

ABSTRACT

Title of Dissertation: THE EFFECTS OF TWO SUMMARIZATION STRATEGIES USING EXPOSITORY TEXT ON THE READING COMPREHENSION AND SUMMARY WRITING OF FOURTH- AND FIFTH-GRADE STUDENTS IN AN URBAN, TITLE 1 SCHOOL

Diane M. Braxton, Doctor of Philosophy, 2009

Directed By: Dr. Mariam Jean Dreher
Department of Curriculum and Instruction
University of Maryland, College Park

Using a quasi-experimental pretest/post test design, this study examined the effects of two summarization strategies on the reading comprehension and summary writing of fourth- and fifth- grade students in an urban, Title 1 school. The strategies, Generating Interactions between Schemata and Text (GIST) and Rule-based, were taught using authentic social studies materials that are part of the school system's curriculum.

Four intact classes participated in fifteen 40 – 60 minute lessons. One fourth-grade (17 students) and one fifth-grade (13 students) received GIST instruction, and one fourth-grade (20 students) and one fifth-grade (14 students) received Rule-based instruction.

The Qualitative Reading Inventory - 4 was used to determine the effects on the expository reading comprehension. For the fourth graders, there was no significant interaction between time and intervention. However, there was a significant main effect for time with a very large effect size. Additional analyses showed a significant time by

intervention by gender interaction for implicit questions (but no effect for explicit questions). GIST group males outperformed the females, while Rule-based group females outperformed males.

For the fifth graders, there was no significant interaction between time and intervention. However, there was a significant main effect for time with a very large effect size.

For the quality of summaries, there was a significant interaction between time and intervention with a very large effect size for both grades, favoring the Rule-based group.

Questionnaire responses showed the greatest change for students in both grades and interventions on concepts of summary writing. Ratings indicated an increase in knowledge about summary writing, paralleling the gained knowledge that was evident in students' post test summaries.

These results suggest that both summarization methods can improve the expository reading comprehension and summary writing of urban, Title 1 students. These findings provide evidence to encourage the teaching of summarization strategies to promote reading achievement especially with students who are lagging behind their peers in the area of reading.

This study extended summarization research by (a) using authentic expository text rather than research-generated material, and (b) instructing a student population that has had limited representation in past studies.

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TEXT ON THE READING COMPREHENSION AND SUMMARY WRITING OF
FOURTH- AND FIFTH-GRADE STUDENTS IN AN URBAN, TITLE 1 SCHOOL

by

Diane M. Braxton

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Advisory Committee:

Professor Mariam Jean Dreher, Chair
Senior Lecturer Rose Marie Codling
Associate Professor Wayne Slater
Associate Professor William Strein
Assistant Professor Jennifer Turner

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DEDICATION

I could never have completed this dissertation without the love and support from my dear family. My 11-year journey to reach this point has finally come to a close. Thank you for being there for me.

To my husband, Walter:

Thank you for your constant love, support, and encouragement throughout this entire process. You were my cheerleader shouting, “Rah, rah, rah,” even at times when I wished you would be quiet so that I could revise that paragraph for the tenth time without your cheerfulness. I know you’re so proud of my accomplishments!

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Chapter 1: Introduction

Statement of the Problem

An issue of major concern to educators, policymakers, and researchers is the achievement gap that exists among groups of students in the United States (Donahue, Daane & Jin, 2003; RAND Reading Study Group, 2002). In particular, the reading achievement of urban, Title 1 students lags behind that of their suburban and rural peers. Since all students face both present and future demands of the 21st century, educators need to focus on effective instruction that will help narrow the gap so the urban learner is equipped to meet academic and societal demands. With this student subpopulation rapidly increasing, it is critical that the issue of improving their reading achievement be addressed (Block & Mangieri, 2004).

The ability to read is essential not only in the school setting, but also for lifelong learning (Duffy & Roehler, 1989; Durkin, 1993; National Institute of Child Health and Human Development, 2000; RAND Reading Study Group, 2002). Reading is a fundamental life skill that helps promote success in school and throughout one's life. Both children and adults are at a serious disadvantage if they are not able to read well (Cunningham & Stanovich, 2000; Salinger, 2003; Torgesen, 2000). Their opportunities for personal fulfillment and job success can be extremely limited or even lost (Anderson, Hiebert, Scott, & Wilkinson, 1985; Bruce, 1998; Good, Simmons, & Smith, 1998; RAND Reading Study Group, 2002; Snow, Burns, & Griffin, 1998). A large number of students cannot carry out more complex reading tasks which may be required to acquire more advanced jobs or further their education (Pressley & McCormick, 1995). The ability to read well can empower a person; the inability to read can be disempowering.

