Impact of teaching summarizing to improve comprehension and retention of a religion textbook

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The Impact of Teaching Summarizing
to Improve Comprehension and Retention of a Religion Textbook

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A Graduate Field Experience
Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts
Language and Literacy
At Cardinal Stritch University
Milwaukee, WI
2012
This Graduate Field Experience
Has been approved for Cardinal
Stritch University by

[Signature]
(Advisor)

July 19, 2012
(Date)
Abstract

This study analyzed the impact of summarizing on students’ comprehension and retention of a religion textbook. The study consisted of an eight-week intervention during which the participants engaged in a variety of summarizing activities three days each week in religion class. Fifteen eighth grade girls from an urban, all-girls, Catholic school in a Midwestern city participated in the study. The researcher used oral and written summaries as well as objective quizzes and exams for pre- and posttests. In addition, the researcher monitored the students’ progress by collecting the students’ notes and written summary paragraphs. Results indicated that the study had a positive impact on the students’ ability to comprehend and retain information from the religion textbook. The study did not impact students’ ability to recognize main ideas and write summaries.
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CHAPTER ONE: INTRODUCTION

This study explored the impact of strategy instruction in a content area class in which comprehension was crucial for understanding and success. While people read for many different purposes, students in content area classes most often read to gain information; as a result, it is imperative that teachers work to foster active engagement at various levels. Rosenblatt (2004) presented a theoretical model that suggested readers approach reading with two different stances: efferent and aesthetic. When readers take an efferent stance, they read for information by paying close attention to the logical, factual, and referential aspects of the text. Readers who take an aesthetic stance focus on the emotive qualities of the text. Rosenblatt (2004) acknowledged that a reader’s stance lies on a continuum—some texts may require qualities of both the efferent and the aesthetic stance. However, due to the nature of content area texts, teachers should instruct students to approach text with an efferent stance in order to comprehend and retain the information being presented. Encouraging students to approach a content area textbook with an efferent stance sets a purpose for reading.

In this way, teachers foster effective readers who actively read the text with a purpose or an efferent stance in order to comprehend and retain the information (Duke & Pearson, 2002; Rosenblatt, 2004). Yet, active reading is more than just establishing a purpose. Active reading means that students participate in comprehension as a process before, during, and after they read the text; the process involves but is not limited to making predictions, asking questions, monitoring comprehension, etc. (Duke & Pearson, 2002). Throughout the comprehension process when reading informational texts, these strategies are manifested as students create and adapt their own summaries of the text based on their comprehension. Therefore, actively participating in the comprehension process by summarizing the text improves the students’
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overall comprehension of the text as well as their ability to recall the information gleaned from the text (Duke & Pearson, 2004).

Bearing this research in mind, this action research study was developed. In this report, I investigate how frequent practice summarizing affects students’ comprehension of a content area textbook. This chapter explains my rationale for selecting this topic, connects the study to state standards, and defines important terms used throughout this report. In the first section, I explain my rationale for selecting the topic based on my classroom context and the needs of my students.

**Rationale**

Throughout my graduate coursework at Cardinal Stritch University, I found a running theme to be that reading comprehension strategies must be explicitly taught in order to improve comprehension. Duke and Pearson’s (2002) research-based claim that good readers are strategic and comprehend when they are actively involved in the reading process has been supported over and over by a multitude of literacy gurus. Because comprehension refers to a critical understanding of the text, it not only affects readers’ ability to make sense of the text, but an ability to communicate their understanding orally and in writing. Therefore, regardless of the content area class, if texts are used to teach the content, teaching comprehension is essential for students’ ability to learn the content from the texts and their ability to communicate about what they have learned. As a Reading and Language Arts teacher, reading strategies fit seamlessly into my classroom instruction. Reading a variety of texts and teaching students how to think critically about the texts are integral components of my curriculum and the academic standards of my school. Still, with the extreme literacy needs of my students, I knew that I needed to do more than simply teach reading in Reading and Language Arts class in order to significantly improve their comprehension. As a result, I turned to my Religion class to determine if implementing
reading strategies would improve the comprehension of my students in a content area class. In this section, I will explain the literacy needs of my students and my rationale for improving their comprehension through my Religion class.

This study took place in a Religion class that consisted of 15 students at an urban, all-girls, Catholic, middle school in a Midwestern city. Almost all of the students who participated in the study spoke Spanish at home, participated in the city’s school voucher program, and received financial assistance from the federally funded free or reduced lunch program. Juggling speaking two languages has prevented many of the students from truly mastering one language. As a result, the students who participated in this study struggled with two important aspects of literacy: vocabulary and comprehension. In my role as a Reading and Language Arts teacher, I observed their frustration with vocabulary and comprehension in classroom activities and assessments. Additionally, as a Religion teacher, I saw how the students’ difficulty with vocabulary and comprehension impacted their ability to learn and retain information from the textbook. Furthermore, informal conversations with teachers and the findings from a needs-based literacy initiative that I completed for my graduate class confirmed a need for literacy instruction in content areas.

In order to complete the needs-based initiative, I met with my principal and analyzed standardized test data to determine which area in the curriculum would most benefit from the initiative. The standardized tests scores revealed that the students struggled most in content areas; however, my principal thought it would be best if completed it for our Social Studies curriculum. Therefore, I interviewed the social studies teachers and continued to analyze test scores as well as student work. The findings implied that the students struggled with reading textbooks. The results of the needs-based literacy initiative coupled with the emphasis on
strategy instruction in my graduate classes led me to investigate how teaching reading strategies in the content area would improve comprehension. Even though I did not teach social studies, I decided that I could help students comprehend textbooks by implementing reading strategy instruction with the textbook for my Religion class. Based on the Common Core Standards described in the next section and the requirements of high schools in my district, summarizing emerged as a necessary strategy to practice with my students. Thus, I carried out an eight-week intervention in my Religion class investigating the impact of the strategy summarizing on the comprehension and retention of the textbook. In the next section, I connect the study to the national and statewide Common Core Standards.

**Connections to the Common Core Standards**

During the year that I conducted my study, the state was adopting the nationally recognized Common Core Standards. The intervention that I implemented aligned with two areas of the Common Core Standards: English Language Arts and Literacy and Literacy in History/Social Studies. Through the instructional practices implemented to practice the strategy of summarizing, the study met a variety of reading and writing standards. The study assisted students meeting the Reading and Language Arts standard for Reading Informational Texts in writing an objective summary of informational text as well as determining the main idea (RLA: RI.8.1 & LH/SS: RH.8.2). Along with determining the main idea, the instructional practices implemented in the study helped students to analyze details in paragraphs in order to understand important ideas (LH/SS: RH.8.5). Additionally, through the written summaries, the students met the following Reading and Language Arts standards for Writing; the students practiced using a variety of transition words and phrases to show the relationship between events (RLA: W.8.3c) and wrote for shorter periods of time for a discipline-specific task (RLA: W.10). The
instructional practices implemented in the study also taught the students valuable study skills relevant to the 21st century learner. Overall, the intervention presented in this study sought to improve the students’ literacy in a content area class. The following section provides definitions for terms used throughout this report to explain and analyze the impact of the intervention.

**Definition of Terms**

Throughout this report I incorporate a variety of terms that are specific to my study as well as other studies on literacy. In this section, I provide a brief explanation of each term.

**Glossary**

1. **Comprehension:** an understanding of the text through reading.
2. **Content area:** any subject area that is not reading or language arts and that is content specific, such as Social Studies, Science, Math, Religion, etc. The intervention presented in this study focused on reading strategy instruction in the content area because the intervention occurred in a Religion class.
3. **Cornell Notes:** a form of note-taking that includes paraphrased information about specific terms determined by the note-taker, memory clues based on personal connections with the information, and a summary of the information. To take Cornell Notes, the note-taker creates three sections in his or her notebook by drawing a line about two and a half inches from the left of a notebook page and two inches from the bottom of the notebook page. The section on the right of the page is devoted to paraphrasing information on ideas based on the discretion of the note-taker. In the section on the left of the page, the note-taker uses pictures of words to make connections with the information as a way to remember the information. The section on the bottom of the page is used to write a few sentences summarizing the notes taken in the
section on the right of the page (Keely, 1997 as cited in Medo & Marko, 2007). See Appendix A for a sample of Cornell Notes.

4. **Dependent variable:** the methods used to measure the independent variable. The dependent variable involves numbers that can be submitted for statistical analysis.

5. **English language learners:** people who speak a language other than English and are in the process of learning how to speak English.

6. **Explicit instruction:** using deliberate language and activities or strategies to teach a concept.

7. **Formative assessment:** a method for determining a person’s understanding of a concept during the learning process. Formative assessments can be informal such as observations and reflections or formal such as quizzes, tests, or rubrics.

8. **Independent variable:** the concept being measured for analysis.

9. **Intervention:** instructional practices or methods implemented to address a student’s needs.

10. **Language Experience Approach:** a whole language approach that teaches reading and writing through oral language and personal experiences (Taylor, 1992).

11. **Literacy:** any task that involves reading, writing, speaking, or listening.

12. **Magnet Summaries:** an instructional strategy that assists students in creating summaries. Students select key words from the text that are referred to as magnet words. Magnet words require other words from the text to explain their meaning. The magnet words are written in the center of a note card with the other words written in the corners of the card. The student uses the words to write or voice a summary of the text (Buehl, 2009). See Appendix B for an example of a Magnet Summary.
13. **Modeling:** an instructional method during which a teacher provides a sample of work. A teacher may prepare the sample ahead of time or go through the process with the students as he or she is teaching the concept.

14. **Multiple literacies:** the many different ways that people read and write such as print and non-print texts, visual arts, and technology (Sheridan-Thomas, 2007). For example, multiple literacies include writing text-messages or emails and reading graphic novels or e-books.

15. **Nativity Miguel Network:** a national network of schools committed to breaking the cycle of poverty through education. The participating school in this study is a part of this network.

16. **Oral retelling:** voicing a summary of the text. After reading, students orally retell the main events of the text.

17. **Professional development:** opportunities for teachers to learn instructional theory and practices to help develop their teaching craft.

18. **Proficiencies:** a term used to describe ability levels typically based on standardized tests.

19. **Quadrant Chart:** a chart developed by the researcher to assist students in determining important ideas in a text. Students divide a notebook page into four sections by drawing a line in the center of the page horizontally and vertically. The four sections are labeled people, places, terms, and events. As the students read, they record any people, places, terms, or events deemed important in the appropriate sections.

20. **Read alouds:** the reading of a text aloud to one or more students.

21. **Scaffold:** a method for teaching concepts in which a teacher breaks the process down into manageable parts. Just as a scaffold is used to construct a building, a teacher uses scaffolding to help construct a student’s knowledge of a concept.
22. **Summary Topic Sentence**: a process for writing a topic sentence for a summary paragraph. First, the students divide a notebook page into three sections and labels the sections “Name It,” “Verb It,” and “Finish It.” In the name it section the students begin the sentence with a phrase such as “In Chapter One, the researcher.” Then, the student chooses a verb to write in the “Verb It” column. Finally, the student finishes the sentence with a phrase that states the main idea for the text being summarized (Medo & Marko, 2007). See Appendix C for an example of a Summary Topic Sentence.

23. **Written summaries**: a written or typed paragraph that summarizes a text. For this study, students began by creating a Summary Topic Sentence (Medo & Marko, 2007). Next, the students created a bulleted list of important ideas from the text and jotted down transition words in between each bullet. Finally, the students wrote a cohesive paragraph that began with the topic sentence followed by the important ideas from their list with transitions between each idea (Medo & Marko, 2007).

**Conclusion**

The study described in this chapter investigated the impact of frequent practice of the reading strategy summarizing on students’ comprehension and retention of information from a content area textbook. I was introduced to the concept of incorporating reading strategy instruction in content area classes through my graduate coursework. Based on Duke and Pearson’s (2002) claim that good readers are active and strategic, I wanted to encourage my students to be good readers by teaching them to approach informational texts with an efferent stance (Rosenblatt, 2004). In this way the students would establish a purpose for reading; then, add the use of reading strategies to comprehend the text. With knowledge of the best practices for teaching reading comprehension, I assessed the literacy needs of my students and provided
targeted instruction based on those needs. In the next chapter, I provide relevant research that supports using professional development to guide instructional decisions, assessing the literacy needs of the students, and targeting instruction based on those literacy needs. The studies summarized in Chapter Two establish a research base for my study that investigates the impact of strategy instruction on students’ comprehension and retention of information from a content area textbook.
CHAPTER 2: RESEARCH ON SUMMARIZING TO IMPROVE COMPREHENSION

When working with struggling readers in both middle school and high school, it is imperative that educators identify the literacy needs of their students and employ professional development to implement targeted instruction. Literacy is ever-evolving, and staff development must support the demands of literacy educators in order to best support the literacy needs of students. Furthermore, educators should implement explicit strategy instruction to improve students’ literacy skills. Literacy experts and educators alike have investigated this topic in order to determine effective strategies and the best means for implementation. Harvey and Goodvis (2007) suggest that good readers are strategic: “they have a plan of action that moves them towards their goal or purpose for reading” (p. 23). The role of a good reading teacher, then, is to help his or her students become strategic by becoming well-versed in the best practices for strategy instruction, identifying the needs of her students, and scaffolding instruction accordingly.

The following studies conducted by Sheridan-Thomas (2007), Fisher, Frey, and Lapp (2009), McIntyre, Kyle, Chen, Munoz, and Beldon (2010) and Echevarria, Richards-Tutor, Chinn, & Ratleff (2011) show the positive results that researchers found when educators participated in professional development opportunities based on the literacy needs of their students. In addition, the studies conducted by Ivey and Broaddus (2007), Cohen (2002), and Ness (2008) reveal how teachers met student needs through the use of targeted instructional strategies, while the studies conducted by Cantrell and Carter (2009), Schorzman and Cheek (2004), Simmons, Hairell, Edmonds, Vaughn, Larsen, Willson, Rupley, and Byrns (2010), Mateos, Martin, Villalon, and Luna (2008), and Alfassi (2004) emphasize how teachers target student needs by implementing explicit reading strategy instruction. In their own unique ways,
each of the following studies reveal the positive literacy growth fostered when a teacher recognizes the strengths and weaknesses of her students and directs her craft based on those needs.

A Need for Professional Development

From pre-service teachers to veteran teachers, educators should engage in professional development opportunities based on their literacy needs as well as their students’ literacy needs. The following studies explain the value of professional development opportunities, for both pre-service and veteran teachers, geared towards the literacy needs of students. The first study identifies the need to prepare teachers with an accurate understanding of literacy before entering the classroom for the first time, while the second study addresses a school staff’s attempt to change their approach in order to improve literacy of the students in their school and the third and fourth studies illustrate the effect of professional development on student achievement.

Sheridan-Thomas (2007) explored how teacher-educators responsible for teaching pre-service teachers could improve their instruction regarding multiple literacies. According to Sheridan-Thomas (2007), multiple literacies refers to reading and writing for different purposes including both print and non-print mediums. The author intended to discover what students understood after the course’s instruction related to multiple literacies so that other instructors could refine their instruction, and if necessary, create a better match with the desired outcomes of the course. She stated two research questions: 1) What understanding about multiple literacies do students construct as they participate in Adolescent Learners and Literacies in the Content Areas? 2) How do students apply their understanding of multiple literacies to working with adolescents and designing content area teaching materials? As data for her research questions, the researcher collected five written assignments that ranged from informal online discussion
forums to a semi-formal reflective learning log, as well as a more formal written piece with a unit plan; then, Sheridan-Thomas analyzed them for signs of growth in students’ knowledge of multiple literacies in curricular planning.

The sample consisted of 64 participants; all students were enrolled in a small Master’s level teacher education program at a state university. The majority of the students were White with a mix of rural, urban, and suburban backgrounds. Most participants came from undergraduate degree programs in a field other than education, and, thus, possessed little classroom experience. However, some of the graduate students were certified teachers pursuing Master’s degrees. The duration of the study is unknown.

The five assignments focused on raising awareness of multiple literacies with two that asked the graduate students to apply their understanding to engage students in both content area lessons and school-based literacies. In the first assignment, the graduate students met in groups to discuss and create a web of experiences from all of the group members. The webs included details such as what kinds of literacies with which the students, themselves, were involved, who influenced their personal views of literacy, and how their understanding of literacy corresponded with academic literacy requirements. During the next class, the students compared and contrasted the webs and discussed what they learned regarding multiple literacies in addition to how their findings would impact their literacy instruction during content area classes. Later in the semester, they completed their field work by observing classes, assisting with group work or individual students, and tutoring during study hall or the after school program.

After the graduate students completed their field work, they wrote papers explaining how multiple literacies could build bridges to subject area content and academic literacies for one of the students whom they observed and participated in a discussion with their classmates regarding
how a variety of reading materials could enhance content area classes. As a capstone assignment for the course, they created a mini-unit project that included two lesson plans focusing on literacy development. The study does not specify whether or not this unit is to be taught. Finally, the graduate students responded to two of the course goals and assessed how their understanding of these goals had evolved.

Sheridan-Thomas (2007) discovered noticeable trends that arose in students’ thinking about multiple literacies throughout the writing assignments. The majority of graduate students found understanding multiple literacies to be an important goal of the course. Their written assignments revealed their beliefs that literacy referred to more than just words on a page but could also refer to music, watching television, and surfing the Internet. Literacy extends beyond the pages of a book. Furthermore, they discovered both factors from within the student such as learning style and intelligence as well as factors from the outside of the student such as community, family, and cultural influences impacted literacy. Many of the graduate students found that adolescent students today engage in a wide range of literacies that are completely different than the literacies they encountered growing up. The graduate students commented on how interactions with the adolescents in their field placement helped them see the need to explicitly relate student interests to content area material, include any kind of reading as a means of improving reading, develop study tools in line with literacies other than those commonly used in schools, and change the way teachers think about adolescent literacies. They also determined that many adolescents found textbook reading to be uninteresting, intimidating, and complex to understand; however, multiple literacies could be used to motivate students to become interested in a topic in which they may not be otherwise interested. Ultimately, Sheridan-Thomas (2007) found that the graduate students’ unit plans lacked intentional use of multiple literacies. The
researcher did not mention specific examples from the lesson plans. The researcher noted this could lead to multiple literacies not used in lesson plans with intentional instructional outcomes.

As a result of this trend, Sheridan-Thomas (2007) made several recommendations for instructors of pre-service teachers. First of all, encourage teachers to be in touch with the influence of multiple literacies in their own lives as a means of promoting a broader view of literacies when working with adolescents. Consequently, the teachers should scaffold their use of new methods for approaching the content that they teach. Secondly, Sheridan-Thomas (2007) recommended that teacher educators encourage pre-service teachers to talk with adolescents as a means of learning about adolescents’ multiple literacies; they should model strategies to use in content areas with multiple literacies and provide support and encouragement to implement multiple literacies connections in their lesson plans.

Sheridan-Thomas (2007) asserted the need for pre-service teachers to possess a deep understanding of literacy before stepping into the classroom for the first time. Teacher educators should encourage pre-service teachers be aware of the influence of multiple literacies on adolescent learning and scaffold instruction accordingly. Extending beyond pre-service teachers, this next study acknowledges the need for teachers of schools with struggling literacy rates to seriously investigate their instruction across the curriculum in regards to promoting literacy. Since literacy is a continuous process, the researchers of this next study assisted the staff of a high school in developing effective professional development opportunities as well as classroom instruction strategies in order to improve student literacy at the school.

