository text, but this instruction did not detract from content acquisition. Furthermore, the results indicated that students were able to transfer what they had learned about text structure to other content as well. Overall, Williams et al. (2005) determined that by learning the compare/contrast text structure, students' comprehension of the expository texts improved.

Similar to the first two studies that focused on instruction of compare/contrast expository text structure, the study conducted by Williams (2005) explored the same concept in a whole group setting. Unlike the first two studies, at-risk elementary students were the targeted group for this study. The purpose of the study was to determine if at-risk primary students' comprehension of expository text would improve if teachers taught compare/contrast text structure. Additionally, researchers determined if students' content acquisition decreased due to the heavy amount of focus on text structure. Based on recent research, Williams (2005) hypothesized that teaching compare/contrast text structure would increase reading comprehension of at-risk elementary students. The independent variable consisted of the type of instruction: text structure program versus content program versus no instruction. The dependent variables consisted of various outcome measures that assessed information recall, written summaries, and oral summaries.

The sample consisted of 173 students. Fifty-one percent of the students were Hispanic, 46% were African American, and 2% Caucasian, and 1% Asian. Nearly 90% of the students received free or reduced lunch, and 6% of the students were enrolled in special education services. All students were identified as at-risk for academic failure. The researchers randomly assigned students to one of three groups: the text structure program, the content program or the no-instruction program. The no-instruction program did not receive any type of treatment, whereas the text structure and content groups received instruction in either text structure or content.

To test the hypothesis, Williams (2005) developed a text structure program with an emphasis on text structure in conjunction with content acquisition. Over the course of ten weeks, teachers delivered animal classification content that incorporated a focus on text structure. To

begin each lesson, teachers introduced eight clue words, such as *alike*, *both*, and *compare*. Next, the teacher read aloud from selected encyclopedias and trade books about specific animals, followed by a class discussion. Vocabulary concepts related to the animals were then introduced, followed by silent reading of target compare/contrast paragraphs by students. After students silently read, they independently circled clue words and generated sentences to compare and contrast the animals. Students organized this information into a graphic organizer that supported the content goals. Finally, students wrote summaries of the paragraph (using a paragraph frame for only the first five lessons), followed by a review of the lesson.

Contrary to the text structure program, the content program focused solely on more traditional content instruction without an emphasis on text structure. The content program did not include a focus on clue words or compare/contrast questions as completed by the students in the text structure program. Teachers began each lesson by activating students' background knowledge regarding the targeted animals. After the teacher read a trade book aloud, a whole group discussion with a focus on content transpired. Teachers answered students' questions regarding content. Next, teachers introduced specific vocabulary words before students completed an information web and a silent reading of a target paragraph. Following the silent reading, another discussion regarding the animal classification content occurred. Students then wrote a summary about the content of the trade books with the support of a paragraph frame. Finally, teachers concluded each lesson with a review of each aspect introduced in the lesson. Through analyzing the outcome measures using a rubric designed by the researcher, the results were determined. The results of the study indicated that the text structure group scored significantly higher on all three of the outcome measures that assessed the following text structure strategies: recall of clue words, the use of a graphic organizer, and compare/contrast

questions. Students in the text structure program scored higher than students in the content program and no-instruction program on orally constructing well-structured comparative statements as well as written summaries. Results also indicated that students who received instruction in the text structure program transferred knowledge more effectively than students in the content and no-instruction programs. On vocabulary concepts and content measures that assessed knowledge about content, both the text structure and content groups performed significantly better than the no-instruction group. The researchers concluded that reading comprehension instruction is effective for early elementary school children at risk for academic failure through compare/contrast text structure instruction. Furthermore, Williams (2005) concluded that this type of instruction did not detract from the students' acquisition of content.

Similar to the first three studies that focused on the effect of explicitly teaching text structures, Williams et al. (2007) conducted a study to evaluate the effectiveness of a comprehension program embedded in social studies instruction. More specifically, the researchers implemented the instruction of cause/effect text structure into social studies instruction and geared the program towards at-risk second graders. The program included instruction of clue words, generic comprehension questions, graphic organizers, and cause-effect target paragraphs. Based on the research in this area, the researchers hypothesized that students' reading comprehension would improve based on text structure instruction. The independent variable was the type of the instructional program: text structure program versus content-only program versus no program. The dependent variables consisted of various comprehension, content and strategy outcome measures that assessed key program components.

The participants included 243 students from three different schools in New York City, New York. All three schools were Title 1 schools. Of the 243 students, 76.5% were Hispanic,

22% were African-American, and 1.5% were Asian or other. Ninety-three percent of the students received free or reduced lunch, and 5% of the student were in part-time or full-time special education services. Researchers randomly divided students into three groups of similar size. Students in the text structure and content-only programs received treatment, whereas students in the third program did not receive treatment.

The text structure program contained 22 lessons that focused on one historical community. An introductory lesson introduced the concept of cause-effect via a narrative book about a community. During this lesson, teachers introduced students to cause-effect clue words, such as *because*, *therefore* and *since*. Next, teachers instructed students in vocabulary concepts related to community embedded in target paragraphs, trade book read-alouds and discussions, completion of a community chart and cause-effect questions. Then, students read a target paragraph silently and aloud, and circled clue words followed by underlining the information that followed the words. Following these activities, students completed a graphic organizer for the target paragraph, and answered comprehension questions. A review of the aforementioned strategies ended each lesson as well as a synopsis of the content covered.

Similar to the text structure program, there were 22 lessons in the content-only program. Teachers involved with the content-only program used the same materials and taught the same social studies content as teachers in the text structure program. However, teachers did not focus on the cause-effect structure. Each lesson began with a discussion of students' background knowledge about the targeted community. This was accomplished through a KWL procedure (what I *Know*, what I *Want* to know and what I *Learned*). Students completed the first two sections of the chart as a whole group during this time. Next, teachers introduced specific vocabulary concepts, followed by a trade book read aloud and discussion. Following these

activities, a community chart was completed to summarize vocabulary concepts, as well as filling in the last portion of the KWL chart (what I *Learned*). Students then completed a graphic organizer with information learned during the lesson, followed by reading a target paragraph silently and aloud. Students answered comprehension questions in the same manner as the text structure program. However, instead of cause-effect structure instruction, students drew a picture and wrote a paragraph about what they learned. Finally, teachers reviewed the aforementioned strategies and content at the end of each lesson.

The researchers determined the mean proportions and standard deviations of the posttest measures to determine the results of the study. Depending on the outcome measure, points from 0-8 were given to each correct student answer. The findings of the study indicated an overall effect of treatment in regards to locating clue words, underlining effect clauses, and answering specific feature questions about the target paragraphs. In addition, there was also an overall effect of treatment regarding non-feature questions about the target paragraphs, vocabulary definitions, written responses to one cause/one effect questions, and oral responses to one cause/multiple effect questions. There was not an effect of treatment with completing the graphic organizer, recalling cause-effect questions, nor oral responses of one cause/one effect questions. The performance of all three groups did not differ on any of the three content outcome measures. This indicated that text structure instruction can be accomplished within a framework of content area instruction without a loss of content acquired. Williams et al. (2007) concluded that cause/effect text structure instruction can improve comprehension on both oral and written tasks in conjunction with increasing social studies content acquisition.

Similar to the first four studies in this section, Westby et al. (2010) investigated the effect that teaching various text structures has on student comprehension. However, Westby et al.

(2010) examined the effect that this teaching has on the microstructures and macrostructures in written summaries of expository text. The researchers define macrostructures as overall text organization, whereas text microstructures include vocabulary and syntactic patterns. Westby et al. (2010) hypothesized that by teaching students how to comprehend the microstructures and macrostructures of expository texts, they can effectively write summaries of these texts. Since text summaries reflect student text comprehension, this task is an accurate measure of how well students comprehend a text and its structure. The independent variable was the type of instructional group: a control group and a treatment group. The dependent variables were evaluations of three written summaries to determine students' comprehension of the expository texts.

The participants of the study included fourth and fifth grade students from five school districts in Utah. Two hundred forty fourth grade students participated, 155 of which were in the treatment group and 85 were in the control group. Two hundred fifty four fifth graders participated, 168 of which were in the treatment group and 86 were in the control group. Pretests concluded that students in both groups averaged similar reading levels. Students in the treatment classrooms received explicit teaching of identifying text structures by using graphic organizers, whereas students in the control group did not receive any type of text structure instruction.

This study reports on the final semester of a project that spanned over the two school districts for a duration of three years. The researchers launched Project ARC (Achievement in Reading and Content Learning) as a professional development program designed to support teachers in improving reading comprehension. Throughout this three year process, teachers received two professional development days and monthly meetings to identify ways to address students' literacy needs. No one strategy for teaching students text structures was used. Rather,

using curricular materials, teachers of the treatment group taught students how to identify various expository text structures (e.g. cause/effect, compare/contrast, description, problem/solution). Furthermore, teachers taught student how to find signal words, complete graphic organizers and draw graphic organizers. The overall emphasis during this phase of the study was to teach text structure as a way to promote comprehension. At the conclusion of the semester-long portion of this study, students were asked to read and summarize three expository passages. Two passages were cause/effect and one passage was compare/contrast. Then, students needed to identify the text structure, fill in a cloze graphic representation, mark signal words and finally write a summary. Each summary was analyzed for microstructure and macrostructure components. One way that researchers analyzed the summaries was by using a macrostructure rubric ranging from 0 to 4 points. A second way of analysis was a microstructure analysis that examined clauses. A final assessment tool was a six trait rubric with a range of 0-24 points that examined both the microstructure and macrostructure components. Written samples were coded and analyzed by researchers who then discussed the samples.

Using a two-way analysis of variance with Bonferroni correction, data were analyzed. According to all microstructure analyses, macrostructure analyses and the six trait rubric score, fifth graders had significantly higher scores on their written summaries than the fourth graders. Treatment groups at both grade levels had significantly higher scores than the control groups. Treatment may have promoted greater growth than age-related development because differences were slightly greater between treatment and control groups rather than between fourth and fifth grade students. The researchers also discovered that fourth grade students in the treatment group did as well as or even better than the fifth grade students in the control group. Overall, students in the treatment groups wrote summaries that were significantly better than control group

students. Since students in the treatment group had more accurate summaries, the researchers concluded this was due to the fact that their text comprehension was better. This stems from the instruction they received of various text structures. The researchers concluded that students should be instructed on how to identify expository text structures to improve their reading comprehension.

The five studies in this section provided insight about the effectiveness of explicitly teaching text structures, namely compare/contrast and cause/effect, to primary grade students. The first study confirmed that teaching compare/contrast expository text in a small group setting improved students' comprehension. The second study confirmed that teaching the same type of text structure in a whole group setting improved students' comprehension as well. The third study confirmed that teaching compare/contrast text structure instruction is effective for primary students at-risk for academic failure. The fourth study confirmed that cause/effect text structure instruction can improve comprehension on both oral and written tasks while increasing social studies content acquisition. The fifth study confirmed that students should be instructed on how to identify expository text structures as evidenced by accurate summaries that reflected student comprehension. The researchers of all five studies confirmed that explicit text structure instruction did not detract from students' content acquisition (Hall et al., 2005; Williams, 2005; Williams et al., 2005; Williams, 2007). Furthermore, the researchers of all four studies agreed that in order to minimize an overall decline in reading scores as students enter the upper grades, it is necessary to teach children how to comprehend expository texts in the primary grades through explicitly teaching text structures (Hall et al., 2005; Williams, 2005; Williams et al., 2005; Williams, 2007). This teaching can transpire through compare/contrast and cause/effect text structure instruction embedded during content area literacy instruction within classrooms.