It is crucial that the urban, Title 1 student be empowered in order to face present and future challenges that include performing satisfactorily on standardized measures in all content areas, earning a high school diploma, pursuing higher learning, and gaining future employment. Yet many such students are not achieving adequately and are not completing high school. For example, the graduation rate in Maryland in 2007 was approximately 85%, but for a large urban area within the state that rate was only about 60% (Maryland State Department of Education, 2007). Both the state of Maryland and the federal government (No Child Left Behind Act, 2001) require the graduation rate to increase to 90% by 2013/2014.

As Kucan and Beck (1997) have asserted, educators must work on ways to ensure that *all* students move from basic reading skills learned in the early grades to more demanding instruction that is required in later grades. Reading is not merely a subject area, but a skill that is required for success in all content areas and in future endeavors.

Several instructional strategies have been found to be effective in improving reading comprehension. For example, there is evidence to support the effectiveness of prediction, concept mapping, questions/questioning, and summarization (National Institute of Child Health and Human Development, 2000). Furthermore, research shows that summarization instruction, along with generating questions, is one of the most powerful techniques for improving comprehension (Kamil, 2008; Rosenshine, Meister, & Chapman, 1996), but very few studies have been conducted involving urban, Title 1 learners. My study examined the effects of two summarization strategies on the reading comprehension and summary writing of students attending an urban, Title 1 school.

Rationale

Researchers have conducted studies analyzing the characteristics of effective urban schools (Taylor, Pearson, Clark, & Walpole, 2000; Wendler, Samuels, & Moore, 1989) and effective teachers working in urban settings (Allington & Johnston, 2002; Pressley, Allington, Wharton-McDonald, Collins, Block & Morrow, 2001). However, studies focused on instructional strategies that promote reading comprehension of urban, Title 1 students are lacking, even though it is in the area of reading comprehension that their underachievement appears to be most evident (Allington & Cunningham, 1996; Chall, Jacobs & Baldwin, 1990; Mahiri, 1999; Ogbu, 2003). Therefore, a critical need presently exists for studies that investigate specific strategies that benefit the reading comprehension of these students. Such studies could help provide classroom teachers with a repertoire of effective practices to help improve reading achievement.

Ineffective instructional practices have contributed to the achievement gap that exists in reading. Several studies reported that schools serving disadvantaged or lower achieving students often devote less time and emphasis to higher-order thinking skills than do schools serving more advantaged students (Allington & McGill-Franzen, 1989; Coley & Hoffman, 1990; Padron & Waxman, 1993). In addition, lower-achieving students tend to spend very little time on comprehension tasks, and often work on assignments usually worksheets focused on isolated word skills (Collins, 1986; Hiebert, 1983). Typically, these students receive the least amount of instruction and practice as they progress through school (Hall, Delquadri, Greenwood, & Thurston, 1982). However, Mathes, Fuchs, Fuchs, Henley and Sanders (1994) reported that when low-achieving, at-

risk students do receive effective reading instruction, they tend to experience greater success in their remaining school years.

Many urban schools focus on teaching basic reading skills rather than advanced skills believing that their students must demonstrate the ability to learn the basics or lower levels of knowledge before they can be taught higher-level skills (Foster, 1989; Means & Knapp, 1991). As Cooper (2004) stated “ low expectations mixed with negative perceptions of students’ cognitive ability persist when learning is perceived as linear with learning gates that students must pass as in having to learn basic skills before moving to more advanced skills” (p.23). Focusing on basic skills can lead to instructional approaches that become scripted and test-driven which, in turn, can lead to a drill-test-drill-retest cycle. Commonly referred to as the “drill and kill” method by educators, “students can become deadened by this type of school experience, demoralized by the thought that there is nothing but drills to look forward to, held back because they do not respond with enthusiasm to what they are given, and finally deciding out of boredom that dropping out is preferable to remaining in” (Cooper, 2004, p. 23). This type of instruction focused solely on basic skills not only creates students who are ill-prepared for today’s high-stakes tests, but also for their future experiences in school and life.

To better prepare urban students for future success in school, effective strategies must be identified to help raise their reading achievement levels. Summarization is a higher-level comprehension strategy that has been shown to be effective in improving reading achievement. Teaching students to summarize not only improves the quality of their written summaries, but also their overall comprehension in content areas (Duke & Pearson, 2002; Taylor, 1982; Taylor & Beach, 1984). Summarization requires readers to

think critically both during and after reading. They must analyze the text information for important concepts, and also for information that can be deleted in order to summarize. Students must take time to process and reflect on what has been read. Summarization, a higher-level comprehension strategy, can improve long-term retention of information that impacts positively on students' learning in content areas (Rinehart, Stahl, & Erickson, 1986). Therefore, learning to summarize can have multiple benefits for students such as improving reading comprehension, enhancing the quality of written summaries, and helping them retain knowledge gained in content areas such as social studies and science.