The formative study conducted by Fisher et al. (2009) promoted professional development at a high school in the area of literacy in order to improve the reading proficiency scores on the statewide achievement tests. The researchers hoped to guide the staff by
developing, refining, and confirming an intervention plan that would improve student achievement at a struggling school. In order to establish the pedagogical goals for the formative study, the researchers asked the school to elect a group of teachers, called the literacy leadership team (LLT), who represented the various perspectives regarding literacy. The researchers did not elaborate on the role each individual member played in the school. The LLT determined a pedagogical goal for the school: Students would develop habits for reading and writing that would go with them from class to class and into college. This goal fit the needs of the school climate. The students’ scores on the statewide achievement test served as the dependent variable.

This two and a half year study involved 2,000 participants from a local school. Atypical to its location, the school was composed of an extremely diverse student population. About 90% of the students identified as one of the following: Latino, African American, Asian/Pacific Islander, or Native peoples. At the onset of the research study, only just over 10% scored at the proficient or advanced level on the statewide test in reading. The low percentage of proficient readers prompted the formative study to improve the school’s reading scores.

After the LLT established the pedagogical goal, the team determined the method for attaining the goal over the next two and a half years. First, the LLT specified note-taking as an area in which teachers could improve their instruction. Thus, teachers instructed students to use Cornell note-taking for every activity that involved taking notes, and that each teacher think-aloud while reading a piece of text every day in class. The LLT also asked the teachers to provide opportunities for students to write to learn each day. Furthermore, the LLT determined that every student should read with no interruptions for 20 minutes each day. Additionally, teachers engaged in professional development sessions during at least three out of the four meetings each month and received compensation for voluntarily observing other teachers. The
overall aim of this study was to improve the reading proficiency of the students through the daily use of Cornell Notes in every class, teacher think-alouds, write-to-learn opportunities, additional independent reading time, and also to encourage professional development in the area of literacy for the staff.

Fisher et al. (2009) visited the school throughout the two and half years of the study on a monthly basis. During each visit, the researchers gathered results from various formative assessments given by the school, interviewed the literacy peer coach and principal, observed classrooms, and accepted feedback from the teachers. The teachers often provided feedback on the weekly professional development sessions and asked for recommendations. At one point, based on the researchers’ observations, the implementation of the plan in the classroom did not seem to be progressing because they observed teachers were not embedding the new instructional goals in their lessons. As a result, the researchers created video footage from a different school regarding the necessary instructional method. The video footage revitalized the staff by allowing teachers to observe the specific instructional routines selected by their school. The researchers encountered another setback when they returned to the school after the summer and found 36 new, first-year teachers. This prompted the researchers to make a plea to the district to alter the induction plan for new teachers so involving less paperwork and more teacher-observation opportunities. The district granted the alteration, and the school experienced a lower turnover rate the following year.

Fisher et al. (2009) also valued the teachers’ feedback. With the emphasis being placed towards certain literacy goals, teachers began to notice other areas that needed support; for instance, the emphasis on Cornell note-taking led teachers to realize the students’ lack of ability to summarize. As a result, the LLT discussed ways to improve the student’s ability to
summarize. Teachers also found implementing the think-aloud component to be challenging because it required them to change their behaviors, unlike the other components of the study, which dealt with a teacher’s use of time. Once the teachers raised their frustration with thinking aloud while reading, the researchers provided more guidance in this area to quell the teachers’ frustrations. Of all the instructional routines implemented by the teachers for this study, the wide reading component of the pedagogical goal proved to be the most successful. Students around the school were visiting the library more frequently, and more students were observed around the school carrying books.

In the first year after the study, the number of proficient readers based on the statewide assessment nearly doubled with just over 20% of students testing at proficient in reading; furthermore, two years after the study, just under 50% of students were proficient in reading. After the two and a half years of the study, just over 50% of the students scored proficient in reading. When this study began, the teachers could only focus their attention on improving their school’s standings on the statewide tests. While the teachers were validated in this goal, the also saw important improvements in the literacy at their school throughout the course of the study. Mainly, the students read more and engaged with teachers in regards to literacy on different levels than the teachers had experienced prior to the study. The teachers involved in the following study also saw improvements in student achievement as a result of professional development. Fischer et al’s (2009) study focused on the effectiveness of professional development on both the quality of a teacher’s instruction and the impact that it made on the students’ reading achievement. The next two studies investigate a similar idea. In 2010, McIntyre et al. (2010) wanted to know how the implementation of an instructional method learned through professional development affected student achievement in reading.
McIntyre et al. (2010) sought to determine if teachers who received proper training on the Sheltered Instruction Observation Protocol (SIOP) (Echevarria, Vogt, & Short, 2004 as cited in McIntyre et al., 2010) were able to improve student reading achievement to a greater extent than teachers who had not been properly trained. The second facet to this study involved the intensity of instruction. McIntyre et al. (2010) investigated the degree to which the teachers structured and provided quality instruction of the SIOP Model effectively over 18 months of professional development.

The study’s independent variable was the type of instruction; the SIOP Model classrooms would be tested versus classrooms not using the SIOP Model. The dependent variables included a rubric to assess teacher learning from the SIOP, seminars, and the students’ scores on the reading section of a standardized assessment given three times a year. McIntyre et al. (2010) hypothesized that the SIOP Model held great value for ELLs’ overall literacy, and, after one year of being taught by the full implementation of the SIOP (Echevarria et al., 2004) model, students would score significantly higher than the students in classrooms with non-participating teachers on the reading section of a standardized assessment given three times a year. Twenty-three teachers who ranged in grade-level and teaching experience participated in the 18-month project. All taught in a large, urban, and diverse school district.

At the beginning of the study, all of the teachers participated in 18 months of professional development focused on the Sheltered Instruction Observation Protocol (SIOP) model of teaching ELLs. The professional development included three full Saturdays and eight, three-hour sessions after-school, which equaled a total of 50 hours. Throughout the professional development sessions, the facilitators referred often to the rubric that the researchers would use during their pre- and post-test observations. Upon completion of the seminars, the researchers
used the rubric to assess what the teachers learned. Based on the teachers’ scores on the rubrics, the researchers selected teacher participants for analyzing student achievement. The selected teachers collected samples of the students’ work in the fall and again in the spring in order to determine the students’ progress. Then, the researchers compared the student performance in the selected teachers’ classrooms with teachers from the control group. The researchers compared 50 students’ scores on the reading section of the standardized assessment from the fall and spring to 59 students in a matched sample who did not receive instruction based on the SIOP Model.

While less than one third of teachers who participated in the professional development seminars effectively implemented the model, all of the teachers demonstrated growth in implementing the model. Overall, teachers’ scores raised the most from the pre- to the post-assessment in the areas of Building Background, Review, and Preparation. Both the facilitators of the professional development seminars and the teachers stated difficulty in carrying out the review portion of the lesson, yet the teachers demonstrated growth in this area over the course of the study. In regards to student achievement, the results indicated that the reading achievement of students instructed by the SIOP Model improved in comparison to the students not instructed by the SIOP Model. The covariate of the students who received instruction by the SIOP Model was significantly higher that those who did not receive instruction from the SIOP Model. While McIntyre et al. (2010) sought to align the professional development seminars with the best practices in professional development, the researchers noted weaknesses in the implementation of the professional development. For instance, many of the sessions were rushed and the researchers were unable to complete all they had intended to cover and the professional development model does not directly cover content. Still, the researchers saw overall improvement in the teachers’ implementation of the instructional focus of the professional
development seminars because student achievement improved. McIntyre et al. (2010) concluded that consistent and focused professional development opportunities should improve teacher performance, which in turn will have a positive impact on student learning. Similarly, Echevarria, Richards-Tutor, Chinn, & Ratleff (2011) discovered that student literacy improved when taught by teachers who implemented instructional practices gained from professional development with fidelity.

Echevarria et al. (2011) tested how the Sheltered Instruction Observation Protocol (SIOP) Model for English Learners (EL) instruction affected students’ content area language and literacy development in Science (Echevarria, Vogt, & Short, 2008, 2010 as cited in Echevarria et al., 2011). The independent variable was the instruction for ELs: SIOP Model vs. regular classroom instruction. Echevarria et al. (2011) measured the quality of instruction by student achievement using the following dependent variables. In the beginning of the study, the researchers administered a pretest to provide a baseline of student knowledge. Throughout the study, after each unit, students answered multiple-choice and fill-in-the-blank questions regarding the content of that particular unit. Finally, after the study, the researchers administered a posttest in order to measure knowledge growth in Science content and academic language. In order to assess the quality of instruction from the teachers, the researchers observed teachers using SIOP Model lessons and recorded notes on a SIOP Model observation form. Teachers were also asked to rate their performance on a “fidelity checklist” provided by the researchers.

Participants in the study included a total of 1,021 seventh grade students and 12 teachers from eight middle schools in a large urban school district. The treatment group consisted of eight teachers and 649 students, and the control group consisted of four teachers and 372 students.
Since the researchers intended to study the effects of quality implementation of strategies learned through professional development on student achievement, the first step of the study was to provide professional development for the teachers on the SIOP Model. As an introduction to the SIOP Model, teachers received intensive training over two-and-a-half days. First, the teachers were given an overview of the model. Then, the teachers learned about the eight components using the same process for each component. The eight components to the SIOP Model were lesson preparation, building background, comprehensible input during which the teacher uses explicit language to explain the lesson, strategy instruction, interaction, practice/application, lesson delivery, and review/assessment of the lesson. At first the research background for the component was presented using PowerPoint. Next, teachers viewed a video that showed classrooms effectively implementing each component and its features. Finally, the teachers used the protocol to rate the lesson, then, justified their rating. After discussing the components and features of the model, participating teachers received a binder containing SIOP Model lesson plans for each unit of study and a description of the instructional activities, and handouts for each lesson as well as the assessments for each unit of study. The researchers provided the teachers time to review the binders. By the end of the training, the researchers hoped that each teacher would be ready to implement the SIOP Model lessons.

Teachers in the treatment group taught the lessons created by Echevarria et al. (2011) whereas teachers in the control group taught lessons for the same units using their own lesson plans and methods. Both groups received a pacing guide so they would teach similar content and assess the students around the same time. The researchers provided coaching for teachers in the treatment group to ensure sound delivery of the SIOP Model lessons. The researchers used the following procedure for coaching. First, before the observation, both the teacher and the
researcher reviewed the lesson plan. Next, the coach observed the teacher and used the SIOP to rate the teachers. Lastly, the coach and the teacher met to discuss the completed SIOP. In order to help teachers correctly follow the SIOP Model with emphasis on the features of objectives and vocabulary, the researchers gave the teachers a “fidelity checklist,” which asked the teachers to record the content and language objectives, introduce, display, revisit, and review vocabulary words, and assess each objective at the end of the lesson.

Echevarria et al. (2011) analyzed the fidelity of implementation of the SIOP Model not as a scripted curriculum or a step-by-step process but instead by the level of quality based on observations and the “fidelity checklist.” The researchers used the protocol scores to create three levels of implementation: high (75% or greater with 75% representing an average of 3 on the features), moderate (50%-74%), and low (0%-49%).

Echevarria et al. (2011) found that teachers who were high implementers displayed common behaviors. When the high implementer teachers read the objectives, they had the students read the objectives and explain them in their own words. Additionally, they continually brought the students back to those objectives throughout the lesson. Not only did these teachers use the objectives as a guide, but they also used a wider variety of instructional practices, and they regularly modeled what they wanted the students to do. Furthermore, they grouped students in a variety of ways and gave the students multiple opportunities to practice language skills through activities involving social interaction. On the contrary, the researchers found low implementers provided few opportunities for students to practice language skills through social interaction. Low implementers tended to teach using whole-class, teacher-dominated instruction.

Upon analysis, the researchers found that teachers who implemented the model with the greatest degree of fidelity taught students who made the greatest gains from the pre- to the posttest.
Echevarria et al. (2011) found the biggest limitations to be time constraints surrounding pre- and post-observation conferencing, preparing lessons, and the timeline of the study. They discovered that some teachers may have benefited from more instruction on facets of the SIOP Model, and they hypothesized that more teachers would have achieved the status of high implementers had they been able to provide intensive and sustained support over a longer period of time. Overall, Echevarria et al. (2011) believed their study acknowledged that fidelity should be the main focus for professional development in order for research-based literacy practices to encourage literacy improvement.

These last four studies can guide administrators as they make decisions about a school’s needs and solutions for them in regards to literacy. If a school notes the trend of declining literacy rates, teachers need to be prepared with necessary methods for addressing the literacy needs of their students. Sheridan-Thomas (2007) asserted that a pre-service teacher needs a deep understanding of multiple literacies in order to effectively teach her future students. Similarly, Fisher et al. (2009) emphasized the need for classroom teachers across the curriculum to constantly update their approach to teaching literacy, while McIntyre et al. (2010) and Echevarria et al. (2011) revealed a connection between professional development and student achievement. Just as educators need targeted instruction to improve their skills, they should also implement instructional strategies targeted towards the literacy needs of their students to improve their students’ literacy skills.

**Meeting Students’ Literacy Needs: Targeted Instruction**

If a student possesses a specific need in the area of literacy development, educators should provide the opportunities necessary in order for that student to show improvement. In the first study of this section, Ness (2008) brings to light the lack of targeted literacy instruction
occurring in middle and high school content area classes. Her findings suggest the need for teachers to provide targeted literacy instruction in all subject areas. The next studies conducted by Ivey and Broaddus (2007) and Cohen (2002) investigate how targeted intervention opportunities foster the literacy growth of struggling readers. Both studies incorporated similar strategies, such as providing reading opportunities in both the student’s first and second language, setting aside time for independent reading, engaging students in comprehensive literacy activities, and emphasizing cultural identity through literature. The first study attempted these endeavors with a group of eighth grade ELL students who speak Spanish, while the second study focused on the affects of these endeavors with a high school, ELL student. All of the studies imply the importance of providing targeted instruction in order to foster students’ literacy growth.

In the first study, Ness (2008) examined the instructional strategies used by middle and high school content area teachers to support struggling readers. She hoped to bring to light the instructional decisions teachers’ make regarding meeting the needs of struggling readers. Ness (2008) posed two research questions in the first phase of the study: 1) To what degree do middle and high school content-area teachers incorporate reading comprehension strategies in their Science and Social Studies classrooms? 2) What are teachers’ attitudes towards the need and usefulness of reading comprehension instruction in content-area classrooms? She answered these questions using 2,400 minutes of classroom observation and teacher interviews. For Phase II of the study, she reevaluated the data from Phase I and asked a third question: How do teachers assist struggling readers in their middle and high school classrooms? She hypothesized that the delivery of instruction, the social interactions that surround the instruction, and the purpose of the instruction supported effective literacy instruction.
For student participants in her study, Ness (2008) selected one middle school and one high school in rural Virginia that boasted high retention and graduation rates, priorities of reading and writing instruction across the curriculum, and test scores at or above the state averages. The middle school contained 430 students, while the high school contained 782 students. In the middle school, 25% received free lunch from the federal program, and 1.7% of the entire student body received English as a Second or Other Language (ESOL) support. Based on the Qualitative Reading Inventory-3 (QRI-3) (Leslie & Caldwell, 2001 as cited in Ness, 2008), 40% of the students read below grade level, 28% read on grade level, and 32% read above grade level. In the high school, 15% of students received free lunch from the federal program and approximately 1% of the entire student body received ESOL support. As determined by the QRI-3, 20% of the students read below grade level, 65% read on grade level, and 15% read above grade level.

For teacher participants in the study, Ness (2008) contacted 23 secondary Science and Social Studies teachers. Of the ten teachers who agreed to participate in the study, eight were selected who fit the researcher’s criteria: four from the middle school level, two Social Studies teachers and two Science teachers, and four from the high school level, two Social Studies teachers and two Science teachers. All of the teachers were state certified in their content areas and only four had completed graduate classes in assessment and special education.

The study consisted of Ness (2008) observing 2,400 minutes of classroom instruction by the eight teacher participants and coding the instructional practices that occurred during the lessons she observed. The teachers’ instructional practices were coded into two categories: (1) Non-Comprehension Instruction and (2) Comprehension Instruction. Any time the teacher explained the how, when, and why of comprehension strategies, Ness (2008) coded it with a (2);
whereas, when the teacher provided routine classroom instruction, such as allowing time for
completing assignments, presenting content through lectures, or transitioning between activities,
Ness (2008) coded it with a (1). She also took qualitative notes regarding information such as the
teachers’ directions, the materials used, and the students’ behaviors. Reviewing videotapes of the
lessons allowed her to check for reliability of the coding and the notes taken during the
observations. After observing the teachers, Ness (2008) held open-ended interviews with each
teacher participant in order to understand the teachers’ approaches and instructional strategies
regarding struggling readers, reading comprehension, and content-area literacy. To ensure
reliability, she audio-recorded and transcribed the interviews and allowed the participants to
confirm their interview transcripts.

Analysis of the data from Phase I revealed that none of the participating teachers
provided reading comprehension instruction. The teachers indicated the following reasons:
pressure to cover the content in their subject area, a sense of responsibility for imparting
knowledge for their particular subject area, lack of training of literacy integration, and limited
knowledge of reading comprehension. For analysis of Phase II, the researcher reread and coded
all of the observation notes and interviews, then, placed the data into new categories that
emerged based on trends in the data. Upon analysis of the data from Phase II, Ness (2008)
discovered that teachers more often compensated for students’ difficulty reading the course texts
instead of teaching the strategies necessary to read the texts.

One of form of compensation was didactic or teacher-centered instruction, which made
up 36% of classroom instruction. In this style of instruction, teachers compensated for students’
inability to read the textbook by giving students the information they needed instead of letting
the students discover the information by other means (i.e. Internet, textbook, collaboration, etc.).
A second form of compensation was multiple exposures to course content, in which teachers would first present the information didactically, then, students engaged in review activities, such as worksheets, quizzes, question answering, and verbal reviews. Similarly, in the third form of compensation, teachers used multiple modalities by presenting information through visual displays, Internet representations, videos, pictures, and other tactile formats. As a fourth form of compensation, two teachers claimed to use alternative texts to meet the reading needs of their students. Even though these alternative texts were used, the teachers did not provide any reading comprehension instruction or support. The last trend Ness (2008) noticed in how teachers compensated for their students’ difficulty reading course texts was that teachers grouped students heterogeneously where struggling readers were paired with students of higher levels. Teachers grouped students this way to read aloud from textbooks, navigate Internet sites, complete worksheets, or answer questions for upcoming tests. In this form of compensation, teachers did not differentiate to meet the needs of all of the students.

Upon completion of the study, Ness (2008) noticed that although teachers recognized the need for remediation for struggling readers, they provided remediation for the content information rather than the reading skills. Many teachers felt spending instructional time on content knowledge was more important than teaching students how to read because content knowledge was needed for the state standardized test. However, because reading strategies improve both comprehension of information and retention of content, this study supported the need for professional development for content area teachers regarding reading to learn in content areas in order to promote lifelong literacy skills and the need for targeted instruction in order to improve the literacy skills of struggling readers. While Ness (2008) focused on the teachers’ role in providing targeted instruction to encourage literacy development, in the next two studies, Ivey
and Broaddus (2007) and Cohen (2002) examined how student literacy benefited from receiving targeted instruction.