Conclusion

One instructional strategy that contributes to increased comprehension of expository text is explicitly teaching text structure. The first section of this chapter focused on narrative text comprehension versus expository text comprehension, specifically the influences on expository text comprehension. Best et al. (2008) focused on the influence of world knowledge and decoding on reading comprehension whereas Romero et al. (2005) focused on students' ability to process local and global questions. Kucer (2010) concentrated on the impact that background knowledge and familiarity of text structure had on the expository text comprehension of students. Even though the researchers conducted different studies, they reached the same conclusions. The researchers concluded that students tend to comprehend narrative text better than expository text. As a result, the researchers agreed that students should be explicitly taught how to comprehend expository text.

The second section of research in this chapter focused on content area literacy, specifically embedding comprehension instruction into the content areas of science and social studies. The studies by Philbrick (2009), Williams et al. (2009), Simmons et al. (2010) and McCoss-Yergian et al. (2010) revealed that embedding expository text structure instruction into the areas of science and social studies can improve students' comprehension and content acquisition. The study by Philbrick (2009) determined that lessons in reading expository text and strategies for active processing of the text enhanced the learning of both the reading strategies and the social studies content for fifth grade students. Similarly, the study by Williams et al. (2009) concluded that explicit comprehension instruction at the primary level can be effective in content area lessons without a loss in the amount of content acquired. The study by Simmons et al. (2010) concluded that teaching comprehension or vocabulary strategies using

social studies texts will enhance student comprehension. The final study in this section by McCoss-Yergian et al. (2010) concluded that poor teacher attitudes toward teaching reading in the content areas negatively impacts student comprehension. Even though the studies were conducted in different manners, all researchers concluded that expository text comprehension should be taught within the content area of which it belongs.

The third section of this chapter focused on the effects of explicitly teaching two different types of text structures to improve elementary students' comprehension of expository text, specifically compare/contrast and cause/effect. Furthermore, the researchers also studied the effects of text structure instruction on content acquisition. The first study conducted by Hall et al. (2005) investigated the effectiveness of an instructional program designed to teach comprehension through the compare/contrast text structure in a small group setting. The second study conducted by Williams et al. (2005) investigated the effectiveness of an instructional program designed to teach primary students how to comprehend compare/contrast expository text in a whole group setting. The third study conducted by Williams (2005) incorporated previous research to investigate the effectiveness of an instructional program designed to teach compare/contrast text structure to students at-risk for academic failure. The fourth study by Williams et al. (2007) determined if cause/effect text structure instruction can improve comprehension on both oral and written tasks while increasing social studies content acquisition. The fifth study by Westby et al. (2010) examined the effects of teaching text structure on microstructures and macrostructures in written summaries of expository texts. Although different in many ways, researchers of all five studies concluded that explicitly teaching text structures, namely compare/contrast or cause/effect text structures will improve students' comprehension of expository text. Furthermore, the researchers agreed that it not sufficient to

simply teach the expository content, but rather students need to learn how to read expository texts effectively by learning how to read different text structures.

In conclusion, educators can effectively embed explicit expository text structure instruction into content area lessons at the primary level. Research has shown that this type of instruction will not detract from the amount of content acquired during content area instruction. In addition, research has shown that this type of instruction is successful in a whole group and a small group setting, as well as for students without learning disabilities and with students with learning disabilities (Hall et al., 2005; Williams, 2005; Williams et al., 2005; Williams et al., 2007; Williams et al., 2009). Due to the current lack of instruction and exposure to expository text at the primary grade level, students are struggling to comprehend these texts as they progress through the upper grades. By teaching younger students the underlying structures of expository texts, the “fourth grade slump” can be minimized and students can have a more successful experience with comprehending expository texts. Most importantly, students will be better prepared to comprehend these texts in the upper grades and beyond. Based on the research in this area, the researcher conducted a comparable study with second graders. Similar to the summarized studies, the researcher explored the effectiveness of teaching cause/effect and compare/contrast text structure on Social Studies comprehension instruction. The procedures for this study are explored in the next chapter.

CHAPTER THREE: PROCEDURES FOR THE STUDY

Introduction

The study occurred within a second grade classroom in a whole group setting. Eighteen students participated in the study. Lessons occurred three times a week for 40 minutes during Social Studies instructional time. The study occurred for six weeks and was divided into two sessions. For the first three weeks, the researcher instructed students how to identify and comprehend the compare/contrast expository text structure. For the final three weeks, the researcher instructed students how to identify and comprehend the cause/effect expository text structure. The researcher chose several expository texts that covered second grade Social Studies content to use for instruction. During week one of each three week session, the researcher modeled how to identify the text structure and use a graphic organizer. During week two, the researcher led students in guided practice with a silent read of the text and a whole group lesson to complete the graphic organizer. Finally, during week three of each session, students independently read a passage and completed the graphic organizer. There was not a control group for this study. Rather, students were all part of the same treatment group and individually assessed. There were several dependent variables. Several components of the Qualitative Reading Inventory-5 (Leslie & Caldwell, 2011) were administered to determine the effectiveness of the intervention. Components included written answers to the three concept questions, a prediction task, and eight comprehension questions. In addition, students read a passage silently, and verbally retold the passage to the researcher. Other methods of assessment were Venn diagrams and t-charts. Students independently completed Venn diagrams and t-charts to demonstrate comprehension of compare/contrast text. As a final measure of assessment, students

independently completed cause/effect graphic organizers to demonstrate knowledge of the cause/effect text structure. The next section discusses the sample of the study.

Description of Sample

Once the researcher designed the study, the sample was selected. Eighteen second grade students in a Midwestern suburban school participated in the study. The school was one of five elementary schools in the district. The participants of this study included 10 boys and eight girls. Sixteen students were Caucasian, one student was Asian and one student was Latino. The range of students' ages was two, with the mean age identified as 7.6 years of age. One student was identified as having ADHD, autism and a speech/language impairment, and another student was identified as having a speech/language impairment. Both students had an IEP (Individualized Education Plan) but were able to participate in normal classroom activities with few adaptations. The student identified with ADHD, autism and a speech/language impairment had assistance from a paraprofessional for a majority of the school day. The other student identified with a speech/language impairment was ultimately dismissed from speech a week after the study began. Therefore, lesson accommodations were made only for the student identified with ADHD, autism and a speech/language impairment. Accommodations included a read aloud of the text by the paraprofessional as well as verbal and visual prompting. No concerns were noted for the remaining 16 participants in this study.

Description of Procedure

At the beginning of the study, the researcher administered a Level Two reading passage from the Qualitative Reading Inventory-5. The nonfiction passage, *Whales and Fish*, compared and contrasted whales and fish (see Appendix A). To assess prior knowledge, students answered three concept questions and completed a prediction based on the content of the concept questions

before reading the passage (see Appendix B). Next, students silently read the *Whales and Fish* passage. Prior to this reading, the researcher instructed students to use their best reading strategies as they were not going to receive assistance with reading. The researcher also informed students that they would need to retell the story once they finished reading. After students read the passage, they wrote answers for eight comprehension questions (see Appendix C). Both the concept questions and the comprehension questions were retyped verbatim by the researcher to allow adequate space for student responses. After students finished writing their responses to the questions, they were asked on an individual basis to retell as much of the passage as they could recall (see Appendix D). The researcher prompted students to *Retell the passage as though you are telling it to someone who has never read it*. For the student identified with special needs, the paraprofessional read aloud the text and questions. Accommodations were not made for other students participating in the study. Concept questions, comprehension questions, and the retellings were collected, analyzed and scored by the researcher.

After the researcher administered the pretests, comprehension instruction began. Prior to the study, the researcher created an anchor chart to assist students in understanding the compare/contrast text structure (see Appendix E). The chart included the definitions of compare and contrast, signal words, graphic organizer examples and questions for students to ask themselves when reading. This chart was subsequently read aloud by students before each lesson for the duration of three weeks. The researcher obtained the three second grade texts in week one from the Read Works Homepage. In addition to reviewing the chart on day one, the students and researcher chorally read a fictional passage titled *My Brother and I* (see Appendix F). The researcher chose this text because it was explicitly written in the compare/contrast format with signal words in italics. During the choral read, the researcher prompted students to highlight

signal words within the text (e.g. alike, different, both, same, etc.). Upon completion of the reading, the researcher and students completed a Venn diagram in the whole group setting (see Appendix G). The researcher modeled how to compare and contrast the text using a Venn diagram and recorded answers on the easel white board for students to observe. Additional answers provided by students were subsequently recorded as well. Students documented their answers on an individual Venn Diagram.

During the next two days, the lesson routines were very similar. On day two, the researcher and students chorally read an expository text titled *Schools Long Ago* obtained from the Read Works Homepage (see Appendix H). The researcher modeled how to locate signal words by using the anchor chart as a guide. The text was projected on the classroom SmartBoard for all students to view. As the researcher modeled how to highlight signal words as well as differences and similarities between schools now and then, the students used their highlighters on a copy of the text as well. Following this activity, students answered five multiple choice questions with a partner (see Appendix I). Then, the researcher reviewed the answers with the whole group, and changes, if any, were made by the students. Finally, a Venn diagram was completed as a whole group following the same procedure from day one. Students were directed to compare schools long ago, and the researcher recorded answers from volunteers on the white board. Similarly, students were then instructed to contrast schools from long ago and today, and answers from volunteers were recorded on the white board. On day three, a different expository text was used and additional comprehension questions were not completed in partnerships. The researcher and students chorally read a text titled *Colonial Life versus Life Today* obtained from the Read Works homepage (see Appendix J). The researcher modeled how to identify and highlight signal words and completed a Venn diagram in a whole group setting. Throughout the

week, the student identified with special needs worked one on one with a paraprofessional. The paraprofessional read the text aloud to the student as this child's reading level is below grade level. After an answer was discussed with verbal prompting, the paraprofessional wrote it down on a small white board for the student to copy as writing is difficult. At the conclusion of week one, all papers were collected by the researcher and analyzed.

During week two, the researcher introduced another expository text to the students titled *At Home: Long Ago and Today* (Brent, 2003). Also, the researcher introduced another graphic organizer called a t-chart (see Appendix K). The t-chart was divided into two columns in which students recorded similarities in one column and differences in the other. The researcher's goal by using a second graphic organizer was to expose children to another way to organize their comparisons. The book presented social studies content within the second grade curriculum and was written for ages six and higher as identified by the author. Before each of the three lessons during this week, the students and researchers read the anchor chart to review elements of compare/contrast text structure. On day one, the researcher read aloud the first chapter called *Where is Home?* It introduced the concept of the book, which compared and contrasted homes in the present day to homes long ago. After the read aloud, students independently read a copy of the next chapter called *The Living Room*. Once students finished reading, the researcher modeled how to compare and contrast the living room from present day and long ago. The researcher recorded one comparison on a large Venn diagram on the easel white board for all students to see. Then, the researcher instructed students to independently record another comparison. The researcher and a paraprofessional checked each students' answer for a correct response, and prompted incorrect responses with probing questions such as *Look back into the text and reread this part*. Next, volunteers shared their answers during a whole group discussion

and the researcher recorded several responses on the large Venn diagram. Students documented the new comparisons on their Venn diagrams. Finally, the researcher collected student work and checked for three correct responses in each section of the Venn diagram.

For the following two lessons of week two, a similar routine occurred. Students independently read a copy of the next two chapters called *The Bathroom* and *The Kitchen*. After reviewing the anchor chart, the researcher demonstrated how to locate and record a comparison from the text on a large Venn diagram. The researcher then instructed students to find a comparison independently and checked their answers. Following an independent response, the Venn diagram was completed as a whole group. Student work was collected, and each answer was worth one point each. Student work was scored from zero to six points. During this week, the same routine from week one occurred with the paraprofessional and the student with special needs.