Research has supported the effectiveness of summarization instruction with various student populations (Friend, 2001; Gajria & Salvia, 1992; Hare & Borchardt, 1984; Malone & Mastropieri, 1992). However, there is limited research on its effectiveness with elementary students attending urban, Title 1 schools. With this increasing student population lagging behind their peers in academic achievement, efforts need to be directed toward identifying effective strategies that can improve their reading comprehension and overall school learning. Teaching students how to summarize can provide challenging instruction requiring higher-order thinking skills which may have beneficial results in multiple areas. Because summarization has been shown to significantly impact student achievement (Armbruster, Anderson & Ostertag, 1987; Bean & Steenwyk, 1984; National Institute of Child Health and Human Development, 2000), the focus of my study was on the effects of summarization instruction on urban, Title 1 students.

Purpose of Study

The purpose of this study was to investigate the effects of two summarization approaches, Generating Interactions between Schemata and Text (GIST) and Rule-based,

on reading comprehension and summary writing of fourth- and fifth-grade students who attended an urban, Title 1 school. This investigation extended the findings of studies conducted by Cunningham (1982) and Bean and Steenwyk (1984) who examined the effects of these two summarization strategies on the reading comprehension and summary writing of fourth- and sixth-grade students. My study extended their findings by (1) examining the effects of these two approaches with urban, Title 1 students, (2) examining the effects when using authentic expository text correlated with the school system's social studies curriculum, and not altered to meet the demands of the task, (3) examining whether students can effectively summarize expository text involving multiple paragraphs, and (4) investigating students' performance on pretest and post test reading assessments when assessments consisted of expository text with multiple paragraphs.

Summarization

Summarization is a strategy that requires the reader to extract important information from text, and reconstruct the meaning in a more succinct, generalized form (van Dijk & Kintsch, 1983). Writing a summary requires conscious thought, judgment, and much effort as the reader distinguishes between important and unimportant text. The reader constructs meaning of the text at a deep level while making many decisions. To summarize, a reader must identify the main idea, decide which content to include and how to restate it using his or her own words, and ensure that the summary is complete, but also brief. This process involves complex metacognitive skills which students do not automatically use, but which can be taught with explicit instruction and practice.

The ability to summarize information is an important study skill for students to learn particularly with expository text. As students move through the intermediate grades

into middle school, they are expected to understand and remember content presented in textbooks. Learning how to summarize can help them with these tasks. Even though summarization is a complex task, studies suggest that middle-grade students profit from direct instruction in summarization (Cunningham, 1982; Doctorow, Wittrock, & Marks, 1978; McNeil & Donant, 1982).

At least two distinct approaches to summarization have had positive learning effects on students participating in studies. The first one, Generating Interactions between Schemata and Text or GIST, is a holistic approach developed by Cunningham (1982). It represents top-down text processing which proceeds from whole to part. With this approach to summarization, the reader begins with the whole text which then must be dismantled into its parts in order to derive meaning. This approach relies on explicit instruction using teacher modeling, guided practice, and finally independent practice.

The second one, a Rule-based approach developed by Brown and Day (1983), uses an established set of rules to teach summarization to students. This method represents bottom-up text processing which proceeds from part to whole. With this approach, the reader uses rules to proceed from sentence to sentence in order to derive meaning from the whole text. This approach also relies on explicit instruction using teacher modeling, guided practice, and finally independent practice.

Generating Interactions between Schemata and Text Approach - GIST

The GIST approach is an instructional, top-down method that does not use explicit rules for developing summaries. Instead, students are led through a systematic procedure designed to enable them to induce what the rules for summarization are. In

addition, this approach requires the student to produce a constrained summary of no more than 15 or 20 words depending on the length of the text.

Using the GIST approach, Cunningham (1982) taught summarization to 14 fourth-grade students in the southeastern region of the United States. Without learning specific rules, the students learned to delete, generalize, and substitute in order to extract the gist of each selection. Through teacher modeling, guided practice, and finally independent practice, the fourth-graders were able to construct summaries containing 15 or fewer words. These students improved the quality of their written summaries by learning the GIST procedure.