In 2007, Ivey and Broaddus conducted a formative study which investigated how to encourage 7th and 8th grade immigrant students just beginning to read, write, and speak in English to be engaged in reading and writing. The researchers’ believed that increasing the time spent actually and purposefully reading and writing would benefit all students. Their intervention encouraged self-selected reading and both whole-class and small-group teacher-directed reading and writing on topics of high interest. In order to determine if the intervention was successful the researchers utilized a number of assessments. Ivey and Broaddus employed classroom observations, student interviews, teacher-researcher debriefings, artifacts of students’ reading and writing and reading logs. In addition, they used research notes and reflections on time spent reading and writing with individual students to determine if the intervention was successful. The dependent variable was student engagement in these tasks.

The study took place in a small, rural town in the southeastern United States with an increasing population of immigrants. More just over 30% of the students participated in the school district’s ESL program, and about 70% spoke Spanish. The classroom selected for the study consisted of seventh and eighth grade students who possessed a limited ability for reading and writing in English. All of the students who participated in the full-year of the study were native Spanish speakers. Ten of those students claimed not to have been exposed to English before moving to the United States. A Spanish-speaking aide, hired to translate in the classroom and participate in small-group activities, encouraged the students’ use of their native language.

The researchers began the study by administering pre-assessments including two widely used reading assessments, both English and Spanish spelling inventories, and a writing sample.
The researchers used the assessments to determine the most informative methods of assessing literacy acquisition in order to contend with existing theories on this topic. Next, the classes were structured to begin with 15 minutes for free reading during which time the teachers provided support for the students as they read by conferencing or partner-reading with students who appeared to be struggling. The researchers provided a wide-range of texts for the students to read in both English and Spanish. The next part of class involved both whole-group and small-group activities that connected listening, reading, and writing geared towards the students’ personal and cultural experiences. The researchers would meet weekly to review and discuss the data collected. They shared notes based on their observations and compared notes from the previous weeks. The researchers used the data from the meetings to make decisions about how to proceed with the interventions.

Interventions suggested by Ivey and Broaddus (2007) included expanding the quantity and diversity of reading materials available to the students, recognizing means of support in order to make a difficult text more accessible, and scaffolding experiences in writing. Evidence of the need to expand the quantity and diversity of available reading materials presented itself when many of the students seemed uninterested in the books available to them in Spanish. In order to address this need, the researchers created specific categories of materials that seemed to work for their participants; they included content and concept books for emergent readers, word-play books, wordless picture books, simple bilingual books, picture books with patterns that repeated, picture books that showcased familiar spoken language, and a variety of other materials from outside of the school such as menus, greeting cards, and letters. Furthermore, the researchers identified a need to make support for difficult texts more accessible to the students. The researchers found choral and echo reading ineffective with the students in their study.
Instead, students benefited from being read aloud to before beginning their reading independently. Finally, the researchers discovered a need for scaffolding writing instruction through the use of the Language Experience Approach (Stauffer, 1970, as cited in Ivey & Broaddus, 2007).

The researchers drew the following conclusions. First, programs created to address the literacy needs of adolescent second-language learners should offer a variety of materials to facilitate student learning and provide flexibility for the use of the materials. Additionally, second language learners should be acquainted with a wide range of materials that are relevant to their culture and experiences while also developing their understanding of the new language, and lastly, effective instruction simultaneously attends to reading, writing, language, and content learning through comprehensive activities. Furthermore, the researcher concluded that a number of instructional practices, including teacher read-alouds before independent reading, teacher explanations, student dictations, and patterned writing improved students’ engagement with reading. While this use of explicit instruction is not elaborated upon in the following study, the following study emphasizes intervention based on the literacy needs of the student.

This next study, conducted by Cohen in 2002, investigated the effects of one-on-one reading intervention on a student’s interest and ability in reading. Cohen (2002) proposed three hypotheses: readers who understand a purpose for reading will be more interested in reading; reading a book of high-interest will improve reading comprehension, and reading books in a student’s native language will improve the student’s reading ability. The dependent variables included a widely used reading assessment and an interview about the student’s perspectives and practices regarding reading. The researcher administered the reading assessment and the interview regarding perspectives and practices at the beginning and the end of the summer
literacy program. Furthermore, he met with his student a year after the summer literacy program to administer the reading inventory and a follow-up interview.

Thirteen high school students participated in a summer literacy program that paired each participant with a graduate student tutor. The participants’ reading level ranged from below grade-level to above grade-level. The researcher served as a tutor in this program for one of the thirteen students. Cohen’s student, Mario, emigrated from Mexico to the United States in eighth grade to join his father who had already lived in the U.S. for a few years. Although he took English classes in Mexico prior to arriving in the U.S., he admitted that (on various occasions) he did not always feel comfortable communicating with his English-speaking peers and teachers. Cohen noticed that Mario tended to memorize what he was reading instead of understanding and thinking about the text. He also seemed to lack an internal purpose for reading, which prevented him from making necessary improvements.

The summer literacy program lasted four weeks and consisted of five periods each day. The length of time for each period was not specified. The sections consisted of whole-group and individual activities. In the first period, the students worked on a computer-based program with a certified English teacher, while the tutors met with to plan the day. In the second period, the tutor met individually with his student to carry out the need-based instructional plan. Next, half of the students read silently, while the other half met with the tutors who taught small group lessons. The students switched after 20 minutes. The students spent the final period researching and writing a biographical report.

During the second period, the Cohen worked with Mario and noticed that he struggled with creating mental pictures to help him comprehend as he read. In order to address this need, the researcher thought-aloud as he created mental pictures while he read and prompted Mario to
do the same. The researcher also discovered that Mario had difficulty making connections with the text; thus, the researcher prompted Mario to make text-to-text, text-to-self, and text-to-world connections (Keene & Zimmermann, 1997 as cited in Cohen, 2007). Furthermore, during the third period of the day, it became obvious to the researcher that Mario had difficulty selecting a book that he was interested in reading. Therefore, the researcher sought books of high-interest for Mario to read. Initially, Mario selected a book about the Egyptian pyramids but had a difficult time reading the text and focused mostly on the captions under the pictures. When the researcher discovered Mario was interested in boxing, he brought Mario a book about Julio Cesar Chavez. Mario took the book home over the weekend and read the book. He came back after the weekend excited about Chavez, but Mario claimed to still have difficulty reading it. At this point, the researcher gave Mario a book in Spanish, but he admitted that he could only understand the book if it was read aloud. The researcher then found a low reading-level novella of high-interest. The weekend after experiencing the terrible tragedy of his friend’s death, Mario admitted he found solace in the book and read it cover-to-cover that weekend. Mario continued to read books of that genre.

Mario’s pretest revealed his difficulty with reading texts at his grade-level. He stopped after the first two paragraphs of the Social Studies portion of the test and did not answer the questions. When Mario was tested fifteen months after participating in the summer literacy program, he responded with ease to all of the questions in this section. Furthermore, Cohen noted that Mario transacted with the text by asking questions and forming opinions. During the perspectives and practices post-interview, Mario shared a few experiences that had occurred since the pre-interview that motivated him to read; however, he also admitted that the one-on-one tutoring during the summer literacy program played a key role in changing his perspective
on reading. Thus, two out of the three hypotheses noted by the researcher proved to be true. Mario became more motivated to read when he understood a purpose for the reading and he became a more avid reader once he found books of high-interest to him. Based on anecdotal evidence, Cohen concluded that books in Spanish did not improve Mario’s literacy development.

It was found that one-on-one tutoring paired with targeted literacy instruction most effectively improved the literacy skills of an ELL reader.

All three studies provided evidence for incorporating targeted instruction for struggling readers. Ness (2008) found that struggling readers could benefit from receiving targeted literacy instruction in all subject areas. Teachers can determine the necessary targeted instruction from initial analysis of the students’ literacy needs. For all educators, this type analysis can come from a formal reading comprehension assessment or an informal interview regarding the student’s perspective on reading and desire to practice reading. Ivey and Broddus along with Cohen agreed that reading books of high-interest that were relevant to the student’s cultural identity increased a student’s motivation to read. Since the participants in the both studies spoke Spanish as a second language, the researchers provided literature in Spanish for the students to read.

Based on the negative response of the students and the lack of positive results, the researchers determined this method to be ineffective in the context for which they were working. All three of the studies asserted the importance of providing support for difficult texts. For Ness (2008) this meant providing explicit instruction of reading strategies in content areas. For Ivey and Broddus (2007), this meant reading aloud to students before they read independently. For Cohen (2002), this meant modeling for students one-on-one strategies such as visualizing and making connections. Thus, Ness (2008), Ivey and Broddus (2007) and Cohen (2002) found targeted instruction valuable for struggling readers. Those teachers seeking to improve their students’
literacy skills need to provide the necessary targeted instruction in order for their students to reach their highest literacy potential.

**Explicit Strategy Instruction: Implementation**

In order for teachers to help students achieve their highest literacy potential, it is essential that teachers implement explicit strategy instruction based on the students’ needs. The following studies conducted by Cantrell and Carter (2009), Schorzman and Cheek (2004), Simmons et al. (2010), Mateos et al. (2008), and Alfassi (2004) show the importance of explicitly teaching reading strategies to improve students’ literacy skills. The study conducted by Cantrell and Carter (2009) explored the reading strategies that middle and high school students perceived using when reading. Cantrell and Carter looked to students to provide teachers with insight as to the most effective instructional practices that would meet the needs of struggling readers. The study investigated how students’ use of academic reading strategies differ based on achievement levels, how gender and grade-level affect the achievement and use of reading strategies, and how adolescents of differing ages, genders, and reading abilities use deep- and surface-level cognitive processes. The independent variables were the students’ age, gender, and reading ability versus their perceived strategy use. The dependent variables were the MARSI, a self-report measure used to assess students’ awareness and perceived use of reading strategies with academic reading, and the Group Reading Assessment and Diagnostic Evaluation (GRADE), which is a norm-referenced standardized reading assessment. Cantrell and Carter hypothesized that reading achievement, age, and gender influence strategy use with academic reading.

This study’s sample consisted of 550 sixth-grade students and 1,570 ninth-grade students from seven schools: one urban, four suburban, and two rural. The gender break-down was about even. The schools’ cultural and socioeconomic diversity ranged from 26% to 69% free and
reduced lunch and 25% to <1% minority. Data collection occurred one time at the beginning of the school year.

The teachers of participating schools administered the GRADE and the project managers administered the MARSI to each sixth and ninth grader in September of the academic year. In order to ensure equity amongst reading ability levels, the project manager read aloud each question on the MARSI and the students marked their responses on the scan sheet.

In general, Cantrell and Carter (2009) found that students perceived using problem-solving strategies more often than the other three strategy types. These strategies included visualizing, rereading, changing reading speed when faced with a comprehension problem, and stopping to think. However, students perceived using global reading strategies less often, and more functional strategies the least often than the three strategy types. Global reading strategies refer to previewing and skimming the text, while functional reading strategies refer to note-taking and paraphrasing.

In the investigation of reading achievement versus students’ perceived strategy use, data revealed a significant positive relationship between reading achievement and the students’ perceived use of global and problem solving strategies while it revealed a negative relationship between reading achievement and the students’ use of support reading strategies. Poorer readers noted using global and problem-solving strategies less often than better readers and better readers noted using support reading strategies less often than poor readers. Ultimately, Cantrell and Carter (2009) concluded that students with higher reading achievement perceived using global and problem strategies more often while students with a lower reading achievement perceived using support strategies more often.
In the investigation of girls strategy use versus boys perceived strategy use, girls noted using more strategies in all three types than boys. Furthermore, in the analysis of age versus strategy use, the researchers found a significant difference existed between sixth graders using support strategies versus ninth graders. However, the negative relationship between the use of support strategies and reading ability appeared to be much stronger for sixth-grade students than for ninth-grade students. Cantrell and Carter (2009) do not cite specific causes for these findings.

Finally, the relationship between deep-level support strategy use and reading achievement was not significant. Both surface-level support strategy use and deep-level support strategy use presented negative relationships to reading achievement. Surface-level support strategies include underlining or circling information, taking notes, and using reference materials while deep-level support strategies include self-questioning, summarizing, and paraphrasing.

Cantrell and Carter (2009) offered several different interpretations thus providing varied instructional implications based on their findings. While poorer readers noted using surface-level strategies more often, one interpretation of this finding may suggest that teaching surface-level strategies is not the best instructional practice for poorer readers. Cantrell and Carter (2009) suggested one reason poorer readers noted using more surface-level strategies could be due to the fact that surface-level strategies were the primary focus of their comprehension instruction. This finding suggested teachers make global reading strategies the focus of instruction in order to better assist struggling readers in solving the comprehension problems they encounter as they read. A different interpretation of this finding suggested that struggling readers use surface-level strategies more because they are more helpful to struggling readers than to proficient readers.

Based on these interpretations, educators seeking to best support this targeted population should consider making global reading strategies the focus of comprehension instruction.
Upon analysis of the age versus strategy use, the results implied that teachers should provide more strategy instruction for boys. The researchers identified that this study focused on students’ perceptions of their strategy use and may not accurately portray their actual strategy use. Additionally, the measurements used in the study required the students to think about their strategy use with academic reading in general; therefore, some of the results might have been different if the measures were content-area specific. In the end, Cantrell and Carter maintained that their study reinforced the idea that strategy use has a positive affect on reading achievement.

While Cantrell and Carter (2009) investigated students perceived strategy use, the next four studies put more than one specific reading strategy to the test to see if they affected reading comprehension (Schorzman & Cheek, 2004; Alfassi, 2004; Mateos et al., 2008). In their 2004 study, Schorzman and Cheek (2004) wanted to know the effectiveness of three commonly used comprehension strategies, the Directed Reading-Thinking Activity (Stauffer, 1969 as cited in Schorzman & Cheek, 2004), the Pre-reading Plan (Langer & Nicolich, 1981 as cited in Schorzman & Cheek, 2004), and graphic organizers.

For their seven-week study, Schorzman and Cheek (2004) identified the independent variable as improving students’ reading comprehension through strategy instruction versus district curriculum. The researchers would refer to the schools as School A and School B in order to compare them. The dependent variables included a norm-referenced test, an informal cloze reading assessment, and classroom observations. The study consisted of 103 sixth grade students from six different classrooms with three classrooms in each of the two middle schools in a suburban, southern school district Schorzman and Cheek implemented the informal reading assessment as a pre- and posttest to all test samples. Additionally, the researchers monitored the study’s implementation through classroom observations. In order to monitor the experimental
group, the researchers used a checklist of objectives with specific strategies and a space for general comments about as well as the students’ response to the lesson in bi-weekly observations.

The strategy instruction consisted of the Directed Reading-Thinking Activity (DR-TA) (Stauffer, 1969 as cited in Schorzman & Cheek, 2004), the Pre-reading Plan (PreP Technique) (Langer & Nicolich, 1981 as cited in Schorzman & Cheek, 2004), and graphic organizers. The DR-TA system involved creating hypotheses before reading a selection of text, and then reviewing or making changes to the hypotheses after reading the selection of text (Stauffer, 1969 as cited in Schorzman & Cheek, 2004). Through use of this strategy, students learn to provide support for their hypotheses from their reading. Through the PreP Technique teachers activated prior knowledge using pictures or clue phrases for the theme or concept of the reading and gauge what knowledge could assist students’ experience with the reading (Langer & Nicholich, 1981, as cited in Schorzman & Cheek, 2004). A graphic organizer (Barron, 1969 as cited in Schorzman & Cheek, 2004) was any strategy for mapping students’ thinking (Barron, 1969, as cited in Schorzman and Cheek, 2004). Teachers whose classrooms were selected to be a part of this study attended training sessions regarding the implementation of the strategies, as well as a weeklong pilot study that allowed the teachers practice with the lesson outlines. Students in School A received strategy intervention during their regular Reading class while students in School B received the sequential, skill-based curriculum of the school district. Both schools received instruction four days each week with the fifth day set aside for the independent reading of students’ Accelerated Reader books.

Upon analysis of the data, Schorzman and Cheek (2004) noted that the instructional practices of each group influenced their assessment results. Again, the assessments employed in
this study to all test samples were an informal reading assessment as a pre- and posttest and classroom observations monitored using a checklist of objectives and a space for general comments. The differences between the scores of the experimental and control groups on the cloze reading assessment were significant; however, the results were not significant for the standardized reading assessment. The researchers believed the intervention helped the experimental group develop the skills needed to respond to the informal cloze reading assessment, such as recognizing and using context clues; whereas, the instruction that the control group received focused on test-taking strategies promoted the control group’s success on the norm-referenced assessment.

Overall, the empirical and descriptive findings suggested that strategy instruction positively impacted reading comprehension affectively. However, the researchers determined some limitations in the study. First, there was an inherent limitation in the heterogeneous nature of the school district. Furthermore, the abbreviated length of time due to the school’s schedule could have limited the study’s scope. And, finally, the fact that the two groups read different stories could have influenced the effectiveness of the strategy intervention. As a result of these limitations, the researchers acknowledged the importance for further investigation on the affects of strategy instruction on reading comprehension.

Simmons et al. (2010) found combined strategy instruction best met the comprehension needs students with Social Studies text. Similarly, the study conducted by Alfassi (2004) found combining the strategies of predicting, clarifying, summarizing, and asking questions in a ninth grade English language arts class improved comprehension, and Mateos et al. (2008) found combining summarizing and synthesizing encouraged literacy growth in a middle school Social Science class.
In this study, the researchers wanted to know how two different instructional approaches for strategy instruction with content area text affected student learning. Simmons et al. (2010) selected two approaches based on the lack of research investigating multiple strategy instruction on comprehension of content area textbooks. One approach taught students using cognitive strategies to comprehend and learn independently, while the other approach promoted vocabulary acquisition and application through the combination of teacher-directed and student-regulated strategies. The researchers investigated the effect of multiple-strategy intervention on students’ performance on typical comprehension and vocabulary assessments compared to common Social Studies practice, whether multiple-strategy interventions affect student performance on assessments of typical Social Studies content and vocabulary, and the impact of teaching quality and fidelity on the effects of the strategy approach. The independent variables were the type of instruction approaches: multiple strategy instruction with content area text versus typical content area instruction and effects of quality and fidelity on student learning: high quality and fidelity versus poor quality and fidelity. The dependent variables used to test the effectiveness of the instructional approaches included a silent-reading fluency assessment, a standardized comprehension assessment, three unit tests given during the Social Studies course, a pre- and posttest vocabulary assessment testing general vocabulary knowledge, and a pre- and posttest vocabulary assessment testing knowledge of Social Studies vocabulary. The dependent variables used to test the effectiveness of quality and fidelity of teaching on student learning included three audio-recorded lessons assessed by a research-based rubric.