During week three, students read the next three chapters independently. The chapters were titled *Chores*, *Dinner*, and *Outside*. Before students read the chapters, the researcher and students reviewed the anchor chart to review elements of compare/contrast text. The researcher then instructed the students to read the chapters independently and search for similarities and differences between homes in present day and long ago. Finally, the researcher instructed the students to record three sentences under each section of the Venn diagram to compare and contrast the aspects of home from present day and long ago. At the conclusion of week three, the researcher collected, analyzed and scored student work. Student work was scored from zero to six possible points.

Once the three week session concluded, another three week session began. A similar instructional routine occurred between the researcher and students during the three weeks;

however, students learned how to identify and comprehend the cause/effect text structure instead. The texts chosen for the three weeks, with the exception for day one, were from the series called *Easy Reader Biographies* by Scholastic. The researcher chose the texts because the content was included in the second grade Social Studies curriculum. Also, the reading levels of this text series ranged from levels I-K, which were second grade reading levels as identified by the authors. Prior to the study, the researcher created an anchor chart to help students understand the cause/effect text structure (see Appendix L). The chart included the definitions of cause and effect, signal words, graphic organizers and questions for students to ask themselves when reading. This chart was subsequently read aloud by students before each lesson over the next three weeks. During week one, the researcher modeled how to identify causes within a text. During week two, the researcher guided students to identify causes and effects within a text in isolation. During week three, students independently practiced identifying and comprehending causes and effects simultaneously. In addition to reviewing the chart on day one, the students and researcher completed a cause/effect worksheet in a whole group setting. The researcher obtained the worksheet titled *What Happened* from the book *Cause & Effect: Using Causes and Effect to Make Connections* (Warrick, 1999) (see Appendix M). The researcher guided students on how to match the cause with the effect, and the worksheet was completed together in a whole group setting. On day two, the researcher and students chorally read aloud a text titled *George Washington* (Martin, 2007). Next, the researcher modeled how to complete the first two boxes of the cause/effect graphic organizer (see Appendix N). The graphic organizer was projected onto the SmartBoard and the researcher recorded answers on it while students recorded answers on their worksheets. The researcher read aloud the causes and modeled how to search the text and find the effects. Finally, students were prompted to think of the effect for the last cause

listed on the page. Several sample answers were verbalized, and one answer was recorded on the graphic organizer for students to copy. The same routine occurred for the last lesson of this week, only a new text was used titled *Squanto* (Ghiglieri, 2007). The same graphic organizer was used as well, except that it was modified to fit the content of the story. At the conclusion of week one, the researcher collected student work and scored it from zero to three points.

During week two of this portion of the study, students began each lesson by reading the cause/effect anchor chart with the researcher. Next, the researcher instructed students to silently read the first half of the book called *Abraham Lincoln* (Findley, 2007). Once students finished the reading, the researcher modeled how to complete the first two boxes of the cause/effect graphic organizer. The graphic organizer was projected onto the SmartBoard and the researcher recorded answers while students recorded answers on their worksheets. The researcher read aloud the causes and modeled how to look back into the text to find the effects. Finally, the researcher prompted students to think of the effect for the last cause listed on the page. Students verbalized several answers, and one answer was recorded on the graphic organizer for students to copy. The researcher and a paraprofessional checked each student answer for a correct response, and prompted incorrect responses with probing questions such as *Look back into the text and reread this part*. Next, volunteers shared their answers during a whole group discussion and the researcher recorded several responses on the SmartBoard graphic organizer. Students added responses to their own graphic organizer. Finally, student work was collected and checked for three completed causes. The next two lessons of this week were conducted in the same manner. On day two, students read the second half of the text titled *Abraham Lincoln* (Findley, 2007). This time instead of the researcher modeling how to find the causes, the researcher modeled how to find the effects. Answers were recorded on another graphic organizer. Finally, on day three,

students read half of a text titled *Martin Luther King, Jr.* (Sweeney, 2007). The researcher reviewed how to find causes again with the students and they recorded answers on the graphic organizer. At the conclusion of week five, the researcher collected and analyzed student work. Student work was scored from zero to three points.

During the final week of the study, each lesson began in the same manner as the other lessons with reading the cause/effect anchor chart as a whole group. Students then read passages from two separate books. The books were divided into sections across the three days. On the first day, students read the first half of *Helen Keller* and finished the second half on day two (Ghiglieri, 2007). Students completed two separate graphic organizers. For the last day, students read the first half of *Harriet Tubman* (Findley, 2007). Students completed a final graphic organizer for this text. The researcher instructed the students to read the selections and record either a cause or effect, depending on the empty box on the worksheet. At the conclusion of day three, the researcher collected, analyzed and scored student work. Student work was scored from zero to three points.

To further enhance the comprehension of compare/contrast and cause/effect text structure, students completed homework for six weeks to support these skills. Students completed this homework once a week. The researcher informed parents of the six assignments prior to the study. For the first three weeks, students read selections from a book titled *Reading Comprehension, Grade 2* (Teacher Created Resources, Inc., 2007). The first selection was titled *City or Suburb* (see Appendix O). The second selection was titled *Getting Around* (see Appendix P). The third selection was titled *Inventions: Then and Now* which was obtained from the Read Works Homepage (see Appendix Q). For the three assignments, students answered the same prompts created by the researcher: *Name two similarities between (the topic) and name two*

differences between (the topic). For assignment one, students identified two similarities and two differences between cities and suburbs (see Appendix R). For assignment two, students recorded two similarities and two differences between transportation long ago and today. Finally, for assignment three, students identified two similarities and two differences from inventions long ago and today. The same graphic organizer was used, except the content was modified to correspond to the text. For the second three weeks, students needed to find the cause or effect of the selections and record their answers. The selections were also from the book *Reading Comprehension, Grade 2* (Teacher Created Resources, Inc., 2007). The first selection was titled *Becoming Farmers* (see Appendix S). *The First Thanksgiving* was the title of the second selection (see Appendix T). The third selection was titled *Blind and Deaf* (see Appendix U). During the three weeks, students needed to find the cause or effect for three possible scenarios regarding each topic. For the first assignments, students needed to identify causes and effects surrounding farming (see Appendix V). Students needed to record causes and effects surrounding the Pilgrims and Native Americans for assignment two. For assignment three, students needed to identify causes and effects regarding Helen Keller's life. After students completed each homework assignments, parents reviewed and initialed the paper. If a child did not complete the assignment, it was returned home for completion. One hundred percent of the children returned their homework each week. Homework was collected, analyzed and scored by the researcher. The compare/contrast homework was scored from zero to four points. The cause/effect homework was scored from zero to three points. The researcher sent home corrected homework.

Data Collection

The researcher collected, analyzed and/or scored various student assessments and assignments throughout the duration of the study. First, the researcher collected, analyzed and scored the QRI-5 concept questions, comprehension questions, and retellings. The written responses to the three concept questions were worth nine points total. Each question was worth one, two or three points each, depending on the amount of detail provided by the student. Based on the concept questions score, the passage was identified as familiar or unfamiliar for the student. If students scored five points or more, the text was considered familiar. Conversely, if the students scored four points or less, the text was considered unfamiliar. An example of a concept question was *How do whales breathe?* Next, the researcher scored students' predictions for zero, one or two ideas implicitly or explicitly stated in the text. Then, the researcher scored the responses to eight comprehension questions regarding the passage's content. There were four explicit and four implicit questions for a total of eight possible points. The researcher recorded the number of implicit questions correct as well as the number of explicit questions correct. An example of an implicit question was *What part of the whale is like our nose?* An example of an explicit question was *What part of the whales and fish are alike?* Based on the number of correct answers, the passage was marked as frustration, instructional or independent for the student. Finally, the researcher recorded how many ideas each individual student was able to recall without prompting.

At the conclusion of weeks one and four (the first week of each session), the researcher collected and reviewed answers on the Venn diagram and the cause/effect graphic organizer. The activities were completed as a whole group, so the researcher did not score the assignments. At the end of weeks two and five (the second week of each session), the researcher collected and analyzed the assignments. The researcher scored student work from zero to six points for the

compare/contrast assignments, one point for each idea written on the Venn diagram. The cause/effect assignments were scored from zero to three points. Finally, during the independent assignments for weeks three and six of the study, the researcher collected, scored and analyzed the assignments. For week three, student work was scored from zero to six points, one for each correct answer in each section of the Venn diagram. For week six, student work was scored from zero to three points, one point for each cause or effect completed. In addition to scoring student assignments completed in class, the researcher scored the homework. For the first three weeks, the assignments were scored from zero to four points, one point for each correct answer. For the last three weeks, the assignments were scored from zero to three points, one point for each correct answer. In addition to recording the homework response scores, the researcher recorded whether or not parents initialed each assignment.

After the data was collected, analyzed and scored, the researcher determined results of the data. The researcher analyzed pretest and posttest results. Specific sets of data were graphed and analyzed. The researcher determined the mean, median and mode of pre and post retellings, as well as and pre and post explicit and implicit answers based on the QRI-5 results. The researcher also conducted paired, one tailed t-tests for these three test results as well. Furthermore, the researcher determined the mean, median and mode the six independent assignments completed for the compare/contrast and cause/effect texts.

Conclusion

In conclusion, the researcher's goal during the six-week study was to explore the effects that teaching expository text structures had on second graders' comprehension. For the study, the research narrowed the focus by choosing two text structures to teach within one content area. For the first three week session, the researcher instructed students in how to identify and

comprehend the compare/contrast text structure. For the second three week session, the researcher instructed students in how to identify and comprehend the cause/effect text structure. This instruction occurred during Social Studies instructional time. The researcher collected, analyzed and/or scored various student assessments and assignments throughout the duration of the study. Upon completion of the study, the researcher determined the results using a variety of methods. The next chapter discusses the results of the study.

CHAPTER FOUR: RESULTS

Introduction

The purpose of the study was to determine the effect of explicitly teaching expository text structure on second graders' Social Studies reading comprehension. The goal of the researcher was to teach children how to identify and comprehend text structure, specifically compare/contrast and cause/effect. The researcher hypothesized that teaching children how to identify and comprehend the two text structures would enhance their comprehension of social studies content. The data represented in this chapter reflects the pretest and posttest results of the Qualitative Reading Inventory-5 administered by the researcher. The chapter also includes data from six independent assignments completed by students. Several components of the Qualitative Reading Inventory-5 were administered, scored and analyzed by the researcher. One component of the QRI-5 was the pre and posttest comprehension questions, both implicit and explicit. There were four explicit and four implicit questions scored from zero to eight. An example of an explicit question was *According to the passage, how are whales and fish different?* An example of an implicit question was *What is this passage mainly about?* A second component of the QRI-5 administered by the researcher was the pre and posttest oral retelling. Students were prompted to tell the researcher what they recalled about the text. The researcher recorded how many ideas each student was able to recall without prompting. In addition to scoring and analyzing components of the QRI-5, the researcher scored and analyzed six assignments completed independently by students. During week three, students independently completed three Venn diagrams. Student work was scored from zero to six points, one for each correct answer in each section of the Venn diagram. For week six, students independently completed three cause/effect graphic organizers. Student work was scored from zero to three points, one

point for each cause or effect completed. The assignments completed in a whole group setting with the researcher and the students were not analyzed. Only independent assignments were analyzed to determine student growth. The next section discusses the presentation of the data.

Presentation of Data

For the implicit and explicit pre and posttest comprehension question results, the researcher determined the mean, median, mode and standard deviation. In addition to determining the mean, median, mode and standard deviation, the researcher conducted a paired, one tailed *t*-test for the retelling and comprehension questions. Similarly, for the pre and posttest retellings, the researcher determined the mean, median, mode and standard deviation. Results were calculated and organized into three separate bar graphs. Students were identified by a randomly assigned number. For the six independent student assignments completed during weeks three and six, the researcher determined the mean, median, mode and standard deviation. Unlike the retellings and comprehension results, the researcher did not conduct a *t*-test. Students were also identified with their initials for these assignments. The next section discusses the researcher's analysis of the data collected.