Three conditions were used for the study: the vocabulary condition, the comprehension condition, and the typical practice condition. The comprehension condition refers to classrooms in which teachers focused reading instruction on content, text, structure and purpose. The
vocabulary condition refers to classes in which teachers scaffolded teacher-directed and independent word-learning strategies, and the typical practice condition refers to classrooms in which teachers continued to instruct students using their usual methods.

Two average-sized school districts in Texas, referred to as District 1 and District 2, participated in this sizeable study. A total of 61 Social Studies classes participated in the study with 903 participants in total. Both school districts served a large number of children from low-socioeconomic households. Fifteen elementary schools participated from District 1 and seven from District 2. Seventy-seven percent of the students in District 1 and 65% of the students in District 2 qualified for the free or reduced-price lunch program. Forty-eight elementary Social Studies teachers participated in the study. Teachers in all three conditions averaged between six and 10 years of teaching experience. Seventy-one percent of the students came from District 1 and 73% came from District 2. The students averaged 10 years in age. Each group consisted of racial and ethnic diversity. Simmons et al.’s study lasted a total of 18 weeks.

In order to carry out the study, the researchers replaced regular Social Studies time with the intervention. In the comprehension condition, teachers implemented one strategy every six weeks over the 18-week study. Thus, participants of the study would be exposed to three comprehension strategies within their content class: asking questions, determining the main idea, and summarizing text. All three of the strategy phases followed the same instructional plan, teacher modeling, then, guided practice, followed by independent practice. A new strategy was implemented every six weeks. First, the teachers taught the students the strategy of asking and answering questions. During the second strategy phase, the teachers prompted students to identify the main idea and write main-idea statements; the third strategy was summarizing. At
this time the teachers instructed the students to use their main idea statements to summarize larger selections of text.

For the vocabulary condition, teachers scaffolded word-learning strategies beginning with teacher-directed instruction followed by independent word-learning strategies. In this condition, teachers integrated one strategy every six weeks to encourage students’ learning of Social Studies vocabulary in order to comprehend Social Studies text. The vocabulary terms selected included words from the district curriculum, teacher experts, state standards, and the Social Studies textbook. During the first unit, teachers selected four to six words each week to explicitly teach. The various strategies taught with each word included reviewing the definition for crucial terms, investigating illustrations, recognizing root words, using the word in context, connecting related words with the new word, and applying the word in a sentence or definition in the students’ own words. In the second unit, teachers activated background knowledge by planting key vocabulary terms in anticipation guides. The anticipation guides consisted of a series of statements from the section of text the students were preparing to read. As a before reading strategy, the students read each statement and mark the ones with which they agree. The teachers in the vocabulary condition used the anticipation guides as a means to of teaching key vocabulary words. For example, to teach the word boundary, the teachers in the vocabulary condition may have used a statement such as *The boundary between Wisconsin and Minnesota is the Mississippi River* on an anticipation guide before reading a text on this topic. During the last unit, teachers incorporated a student-directed vocabulary strategy into the lesson plan. Teachers taught the students to determine the meaning of new words using morphological and contextual clues.
In order to assess the quality and fidelity of the instruction, professional development played a crucial role in the study. Teachers in the experimental group received professional development that involved face-to-face sessions led by the researchers as well as opportunities to apply the learned instructional strategies and work in small-groups of other teachers for a total of 18 hours over 21 weeks. In comparison, the researchers instructed the teachers in the typical practice condition to maintain their usual instructional practices.

Simmons et al. (2010) found that the vocabulary assessments and the comprehension assessment presented a positive correlation. When comparing the vocabulary condition to the comprehension condition, the researchers found that students in the vocabulary condition knew an average of five more words than those students in the comprehension condition. This could be attributed to the explicit vocabulary instruction provided in the vocabulary condition. Additionally, it was concluded that students in the vocabulary condition knew six more words on the assessment for general vocabulary knowledge than the students in the typical practice condition. The researchers noted that 10 words in this assessment were selected from the 62 words taught during the 18-week intervention. Still, Simmons et al. (2010) found no reliable difference between the conditions on the standardized assessment of reading comprehension or the assessment specifically for Social Studies vocabulary. This finding could be due in part to greater expanse of Social Studies vocabulary and content included in the standardized assessment in comparison to the intervention.

Based on the standardized reading comprehension measure, the quality of teaching did not have an effect on either condition. The researchers believed this to be true because many components of quality teaching existed in the intervention strategies. In addition, the researchers
found the fidelity of treatment across the conditions difficult to distinguish. Teachers may have needed more time to master the complex instructional procedures required for the interventions.

Upon analysis of the results, the researchers believed the study provided insight into the benefits of incorporating strategy instruction in the content area. Based on the findings of this study, distinguishing a part of Social Studies instructional time to explicitly teach comprehension and vocabulary strategies may help students understand content area texts and content-specific vocabulary. In regards to vocabulary instruction, teachers should explicitly teach content vocabulary and scaffold word-learning strategies so students can use them independently. In regards to comprehension, teachers should incorporate specific strategy instruction in order to improve reading comprehension.

As emphasized in the studies mentioned earlier in this section, Simmons et al. (2010) identified explicit strategy instruction as a valuable asset for reading comprehension. Additionally, Simmons et al. (2010) recognized the need for further investigation of the time needed to effectively implement the strategies and the most effective combination of strategies to best meet students’ comprehension needs. Alfassi et al. (2004) provides further investigation on the effects of combining strategies predicting, clarifying, summarizing, and asking questions to best meet student needs.

Alfassi (2004) examined how effective reading comprehension intervention is when delivered by teachers within a high school English language arts class. He investigated whether combined strategy instruction or traditional instruction would best meet the literacy needs of high school students whose reading skills were at or near grade level. Alfassi (2004) hypothesized that combining strategy instruction would promote improved learning from texts. The independent variable was the type of reading instruction: combined strategy instruction
versus traditional classroom instruction. The dependent variables were the results from the Gates-MacGinitie Reading Comprehension Test (MacGinitie & MacGinitie, 2000 as cited in Alfassi, 2004) and a researcher created reading assessment.

The student participants included 49 freshmen from a suburban, Midwestern high school in two heterogeneous English language arts classes. The students were randomly selected to be a part of each condition. Twenty-nine students comprised the experimental group with 20 students in the control group. The researcher selected student participants who were at or near grade level based on the recommendation of their language arts teacher as well as their reading ability based on the results of a standardized reading assessment. All of the students performed within the 45th percentile and above on the standardized reading assessment administered before the study began. The teacher participants possessed similar years of experience and training including participation in a six-hour training session by the school administration on strategy instruction just before the study began.

In order to assess the students reading ability and strategy use before and after the study, Alfassi (2004) selected eight expository reading passages at a ninth-grade reading level from textbooks that involved a variety of reading skills. Once students finished reading each passage, they were given 10 comprehension questions that included four questions in which the answer was explicitly stated within the text, four questions in which the answer had to be inferred from information within the text, and two questions in which the answer had to be inferred using prior knowledge related to the topic. The researcher chose this format because it mirrored that of the question presented on quizzes and tests given in content-related courses. Four of the expository texts and the corresponding questions would be used for the pretest and four would be used for the posttest. Additionally, teachers administered the Gates-MacGinitie Reading
Comprehension Test (MacGinitie & MacGinitie, 2000 as cited in Alfassi, 2004) to determine whether or not the strategic reading learned from the expository passages carried over to a measure similar to high-stakes testing.

The study spanned over a period of 20 consecutive school days and contained three phases. In Phase I, teachers administered the Gates-MacGinitie Reading Comprehension Test (MacGinitie & MacGinitie, 2000 as cited in Alfassi, 2004) and four of the eight expository passages with the corresponding questions to both the experimental and the control groups to determine a baseline. Phase II involved the intervention for 20 minutes each day during the study. The teachers of both the experimental and the control group maintained similar course content including reading load and assignments. Students in both groups studied difficult vocabulary words, read a minimum of 50 pages per week, wrote responses to assigned questions, and studied the literary devices authors use to enhance the reading experience for readers. Finally, Phase III involved post-testing the students using the four remaining expository passages and their corresponding questions as well as the Gates-MacGinitie Reading Comprehension Test (MacGinitie & MacGinitie, 2000 as cited in Alfassi, 2004).

While both groups studied similar concepts during Phase II, teachers of the experimental group provided intervention in three stages through the use of reciprocal teaching to explicitly teach reading strategies. First, over two consecutive days, teachers of the experimental group modeled and practiced the reciprocal teaching strategies of predicting, clarifying, summarizing, and asking questions using think-alouds. During these sessions, the students observed the teachers modeling these strategies. When modeling making predictions, the teacher shared predictions for the next section of text, then, shared questions related to prior knowledge associated with the information in the text. In order to model the strategy of clarifying, the
teacher modeled how to make sense of new words and confusing phrases. Modeling the strategy of summarizing involved teaching students how to differentiate between main ideas and supporting details and present the gist of the passage using a few sentences. Finally, when modeling asking questions, the teacher explained to students the various purposes for asking questions. One purpose presented was to check for comprehension of the text, and another purpose presented involved generating factual questions that could appear on a test or quiz. The teachers ended each of these introductory sessions by presenting the students with 10 questions on the reading passage that related to the strategy taught during that lesson.

Next, the students gradually took over more responsibility for leading the group through the strategies in the guided practice stage. For the first two days the student led the class with one of the four strategies and the teacher led the class with the remaining three strategies. Each day the student led an additional strategy until the student was responsible for leading the class with all of the strategies. Finally, during the third stage, the teacher divided the class into small groups and the students took turns leading discussions using the strategies. At the end of both the second and the third stage, the teacher gave the students 10 comprehension questions to answer based on the text read during that stage. After completing the 20 days of intervention, the teachers administered posttests using the remaining four expository passages and response questions, as well as the Gates-MacGinitie Reading Comprehension Test (MacGinitie & MacGinitie, 2000 as cited in Alfassi, 2004).

Alfassi (2004) analyzed the results of the pretests and determined that prior the study both groups had similar levels of comprehension. Upon completion of the study, students in the experimental group revealed improvement in comprehension from pretest to posttest while the control group remained the same with, in some cases, slightly lower scores on the posttest. The
results prove Alfassi’s (2004) hypothesis that combined strategy instruction taught in an English language arts class will improve students’ reading comprehension ability. Mateos et al. (2008) found similar results but with middle school students in a content area class.

Mateos et al. (2008) conducted a qualitative study to investigate the effects of summarizing and synthesizing on tasks involving reading and writing to learn in a Social Science class. They hoped to better understand what challenges 15-year-old, Spanish secondary students face when they encounter activities that involve reading and writing to learn. The researchers posed the following research questions. 1) What type of cognitive and metacognitive activities do secondary students express when carrying out “hybrid” reading and writing tasks? (Hybrid refers to tasks that involve both reading and writing.) 2) Does a student’s processing change when carrying out tasks that involve summarizing a single text versus synthesizing multiple texts? 3) To what extent does student processing connect to the quality of a written product produced during reading and writing tasks? Mateos et al. (2008) hypothesized that no direct relationship existed between the quality of a student’s written product and the quality and quantity of the student’s cognitive approach to reading and writing tasks. They collected data to analyze their hypothesis by videotaping two sessions each year when the students were engaged in the summarizing and synthesizing activities and analyzing the students’ utterances. Additionally, the researchers collected the students’ written summaries and syntheses.

The participants for the study included nine, 15-year-old students from a state-run secondary school in a middle to lower class section of Madrid. The researchers chose three girls and six boys based on their reading comprehension and writing skills on a language assessment as well as the academic achievement in their Social Sciences classes measured by their grades. The nine students represented a range of achievements based on the measures for the study. Two
of the students had high scores in both the language assessment and their Social Science grades, two students had high scores in their Social Science grades and low scores in the language assessment, while two had low scores in the Social Science grades and high scores in the language assessment, and the remaining three students possessed low scores in both measures.

Mateos et al. (2008) chose to complete this study in the context of the students’ Social Science class. They used an unfamiliar topic of learning how cities evolved to practice the strategy of summarizing, whereas, to practice the strategy of synthesizing, Mateos et al. (2008) used the slightly familiar topic of immigration in Spain. The texts selected for the synthesis practice included one from a textbook and a second from a newspaper. To determine the students’ familiarity with the topics before performing the summarizing and synthesizing tasks, the researchers asked questions regarding their prior knowledge. Two times during the year, in March and in May, the participants performed the summary task followed by the synthesis task in a whole group setting. Both sessions were video taped, and each session ranged from 20 minutes to one hour in time.

During the summarizing and synthesizing tasks, Mateos et al. (2008) asked the students to read one text and write a summary of that text, then read two texts and write a synthesis of the two texts. As the students read, the researchers asked the students read aloud and think-aloud everything they were thinking as they read and wrote. If the researchers needed clarification on the think-aloud task or a student did not think-aloud spontaneously, the researchers used neutral questions to probe the students, such as “What are you thinking now?” The students received training on the think-aloud procedure prior to complete the reading tasks for the study. As they performed the tasks, a video camera recorded the students.
To analyze the data from the video recordings of the reading and writing tasks, Mateos et al. (2008) categorized each utterance made by the students. The utterances were categorized as task analysis events when students reflected on the difficulty of a task, planning utterances when students set goals or organized procedures, meaning construction when students paraphrased or elaborated on an idea, monitoring when students confirmed or questioned their comprehension, and affective/evaluative reactions when students reacted emotionally or evaluated the task. Mateos et al. (2008) coded the videotaped reading and writing activities based on how the reader monitored comprehension through various approaches to rereading and taking notes. If the activity was performed at least once, it was coded for analysis.

In addition to analyzing the video recordings, Mateos et al. (2008) analyzed the students’ written work. Mateos et al. (2008) categorized the written summaries into four levels for analysis. Written summaries categorized into level one included ideas in a list format that lacked organization with minimal paraphrasing and excluded the main ideas. Level two summaries included ideas in list format with a minimal attempt at organization as well as paraphrasing and included some main ideas. Level three summaries included almost all of the main ideas with coherence and paraphrasing but failed to address the overall theme; whereas, level four summaries included all of the main ideas with coherence and addressed the overall theme. Similarly, Mateos et al. (2008) categorized the written syntheses into three types for analysis. Type one syntheses included ideas from only one of the texts; type two syntheses revealed a combination of summaries without connecting similar ideas; whereas, type three syntheses revealed an integration of similar ideas from the two texts.

During the analysis, Mateos et al. (2008) discovered activities related to making meaning such as paraphrasing and making connections through restatements and elaborations happened
most frequently in both the reading and writing tasks. However, in the context of making meaning, students infrequently drew conclusions or integrated ideas from within one text in the summaries or from one text to another in the syntheses. Yet, when comparing the integration of ideas between the summaries and the syntheses, ideas were more frequently integrated in the syntheses. Furthermore, in comparing the students’ cognitive strategy use during each task, the researchers found that students tended to verbalize a lack of understanding or confirmation of their understanding more often during the writing task than during the reading task. Also, when comparing the summaries and the syntheses, the researchers found that on the syntheses students engaged in reformulating ideas less and rereading more than on the summaries. In addition, the researchers noticed that the students did not track their thinking during both tasks based on the students’ lack of annotating and underlining while reading as well as the lack of outlining or drafting during the writing tasks.

After analyzing the data, Mateos et al. (2008) suggested the following responses to their research questions. In response to the first research question posed regarding the type of metacognitive activities secondary students express during hybrid reading and writing tasks, Mateos et al. (2008) found that students lacked the cognitive and metacognitive ability to read and write strategically. Evidence of this conclusion revealed itself in the students’ inability to make revisions and monitor comprehension over multiple texts. Most notably, the students’ revisions involved simple modifications due to comprehension problems of single sentences rather than reorganizing sections. Additionally, most students did not create rough drafts or make notes during the writing process.

In response to the second research question investigating the cognitive processing strategies the students use to summarize and synthesize, Mateos et al. (2008) discovered a few
differences. One difference was the students’ expression of opinion increased when synthesizing, which the researchers felt could have been a result of the topic of the text. Secondly, the researchers noticed the students reread more on the synthesis task, which could have occurred as a result of the intense processing needed for synthesizing two texts. The researchers also included the students’ approach to planning in the discussion of cognitive strategies. The researchers hypothesized that the students would put more effort into planning when writing the synthesizes; in contrast, the students appeared to put equal effort into planning both the summaries and the synthesizes. One reason for the equity of effort could be due to the students’ inexperience with the task of synthesizing, which caused them to tackle it using the same approach they would for the more familiar task of summarizing.

Finally, in response to the third research question regarding the extent to which student processing connects to the quality of the written product, Mateos et al. (2008) believed the best work came from the students who displayed more recursive or flexible reading and writing skills such as rereading the sources and revising ideas in their written tasks. Whereas, they believed the poorest work came from students who displayed a more linear or routine approach to reading and writing tasks. Often, these students misinterpreted the text or lacked the appropriate background knowledge needed for accurate comprehension. While Mateos et al. (2008) recognized areas of weakness in their study, such as the inability to make generalization based on the small number of participants and the subjectivity of the text selection, they concluded the importance of practicing summarizing and synthesizing in classrooms in order for students to develop stronger reading and writing skills.
Conclusion

The studies cited in this chapter suggest it is essential that educators participate in professional development targeting the literacy needs of their students, utilize the instructional strategies gained through the professional development to target student needs, and implement explicit strategy instruction in order to meet those needs. The first section of studies acknowledges the role of professional development in literacy instruction. In the first study, Sheridan-Thomas (2007) found it important to educate pre-service teachers on the multiple facets of literature before they enter a classroom for the first time as a teacher. While the second study conducted by Fisher et al. (2009) addressed the need for a school staff to reevaluate their approach to literacy instruction in order to improve the literacy of their students. Finally, the third and fourth studies, conducted by McIntyre et al. (2010) and Echevarria et al. (2011) determined the effect of professional development on student achievement. All four studies supported the need for quality professional development for educators in order to improve student literacy (Sheridan-Thomas, 2007; Fisher, Frey, & Lapp, 2009; McIntyre, Kyle, Chen, Munoz, & Beldon, 2010; Echevarria, Richard-Tutor, Chinn, & Ratleff, 2011).

Quality professional development can provide educators with the instructional strategies needed to provide targeted instruction in order to meet students’ needs. However, teachers need to identify their students’ needs first, and then seek the instructional strategies that best meet the students’ needs. The next section of studies revealed how teachers targeted instruction for struggling readers (Ness, 2008; Ivey and Broaddus, 2007; Cohen, 2002). Ness’s (2008) study identified the need for targeted literacy instruction in content areas. While the studies conducted by Ivey and Broaddus (2007) and Cohen (2002) incorporate targeted reading strategies to ameliorate the literacy needs of ELLs. While not all struggling readers are ELL, and vice versa,
the studies in the second section illustrate the importance of incorporating instructional strategies targeted towards the literacy needs of the struggling readers.

The final section of studies show the effectiveness of implementing literacy instructional strategies based on students’ needs. Cantrell and Carter (2009), Schorzman and Cheek (2004), Simmons et al. (2010), Alfassi (2004), and Mateos et al. (2008) asserted that explicitly teaching reading strategies with adolescent readers improves their comprehension. The study conducted by Cantrell and Carter (2009) concluded that skilled readers perceived using strategies more than poor readers. Additionally, Schorzman and Cheek (2004), Simmons et al. (2010), Alfassi (2004), and Mateos et al. (2008) found that multiple strategy use improved comprehension of content area texts. Each section of this chapter suggests that educators who recognize the needs of their students and direct their craft based on those needs will foster positive literacy growth in their students.