Analysis of Data

Upon completion of the six-week study, the researcher calculated and reported the results of pre and posttest QRI-5 data. For the pretest explicit question results, the researcher determined a mean of 1.83. The maximum mean score was four. The mode of the data was two, and the median score was two as well. The standard deviation was 1.20. For the posttest explicit results, the researcher determined a mean of 2.38 and a mode of three. The median score was three, and the standard deviation was 0.77 (see table 1).

Table 1

Explicit Pretest and Posttest Results

	Mean	Median	Mode	Standard Deviation
Explicit Pretest Questions	1.83	2	2	1.20
Explicit Posttest Questions	2.39	3	3	1.78

Differences in students pre and post-test explicit comprehension questions are presented in Figure One.

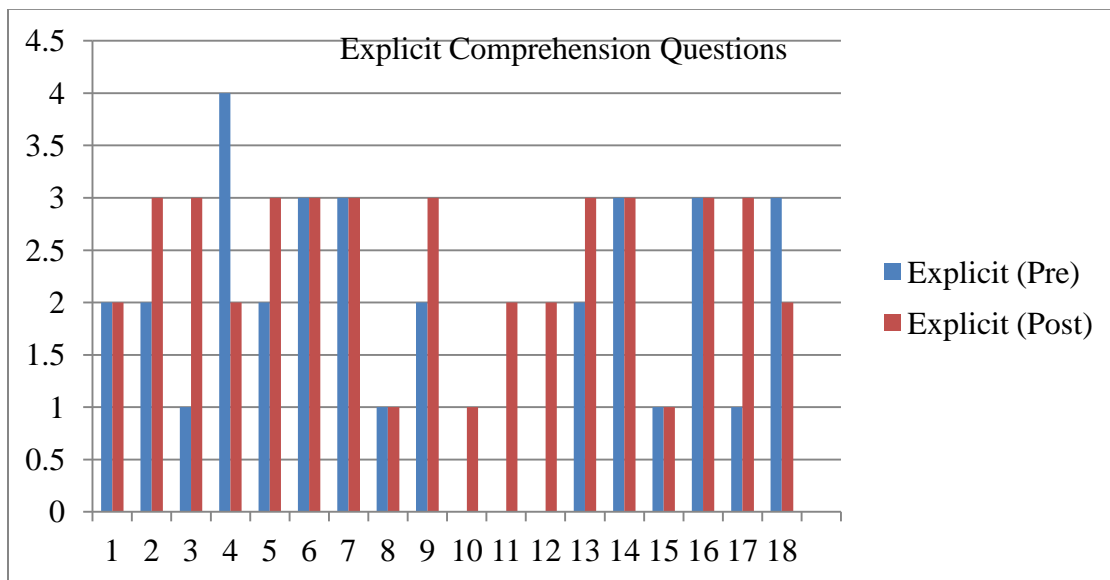


Figure 1. Explicit comprehension question results. This figure illustrates the pretest and posttest results of the QRI-5 explicit comprehension questions.

Post data results indicated an increase in mean from explicit pre and posttest responses. The mean increased from 1.83 to 2.38. For the pretest implicit question results, the researcher determined a mean of 2.44 and a mode of two. There was a median score of 2.5 and a standard deviation of 0.98. For the posttest implicit results, the researcher determined a mean of 2.5, a mode of three and a median of three as well. The standard deviation was 1.04 (see Table 2). Similar to the explicit question results, the researcher determined growth between implicit pretest responses to posttest responses. Post data results indicated a minimal increase in mean from 2.44

to 2.5, as well as an increase in mode from two to three. Also, there was an increase in the median score from 2.5 to three. The standard deviation of the pretest (0.98) and the standard deviation of the posttest (1.04) were similar (see Figure 2). Overall, the researcher determined growth from the explicit pretest to the posttest. However, the researcher did not observe growth from the implicit pretest to the posttest.

In addition to calculating the mean, mode, median and standard deviation, the researcher conducted a paired, one-tailed *t*-test for each assessment. A paired, one-tailed *t*-test was conducted to compare overall scores from the pre and posttest responses. There was a statistically significant difference in scores for the explicit pretest responses ($M=1.83$, $SD=1.20$) and posttest responses ($M=2.39$, $SD=1.78$); $t(17)=0.02$, $p=0.05$. Similarly, there was a statistically significant difference in scores for the implicit pretest responses ($M=2.44$, $SD=0.98$) and posttest responses, ($M=2.5$, $SD=1.04$); $t(17)=0.43$, $p=0.05$. The results of both *t*-tests suggested that positive gains could be attributed to the comprehension instruction surrounding compare/contrast and cause/effect text structures. Specifically, using all of the data, the researcher concluded an overall effect of treatment for explicit question responses.

Table 2

Implicit Pretest and Posttest Results

	Mean	Median	Mode	Standard Deviation
Implicit Pretest Questions	2.44	2.5	2	0.98
Implicit Posttest Questions	2.5	3	3	1.04

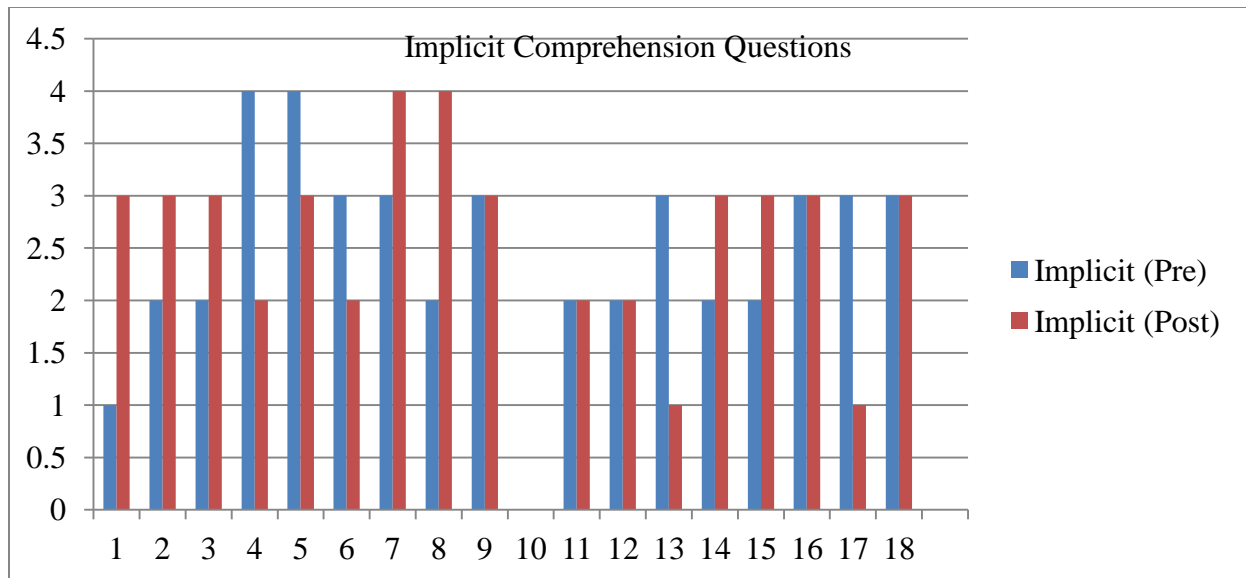


Figure 2. Implicit comprehension question results. This figure illustrates the pretest and posttest results of the QRI-5 implicit comprehension questions.

Once the results of the pre and posttest comprehension questions were determined, the researcher determined the effect of treatment for the retelling portion of the assessment (see Table 3). For the pretest retelling results, the researcher determined a mean of 15.87 and a mode of 20. The median score was 15, and the standard deviation was 6.50. For the posttest retelling results, the researcher calculated a mean of 18.11. The median was 19, and the mode was 19 as well. The standard deviation was 6.29. Overall, the researcher determined growth from retelling pretest to posttest responses (see Figure 3). Post data results indicated an increase in mean from 15.87 to 18.11. The median increased from 15 to 19; however, the mode decreased from 20 to 19. The standard deviations of 6.50 and 6.29 were similar. Overall, the researcher observed an effect of treatment surrounding compare/contrast and cause/effect text structure instruction.

In addition to calculating the mean, mode, median and standard deviation, the researcher conducted a paired one-tailed *t*-test to compare scores from the pre and posttest responses. There was a statistically significant difference in the scores for the retelling pretest responses ($M=15.67$, $SD=6.50$) and for the retelling posttest responses ($M=18.11$, $SD=6.29$); $t(17)=0.01$,

$p=0.05$. The results of the t -test suggested that positive gains could be attributed to the comprehension instruction surrounding text structure. Overall, the researcher concluded an effect of treatment.

Table 3

Retelling Assessment Results

	Mean	Median	Mode	Standard Deviation
Retelling Pretest Responses	15.67	15	20	6.50
Retelling Posttest Responses	18.11	19	19	6.29

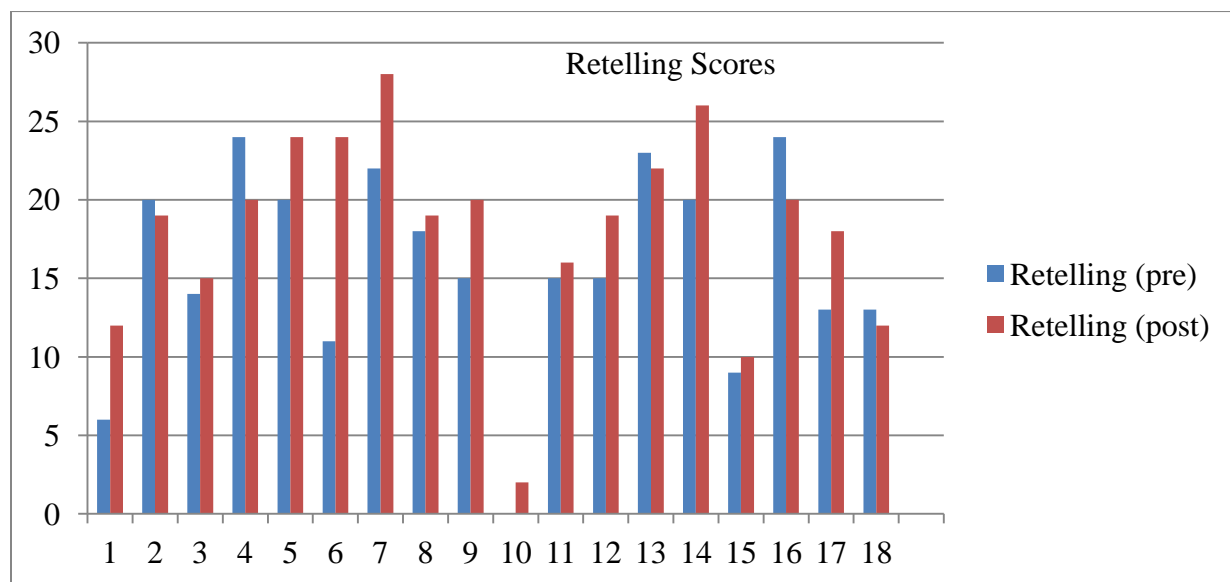


Figure 3. Results from the QRI-5 retelling assessment. This figure illustrates the pretest and posttest results of the QRI-5 retelling assessment.