In Chapter 2, a research base for implementing reading strategy instruction to improve comprehension was established. It addressed the need to target the literacy needs of students and provide strategy instruction accordingly. The following chapter explains a case study investigating the effect of targeting the literacy need of a group of students, scaffolding instruction, and providing frequent practice based on that need. The case study investigates the effect of targeting and scaffolding instruction for the strategy of summarizing on reading comprehension.
CHAPTER 3: ACTION RESEARCH DESIGN

The intervention in this chapter aligns with the research described in Chapter Two that supports teaching reading strategies to improve comprehension. To improve reading comprehension and the retention of information in content area textbooks, the researcher taught her students how to summarize. The researcher implemented Cornell Notes (Keely, 1997 as cited in Medo & Marko, 2007), Magnet Summaries (Buehl, 2009), as well as frequent oral and written summarizing into her instruction of an eighth grade religion textbook. This action research project followed a qualitative paradigm, in so being that the researcher observed the effects of one particular reading strategy on her students’ comprehension of textbook for their Religion class.

This action research project set out to examine the effects of frequent use of summarizing strategies on student comprehension and retention of textbook information. In this chapter, the study’s context will be explained, which will include a description of the school setting in which the study took place and the student sample that participated in the study. Next, the procedures the researcher employed to test her hypothesis will be described followed by an analysis of the methods used for data collection.

Description of Site and Participants

Description of Site

The school in which this study took place served 139 Latina girls in grades five through eight in an urban, Midwestern city. The organization of this school yielded approximately 34 students in each grade broken into two homerooms of approximately 17 students. It belonged to a national network of schools called the Nativity Miguel Network committed to breaking the cycle of poverty through education. This school, as well as other schools in the network,
provided extended-day programs, faith-based education, while serving economically poor and marginalized populations. All students in this school participated in a mandatory after-school program four days a week. The after-school program consisted of an hour of extracurricular activities and an hour of study hall. Students were required to have homework in multiple subjects to be completed in study hall or at home. The students were also required to attend two weeks of camp or other programs during the summer. Graduates of this school were followed through high school and into college by tracking grades and providing academic support to ensure their success in higher education. In 2012, this school employed eleven full-time teachers, five part-time teachers, along with a principal and a part-time assistant principal, a director of the graduate support program, a director of after-school and summer enrichment program, as well as a development office led by the president.

As a school sponsored by the School Sisters of Notre Dame, this school promoted social justice and service with a foundation in faith. The students took classes in Language Arts, Reading, Spanish, Math, Social Studies, and Religion, as well as Computer Skills, Physical Education, Art, and Music. To ensure that students’ needs were being met, students were grouped by ability level for Math, Language Arts, and Reading class, but remained in their mixed ability homeroom groups for all of the other classes including Religion class.

**Description of Participants**

The 15 students that participated in this study were all girls in eighth grade with a median age of 14. Almost all of the students participated in the city’s school voucher program and received financial assistance from the federally funded free or reduced lunch program. Eighty percent of the students and 87 percent of their parents spoke primarily Spanish at home. Almost
all of the students lived in two parent households with siblings. Less than half of the students’ parents held an associate, undergraduate, or graduate degree.

The 15 students made up an eighth grade homeroom and represented mixed abilities in reading. The students remained in this mixed ability group for Religion class. The eighth grade Religion curriculum focused on the history of the Catholic Church. Major historical topics covered during the project include the Church’s response to the Protestant Reformation, the discovery of North America, World War I and World War II. The students had Religion class four days each week—Monday through Thursday with no class on Fridays.

**Procedures**

**Preliminary Preparations**

The week before the project began the researcher explained the purpose of the project to the students, taught the students how to take Cornell Notes (Keely, 1997 as cited in Medo & Marko, 2007), and administered pretests. In the first few weeks of school, the researcher taught the students how to identify important information in content area texts by creating a chart that she referred to as the “Quadrant Chart” (Appendix C). The chart consisted of four sections with each section labeled people, places, terms, and events in which the students recorded important people, places, terms, and events from their reading. Prior to the week of preliminary preparation, the students used the chart to take notes in formats of their choice. The class spent minimal time talking about the format of the notes; the only expectation was that the students included ideas from their Quadrant Charts. Because the purpose of the Quadrant Charts was to identify important ideas, it became an effective step towards practicing the skill of summarizing.

Additionally, prior to the project, the researcher had all of the students in Language Arts or Reading class and taught the students a strategy for writing a summary paragraph. Therefore,
she explained to the students that during the eight weeks of the project they would be using the same strategy used in Language Arts/Reading class as well as the Quadrant Chart from religion class to practiced the strategy of summarizing three days a week in order to improve their comprehension of the Religion textbook and retain information from their reading.

In order to prepare the students to use their Quadrant Charts for practicing summarizing on a daily basis, the researcher taught the students how to take Cornell Notes. She instructed the students to divide a notebook page into three sections (Appendix C). The first section was labeled “Cues,” and it extended just to the left of the margin line on a notebook page (about 2.5 inches from the right edge of the page). The next section was labeled “Notes,” and it began where the Cues section ended, then went to the left edge of the page. The third section was labeled “Summary,” and it was at the bottom of the Cues and Notes section about two inches from the bottom of the page. She explained to the students that they would continue to use their Quadrant Charts to guide the note-taking in the Notes section of the page. For the rest of that week, the class took notes together with the teacher modeling the procedure. The researcher thought aloud for the students what information she would put in the notes section and provided a variety of ideas for Cues. She allowed the students to generate their own summaries for the Summary section of the notes, and informed them that they would be practicing different strategies for summarizing over the course of the project.

For the final step of preliminary preparations, the researcher administered pretests to determine the students’ ability to summarize orally and in writing. The researcher selected a passage that came from the next chapter of the text for the students to summarize. This passage was selected because the students had similar background knowledge since they had just
completed the previous chapter. Each student read the passage and had one class period (45 minutes) to write a summary paragraph.

The following day, the students were asked to reread the passage and orally summarize or retell what they had read. The students were allowed to use the passage as well as any notes that they had taken during the retelling. The researcher created a rubric for both the written and oral summaries (Appendix C) that assessed the students’ ability to incorporate specific people, places, terms, and events, as well as their mention of a main idea or topic sentence, and the accuracy of their information. During the students’ oral summarizing, the researcher noted whether or not the students referred to their notes or the passage as they summarized and the amount of time they used to retell. For the next eight weeks the students updated their Quadrant Charts and took Cornell Notes as they completed their textbook reading assignments, and practiced oral and written summarizing.

**Intervention: Instructional Measures/Activities/Procedures**

**Oral retelling.** During each of the eight weeks of the project, the students in the researcher’s religion class orally summarized their daily reading assignment from the Religion textbook with their partners three days a week. For each of the first three weeks, the researcher modeled a new component to add to the procedure. In the first week of the project, she modeled for the students how to orally summarize the information from their reading using the ideas listed in the Quadrant Chart. The researcher used as many ideas as possible and crossed out the ideas as they were included in her oral summary. Immediately following her model of the procedure for orally summarizing, the researcher gave the students two to three minutes to think about how they would retell the information they had read before orally summarizing to their partner. The students were encouraged to use their Quadrant Charts, Cornell Notes, and text as they orally
summarized their readings to their partners. Each partner orally summarized what she read while the other partner listened for accuracy.

During the second week of the project, the researcher instructed the listening partner to use the chart of the partner giving the oral summary to cross out the ideas she mentioned. Crossing off the ideas that the summarizing partner said from her Quadrant Chart actively involved the listening partner in the exercise and reinforced the importance of using the important ideas listed on the Quadrant Chart in the oral summary. Three days a week for a total of seven weeks, from the second week through the eighth week, the students orally summarized three days a week with their partner crossing out ideas from their Quadrant Charts.

During the third week of the project, the researcher incorporated Magnet Summaries (Buehl, 2009) to help the students synthesize the information rather than just list ideas in their oral summaries. The researcher gave each student an index card and explained that some of the words on their Quadrant Charts were like magnets because other ideas from the charts were needed in order to explain these words. Using a Quadrant Chart that she had prepared from the day’s reading assignment, the researcher wrote one idea in the center of her index card and explained to the students that the word in the center was a magnet word because other words were needed to explain it. Then, the researcher wrote the other words in the corners of her index card. When she completed her card, the researcher used the card to orally summarize a section of the text using the ideas on her index card. Furthermore, she explained to the students that the Magnet Summaries could also be used for the summary section of their Cornell Notes (Buehl, 2009; Keely, 1997 as cited in Medo & Marko, 2007). Three days a week for six weeks, from week three through week eight, the students created Magnet Summaries for each reading.
assignment and used the Magnet Summaries to orally summarize as well as for the summary section of their Cornell Notes (Buehl, 2009; Keely, 1997 as cited in Medo & Marko, 2007).

The procedure for orally summarizing to their partners changed slightly with the use of the Magnet Summaries. The students used their Magnet Summaries to orally summarize while the listening partner would cross out any ideas mentioned in the oral summary. The ideas that remained on the students’ Quadrant Charts after orally summarizing served as a self-assessment of what ideas the students had not mastered. Thus, the students were fulfilling the purpose of the project: to improve comprehension of the religion textbook and to practice study skills to improve the retention of information from the religion textbook.

**Written summarizing.** During the first week of the project, along with modeling the procedure for orally retelling, the researcher also reviewed the procedure for writing a summary paragraph. All of the students were familiar with this procedure because they had used it frequently in the researcher’s Language Arts class; in addition, they had used the procedure once before in Religion class. The students began by writing a Summary Topic Sentence (Auman, 2002 as cited in Medo & Marko, 2007) for the assigned section of the text. They created a three-column chart and labeled the columns “Name It,” “Verb It,” and “Finish It.” The ideas in the chart would form a complete sentence that could be used as the topic sentence for the summary paragraph. The researcher provided the information for the “Name It” column so they would understand how to begin a strong topic sentence. The sentence began “In the first half of Chapter Twelve, Catholics;” then, the researcher invited the students to brainstorm verbs for the “Verb It” column. Each student had a list of strong verbs (Appendix C) to use as a guide. Once the class gathered a list of four to five verbs, the researcher had the class finish two to three of the
sentences with their partners. For example, “In the first half of Chapter Twelve, Catholics encounter challenges brought on by the Protestant Reformation.”

Once the students wrote a topic sentence for their summary paragraphs, the researcher reviewed each of the other steps of the procedure and asked them to complete a summary paragraph for homework. After the writing the topic sentence, the students used their Cornell Notes (Keely, 1997 as cited in Medo & Marko, 2007) to gather important information for their summary paragraphs and numbered the information in the order that they wanted it to appear in their summary paragraphs. Then, they thought about how they might want to transition from one idea to the next and jotted down these transition words in the margins of their Cornell Notes (Appendix C). Transitions included words such as first, second, next, additionally, after, etc. The researcher posted a list of transition words in her classroom for the students to use. Finally, they wrote a paragraph that began with their topic sentence, followed by the ideas from their Cornell Notes synthesized with transition words between each idea. The students completed a summary paragraph using this procedure three times during the course of the project during the first, third, and sixth week of the project.

Table 1.1 Weekly procedures.

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<thead>
<tr>
<th>Week</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comprehension Quizzes</th>
<th>Cumulative Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Description of Data Collection Methods

**Pre and Posttests**

**Pretests.** Before the project began the students were given half of a page from the next chapter in the religion textbook to read and summarize in writing. The researcher selected a section from the next chapter because the students would have equal background knowledge. She gave the students the entire class time (45 minutes) to complete this part of the pretest. Over the course of the next two days, the students were given the same text to reread before orally...
summarizing it to the researcher. The researcher used a rubric to assess if they incorporated specific people, places, terms, and events as well as their understanding of the main idea of the information in that section for both the oral and written summaries. In the oral summaries, the researcher also noted if the students referred to the text or any notes they had taken as they summarized.

**Posttests.** The same steps were taken for the posttests; however, the selection from the text used for summarizing was not the same. Instead, the selection from the religion textbook was taken from the chapter after the one the class had completed during the eighth week of the project. Again, this was in an attempt to ensure equal background knowledge with the topic.

**Quantitative Assessments**

**Quizzes.** Two sources of data came from the objective quizzes and tests that accompanied the religion textbook. One source of data was the class average of comprehension quizzes. One comprehension quiz was given for every two pages in the religion textbook with two given per chapter. The quizzes were administered approximately once a week depending on the school’s schedule. A total of five comprehension quizzes were used during the course of the project. They included true/false, fill-in-the-blank, multiple choice, and short answer questions. The average score of quizzes taken before the project were compared to the class average of the quizzes taken during the project to determine if frequent summarizing affected the students’ scores on the chapter quizzes.

**Cumulative exams.** The second source of data came from the class average on a cumulative exam given at the beginning of the project and at the end of the project. The cumulative exam given at the beginning of the project included information from the chapters covered during the previous quarter before the project, while the cumulative exam at the end of
the project included information from the chapters covered during the eight weeks of the project. The cumulative unit exam also included true/false, fill-in-the-blank, multiple choice, and short answer questions; however, it required students to recall information from multiple chapters. The data sources from the religion textbook provided an objective measure of the effectiveness of frequent summarizing on retention.

**Qualitative Assessments**

During week four and six, data from students’ religion notebooks and written summary paragraphs were collected. In the students’ notebooks, the structure and contents of their Quadrant Charts and Cornell Notes (Keely, 1997 as cited in Medo & Marko, 2007) were checked in order to determine their understanding of these skills and inform my own instruction of these skills. Furthermore, the researcher collected a summary paragraph during weeks four and six of the project to check for accuracy of details included in the summary as well as the students’ competency with written summaries.

In summary, the researcher used a variety of assessments in order to gauge growth in several areas. To measure comprehension of the text the researcher used the textbook quizzes. In order to determine the students’ retention of information from the text, the researcher administered cumulative exams. Finally, the researcher employed qualitative assessments including the students’ summary paragraphs and the notes they took throughout the study as a means of monitoring the quality of their participation.

**Conclusion**

This chapter explained the setting and participants examined in this action research project. The project took place in an eighth grade religion class at an all-girls, Catholic middle school for Latinas. This chapter detailed the procedures for the project as well as the data used
for analysis. The procedure section included the preliminary preparations during which the researcher modeled some of the summarizing strategies used during the project. Next, the researcher elaborated on the intervention, which included descriptions of the scaffolding and implementation process for the oral and written summarizing strategies used during the project. The researcher also included a table to show what strategies were practiced on each day of the project. Collectively, these procedures attempted to produce sufficient quantitative and qualitative data to investigate the impact of frequent summarizing on students’ comprehension and retention of information from a content area textbook. The next chapter will elaborate on and analyze the results of the data collected.
CHAPTER FOUR: RESULTS

The purpose of this action research study was to investigate how frequent practice of the reading strategy summarizing affected students’ comprehension and retention of content from the textbook for Religion class. This study served as a literacy intervention for 15 female students in a private urban school setting. As cited in Chapter Two, other researchers have also examined the impact of strategy instruction on content area reading. In order to measure the students’ ability to summarize, students summarized a section of text both in writing and orally as a pre- and posttest. Additionally, to measure the students’ comprehension and retention of the content from their Religion textbook, objective comprehension quizzes were administered for every two pages of text, and a cumulative exam was given upon the completion of the intervention. These scores were compared to the objective comprehension quizzes and cumulative exam administered prior to the intervention. The researcher also monitored the students’ progress with the strategy by collecting two summary paragraphs and the notes taken by the students during the intervention. This chapter unveils the results from the pre- and posttests as well as describes the measures taken to monitor the students’ progress during the intervention.

Pre- and Posttest Results

During the week before and the week after the intervention, the students had 45 minutes to write a summary paragraph from a section of the Religion textbook. The researcher selected a passage from the next chapter in the textbook so all students would have similar background knowledge. Once all of the written summaries were completed, the students received as much time as needed to prepare to give an oral summary or retelling of the same passage to the researcher. Both the oral and written summaries were scored using similar rubrics created by the
researcher. Through investigation of the students’ ability to summarize, the researcher hoped to determine the students’ comprehension of the Religion textbook by assessing three important skills associated with summarizing: identifying important ideas, determining relevance, and recognizing the main idea. In addition to the oral and written summaries, the researcher compared the students’ scores on comprehension quizzes and a cumulative exam from the chapters studied during the academic quarter (9 weeks) prior to the intervention to those taken during and after the eight-week intervention. Both the quizzes and cumulative exams consisted of fill-in-the-blank, multiple choice, true/false, and short answer questions regarding information from the textbook. The comprehension quizzes assessed the students’ understanding of information from two pages of the textbook while the cumulative exam assessed the students’ comprehension and retention of the information from five chapters of the textbook. From the comprehension quizzes and cumulative exams, the researcher hoped to gain an objective gauge of the students’ ability to comprehend and retain information from the Religion textbook. The following section presents pre- and posttest results from the written summaries, oral retellings, comprehension quizzes, and cumulative exams. Later in the chapter, the researcher presents the measures used to monitor the students’ progress with the strategy of summarizing.

**Pretest Results**

**Written summaries.** In order to determine and measure the students’ ability to summarize, the students wrote a summary of a selection from the textbook. All of the students had 45 minutes to write a summary of half of a page from their Religion textbook. The text selection came from the next page of the textbook that had not yet been studied in class. The researcher informed the students that they could take as much time as they needed, and they could take notes or annotate the text as well. None of the 15 students (0%) took notes or
annotated the text before writing their summary paragraphs. The researcher created a rubric to score the summary paragraphs. To see a copy of the rubric, see Appendix A. Three areas were assessed on the rubric: Identification of Important Ideas (3 points), Relevance of Details (3 points), and Understanding of the Main Idea (2 points). In the area of Identification of Important Ideas, students scored an average of 1.87 with a median score of 2 out of 3 points; in the area of Relevance of Details, students scored an average of 3 with a median score of 3 out of 3 points, and in the area of Understanding of the Main Idea, students scored an average of 1.33 with a median score of 2 out of 2 points. Overall, students scored an average of 6 with the median score of 6 out of the 8 total points available on the rubric. The scores on the written summaries are displayed in Table 4.1 following this section. The day after the students wrote the summary paragraphs, they also completed an oral retelling of the same part of the text. Students were invited to use look backs if necessary. The researcher used a similar rubric to score the oral retellings. The next section explains the pretest results from the oral retellings.
Table 4.1

Pretest Results: Written Summaries

<table>
<thead>
<tr>
<th>Identification of Important Details</th>
<th>Relevance of Details</th>
<th>Understanding the Main Idea</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.867</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Median</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>TOTALS</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Oral retellings. Another method used to measure the students’ ability to summarize was an oral summary or retelling of a selection from the Religion textbook. The researcher called each student individually to a table in the back of the classroom to prepare for and give their oral retelling of half of a page from the Religion textbook. Students had completed a summary paragraph on the same text selection on the day prior to the oral retelling; the researcher allowed each student as much time as needed to reread the text selection, prepare any notes, or annotate the text before orally retelling the text selection. During the retelling, students could use the text as well as any notes they had taken. Out of the 15 students, no students annotated the text (0%), 3 took notes to prepare for the retelling (20%), and 2 used the notes during the retelling (13%) while 9 students referred to the text during the retelling (60%). The average time that students prepared for their retelling was 2.18 minutes with a median time of 2 minutes. The average time that the students took to retell was 0.9 minutes with a median time of 1.1 minutes.