In addition to determining results for the comprehension questions and retellings, the researcher determined results for six independent assignments (see Table 4). First, the researcher determined the results of the Venn diagrams used to determine growth of students' compare/contrast text structure knowledge. The students completed three Venn diagrams scored from zero to six points during week three. For the first assignment of week three, results

indicated a mean of 5.5. Both the mode and the median were calculated at six. The standard deviation was 0.79. For the second assignment, the mean was 5.28. The median and mode scores were both six. The standard deviation was 1.18. For the third assignment, the mean was 5.39. The median was 5.5 and the mode was six. The standard deviation was 0.70. An analysis of the three assignments indicates a decrease in mean from 5.5 to 5.28 from assignment one to assignment two; however, there was then an increase in mean from 5.28 to 5.39 from assignment two to assignment three. The median remained at six from test one to test two. However, the median decreased to five from test two to test three. The mode was calculated at six across all three tests. The standard deviation from week one scores was 0.79. The standard deviation from week two was 1.18, and the standard deviation from week three was 0.70. The results of the independent assignments suggested no significant difference in scores. The mean, median, mode and standard deviation were very similar for all three assignments (see Figure 4). Therefore, the researcher did not conclude an effect of treatment regarding the three assignment scores.

Table 4

Independent Assignment Results, Week Three

	Mean	Median	Mode	Standard Deviation
Assignment 1	5.5	6	6	0.79
Assignment 2	5.28	6	6	1.18
Assignment 3	5.39	5.5	6	0.70

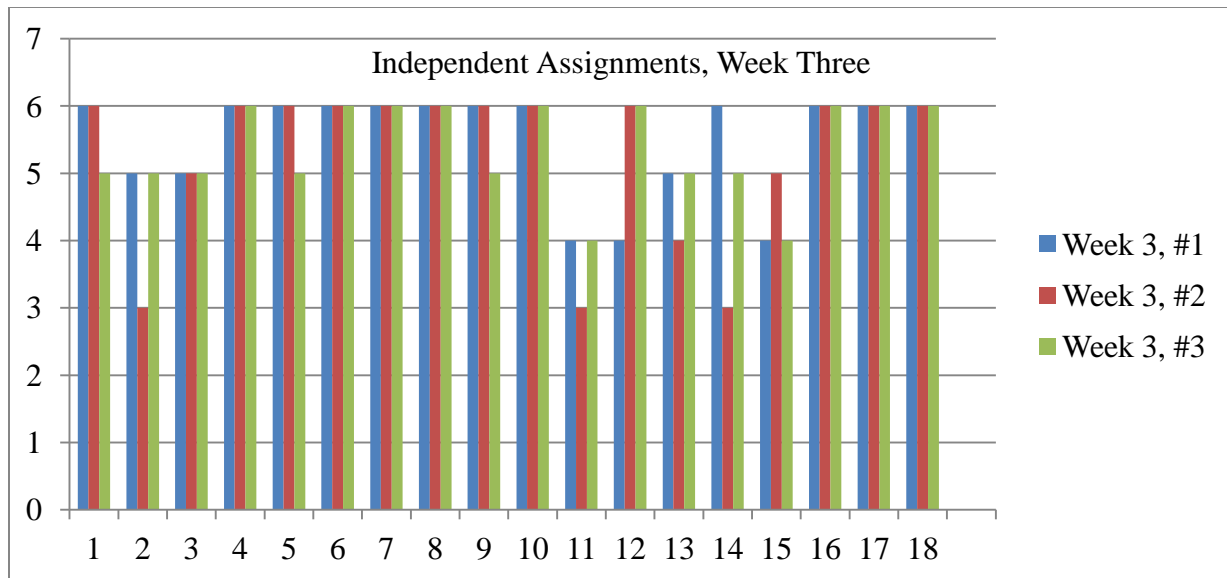


Figure 4. Results of independent assignments. This figure illustrates the results of the independent assignments demonstrating students' knowledge of compare/contrast text structure.

In addition to determining the results of the Venn diagram responses, the researcher determined the results of the cause/effect graphic organizer responses (see Table 5). The students completed three cause/effect graphic organizers scored from zero to three points during the final week of the study. For the first assignment of week six, the mean was 2.78 with a median of three. The mode was also three. The standard deviation was 0.43. For the second assignment, the mean was 2.33 with a median of 2.5. The mode was three with a standard deviation of 0.77. Finally, for week three, the mean was 2.56 with a median of three. The mode was three with a standard deviation of 0.62.

Table 5

Independent Assignment Results, Week Six

	Mean	Median	Mode	Standard Deviation
Assignment 1	2.78	3	3	0.43
Assignment 2	2.33	2.5	3	0.77
Assignment 3	2.56	3	3	0.62

Results indicated a decrease in mean from 2.78 to 2.33 from assignment one to assignment two; however, there was then an increase in mean from 2.33 to 2.56 from assignment two to assignment three. The median decreased from three to 2.5 from assignment one to assignment two; however, the median increased from 2.5 to three from assignment two to assignment three. However, there was a decrease in mean from assignment one to assignment two, and another decrease in mean from assignment two to assignment three. The mode remained a score of three across all three assignments. The standard deviation from week one scores was 0.43. The standard deviation from week two was 0.77, and the standard deviation from week three was 0.62. The overall results did not suggest an overall effect of treatment and growth in knowledge of cause/effect text structure (see Figure 5).

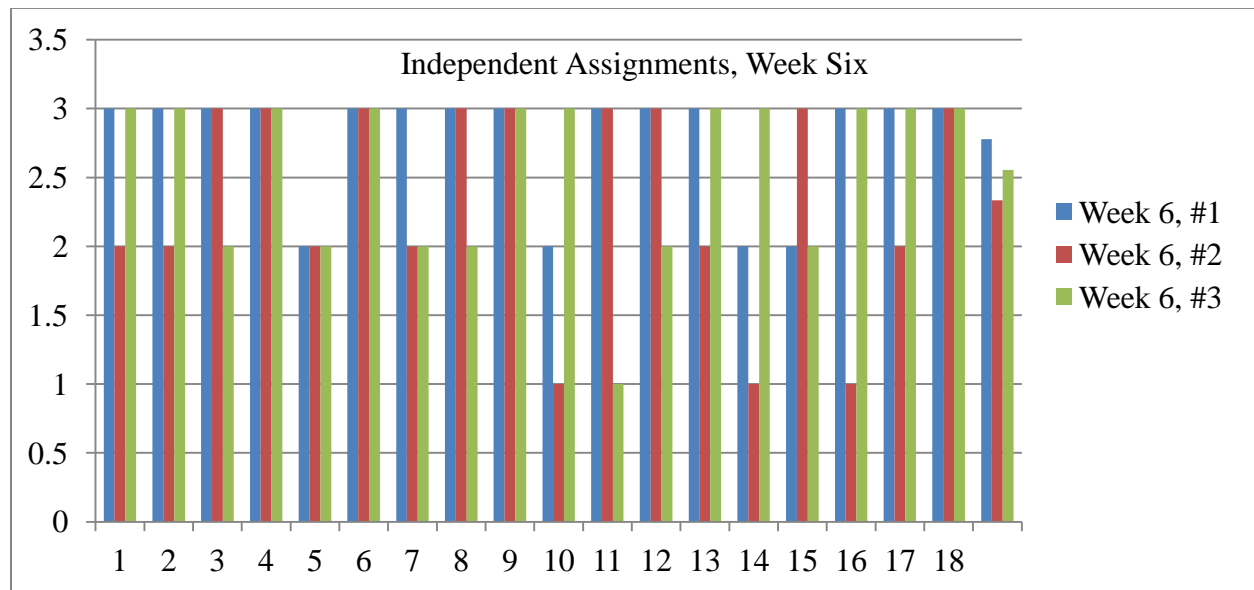


Figure 5. Results of week six independent assignments. This figure illustrates the independent assignment results from week six.

Conclusion

The purpose of the study was to determine the effects of explicitly teaching expository text structure on second graders' Social Studies comprehension. Throughout the six-week study,

the researcher taught children how to identify and comprehend text structures, specifically compare/contrast and cause/effect. As a result of this teaching, the researcher hypothesized that students' social studies comprehension would improve. The researcher scored and analyzed data from various QRI-5 assessments, as well as six independent assignments regarding compare/contrast and cause/effect text structure. The researcher determined growth from explicit pretest question responses to posttest responses, as well as the retellings that occurred pretest and posttest. However, the researcher did not determine growth from the implicit pretest responses to the posttest responses. Similarly, the researcher did not conclude an effect of treatment as a result of the retelling scores. In addition, the results of the first three assignments did not suggest an overall effect of treatment and growth in knowledge of cause/effect text structure. Similarly, the results of the last three assignments did not suggest an overall effect of treatment and growth in knowledge of cause/effect text structure. Overall, the researcher determined that there was very little effect of treatment. For the five sets of data scored and analyzed, the explicit pretest and posttest responses were the only ones that indicated a significant effect of treatment. The next chapter discusses an explanation of the results and conclusions of the study.

CHAPTER FIVE: CONCLUSIONS

Introduction

The purpose of the study was to determine the effect of explicitly teaching expository text structure on second graders' Social Studies reading comprehension. Throughout the six-week study, the researcher taught children how to identify and comprehend text structure, specifically compare/contrast and cause/effect. As a result of this instruction, the researcher hypothesized that students' social studies reading comprehension would improve. After various assessments were administered, the researcher collected, scored and analyzed the results to determine the effectiveness of the treatment. Of the five pretest and posttest assessments analyzed, the researcher determined growth from two assessments: the pretest to posttest responses of the explicit question responses and retellings. The researcher did not observe growth from the pre and posttest implicit question responses, nor the six independent assignments. Therefore, the researcher concluded very little effect of treatment. In this chapter, an explanation of data results, strengths and limitations of the study, and recommendations for future research are discussed. The following section connects the study to existing research supporting expository text comprehension within the content areas.

Connections to Existing Research

The researcher developed a study regarding expository reading comprehension embedded in content area instruction. By sixth grade, expository texts comprise more than 75% of reading in the classroom (Gill, 2009). However, students are exposed to more narrative texts than expository texts at the elementary level (Gill, 2009). This lack of exposure to expository texts is problematic because the "fourth grade slump" commonly occurs, which is a common decline in reading scores as children enter fourth grade (Best, et al., 2008; Philbrick, 2009; Williams, et al.,

2005; Williams, et al., 2007). Early exposure to the language of nonfiction may enhance children's understanding of these types of text and prevent future academic difficulties (Gill, 2009). Therefore, the earlier in the elementary years students are taught how to comprehend expository texts as well as understand text structure, the more successful they will be in middle school and beyond (Williams, 2005). Furthermore, research has also indicated that this form of comprehension instruction is effective if it is focused on a single text structure during reading comprehension lessons and content area instruction (Williams, 2005). With the support of prior research, the researcher conducted a study specifically teaching comprehension of expository text structure to second grade students within social studies instruction time. The researcher chose to instruct students how to identify and comprehend two text structures: compare/contrast and cause/effect. The researcher's goal was to improve students' reading comprehension of social studies content as a result of text structure instruction. The next section explores the influence of the Common Core State Standards on the development of the study.

Connection to Common Core Standards

The Common Core State Standards guided the development of the study. The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn in a specific grade level. As a result, teachers use the standards as a guide for their teaching of Math and English Language Arts. According to the Common Core English Language Arts Standards for Informational Text (2010), students as young as kindergarten are expected to read and comprehend informational, or expository, texts. Beginning in grade two, students are required to comprehend expository texts across the content areas of history, social studies, science as well as technical texts. Furthermore, beginning in second grade and continuing through high school, students are expected to compare and contrast the most

important points presented by two texts on the same topic. According to the Reading Standards for History/Social Studies from Grades 6-12 (2010), students are required to comprehend texts within the grades 6–8 text complexity band independently and proficiently by the end of eighth grade. With the Common Core State Standards as a guide, the researcher designed the study. The researcher taught second graders how to identify and comprehend two expository text structures, specifically compare/contrast and cause/effect. Furthermore, the instruction occurred during social studies instructional time. The next section explains the results of the study.

Explanation of Results

The data that the research analyzed reflects the pretest and posttest results of the Qualitative Reading Inventory-5 (QRI-5; Leslie & Caldwell, 2011) and six independent assignments. One component of the QRI-5 administered by the researcher was the pre and posttest comprehension questions, both implicit and explicit. Four explicit and four implicit questions were scored for correctness or incorrectness with a minimum score of zero and a maximum score of eight. A second component of the QRI-5 administered by the researcher was the pre and posttest oral retelling in which students were prompted to inform the researcher what they recalled about the text. The number of ideas recalled without prompting was recorded by the researcher. Scores ranged from zero to 49. In addition to administering components of the QRI-5, the researcher scored and analyzed six assignments completed independently by students. During week three, students independently completed three Venn diagrams which were scored from zero to six points. One point was provided for each correct answer in each section of the Venn diagram. For week six, students independently completed three cause/effect graphic organizers which were scored from zero to three points. One point was provided for each cause or effect completed. All pretest and posttest assignments were analyzed to determine student

growth. For the results of the pretest and posttest assessments, the researcher determined growth through the analysis of various scores. First, the researcher calculated mean, median, mode and standard deviation for the explicit, implicit, and retelling pretest and posttest assessments. Similarly, the researcher calculated the mean, median, mode and standard deviation for the six independent assignments. In addition, the researcher conducted paired, one tailed *t*-tests for explicit, implicit and retelling pretest and posttest assessments.

Once the researcher calculated results, data were organized into graphs with corresponding tables. Students were anonymously identified with a number. For the explicit pretest and posttest responses, the researcher determined a statistically significant difference. The researcher observed an increase in scores for the explicit pretest responses ($M=1.83$, $SD=1.20$) and posttest responses ($M=2.39$, $SD=1.78$); $t(17)=0.02$, $p=0.05$. The median increased from 1.83 to 2.39, which indicated that the average student score of the explicit question responses increased from pretest to posttest. Second, the mode and median increased from two to three from pretest to posttest. This indicated that the middle student score and the score that occurred most often increased. Furthermore, the researcher determined that the standard deviation remained about the same. This indicated that the variation of scores from the mean of the data set were about the same from the pretest and posttest. Ultimately, based on these calculations, the researcher determined an effect of treatment on explicit questions surrounding expository content. For the implicit question results, the researcher determined a statistically significant difference in scores for the implicit pretest responses ($M=2.44$, $SD=0.98$) and posttest responses, ($M=2.5$, $SD=1.04$); $t(17)=0.43$, $p=0.05$. The pretest and posttest mean scores averaged about the same in the pretest and posttest. There was a minimal increase in mode from two to three, which indicated that the most popular student score slightly increased. The median

score increased from 2.5 to three, which indicated a slight increase in the middle score from pretest to posttest. With the standard deviation remaining about the same from pretest to posttest, this indicated that the variation from the mean of the data set were similar. Although the *t*-test indicated a statistically significant difference, the mean only increased by .06. Considering the data for the implicit pre and posttest results, the researcher did not determine an effect of treatment on implicit questions regarding expository content.

Another set of data analyzed by the researcher was the pretest and posttest results for the retelling portion of the assessment. The researcher determined that there was a statistically significant difference in the scores for the retelling pretest responses ($M=15.67$, $SD=6.50$) and for the posttest responses ($M=18.11$, $SD=6.29$); $t(17)=0.01$, $p=0.05$. Posttest data results indicated an increase in the average score, the mean, from 15.67 to 18.11. Similarly, the middle score, the median, increased from 15 to 19; however, the most popular score, the mode, decreased from 20 to 19. The standard deviations of 6.50 and 6.29 were similar, indicating that the variation the mean of the data set were about the same. The results of the *t*-test suggested that positive gains could be attributed to the comprehension instruction surrounding text structure. Therefore, the researcher observed an effect of treatment surrounding compare/contrast and cause/effect text structure instruction.

Another set of data analyzed by the researcher were the results of three independent assignments assessing comprehension of compare/contrast text structure. An analysis of the three assignments indicated a decrease in mean from 5.5 to 5.28, with a final increase to 5.39 across the three assignments. The mean scores were similar overall. The median, or middle score, remained at six from test one to test two, but decreased to five from test two to test three. The mode, the most popular student score, was calculated at six across all three tests. The

standard deviation from week one scores was 0.79, followed by a 1.18 for week two and a 0.70 for week three. This indicated that the variation from the mean of the data set were similar. The mean, median, mode and standard deviation were comparable for all three assignments.

Therefore, the results of the independent assignments did not suggest a significant difference in scores. The researcher did not conclude an effect of treatment regarding the three independent assignment scores assessing comprehension of compare/contrast text structure.

A final set of data analyzed by the researcher were the results of the three independent assignments assessing comprehension of the cause/effect text structure. Results indicated a decrease in the average score, the mean, from 2.78 to 2.33 from assignment one to assignment two, followed by an increase in mean to 2.56. The median, the middle score, decreased from three to 2.5 from assignment one to assignment two, but increased to three from assignment two to assignment three. The mode, the most popular student score, remained a three across the three assignments. The standard deviation from week one scores was 0.43, followed by 0.77 from week two and 0.62 from week three. The researcher determined that the overall results did not suggest an overall effect of treatment and growth in knowledge of cause/effect text structure. There was a ceiling effect for the cause/effect and compare/contrast questions; therefore, it may not have been reasonable to expect growth. The next section discusses the strengths and limitations of the study.

Strengths and Limitations

The researcher acknowledged several strengths and limitations of the study. One strength of the study was its instructional format. The researcher taught students how to identify each text structure, in isolation, for a period of three weeks each. Therefore, students could concentrate on one text structure at a time. The researcher began each three week session with

whole group teacher modeling, followed by whole group guided practice, and concluding with independent practice. As a result, the students were gradually responsible for their own learning. Furthermore, this instruction occurred in the students' natural setting, the classroom, during their regularly scheduled social studies instruction time. A second strength of the study was the variety of texts used for instruction. The content of the text was included in the second grade social studies curriculum. Students expressed interest in the text content as well. Furthermore, all texts were written at a second grade reading level as an attempt to ensure reading success for the second graders. All students, except for one, were reading at a second grade level or above. The student who was reading below grade level received individual support from a paraprofessional throughout the duration of the study. A third strength of the study was the choice of graphic organizers. Students were previously familiar with the purpose of a Venn diagram, cause/effect organizer and the T-chart in a whole group setting during Reading instruction. Therefore, the transition to having the students complete the diagrams independently was more successful than if the researcher had used different graphic organizers. The three strengths discussed in this section could be incorporated into future research.

Contrary to the strengths, there were several limitations of the study. One limitation of the study was the format in which the researcher assessed students for the QRI-5. The students wrote the answers to the explicit and implicit questions, which is a limitation for seven and eight-year-olds. Students' oral skills would have been more accurate; however, for the sake of time, the researcher instructed students to write answers. Also, the students read the expository passage *Whales and Fish* silently instead of aloud to the researcher. The students should have read aloud the passage individually to the researcher followed by answering the explicit and implicit questions orally. A second limitation of the study was the sample size. Although the

sample was 18 students, controlled and manageable, this could be a limitation. Since it was a small, controlled sample size without population diversity, it is difficult to generalize the results to a different, or larger, sample. A third limitation was that there was not a control group. Even though the researcher determined minimal growth, there was a ceiling effect. Students who scored well on the pretests could not have shown much, if any, growth on the posttests. With the influence of the strengths and limitations, the recommendations for future research are discussed in the next section.

Recommendations for Future Research

Based on the results of the study, the researcher recommended several ideas for future research. First, the pre and post assessment QRI-5 explicit and implicit questions should be completed individually and orally by students rather than written. This may be more time consuming before and after the study, but the results may be more accurate. Similarly, for the reading of the QRI-5 expository passage, *Whales and Fish*, students should read this aloud to the researcher. This task may also be time consuming for the researcher but it may lead to more accurate results. If these oral assessments are implemented, future researchers may want to extend the study from six weeks to eight weeks to allow ample time to meet with each student. Another recommendation for future research is a larger, more diverse sample. The sample of this study included children of similar demographics, socioeconomic status and academic abilities. A future sample should include children with various academic levels in both reading and writing, demographics and/or socioeconomic status. Another recommendation would be for students to orally complete the graphic organizer with the researcher or a partner during week one of each three week session. Independently writing with a new graphic organizer can be a limitation for elementary students. A final recommendation is to focus on one text structure and

have a control group for the study. For example, two groups of students can receive reading comprehension instruction of social studies content written in the compare/contrast format. However, one group of students could be explicitly taught how to identify the text structure, and the other group will not. The recommendations for future research may enhance the effectiveness of the study.

Conclusion

In conclusion, the six-week study explored the effect of explicitly teaching expository text structure on second graders' Social Studies reading comprehension. The researcher instructed students on how to identify and comprehend text structure, specifically compare/contrast and cause/effect. Upon analyzing the assessment results, the researcher concluded very little effect of treatment. Of the five pretest and posttest assessment results analyzed, the researcher observed growth from two of the five assessments: explicit comprehension questions and retellings. The other three assessments demonstrated little, if any, growth. Those assessments were implicit comprehension questions, the compare/contrast assessments as well as the cause/effect assessments. The researcher acknowledged several strengths and limitations of the study. One strength of the study was the instructional format, whereas one limitation was the small sample size. The strengths and limitations could be a guide for developing a similar study in the future. With the Common Core State Standards as a guide, expository text comprehension will become more prevalent in classrooms. This study, and prior studies, can be the foundation for continuous research in this area as educators determine the most successful ways to teach children.

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Appendix A

Whales and Fish

Whales and fish both live in the water, but they are different in many ways. Whales are large animals that live in the water. Even though whales live in the water, they must come to the top of the water to get air. When they come to the top of the water, whales breathe in air through a hole in the top of their heads. At the same time they blow out old air. Whales don't get air like fish. Fish take in air from the water.

Mother whales give birth to live whales. The baby whale must come to the top of the water right away for air. The baby drinks milk from its mother for about a year. Then it finds its own food. Fish have babies in a different way. Most mother fish lay eggs. The babies are born when the eggs hatch. Right after they are born, the baby fish must find their own food.

Whales and fish are alike in some ways too. Whales and fish have flippers on their sides. They also have fins on their tails. Flippers and fins help whales and fish swim. Fins move and push the water away.

Appendix B

Name: _____ Date: _____

Concept Questions for “Whales and Fish”

What is this passage mainly about?

According to the passage, how are whales and fish different?

According to the passage, name another way that whales and fish are different.

What part of the whale is like our nose?

Why does a baby whale stay with its mother for a year?

What part of the whales and fish are alike?

Where are fins found on fish and whales?

Why might a mother fish not know her baby?

Number correct explicit: ____
Number correct implicit: ____
Total: ____
____ Independent: 8 correct
____ Instructional: 6-7 correct
____ Frustrational: 0-5 correct

Appendix C

Questions for “Whales and Fish”

What is this passage mainly about?

According to the passage, how are whales and fish different?

According to the passage, name another way that whales and fish are different.

What part of the whale is like our nose?

Why does a baby whale stay with its mother for a year?

What part of the whales and fish are alike?

Where are fins found on fish and whales?

Why might a mother fish not know her baby?

Number correct explicit: ____
Number correct implicit: ____
Total: ____
____ Independent: 8 correct
____ Instructional: 6-7 correct
____ Frustration: 0-5 correct

Appendix D

Level: Two

Retelling Scoring Sheet for
"Whales and Fish"

Main Idea

- Whales
- and fish both live
- in the water
- but they are different
- in many ways.

Details

- Whales are large animals.
- They must come to the top of the water to get air.
- Whales breathe in air through a hole in the top of their heads.
- At the same time, they blow out old air.
- Fish take in air from the water.
- Mother whales give birth to live whales.
- The baby whale comes to the top of the water right away for air.
- The baby drinks milk from its mother for about a year.
- Most mother fish lay eggs.
- The babies are born when the eggs hatch.
- Right after they are born, the baby fish must find their own food.