To assess the retellings, the researcher used the same rubric as the one used to assess the summary paragraphs. Students were scored in the same three areas: Identification of Important Details (3 points), Relevance of Details (3 points), and Understanding the Main Idea (2 points). In the area of Identification of Important Details, students scored an average of 1.6 with a median score of 2 out of 3 points; in the area of Relevance of Details, the students scored an average of
2.87 with a median score of 3 out of 3 points, and in the area of Understanding the Main Idea, students scored an average of 1.27 with a median score of 2 out of 2 points. Overall, the students scored an average of 5.73 points out of 6 with a median score of 6 out of the 8 total points available on the rubric. The scores on the oral retellings are displayed in Table 4.2 following this section. The written summaries and oral retellings provided a baseline for the students’ ability to summarize text. The researcher also used objective assessments to establish the students’ ability to comprehend and retain information from the Religion textbook. To measure the students’ ability to comprehend the textbook, the researcher used scores from comprehension quizzes given for every two pages of the textbook during the previous academic quarter. The next section provides the pretest results from the comprehension quizzes from the academic quarter prior to the intervention.

Table 4.2

Pretest Results: Oral Retellings

<table>
<thead>
<tr>
<th></th>
<th>Identification of Important Details</th>
<th>Relevance of Details</th>
<th>Understanding the Main Idea</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>1.6</td>
<td>2.87</td>
<td>1.27</td>
<td>5.73</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

**Comprehension quizzes.** During the academic quarter (9 weeks) prior to the eight-week intervention, students completed a total of five comprehension quizzes. Each quiz included eight to ten, fill-in-the-blank, multiple choice, true/false, and short answer questions from the information covered on two pages of text. The students had 35-45 minutes to complete each quiz. The students scored an average of 90% on the five quizzes. The median score was 91%. In order to measure the students’ retention of the information from the text over the course of the
academic quarter prior to the intervention, the researcher used the students’ scores on a cumulative exam. The next section presents the pretest results from the cumulative exam.

**Cumulative exam.** The cumulative exam included fill-in-the-blank, multiple choice, true/false, and short answer questions from the text read during the entire academic quarter prior to the intervention. Students had 45 minutes to complete the cumulative exam. The students scored an average of 87% with a median score of 90%. From the pretest scores on the summary paragraphs, oral retellings, comprehension quizzes, and the cumulative exam, the researcher established a baseline of the students’ ability to summarize as well as comprehend and retain information from the Religion textbook. The results from all of the pretests are displayed in Table 4.3 following this section. These results were compared to the results of the posttests to determine the affect of the intervention. The next section presents the students’ posttest results.
Table 4.3

**Pretest Results**

<table>
<thead>
<tr>
<th></th>
<th>Written Summaries</th>
<th>Oral Retellings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td><strong>Median</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Identification of Important Ideas</td>
<td>1.87</td>
<td>2</td>
</tr>
<tr>
<td>Relevance of Details</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Understanding the Main Idea</td>
<td>1.13</td>
<td>2</td>
</tr>
<tr>
<td>Overall Score</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Identification of Important Ideas</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>Relevance of Details</td>
<td>2.87</td>
<td>3</td>
</tr>
<tr>
<td>Understanding the Main Idea</td>
<td>1.27</td>
<td>2</td>
</tr>
<tr>
<td>Overall Score</td>
<td>5.73</td>
<td>6</td>
</tr>
<tr>
<td>Chapter Quizzes</td>
<td>90.18</td>
<td>91</td>
</tr>
<tr>
<td>Cumulative Exam</td>
<td>87.32</td>
<td>90</td>
</tr>
</tbody>
</table>

**Posttest Results**

**Written summaries.** Just as during the pretest, the students had 45-minutes to summarize half of a page from their Religion textbook in a written paragraph. The text selection came from the next page of the textbook that had not yet been studied in class. The researcher informed the students that they could take as much time as they needed, and they could take notes or annotate the text as well. Five out of the 15 of the students took notes and 8 out of the 15 of the students annotated the text before writing their summary paragraphs. This is a +33% increase for note taking and +53% increase for annotations. The researcher used the same rubric to score the posttest written summaries as she did for the pretest written summaries. In the area of Identification of Important Ideas, the students scored an average of 1.87 with a median score of 2 out of 3 points; this is an increase of 0% from the pretest. In the area of Relevance of Details, the students scored an average of 3 with a median score of 3 out of 3 points, which is an improvement by +0% from the pretest. In the area of Understanding the Main Idea, the students scored an average of 0.4 with a median score of 0 out of 2 points. This compares to the pretest by
a decrease of -37%. Overall, the students scored an average of 5.27 with a median score of 5 out of the total of 8 points available on the rubric. Thus, the overall difference in median score from the pre to the posttest decreased by -13%. Table 4.4 reveals the results from the pre- and posttest written summaries. In order to the effectiveness of the intervention on the students’ ability to summarize, the researcher also had the students complete an oral retelling of the same section of text on the next day. The researcher scored the retelling using the same rubric. The posttest results from the oral retellings are presented in the next section.

Table 4.4

*Composite Scores: Written Summaries*

<table>
<thead>
<tr>
<th>COMPOSITE SCORES: WRITTEN SUMMARY</th>
<th>Total</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Difference</th>
<th>Pretest Median</th>
<th>Posttest Median</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of Important Ideas</td>
<td>3</td>
<td>1.87</td>
<td>1.87</td>
<td>+ 0%</td>
<td>2</td>
<td>2</td>
<td>+ 0%</td>
</tr>
<tr>
<td>Relevance of Details</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>+ 0%</td>
<td>3</td>
<td>3</td>
<td>+ 0%</td>
</tr>
<tr>
<td>Understanding the Main Idea</td>
<td>2</td>
<td>1.13</td>
<td>0.4</td>
<td>+36.5%</td>
<td>2</td>
<td>0</td>
<td>-100%</td>
</tr>
<tr>
<td>Overall Score</td>
<td>8</td>
<td>6</td>
<td>5.27</td>
<td>-9%</td>
<td>6</td>
<td>5</td>
<td>-12.5%</td>
</tr>
</tbody>
</table>

**Oral retelling.** The researcher used the same format as in the pretest for the posttest oral retellings. Each student joined the researcher at a table in the back of the classroom to prepare for and give their oral retelling. The students orally summarized or retold the same half of the page from the Religion textbook that they had summarized in writing on the day prior to the oral retelling. To maintain continuity with the pretest, the researcher allowed each student as much time as needed to reread the section, prepare any notes, or annotate the text before orally retelling. During the retelling, students could use the text as well as any notes they had taken.

Out of 15 students, 7 students (47%) prepared to retell by taking notes, 7 students (47%)
prepared to retell by annotating the text, 9 students (60%) referred to the text during their retelling, and 8 students (53%) referred to their notes during the retelling. This presents a +27% increase in students who took notes, a +60% increase in students who referred to the text during their retelling, and a +40% increase in students who referred to their notes during the retelling. The average time that the students took to prepare for the retelling was 3.22 minutes with a median time of 2.5 minutes. This means that students took on average 1.04 minutes more to prepare for the posttest than they did to prepare for the pretest with a difference in medians as .5 minutes. The average time that the retellings lasted was 1.43 minutes with a median score of 1.32 minutes. Thus, students orally retold on average for .53 minutes more during the posttest as compared to the pretest with the difference in medians at .2 minutes.

To maintain an accurate comparison, the researcher used the same rubric to assess the posttest oral retellings as the rubric used for the pretest. In the area of Identification of Important Ideas, the students scored an average of 2.2 points, with a median score of 2 out of 3 total points; in the area of Relevance of Details, the students scored an average of 2.4 points with a median score of 2 out of 3 points, and in the area of Understanding the Main Idea, the students scored an average of 0.2 points with a median score of 0 out of 2 points. The students’ average score increased by +20% in the area of Identification of Important Ideas from the pre- to the posttest. However, the students’ scores decreased in the remaining areas. In the area of Relevance of Details the students’ average score decreased by -16% and in the area of Understanding the Main Idea, the students’ average score decreased by -53.5%. Overall, the students scored an average of 4.87 with a median score of 5 out of the total of 8 points available on the rubric, which is an -11% decrease from the students’ average overall score on the pretest. The scores from the oral retellings are displayed in Table 4.5 following this section. Additionally, the results from the pre-
and posttest oral retellings are shown in Table 4.6. As a means of measuring the effectiveness of the intervention on the students’ ability to comprehend the textbook, the researcher used scores from comprehension quizzes given for every two pages of the textbook during the intervention to compare with the pretest scores of the comprehension quizzes. The next section provides the posttest results from the comprehension quizzes administered during the intervention.

Table 4.5

*Posttest Results: Oral Retelling Preparations*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took notes</td>
<td>15</td>
<td>3</td>
<td>7</td>
<td>+26%</td>
</tr>
<tr>
<td>Annotated text</td>
<td>15</td>
<td>0</td>
<td>7</td>
<td>+46%</td>
</tr>
<tr>
<td>Referred to text</td>
<td>15</td>
<td>9</td>
<td>9</td>
<td>+0%</td>
</tr>
<tr>
<td>Used notes</td>
<td>15</td>
<td>2</td>
<td>8</td>
<td>+40%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Prep Time</th>
<th>Talk Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Mean</td>
<td>2.18 min.</td>
<td>.09 min.</td>
</tr>
<tr>
<td>Posttest Mean</td>
<td>3.21 min.</td>
<td>1.43 min.</td>
</tr>
<tr>
<td>Difference</td>
<td>+1.03 min.</td>
<td>+1.34 min.</td>
</tr>
</tbody>
</table>

Table 4.6

*Composite Scores: Oral Retellings*

<table>
<thead>
<tr>
<th></th>
<th>Totals</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
<th>Pretest Median</th>
<th>Posttest Median</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of Important Ideas</td>
<td>3</td>
<td>1.6</td>
<td>2.2</td>
<td>+20%</td>
<td>2</td>
<td>2</td>
<td>+0%</td>
</tr>
<tr>
<td>Relevance of Details</td>
<td>3</td>
<td>2.87</td>
<td>2.4</td>
<td>-16%</td>
<td>3</td>
<td>2</td>
<td>-33%</td>
</tr>
<tr>
<td>Understanding the Main Idea</td>
<td>2</td>
<td>1.27</td>
<td>0.2</td>
<td>-53.5%</td>
<td>2</td>
<td>0</td>
<td>-100%</td>
</tr>
<tr>
<td>Overall Score</td>
<td>8</td>
<td>5.73</td>
<td>4.87</td>
<td>-11%</td>
<td>6</td>
<td>5</td>
<td>-12.5%</td>
</tr>
</tbody>
</table>
Comprehension quizzes. During the eight-week intervention, the students completed a total of five comprehension quizzes. Each quiz included eight to ten, fill-in-the-blank, multiple choice, true/false, and short answer questions from the information covered on two pages of text. The students had 35-45 minutes to complete each quiz. The students scored an average of 94%, which is a +4% increase from the pretest with a median score of 91%, which is a +5% increase from the pretest on the five comprehension quizzes. In order to measure the effectiveness of the intervention on the students’ ability to retain information from the text over the eight weeks of the intervention, the researcher compared the students’ scores on the cumulative exam given during the academic quarter prior to the intervention with their scores on the cumulative exam given the week after the conclusion of the intervention. The next section provides the posttest results from the cumulative exam.

Cumulative exam. The cumulative exam included fill-in-the-blank, multiple choice, true/false, and short answer questions from the text read during the intervention. Students had 45 minutes to complete the cumulative exam. The students scored an average of 89% with a median score of 93% on the cumulative exam. Comparing the pretest scores with the posttest scores on the summary paragraphs, oral retellings, comprehension quizzes, and the cumulative exam allowed the researcher to determine the impact of the intervention on the students’ ability to summarize as well as comprehend and retain information from the Religion textbook. The composite results from the comprehension quizzes and cumulative exams are shown in Table 4.7 following this section. During the intervention, the researcher collected qualitative data to monitor the students’ progress. The next section elaborates on the students’ progress with the strategy of summarizing based on the instructional practices implemented during the intervention.
Table 4.7

Posttest Results: Comprehension Quizzes & Cumulative Exams

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension Quizzes</td>
<td>Mean</td>
<td>100</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>100</td>
<td>91</td>
<td>96</td>
</tr>
<tr>
<td>Cumulative Exams</td>
<td>Mean</td>
<td>100</td>
<td>87</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>100</td>
<td>90</td>
<td>93</td>
</tr>
</tbody>
</table>

Progress Monitoring Results

One aspect of the intervention was implementing instructional practices that would allow
the students to practice the strategy of summarizing while reading their Religion textbook. Two
of the instructional practices that the researcher implemented allowed her to monitor the
students’ progress with summarizing. The researcher taught the students a process for writing a
summary paragraph and a note-taking format that involved summarizing. Samples of the
students’ written summaries and notes were collected throughout the intervention as a means of
monitoring the students’ progress with the strategy of summarizing. Both instructional practices
are explained in detail in Chapter Three of this study. This section will provide a brief
description of each instructional practice in order to explain the researchers’ observations of the
students’ progress based on their written summaries and notes.

Written Summaries

Week three. During the third week of the eight-week intervention, the researcher had the
students write a summary for two pages of the Religion textbook as a formative assessment. The
summaries helped the researcher determine the level of the students’ commitment to the
intervention. So as not to compromise the integrity of the intervention, the researcher did not
change her practices according to the students’ progress. Instead, she used the summaries to monitor the students’ progress throughout the intervention and included the results in the analysis upon the completion of the intervention. The students were familiar with the process for writing a summary because the researcher had modeled the process during the first two weeks of the intervention. The students’ written summaries provided a sample of the students’ progress with the strategy of summarizing text especially the ability to identify the main idea. When reviewing the written summaries, the researcher focused on four areas: the students’ ability to identify the main idea, to include specific and relevant details, and to present an accurate and complete summary of the assigned text. In the area of identifying the main idea, 14 out of the 15 or 88% of the students included a statement of the main idea; in the area of including relevant and specific details, 15 out of 15 or 100% of the students included specific details while 14 out of 15 or 93% of the students included relevant details, and in the area of accuracy, 10 out of 15 or 67% of the students wrote accurate and complete summaries. All of the results for the Week 3 written summaries are displayed in Table 4.8 following this section. The researcher also collected a written summary during the sixth week of the eight-week intervention. The next section provides results from the Week 6 written summaries.

Table 4.8

_Progress Monitoring Results: Week 3 Written Summaries_

<table>
<thead>
<tr>
<th>PROGRESS MONITORING RESULTS: Week 3 Written Summaries</th>
<th>Number of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying the Main Idea</td>
<td>14</td>
<td>93%</td>
</tr>
<tr>
<td>Including Specific Details</td>
<td>15</td>
<td>100%</td>
</tr>
<tr>
<td>Including Relevant Details</td>
<td>14</td>
<td>93%</td>
</tr>
<tr>
<td>Accurate and Complete Summary</td>
<td>10</td>
<td>67%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>
**Week six.** During week six of the eight-week intervention, the researcher collected a second summary paragraph in order to monitor the students’ progress with summarizing especially their ability to identify the main idea. The researcher focused on the same four areas as she did for the summary paragraph collected during Week 3. In the area of identifying the main idea, 14 out of 15 or 93% of the students included a statement of main idea; in the area of including specific and relevant details, 13 out of 15 or 87% included specific details while 14 out of 15 or 93% included relevant details, and in the area of accuracy, 9 out of 15 or 60% of the students wrote accurate and complete summaries. All of the results from the Week 6 written summaries are displayed in Table 4.9 following this section. The written summaries collected during the third and sixth week of the eight-week intervention allowed the researcher to monitor the students’ progress with summarizing especially identifying the main idea. In addition to the written summaries, the researcher collected the samples of the note-taking strategy practiced during the intervention. The next section explains the researcher’s observations on the students’ progress with summarizing from the students’ notes.

Table 4.9

*Progress Monitoring Results: Week 6 Written Summaries.*

<table>
<thead>
<tr>
<th>PROGRESS MONITORING RESULTS: Week 6 Written Summaries</th>
<th>Number of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying the Main Idea</td>
<td>14</td>
<td>93%</td>
</tr>
<tr>
<td>Including Specific Details</td>
<td>13</td>
<td>87%</td>
</tr>
<tr>
<td>Including Relevant Details</td>
<td>14</td>
<td>93%</td>
</tr>
<tr>
<td>Accurate and Complete Summary</td>
<td>9</td>
<td>60%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>15</td>
<td>100%</td>
</tr>
</tbody>
</table>
Note-taking Samples

Over the eight-week intervention, the students took notes in two different formats: Quadrant Charts and Cornell Notes. In the Quadrant Chart, the students kept track of important people, places, terms, and events. The details on their Quadrant Chart served as a list of information to include in their Cornell Notes. Taking Cornell Notes required the students to paraphrase information from the textbook about the ideas listed on the Quadrant Chart, then, write a brief summary of the information recorded on a notebook page. The researcher observed the ideas the students included in their Quadrant Chart as well as the accuracy of the brief summaries at the end of each page of Cornell Notes.

In the Quadrant Charts the researcher noted that all of the students consistently included specific details from each page read of the Religion textbook. Additionally, in their Cornell Notes the researcher noted that the students consistently summarized the information recorded on each notebook page. Both the written summaries and the note-taking samples collected during the intervention allowed the researcher to monitor the students’ progress with the strategy of summarizing. The researcher provided general feedback to the students in class regarding their progress in the areas assessed. This information along with the comparison of the pre- and posttest results enabled the researcher to determine the impact of the intervention implemented in this study.

Conclusion

This chapter presented the data collected during the pre- and posttests as well as the measures taken to monitor the students’ progress during the eight-week intervention. The researcher collected pre- and posttest data from written summaries, oral retellings, comprehension quizzes, and cumulative exams to measure the impact of the intervention. The
results of the written summaries and oral retellings suggest that the intervention did not impact the students’ ability to summarize. However, the researcher noticed the method used and the amount of time taken to prepare for the oral retellings improved from the pre- to the posttest. The number of students who took notes to prepare for the oral retelling increased by +26% with an increase of +40% for students who referred to the notes during the oral retelling, and the number of students who annotated the text increased by +46%. In addition, the amount of time taken to prepare for the oral retelling increased by 1.03 minutes. The researcher also noted an improvement in the students’ scores on the comprehension quizzes and cumulative exams from the pre- to the posttest. The average mean for the comprehension quizzes increased by +4% while the average mean for the cumulative exams increased by +2%.

The results suggest that the intervention involving frequent practice summarizing impacted the students’ comprehension and retention of information from their Religion textbook. Further analysis of the results will determine how the intervention affected the students’ ability to comprehend and retain information from their Religion textbook. The following chapter will provide further analysis with explanations connecting the results to the research mentioned in Chapter Two of this study.
CHAPTER FIVE: CONCLUSIONS

This study examined the impact of summarizing on the comprehension and retention of information from a content area textbook. The data from the pre- and posttests as described in Chapter Four suggested that frequent practice summarizing can improve comprehension and retention of a content area textbook. This chapter is divided into two sections in which the researcher will further analyze the results and offer insights to help understand the data. The first section explains the results of the study and connects this study to the research described in Chapter Two. The second section elaborates on the strengths and limitations of this study and provides direction for future research studies on reading strategy instruction in content areas.

This section explains the results outlined in Chapter Four and connects these findings with the research described in Chapter Two. To begin, the results of the students’ ability to summarize as well as comprehend and retain information from their Religion textbook based on the pre- and posttest written summaries, oral retellings, comprehension quizzes, cumulative exams, and the progress monitoring measures are discussed. Next, connections with existing research on strategy instruction in the content area are made. These connections allow the researcher to compare the current study with previous research in order to determine best practices for reading instruction in the content area. After explaining the results of this study and making connections with relevant research, in the final section of this chapter, the strengths and limitations of this study in order to facilitate the development of future research studies are elaborated upon.
Explanation of Results

**Written summaries.** While the students’ average overall score did not show improvement from the pre- to the posttest, the results of the written summaries indicated an improvement in how the students approached the writing task. Two points in which the students improved from the pre- to the posttest were taking notes and annotating the text when preparing to write the summary. The researcher viewed taking notes as writing down ideas in a format other than a paragraph on the same or a separate sheet of paper in order to prepare ideas for their written summary. On the pretest, 0% of the students took notes for the written summary; however, on the posttest the average percentage of students that took notes increased by 33%. This finding is congruent with the average amount of students who annotated the text.

Annotating the text referred to highlighting, underlining, or writing notes on the copy of the selection from the text that the students were summarizing. Again, 0% of the students annotated the text on the pretest; whereas, on the posttest, the average percentage of students that annotated the text increased by 53%. The increased percentage of students who took notes and annotated the text is most likely due to the emphasis placed on taking notes during the intervention (i.e. the Quadrant Chart and Cornell Notes). The increases in the percentages of students who took notes and annotated the text from the pre- to the posttest suggest that the intervention encouraged the students to plan before writing their summaries, which assisted their comprehension and retention of the text. When a student takes notes or annotates the text, he or she *processes* the information instead of just reading the text. This act of actively engaging with the text further embeds the information in the students’ memory, thus, improving his or her retention. The student may struggle to recall what he or she read; however, the student may be able to visualize
the annotations or notes he or she made regarding the text. In this way, a student’s ability to retain information improves from the act of taking notes or annotating the text.

The average overall score as well as the scores from the three different areas of the rubric for the written summaries suggest that the intervention did not impact the students’ ability to summarize in writing. The students showed no change in the areas of identifying important ideas or determining the relevance of details, and the students’ score in the area of recognizing the main idea decreased from the pre- to the posttest. This could be due to the minimal time spent by the researcher modeling the procedure for summarizing information from the Religion textbook to the students. Minimal time was spent modeling procedure because of the time; earlier in the school year, modeling the procedure during Reading and Language Arts class occurred weekly for the first academic quarter. Further rationale for the lack of impact that the intervention had on the students’ ability to summarize in writing will be discussed in the final section of this chapter that is devoted to discussing the strengths and limitations of the study.

**Oral retellings.** Similar to the written summaries, the intervention did not have a significant impact on the students’ average overall score from the pre- to the posttest on the oral retelling; however, the results indicated three points of improvement on specific skills necessary for retelling. The students showed improvement in the area of identifying important ideas and the amount of time and effort put towards preparing for the oral retelling. First, in the area on the rubric for identifying important ideas, the students’ average percentage increased by 20% from the pre- to the posttest with the median remaining the same. This improvement suggested that the intervention helped students become more attuned to important details as they read. The aspect of the intervention that developed the students’ ability to identify important ideas was the Quadrant Chart. During the intervention, the students updated their Quadrant Chart with
important people, places, terms, and events from their daily reading task. Updating the chart focused the students’ attention on the important details from the reading.

Secondly, the students took more time to prepare for their oral retelling in the posttest as compared to the pretest. This may be a result of the instructional practice of the Magnet Summaries that the students practiced during the intervention. The Magnet Summaries required the students to write down important words on a note card before voicing a summary to their partner. The process of preparing for the Magnet Summaries encouraged the students to prepare for their oral retelling. On average, the students spent 1.03 minutes more preparing for the oral retelling on the posttest than on the pretest.

Finally, the students put more effort into preparing for the oral retellings from the pre- to the posttest. The percentage of students who took notes increased by 26% while the percentage of students who annotated the text increased by 46%. This finding, coupled with the increase in the time spent preparing for the oral retelling, suggested that the intervention prompted the students to think more about the text before putting the information into their own words. The notes that the students took and the annotations that the students made in order to prepare for their oral retelling provided evidence that the students thought before summarizing. Without ideas written down on a page, the researcher had no proof that the students were thinking about what they were reading. The act of writing the ideas down on the page signified that the students were processing the information they read. It is possible that the increase was a result of the students’ daily practice taking Cornell Notes as part of the intervention. During the intervention, the researcher explicitly modeled a strategy for taking notes known as the Cornell Notes method. The researcher intended the note-taking method to improve the students’ ability to comprehend their Religion textbook, and the results indicated that Cornell Notes met the intended outcome.
Overall, these three points of improvement imply that frequent practice summarizing impacted the students’ ability to identify important ideas and process information from their Religion textbook. Because textbooks often serve as a source of information for a content area class, students need to comprehend what they are reading in order to retain or learn the information. Identifying important ideas and processing information from the textbook supports students’ comprehension of the information, which in turn enables their retention of the information. Incorporating instructional practices such as updating the Quadrant Chart, preparing Magnet Summaries, and taking Cornell Notes benefited the students by providing them with tools to improve their comprehension and retention of textbooks in other content area classes.

While these three points provided positive implications for the intervention implemented in this study, the results from the rubric used to assess the oral retellings revealed the intervention had a negative impact on the students’ ability to recognize the main idea. The results indicated that the majority of students did not state a main idea in their posttest oral retelling, which could be due to the lack explicit instruction provided for stating the main idea. Additionally, the posttests were administered during a non-ideal, mentally fraying time for the student participants. The students were preparing for their class’s musical production as well as their eighth grade graduation and class trip. For these reasons, it is a possibility that the students may not have given as much effort to the posttest as the pretest.

In the area of recognizing the main idea, students’ average percentage decreased from the pre- to the posttest by 52%. This finding implies that the intervention did not support the students’ ability to recognize the main idea in a selection from their Religion textbook. This decrease could be a result of the minimal time spent in the intervention on recognizing the main idea. Upon reflection, the researcher recognized that the students practiced the skill of
identifying important ideas more during the intervention than the skill of recognizing the main idea. The students practiced identifying important ideas using the Quadrant Chart for 75% of the intervention period; whereas, the students practiced recognizing the main idea by writing Summary Topic Sentences (Medo & Marko, 2007) for 9% of the study. It was hoped that scaffolding instruction for creating a Summary Topic Sentence would help the students recognize the main idea. However, the results indicated that the researcher needed to provide more practice with this skill in order for the students to master it. The researcher could have insisted the student write a summary topic sentence for every summary written in their Cornell Notes. By doing this, the students would have practiced recognizing the main idea daily. Further suggestions for improving this area of the intervention are provided in the final section of this chapter that focuses on recommendations for future research.

**Comprehension quizzes.** While both the written summaries and oral retellings reveal areas in which the intervention made little to no impact, the students’ average score on comprehension quizzes revealed that the intervention positively impacted the students’ ability to comprehend and retain information from the textbook. The students’ average score on the comprehension quizzes administered in the academic quarter prior to the intervention was 90% while the students’ average score during the intervention was 94%. The researcher used a $t$-test to determine the significance of the scores’ increase. The students’ average percentage from the pre- to the posttest significantly increased by 4% ($F= .0015$, $p < .01$). In addition to the significant increase between the students’ average scores on the pre- and posttest comprehension quizzes, the averages for individual quiz scores for 14 out of the 15 students improved from the pre- to the posttest. Furthermore, the median score on the comprehension quizzes administered during the academic quarter prior to the intervention was 91% whereas the median score on the
posttest was 96%. This means that prior to the intervention half of the students scored above and below 91% while half of the students scored an average percentage above and 96% on the comprehension quizzes during the intervention. The results from the comprehension quizzes indicated that the intervention positively impacted the students’ ability to comprehend information and retain it for the week in between quizzes. This could be due to the enhanced study habits that the students developed as a result of the intervention such as taking notes that require summarizing and synthesizing the information as well as frequently revisiting important ideas from the text using the Magnet Summaries (Appendix B). The students’ average score on the cumulative exam also suggests that the students’ ability to retain information improved from the intervention. This finding correlates with the purpose of the study due to the fact that the intervention helped the students improve their ability to retain information from the textbook.

**Cumulative exams.** In order to determine if the intervention impacted the students’ ability to retain information, the students’ average scores were compared from the cumulative exam administered at the end of the academic quarter before the intervention with their scores on the cumulative exam administered at the end of the intervention. From the pre- to the posttest, the students’ average percentage increased by 2% from 87% to 89%. A t-test was used to determine the significance, which found that the 2% change was not significant (F=.1445, p < .01). However, the individual cumulative exam scores for 10 out of 15 students improved from the pre- to the posttest. Therefore, while the increase was not significant, the intervention positively affected individual students’ progress. This finding aligns with the increase of the students’ scores on the comprehension quizzes and indicates that the intervention positively impacted the students’ ability to retain information. Thus, this finding also supports the purpose of the study; this intervention helped the students improve their ability to retain information.
Implications. The results from the pre- and posttest imply that the intervention positively impacted the students’ ability to comprehend and retain information. Specifically, the results from the written summaries and oral retellings suggest the intervention impacted two components of comprehension: the ability to identify important details and process information after completing a reading task. One aspect of the intervention that helped the students improve in the area of identifying important ideas was the Quadrant Chart. The students updated the Quadrant Chart daily with important people, places, terms, and events from their reading task. Frequently updating the Quadrant Chart helped the students become more attuned to important ideas in the text. For example, when the students read “Peter and the other Apostles and all of Jesus’ disciples spread the good news of Christ throughout the known world, which at that time included Europe, Asia, and North Africa.” The students were attuned to the people, places, terms, and events in that sentence: Peter, Apostles, Jesus, good news, Christ, Europe, Asia, and Africa. Then, the students wrote these ideas in their Quadrant Charts, and the Quadrant Charts served as a list of ideas on which to take Cornell Notes Keely, 1997 as cited in Medo & Marko, 2007). In addition to taking Cornell Notes, the students would use the information from their Quadrant Charts to create Magnet Summaries (Keely, 1997 as cited in Medo & Marko, 2007; Buehl, 2009). The researcher observed that students became more adept at taking notes in the form of the Quadrant Chart, Cornell Notes, and Magnet Summaries. Further observations indicated that students found the strategy to be useful in other content area classes.

Creating Magnet Summaries and taking Cornell Notes were two additional aspects of the intervention that influenced the students’ ability to process information after reading. In order to create a Magnet Summary, the students had to select a word representing an important idea that needed multiple words from their Quadrant Charts to describe it. After writing these ideas on
index cards, the students would orally retell the information from the text selection and use the words on the index cards in their retelling. Thus, in creating the Magnet Summaries, the students had to process the information after-reading as they were responsible for selecting words that represented important ideas and voicing a summary of the text to their partners using the words from their Magnet Summaries. Similarly, when taking Cornell Notes, after paraphrasing important ideas, the students revisited the ideas and processed their understanding of the ideas in order to determine memory clues and to write a summary of the information. Both the Magnet Summaries and Cornell Notes also fostered the students’ ability to set a purpose for reading as making meaning and recalling it. Creating Magnet Summaries and taking Cornell Notes impacted the students’ ability to process information after reading because the students thought about what they read after reading it and put important information into their own words. This skill allows students to make meaning of information, which is an imperative step towards higher-level thinking such as synthesizing. Students must acquire this skill in order to competently engage in the higher-level thinking required for their future educational endeavors. Thus, the students made meaning of the text and practiced recalling information from the text.

Overall, the intervention impacted essential components of comprehension including the ability to identify important details, process information, make meaning, and recall information. The impact that these components had on improving the students’ comprehension and retention is revealed in the increase in the students’ individual average scores from the pre- to the posttest on the comprehension quizzes and the cumulative exams and the significant increase in the students’ average scores from the pre- to the posttest on the comprehension quizzes (p < .01).

While the intervention appeared to have a positive impact on components of comprehension, the results suggest that the intervention did not impact the students’ ability to
write a summary and recognize the main idea. It is possible that this is due the lack of instructional time spent on these skills during the intervention. An incorrect presumption was made that the students had a better understanding of writing summaries and recognizing main ideas simply because they had spent ample time on these skills in their reading and language arts class taught by the researcher. While the researcher modeled for the students how to write a summary paragraph and recognize the main idea, she did not look for mastery of these skills before moving on to other skills necessary for the intervention. Since these skills are also critical components of comprehension, possible modifications and adjustments for the format of this intervention in order to help the students achieve success in these skills is discussed in the final section of this chapter. Next, connections are made between the results and implications of the current study and the research studies that were presented in Chapter Two.

**Connections to Existing Research**

There are five distinct connections between the relevant research described in Chapter Two and with the findings of this study. First, the researcher noted that the Quadrant Chart, Cornell Notes, and Magnet Summaries had a positive impact on the students’ ability to comprehend and retain information. The researcher learned about Cornell Notes and Magnet Summaries from a professional development opportunity at her school; thus, her plan for investigating the impact of these instructional practices on the students’ reading ability aligns with the study conducted by Fisher, Frey, and Lapp (2009) described in Chapter Two. The study conducted by Fisher et al. (2009) investigated how the implementation of a cross-curricular needs-based literacy plan would affect literacy growth in a high school. Their cross-curricular needs-based literacy plan involved implementing Cornell note-taking, teacher think-alouds, more writing opportunities, and additional independent reading time. Upon completion of their study,
Fisher et al. (2009) saw significant improvement in the students’ reading ability as shown on the state standardized test scores. The current study achieved similar results with a smaller population—a classroom as opposed to an entire school. Similar to Fisher et al.’s (2009) study, the current study also saw improvement in the students’ reading ability from the implementation of instructional practices gained from professional development.

Secondly, the current study and the study conducted by Fisher et al. (2009) determined the students’ needs first in order to target instruction accordingly. An apparent literacy need of the student participants in both studies was in the content area. The researcher of the current study had completed a needs-based literacy initiative for her school regarding the literacy needs in the content area of social studies. All of the teachers interviewed along with the data collected pointed to a need for more literacy instruction in content areas. The literacy leadership team in Fisher et al.’s (2009) study found an apparent need to be that students learn certain literacy skills across the content areas. A study conducted by Ness (2009) concurred with the findings of both the researcher of the current study and Fisher et al. (2009). Ness (2009) discovered most content area teachers provided remediation for the content taught in their classes rather than their students’ literacy needs. Ness (2009) believed that reading strategies improve comprehension and retention of information and promote lifelong literacy skills; therefore, Ness’s (2009) study supported teaching reading strategies in the content areas in order to improve the literacy development of students.

After content area literacy was established as a need for the students at her school, she planned her instructional practices to meet the students’ needs. The third connection is with two studies conducted by Ivey and Broaddus (2007) and Cohen (2002) proved the positive impact targeting instruction has on improving student literacy skills. In both studies, the researchers
assessed their students’ literacy needs and created an instructional plan that involved explicit reading instruction to meet the students’ needs (Ivey & Broaddus, 2007; Cohen, 2002). Ivey and Broaddus (2007) worked with a small group of ELLs while Cohen (2002) provided one-on-one tutoring for an ELL student. Both studies found that targeting student needs led to significant improvements in their students’ literacy skills (Ivey & Broaddus, 2007; Cohen, 2002). The current study saw similar results regarding the students’ ability to summarize in the areas of retaining information, recognizing important ideas, and processing information after completing a reading task.

Additionally, in the current study, the researcher attempted to target the needs of her students by teaching them to use the reading strategy of summarizing using three instructional practices. The results of the current study implied that the intervention had a positive impact on the students’ ability to process information after completing a reading task. Specifically, more students took notes or annotated the text during the posttest than they did during the pretest. This result contrasts with that of the study conducted by Mateos, Martin, Villalon, and Luna (2008). Mateos et al. (2008) found that students did not create drafts, take notes, or annotate during the reading or writing process for summarizing and synthesizing the text. Further investigation into how they modeled and prepared their students for the summarizing and synthesizing tasks would reveal why the two studies produced differing results. Based on the methods of the current research study, explicitly teaching the skills necessary for effective use of the strategy and frequent practice with those skills positively impacted the students’ development of the skills.

Finally, a study conducted by Simmons, Hairell, Edmonds, Vaughn, Larsen, Willson, Rupley, & Byrns (2010) also found that explicit strategy instruction in the content area improved students’ literacy skills. Simmons et al. (2010) investigated how combined strategy instruction
impacted comprehension of a social studies textbook. They used an experimental design with a control group that maintained traditional instructional practices and a control group that received explicit comprehension and vocabulary strategy instruction over the 18-week study. Their findings suggested that combining comprehension and vocabulary strategy instruction positively impacted comprehension (Simmons et al., 2010). While the current research study did not combine multiple strategies for instruction, the results of the study conducted by Simmons et al. (2010) is congruent with the results of the current research study by revealing the positive impact of strategy instruction in the content area. Interestingly, the current research study lasted for less than half of the time than the study conducted by Simmons et al. (2010). This implies that strategy instruction can take effect soon after implemented.

This action research clearly connected to existing research. First, the researcher acknowledged that professional development plays an important role in effective literacy instruction (Fisher et al., 2009). Next, she posited the importance of targeting instruction according to the literacy needs of the students especially in content areas (Ness, 2008; Ivey & Broaddus, 2007; Cohen, 2002). Additionally, reading strategies were determined to play a significant role in effective literacy instruction in content areas (Mateos et al., 2008). Finally, the researcher discovered explicit strategy instruction to be essential to improving student literacy (Simmons et al., 2010). Moving forward, the strengths and limitations of the current study are discussed in order to facilitate the development of future research studies.
Implications for Future Research

There is a need for further research on the topic of teaching reading strategies in the content area. To begin, the researcher presents the implications for future research based on the current study. While the current study investigated the impact of practicing one reading strategy in one content area, future researchers should investigate the impact of multiple strategy instruction across the curriculum. Just as Simmons et al. (2010) looked at the affect of multiple strategy instruction on reading the ability to comprehend text in social studies, future researchers should investigate various combinations of strategy instruction in content areas across the curriculum (i.e. Science, Social Studies, Music, Math, etc.) in order to identify the overall impact of strategy instruction on comprehension. Furthermore, the students’ general reading comprehension on both narrative and informational tests should be assessed after the students received strategy instruction in content areas to determine if strategy instruction impacts more than just the students’ comprehension in the particular content area.

Taking into account the purpose for implementing the intervention in the current study as a means to improve the students’ comprehension and retention of a content area textbook, it is believed that future research should stem from the needs of the students and the instructional standards established by the participating institution.