Main Idea

- Whales
- and fish are alike
- in some ways too.

Details

- Whales
- and fish have flippers on their sides.
- They have fins on their tails.
- Flippers
- and fins help whales and fish swim.
- Fins move
- and push the water away.

49 Ideas

Number of ideas recalled _____

Other ideas recalled, including inferences:

Questions for "Whales and Fish"

1. What is this passage mainly about?
Implicit: how whales and fish are alike and different

2. According to the passage, how are whales and fish different?
Explicit: whales breathe air and fish take in air from the water; whales give birth to live babies and fish lay eggs; baby whales get food from their mother, and baby fish have to get it for themselves

Appendix E

COMPARE and CONTRAST

↓

find ways that 2 or more things are ALIKE

↓


find ways that 2 or more things are DIFFERENT

Signal Words

Compare	Contrast
<ul style="list-style-type: none"> • same as • alike • both • likewise • similar(ly) • not only, but also • also 	<ul style="list-style-type: none"> • different • However • instead of • but • on the other hand • even though • although • on the contrary • unlike

Graphic organizers

Venn diagram 

T-chart 

Ask yourself:

- How are these things alike?
- How are these things different?

Appendix F

My Brother and I

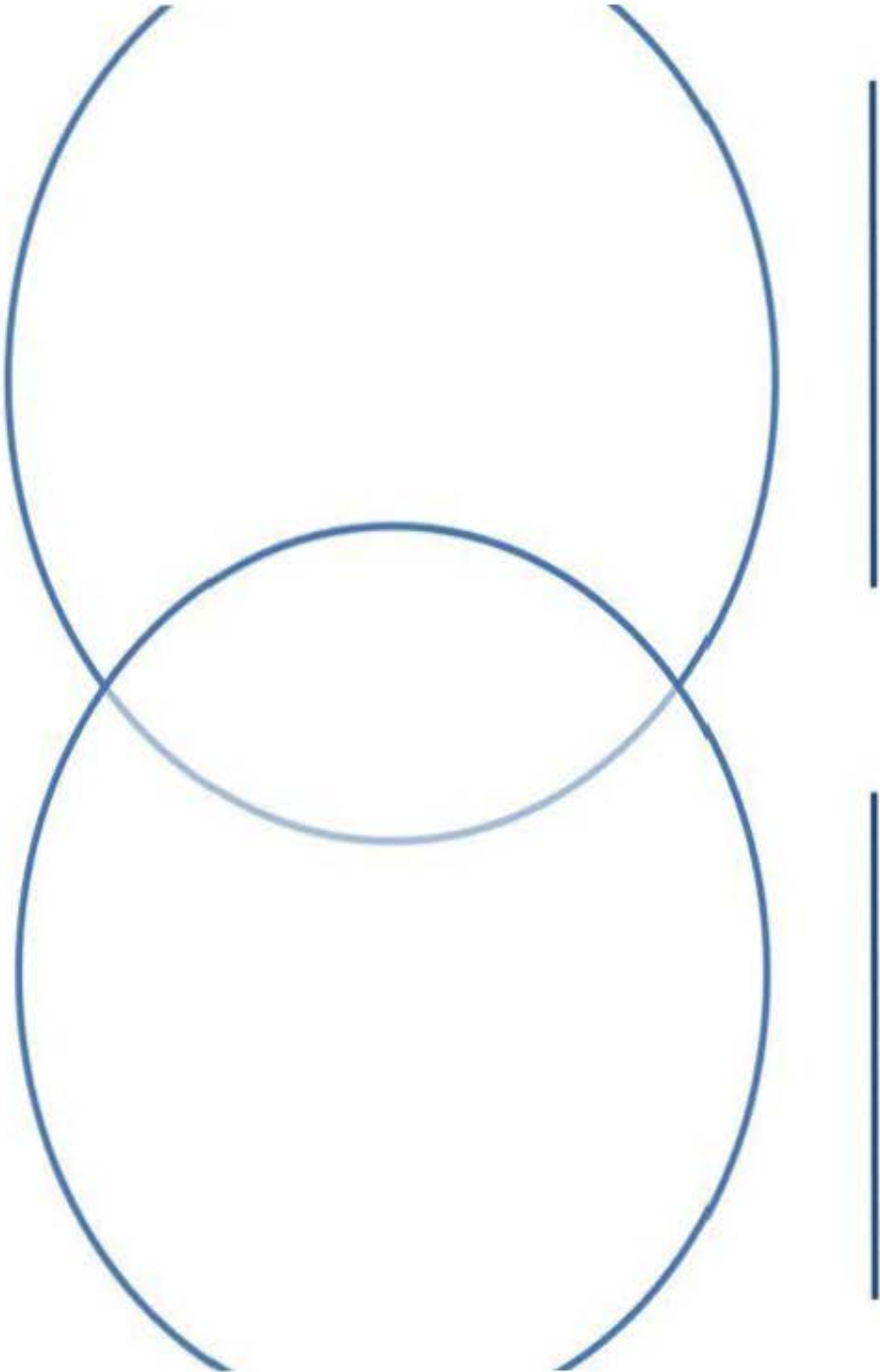
Isn't it strange that two people from the *same* family can be *alike* and yet very different at the same time? Take me and my brother Jared for example. Sometimes my mom says we are *like* each other. Other times we are as different as night and day.

First of all, we are *alike* because we *resemble* one another. We are *both* tall with skinny legs, long arms, and dark hair. My teacher always says, "You look just *like* your brother Jared." Also, we both play basketball. But, I'm actually better than he is. We *both* love ice cream for dessert, especially on Friday nights after pizza.

Not everything is the *same* about us though. One way we are different is that Jared loves to read. However, my favorite subject is math. This works out though, because we can help each other with our homework. Another way we are different is that Jared eats all his vegetables at dinner every night. On the other hand, I like to hide my peas and broccoli under my napkin. I always hope my mom doesn't notice. She always does.

I guess that's how families are. You are a little bit the *same* and a little bit different from one another. I do know one thing. Even when he drives me crazy, I still think Jared is the best brother in the world!

Appendix G



Appendix H

Venn Diagram

CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 2nd GRADE UNIT

Reading Passage

School: How Has It Changed?

School has changed in some ways over time. Let's learn about those ways.

Schools did not always have computers. How is school today different from school many years ago?

School: Then and Now

School Buildings



Dynamic Graphics

Then: Many schoolhouses had only one classroom. Students of all ages learned together.



photos.com

Now: Most school buildings have many classrooms. Students in each class are about the same age.

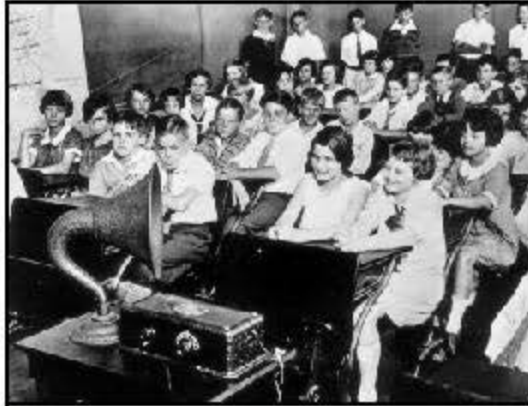
ReadWorks.org

PROVEN TOOLS FOR TEACHING COMPREHENSION

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CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 2nd GRADE UNIT
Reading Passage

School Tools



Value/ SuperStock

Then: Students listened carefully to a phonograph. That is a machine that plays recordings.



photos.com

Now: Students use computers during lessons. They wear headphones to listen and learn.

CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 2ND GRADE UNIT
Reading Passage

School Rules



Library of Congress

Then: Students raised their hands to answer questions. The teacher called on students to respond.



Fotostock/SuperStock

Now: Students still raise their hands to answer questions. That is one way school has not changed.

CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 2 nd GRADE UNIT
Question Sheet

Name: _____

Date: _____

“School: How Has It Changed?” Questions:

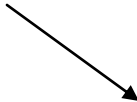
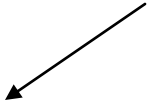
- _____ 1. How were schools in the past *different* from schools today?
- In the past, students of many ages learned together.
 - Girls could wear skirts to school in the past.
 - Students raised their hands in the past.
 - Students used machines in the past.
- _____ 2. How were schools in the past the *same* as schools today?
- In the past students of many ages learned together.
 - In the past pictures were only in black and white.
 - Students did not eat lunch in the past.
 - Students raised their hands in the past.
- _____ 3. One thing schools now have that schools in the past did not is
- desks
 - students
 - computers
 - teachers
- _____ 4. The author included pictures of schools from the past
- because he likes black and white photos.
 - to compare them to schools of today.
 - because the author went to school long ago.
 - to show the reader how much better schools were.
- _____ 5. What is a phonograph?

Colonial Life versus Life Today

People who lived during Colonial times had a very different life than we have today. For example, many of the city merchants were craftsmen, shoemakers, silversmiths, and blacksmiths. On the contrary, in cities today you can find large department stores, grocery stores, and even specialty stores, like music stores. Homes had windows that were covered in paper rather than the glass we use today. Also, the medicines that they had were unlike the modern kinds that we have today.

Not everything is different, however. In colonial times, people planted vegetable gardens behind their homes. Similarly, many families today plant their own gardens to grow fresh vegetables. Colonial families ate the same foods as we do today, like chicken, turkey, oatmeal, and fruits. Colonial children played games like hide-and-go-seek, hopscotch, and checkers. Likewise, children today also play these games.

Name: _____ Date: _____



SIMILARITIES

DIFFERENCES


Appendix L

Rotafolio autoadhesivo de papel reciclado Super Adhesivos Reciclado 30% reciclado CONT. 1 BLOCK DE 30 HOJAS

CAUSE and EFFECT

Cause


Why did It happen?



It rained.

Effect

What happened.

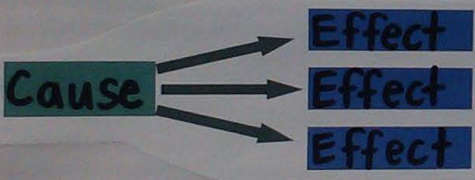


I used my umbrella.

(the REASON something happened)

(the RESULT that happened)

Graphic Organizers



Signal Words

- because
- if... then...
- therefore
- so that
- as a result
- in order to
- since
- nevertheless
- thus

Ask yourself:

- What happened?
- Why did it happen?
- What caused it to happen?

Appendix M



Name _____

What Happened?

Can you guess what happened? Match the cause to the effect by writing the correct letter on the line.

Cause

Effect

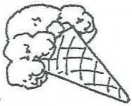
___ 1. Kate was all wet because...  a. I threw his ball.