In the current study, the instructional practices implemented in the intervention sought to help the students understand how to read a textbook more effectively. As noted in Chapter One, this focus was based on analysis of standardized test scores and interviews with other content area teachers. The intervention was aligned with the Common Core Standards for English Language Arts and Literacy as well as Literacy in History/Social Studies. The intervention assisted students in meeting the Reading and Language Arts standard for Reading Informational Texts by teaching
the students how to write an objective summary of an informational text (RLA: RI.8.1). The intervention also provided opportunities for students to practice determining the main idea when reading an informational text (LH/SS: RH.8.2) and analyze details in paragraphs in order to understand important ideas (LH/SS: RH.8.5). Furthermore, the students had many opportunities to write (RLA: W.8.10) and practiced using a variety of transition words and phrases to show the relationship between events (RLA: W.8.3c). Similarly, future research on strategy instruction in the content area should implement intervention that meets the needs of the student participants and aligns with the instructional standards of the participating institution. The intervention presented in the current study met the needs of the student participants and aligned with the Common Core Standards by teaching reading strategies and study skills to improve comprehension and retention of a content area text.

Future research should take into account the needs of the student participants and the instructional standards established by the institution when planning the intervention. However, unlike the current study, future research on reading strategy instruction in the content area should employ multiple strategies across a variety of content areas and assess the students’ comprehension on both narrative and informational texts in order to determine if the intervention impacts the students’ overall reading comprehension. Furthermore, the intervention period in future research should span a longer period of time. A longer period of time would allow for more opportunities to implement the instructional strategies in order for the students to develop competency. The intervention in the current study lasted eight weeks, just short of one academic quarter; however, the results may have indicated a more positive impact if the students had participated in the intervention for a semester (18 weeks) or even an entire academic year.
This action research study provides the aforementioned implications for future research: Future research should craft an intervention that meets the needs of the participating students and aligns with the instructional standards of the participating institution. Additionally, the results of the current study imply that the intervention should have employed multiple reading strategies across the content area for an academic semester or year. In the remainder of this section, aspects of the current study that bolstered and limited its success are further discussed. To conclude the section, the researcher uses this discussion to further reflect on recommendations for facilitating future research on strategy instruction in the content area.

**Strengths and Limitations of the Current Study**

**Strengths.** The researcher noted two distinct strengths in her study: the benefits of providing reading instruction for students in the content area and the valuable study skills the students gained from the intervention. With evidence pointing to the need for more reading instruction for the students at the researcher’s school, a definite strength of this study was providing explicit reading strategy instruction in a content area. As Ness (2008) discovered, many teachers view reading instruction as being the job of the reading teacher. The researcher of the current study dared to take reading instruction into a content area and was rewarded by the students’ improved literacy skills upon completion of the study. The students benefited from having explicit reading strategy instruction woven into an additional period each day. An additional strength of the literacy intervention was that there was no additional cost to the school, and it could be easily replicated for other content area teachers to apply to their classes.

Not only did the students’ literacy skills improve, the students gained valuable study skills as a result of the instructional practices implemented during the intervention. The eighth grade students who participated in this study will enter high school familiar with taking Cornell
SUMMARIZING TO IMPROVE COMPREHENSION

Notes, a note-taking format that will help them process information after reading it. In addition, the students learned two methods for studying information, Magnet Summaries and summary paragraphs that will help them retain information for assessments based on reading assignments and lectures. Thus, the researcher believes two strengths of the study are that the students who participated in this study benefited from the intervention by improving their literacy skills through explicit strategy instruction in the content area and learning valuable study skills for their future educational endeavors. In the next section, the researcher acknowledges limitations to the intervention’s success and how to remediate the limitations in order to meet the intended results.

Limitations. A significant limitation of this study was the lack of time devoted to modeling the skills of summarizing in writing and recognizing the main idea. In order to remediate this limitation, the researcher should have planned more time for modeling these skills. During three out of the four days that the researcher taught the students for Religion class, the students practiced identifying important ideas and retaining information through the Quadrant Chart, Cornell Notes, and Magnet Summary. Whereas the researcher modeled and provided independent practice for determining the main idea and writing a summary four times during the eight week study. Implementing explicit instruction on writing a summary and recognizing the main idea each week during the intervention would have fostered the students’ mastery of these skills. Since the researcher taught all of the students in reading class where they had spent ample instructional time on writing summaries, she assumed the students understood how to summarize in writing. The researcher did not fully take into account the distinct differences between summarizing fiction and nonfiction. One distinct difference was recognizing
the main idea. Therefore, the skill should have been modeled a few more times before the
students were expected to use it independently.

One simple modification to the intervention that would have provided scaffolded
instruction on recognizing the main idea would have been to teach the students how to write
Summary Topic Sentence once or twice each week (Medo & Marko, 2007). The Summary Topic
Sentence lesson teaches students to take into consideration the important details in order to
extract a main idea statement. (This procedure is explained in greater detail in Chapter Three.)
In sum, the students identify the main subject of the text, then choose a verb that represents the
main action of the page, and complete it with a phrase that states the general topic or main idea
of the text. If the researcher had placed more emphasis on modeling how to write a summary
paragraph for nonfiction and how to recognize the main idea, the students’ ability to comprehend
and retain information from their Religion textbooks may have shown more significant
improvement. The limitations of the current research study segue into recommendations for
future research on the topic of strategy instruction in content areas.

Recommendations for Future Research

In the introduction of this chapter, it was suggested that that the intervention implemented
in the current study implies future research should meet the needs of the participating students,
align with the standards of the participating institution, and span for an academic semester or
year. Based on the limitations mentioned in the previous section, in this section the researcher
makes additional recommendations. First, researchers interested in pursuing this topic in the
future should consider all of the skills that need to be taught in order for students to effectively
use a reading strategy and the assessments used to measure the effectiveness of the study. If
students are relatively unfamiliar with a particular reading strategy, then all of the skills
necessary for using the strategy should be modeled in order to effectively gauge the impact of intervention with that particular strategy. For example, upon completion of the current research study, the researcher realized that the students needed more support with the skill of recognizing the main idea. The ability to recognize the main idea would have enabled the students to see the summary more cohesively rather than a merely a list. In the same regard, researchers should consider all of the skills the students need in order to effectively use a reading strategy. Researchers can gather this information from interviews with content area teachers at the participating institution and the participating institution’s curriculum. Additionally, researchers should consider the type of assessment used to gauge the impact of the reading strategy on the students’ comprehension; the use of a standardized assessment is recommended. Because the researcher created most of the assessments used for this study with the exception of the quizzes and the cumulative exams, much of the data was subjective. This limited the researcher’s ability to use data to draw conclusions. This served researcher’s purpose of measuring the impact of strategy instruction in the context of her Religion class; however, if the purpose of future research on this topic is to measure the impact of instruction on students’ comprehension across the curriculum, researchers should include objective assessments. For example, researchers could administer the Qualitative Reading Inventory-5 (Leslie & Caldwell, 2011) to measure the students’ overall reading comprehension or additional quizzes and tests with questions directly derived from the textbook used in the content area. If researchers of future studies on implementing reading strategies into the content area allot enough time for teaching students the skills necessary to effectively use reading strategies and incorporate objective assessments, the results may encourage more content area teachers to include reading strategy instruction as part of their curriculum.
Conclusion

This study illustrated that explicit instruction of the reading strategy summarizing can positively impact students’ comprehension and retention of a content area textbook. While the results implied that intervention did not impact the students’ ability to summarize or improve their ability to recognize the main idea, the posttest results clearly indicated an improvement in the students’ ability to comprehend and retain information from their Religion textbook. These results parallel those of the studies described in Chapter Two. Results from the current study along with the results from previous research on this topic suggest that reading strategy instruction in the content area improves students’ comprehension. Future research should continue to investigate the impact of reading strategy instruction in various content areas in order to improve student literacy.
References


Simmons, D., Hairrell, A., Edmonds, M., Vaughn, S., Larsen, R., Willson, V., Rupley,


### APPENDIX A: PRETESTS

**Oral Retelling & Written Summary Rubric**

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<thead>
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_____ / 15 = Summary Writing  

_____ / 15 = Summary Retelling

Comments/Observations:
Comprehension Quiz

Ch. 8: Part One Quiz

Directions: Write the letter of the answer that best describes each person.

1) _______ Helena
2) _______ Diocletian
3) _______ Theodosius I

A. the emperor who made Christianity the official religion of the Roman Empire
B. the saint who translated the Bible into Latin from Hebrew and Greek
C. Emperor Constantine’s Christian mother
D. the Roman emperor who was responsible for the “Great Persecution”

Directions: Circle the correct answer.

4) The Emperor Constantine built a great basilica over the tomb of ______.
   Saint Peter           Saint Jerome           Mary           Pope Leo the Great

   forty-five            thirty-three          fourteen        twenty-seven

Directions: Complete the following.

6) The word __________________ is another word for “covenant”.

7) In 313 the Emperor Constantine issued the __________________, granting religious
tolerance throughout the Roman Empire.

8) The early Christians compiled for the Church the official list, or _________________, of
   Sacred Scripture.
Directions: Respond to the following in complete sentences.

9) Give at least two examples of how the Holy Spirit worked through the early Christians leaders to define the faith. Explain your choices.
Cumulative Exam

Name: ___________________
Date: ________________

UNIT EXAM

Directions: Use the names listed below to complete the sentences.

Word Bank

John Calvin
Jerome
Thomas More
Charles Borromeo
Benedict of Nursia
Diocletian
Theodosius I
Constantine
Charlemagne
Gregory the Great
1) Saint _____________ translated the Bible from Hebrew and Greek into Latin.

2) The Emperor _____________ made Christianity the official religion of the Roman Empire.

3) In 303 the Emperor _____________ issued edicts that led to what we now call the “Great Persecution,” during which thousands of Christians were martyred for their faith.

4) Saint _____________, whose motto was Ora et labora, wrote a rule for his monks that named seven specific times each day for community prayer.

5) On Christmas Day, 800, Pope Leo III crowned ________________ as Holy Roman Emperor.

6) Pope _____________ reached out to the pagan tribes and began their conversion; he also helped to reform the Church by contributing to canon law and helping to develop the Gregorian Sacramentary.

**Directions:** Write True or False next to the following sentences. Then, on the lines provided, change the false sentences to make them true.

7) _____ About one hundred people were baptized by Saint Peter on Pentecost.

8) _____ In his “Gregorian Reforms,” Pope Gregory VII forbade the corrupt practice of lay investiture and banned all forms of simony.

9) _____ The Council of Jerusalem, which took place around A.D. 49, was the first great council of the Church.

10) _____ At the Fourth Lateran Council, which met in Rome in 1215, every aspect of Catholic life was discussed and regulated by decree.

11) _____ The friars did not commit themselves to being well educated in their faith.

**Directions:** Complete the following.

12) Under the rule of Saint Basil the Great, monks vowed to practice the evangelical counsels of ____________________________,

____
13) _________________ is the term used to describe the changing of the bread and wine into the Body and Blood of Christ that takes place during the consecration of the Mass.

14) _________________ is a severe penalty imposed by the Church for serious sins against the Catholic religion; it brings exclusion from participation in the Church’s sacramental life.

**Directions:** Respond in complete sentences to TWO of the questions below.

15) Describe some of the challenges Saint Paul and the early Christian missionaries faced.

16) Briefly describe the books of the New Testament.

17) What was the original purpose of the crusades, and what did many of the people who supported or fought in the Crusades forget?

18) Briefly describe Charlemagne’s contributions to Christian education.
## APPENDIX B: POSTTESTS

### Oral Retelling and Written Summary Rubric

**Testing Order #:____________  Date: ______________  Pre-test ____  Post-test ____**

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<th>Summary Retelling</th>
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_____ / 15=Summary Writing  
_____ / 15=Summary Retelling

Comments/Observations:
Comprehension Quiz

Ch. 11: Part 1 Quiz

Directions: Write True or False next to the following sentences. Then, on the lines provided, change the false sentences to make them true.

1) ________ A major problem in the Church during the late Middle Ages was a lack of understand of the papacy, which should be the center of every Christian’s spiritual life.

2) ________ Scientists today believe that most of those who died from the Black Death (Black Plague) during the late Middle Ages had contracted a form of what we now call the bubonic plague.

3) ________ During the plague, called the Black Death, all Christians remained faithful to God and the Church.

4) ________ Many Catholic priests were highly educated in their faith during the late Middle Ages.

Directions: Complete the following.

5) By the late Middle Ages, few laypeople spoke or understood _________________, the language of the Mass.

6) One woman that provided hope during the troubled times of the late Middle Ages was _________________.

7) During the late Middle Ages, Europe began to lose the values of _________________, which caused the once powerful papacy to decline.

Directions: Respond to the following in complete sentences.

8) Discuss the state of the Christian faith in Europe during the spread of the plague.
Cumulative Exam

Quarter Three Exam
Ch. 11, 12, & 13: Part 1

Part 1-DIRECTIONS: Complete the following using the word bank. Each problem is worth one point.

<table>
<thead>
<tr>
<th>Charles Borromeo</th>
<th>John Calvin</th>
<th>Bartolome de las Casas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leo X</td>
<td>Martin Luther</td>
<td>Henry VIII</td>
</tr>
<tr>
<td>Pius V</td>
<td></td>
<td>Charles V</td>
</tr>
</tbody>
</table>

1. During the age of exploration, great Catholic missionaries such as ________________ boldly defended the human rights of America’s native peoples.

2. The Protestant reformer ________________ believed in predestination, a false doctrine stating that God, regardless of any efforts people made to lead good lives on earth, chooses some people for heaven and some for hell.

3. The Roman Catechism of 1566 was completed by a papal commission headed by Saint _________________.

4. ________________ wrote the Ninety-five Theses.

5. Pope ________________ approved an indulgence for anyone who made a contribution of money for the Saint Peter’s Basilica in Rome.

6. King ________________ became angry when the pope refused to allow his marriage to be annulled, or dissolved, so he could marry again.

Part 2-DIRECTIONS: Complete the following. Each problem is worth one point.

7. In 1054 a division, or ________________, took place in Catholicism, separating the Church in the eastern and western parts of the Roman Empire.

8. The ________________ (5 words) was a split in the Catholic Church that developed in the late 1300s when competing cardinals elected two new popes, each one claiming to be the real pope.

9. The period in history in which the Church began a program of reform to answer the crisis begun by the Protestant reformers is known as the ________________ (2 words).
10. _____________ is a philosophy, developed during the Renaissance, that placed an increased emphasis on the importance of the person.

11. To _______________ is to proclaim the good news of Christ to people everywhere.

12. The kings and queens of Europe in the 1600s and 1700s who had complete power over all aspects of the lives of their people were known as _________________ (2 words).

13. The ___________________________ (3 words) brought reform after the Protestant Reformation.

14. As the bishop of Rome, the pope had always lived in Rome. However, in 1305 to 1377 the pope lived in ________________.

**Part 3-DIRECTIONS:** Respond to **THREE** of the following questions in complete sentences. Each problem is worth two points.

A. What hardships did the Church endure during the Middle Ages? How did the Church respond to these hardships?

B. How did the Renaissance and humanism influence the life of the Church?

C. How was the Church renewed and strengthened by the challenge of the Protestant Reformation?

D. What challenges did the Church face in evangelization?
SUMMARIZING TO IMPROVE COMPREHENSION

APPENDIX C: INTERVENTION

Magnet Summary Example

Magnet Summaries for History

- **Homestead Act**
  - acres: 160
  - farm for 5 years
  - 1862

- **Hardship**
  - The Great Plains
  - drought
  - crops
  - failed

- **Dry Farming**
  - wheat
  - dug wells
  - Irrigation

- **Homes on the Prairie**
  - no trees
  - far from each other
  - dirt floors
  - "soddies"

"Many people went west because of the *Homestead Act*, which gave 160 acres to people if they farmed them for 5 years."

"In the Great Plains, people had *hardships* with the very hot and very cold weather, and their crops failed due to drought and insects."

"Farmers needed to do *dry farming*, so they dug wells, made windmills, and changed the way they plowed to grow wheat."

"Homes on the Prairie were *sod houses*, called "soddies," because they had no trees. People were lonely because the houses were far from each other."

### Summary Topic Sentence Verb List

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Student Sample: Written Summary

Name it  Verb it  Finish it
In the first half entangled in many of Chapter 13, problems the Church 13

First step: Pope Alexander VI asked explorers to evangelize everywhere including the New World
Then explorers started to treat native people rudely and Antonio Montesino and Bartolomé de las Casas boldly defended their rights
Meanwhile in Goa, Francis Xavier baptized many people
Also St. Augustine of Hippo was a scholar who spread faith all throughout Africa
- Absolute monarchs are kings and queens who gained power over all aspects of their lives including religion
Furthermore King Louis established the Gallican Articles to make him seem like he had more power than the pope to rule the Church
However Pope Pius VI went to Vienna to tell King Joseph to stop abolishing monasteries overall. The Church faces many obstacles but never give up on God
In the first half of Chapter 13, the Church is entangled in many problems. First of all, Pope Alexander VI asked explorers to evangelize everywhere, including the New World. Then, explorers started to treat native peoples rudely, and Antonio Montesinos and Bartolomé de las Casas boldly defended their rights. Meanwhile, in Goa, Francis Xavier baptized many people. Also, St. Augustine of Hippo was a scholar who spread faith all throughout Africa.

Absolute monarchs are kings and queens who gained power over all aspects of their lives, including religion. Furthermore, King Louis XIV established the Gallican Articles to make him seem like he had more power than the pope to rule the Church. However, Pope Paul VI went to Vienna to tell King Joseph II to stop abolishing monasteries. Overall, the Church faces many obstacles but never gives up on their faith.
### Student Sample: Quadrant Chart

**Ch. 13 Learning Goals**

1. What challenges did the Church face in evangelization, politics, and scientific thought?
2. How did the faithful respond to these challenges?
3. What challenges do we face today?

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<td>Ming Joseph II</td>
<td>Goa</td>
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<td>absolute monarchs</td>
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## Cornell Notes Format

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**Summary**
Student Sample: Cornell Notes

SUMMARIZING TO IMPROVE COMPREHENSION

Notes, pg 115

Absolute monarchs are kings and queens who gained complete power over all aspects of the lives of their people, even deciding which religion they were to practice.

Furthermore, King Louis XIV established the Gallican Articles to enable him to rule the Church to become more powerful than the Pope.

However, King Joseph abolished monasteries and Pope Pius VI went to Vienna to tell him to stop interfering in the church.

Summary:

King Louis XIV was an example of an absolute monarch and he established the Gallican Articles. In Vienna, Pope Pius VI told King Joseph to stop interfering in the Church.
Two missionaries, Antonio Montesua and Bartolomé de las Casas, were against the harsh treatment towards the native people.

Pope Alexander VI asked explorers to evangelize, or proclaim the good news of Christ, everywhere, including the New World with the voyage of Christopher Columbus.

When arriving to Goa, Francis Xavier baptized many people.

St. Augustine of Hippo was a scholar who spread faith throughout Africa.

Summary:
Explorers were asked to evangelize all throughout the world. Unfortunately, some started enslaving native people. Two missionaries boldly defended their rights.