___ 2. John made a face because... b. she was hot and thirsty.

___ 3. Joe's dad was mad because...  c. Joe forgot to put his bike away.

___ 4. My teacher smiled because... d. I am hungry.

___ 5. My dog Scruff ran because... e. she fell into the lake.

___ 6. Mike wanted Raquel on his team because...  f. his mom gave him ice cream.

___ 7. Keisha asked for a glass of water because... g. the juice tasted funny.

___ 8. Toby smiled because...  h. she can hit the ball a long way.

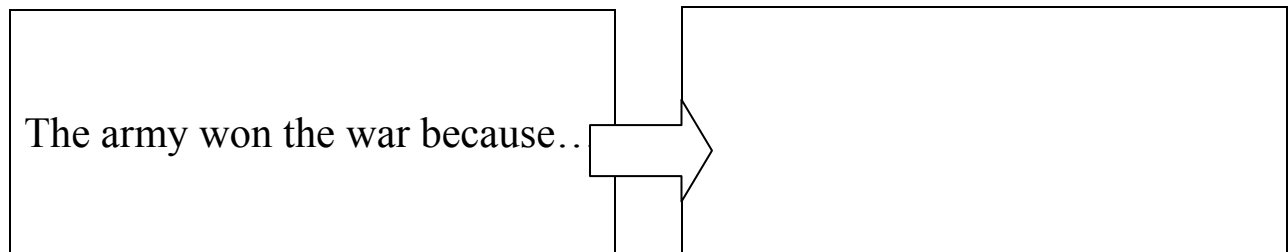
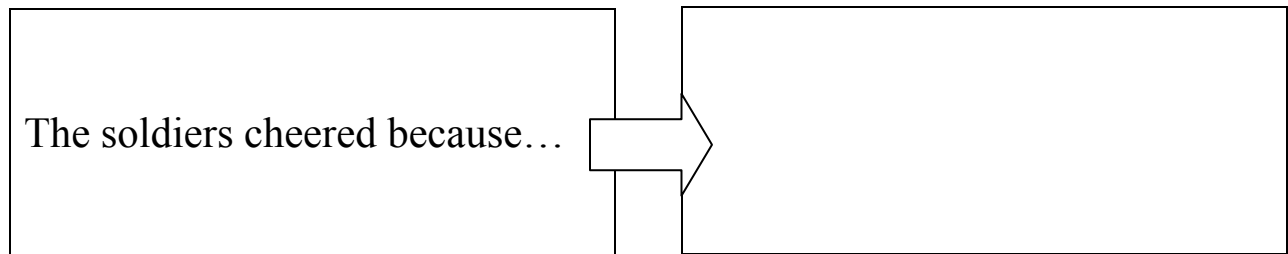
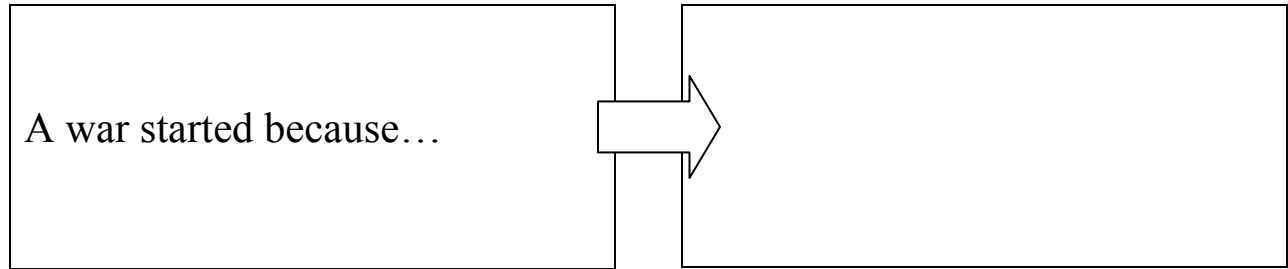
___ 9. Everyone ran to the porch because... i. we all did well in reading.

___ 10. I want some popcorn because...  j. it began to rain.

Appendix N

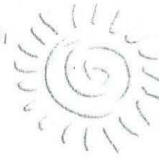
CAUSE

EFFECT



Appendix O

Ready, Set, Learn!



City or Suburb?

Many people live in a city. Their homes are close together. Cities have businesses and factories, too. There are tall office buildings and lots of places to work. Often people who live in the suburbs have jobs in the city.

Suburbs are the areas around a city. They have lots of houses. These homes have more space between them. The yards are bigger. Suburbs have more space. So, big shopping malls are often found there.

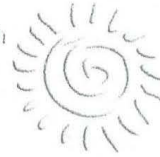
City streets have sidewalks and streetlights. Some of the streets may be "one way." This means you can only drive in one direction. It is uncommon to find one-way streets in a suburb.

There are other differences, too. The people in the city can walk to many places. Children may walk to school. The people in the suburbs often must drive to get places. So, many children in a suburb ride school buses.



Appendix P

..... Ready, Set, Learn!

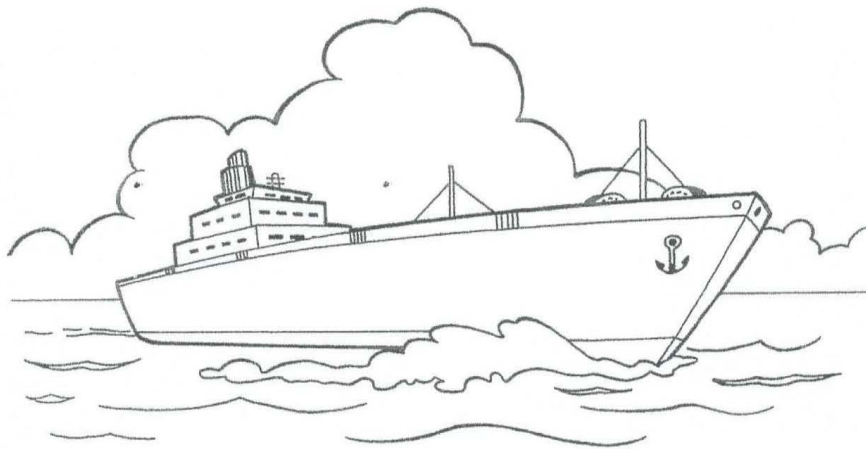


Getting Around

Long ago, people had to walk to get where they wanted to go. Then someone tamed horses. People could go farther than ever before. They could go faster, too. After a while, someone made a wagon for a horse to pull. Then people could move big, heavy things.

Today we have many ways to move people and things around. There are cars, boats, planes, and trains. There are big trucks. These are all forms of transportation.

How do you get bananas from South America? They are put on a big ship or plane. When they get to the U.S., they are unloaded. Then they are put on a train. At the train station, a truck picks them up. The truck takes the bananas to your store. That's how you can get foods from around the world!



Appendix Q

CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 2 ND GRADE UNIT
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Reading Passage

Inventions: Then and Now

Inventions¹ solve problems and help make our lives easier. The Wright brothers invented the first airplane in 1903. The first flight traveled about half the length of a football field and lasted 12 seconds. Today's airplanes can travel long distances. Look at the ways that some inventions have changed over the years.

Discover how some inventions have changed over time.

Telephone



Then

Alexander Graham Bell invented the telephone in 1876. The first phone had a trumpet-shaped part that was used to speak and to listen.



Now

Many people carry small cell phones. They have no wires, unlike earlier phones. Cell phones let people talk all over the world.

¹ Invention: something created for the first time.

CONCEPTS OF COMPREHENSION: COMPARE AND CONTRAST 3RD GRADE UNIT

Reading Passage

Calculator

Then

The first calculator was invented in Asia nearly 500 years ago. People moved beads on a wooden rack to help them count.



Now

Calculators come in many shapes and sizes. They can even be part of other inventions, including computers, watches, and cell phones.

Television

Then

Television became popular in the 1950s. The first TVs did not have a remote control. The screens showed pictures in black and white, and the sound was poor.

Now

Many modern TVs have flat screens. Some can be hung on a wall. Today's televisions have very clear, colored pictures, and excellent sound.

Appendix R

Name: _____ Date: _____

City or suburb?

Directions: Use the passage called “City or Suburb?” to answer the 4 questions below.

Name 2 ways in which a city and suburb are alike.

1. _____

2. _____

Name 2 ways in which a city and suburb are different.

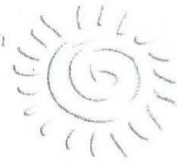
3. _____

4. _____

Parent Initials: _____

Appendix S

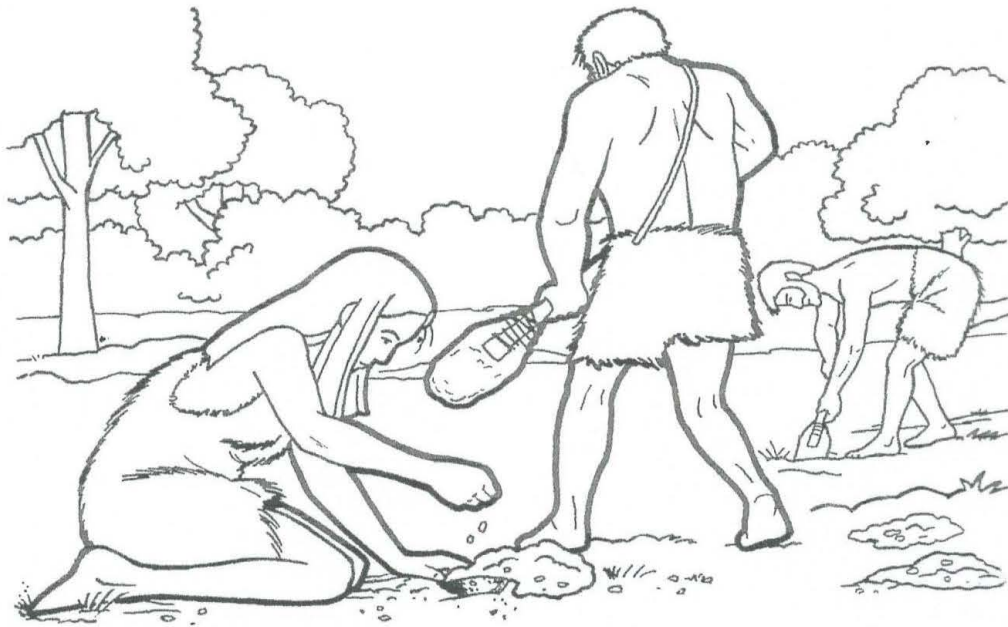
Ready, Set, Learn!



Becoming Farmers

Long, long ago people did not know how to grow food. So they looked for fruits and nuts. They hunted and ate animals. The animals moved around. So the people had to move around, too. At night they looked for a cave to stay in. When they couldn't find one, they often got cold and wet.

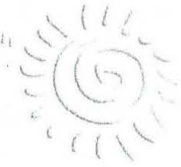
Then people found out that if they put seeds in the ground, plants would grow. Then they could eat the plants or their seeds. This let the people stay in one place. They made homes and grew **crops**. They stored up food, too. They lived longer.



Appendix T

The First Thanksgiving

Ready, Set, Learn!



In 1620 the Pilgrims left England. They wanted their own land. They sailed in a ship called the *Mayflower*. When they reached America, they named their new home Plymouth.

The first winter was hard. There wasn't much to eat. Half of the people died. In the spring, Native Americans found them. They gave the Pilgrims corn seeds. They told them where to fish and dig for clams.

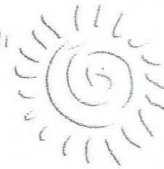
By that fall the people had lots of food. They had a big **feast**. They asked the Native Americans to come. They ate for three days! It was the first Thanksgiving.



Appendix U

..... Ready, Set, Learn!

Blind and Deaf



Helen Keller was born on June 27, 1880. She was a happy baby. Then, Helen got sick. Helen got a fever. It hurt her ears. Helen became deaf. She could not hear.

Think about how you learn to talk. You listen. You learn to say what other people say. Helen could not hear. She could not listen. She could not learn to talk. The high fever also hurt Helen's eyes. Helen became blind. She could not see.

Helen was not happy. She became wild. She hit. She screamed. She threw things. She hurt people.



Helen's parents found a teacher. The teacher was named Annie Sullivan. Annie did not let Helen hit. She did not let her break or throw things. Annie taught Helen how to talk. Helen was deaf. She was blind. How could Annie teach her how to talk?

Annie made signs with her fingers. She used the signs to spell words. She made the signs in Helen's hand. At first, Helen did not know what the signs meant. Annie did not give up. She took Helen to a water pump. Annie pumped. Water came out. Helen felt the water. At the same time, Annie signed. She signed w-a-t-e-r. Then, Helen knew!

Appendix V

Below are 3 causes from the passage called “Becoming Farmers.” Write down the effects.

CAUSES

EFFECTS