The students received nine, 25- minute lessons that spanned a 3-week period in a small room away from their classroom. Cunningham instructed the students using only short paragraphs that were at a 3rd grade reading level, a level lower than the students' grade at the time. The paragraphs were selected from a supplementary reading series that focused on the specific skill of drawing conclusions (Boning, 1970). These materials were used because they best fit the study's focus, and not because they fit the content of the school's curriculum. How might students perform in a more authentic situation? What if the students worked in their own classrooms with text that corresponded with the curriculum that they use on a daily basis? Today's students must navigate through expository text in content areas that are seldom single paragraphs written below their grade level. They not only deal with this type of text in their classrooms, but also on standardized tests that measure their achievement.

Bean and Steenwyk (1984) worked with sixth-grade students from a suburban area in California. They divided the students into three groups. One group received the

GIST approach, a second group received instruction in the Rule-based approach, and the third group received no explicit instruction on summarization. Bean and Steenwyk concluded that students benefited equally by receiving direct instruction in the GIST or Rule-based approach. No differences between these two groups were noted. Not only did those students improve their written summaries, but also on the paragraph comprehension section of the Nelson Reading Test (Nelson, 1962). This reading test consisted of 75 multiple-choice questions related to main idea and details.

These students received twelve, 25 - 30 minute lessons that spanned over five weeks in an area away from their classroom. All instruction was delivered by one of the researchers, Steenwyk, who used short paragraphs of five sentences that were at a 6th grade reading level. As with Cunningham's study, the paragraphs were selected from a supplementary reading series. Again, these materials were used because they best fit the study's focus, and not because they fit the content of the school's curriculum.

Bean and Steenwyk reported that the conclusions drawn from their study were only pertinent to summarization training using single paragraphs. Therefore, this limited any inferences that might be made about the transfer effect of summarization training to other texts. In addition, students' reading comprehension was measured by the Nelson reading test which consisted of reading single paragraphs followed by multiple-choice questions. The researchers stated that student performance on this assessment suggested that transfer occurred at least with reading paragraphs. Two questions were left unanswered by their study: (1) Can students effectively summarize text involving multiple paragraphs?, and (2) How would students' performance be affected when the reading assessment consisted of text with multiple paragraphs?

Rule-based Approach

The Rule-based approach is a structured, bottom-up method that teaches summarization using specific rules. The reader is guided through a process of eliminating information that is not essential and reworking the remainder into a condensed format. These rules or steps ask students to delete, substitute, and retain information in order to create a summary.

Based on the macrorules developed by Kintsch and van Dijk (1978), Brown and her colleagues (Brown, Campione, and Day, 1981; Brown and Day, 1983) formulated a set of five rules that they deemed essential for summarization. Their rules were:

1. deletion of unimportant or trivial information;
2. deletion of redundant information;
3. substitution of superordinate term for a list of similar items (e.g., items such as daisy, rose, aster could be replaced with the word “flowers”) or actions (e.g., actions such as “Beth got ready for school.” for Beth woke up. Beth ate breakfast. Beth washed her face and brushed her teeth);
4. selection of a topic sentence if it is provided by the author;
5. invention of a topic sentence if one does not appear in the text.

Brown and Day (1983) investigated the ability of fifth-, seventh-, and tenth graders and college students to employ these rules while summarizing. They used specially-constructed expository texts that allowed the use of these rules. In analyzing the summaries written, Brown and Day noted that trends emerged across the grade levels. Deletion rules were used effectively at all grade levels, but age made a difference in reference to the other rules. With deletion appearing first, the use of superordination

appeared next followed by the selection rule. The invention rule, the most difficult, developed at a much later age because it required the students to infer meaning. Fifth graders could delete information when necessary, but had difficulty using the other rules. Seventh graders were able to use the substitution and selection rules, but not invention. For the invention rule, even college students utilized it only about 50% of the time when it was appropriate to use. Brown and Day noted that younger students wrote summaries that followed the same order as the text, with older students more apt to order according to topic. The younger groups were also more likely to run out of space on their paper before the summaries were finished.

Brown, Day, and Jones (1983) taught fifth graders to use the explicit set of rules outlined by Brown and Day (1983) in writing constrained summaries of 20 words. The results showed that the students produced improved summaries when they were taught to follow specific rules used by older and more-skilled summary writers, and became more proficient in choosing important ideas to include in their writings.

Much of the work conducted on summarization instruction has involved reading selections that were written or altered to meet the demands of the task (Day, 1980; Brown & Day, 1983; Garjria & Salvia, 1992; Jitendra, Hoppes, & Xin, 2000). At the present time, there is limited research on the effects of summarization strategies using authentic expository selections from textbooks and resource materials with urban, Title 1 students. My study examined the effects of two summarization approaches involving classroom materials actually used by students in the area of social studies.

Research Questions

1. Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension using expository text with urban, Title 1 learners?
2. Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners?
3. Does either instructional approach, GIST or Rule-based, appear to affect the students' concepts, views, and attitudes toward summarization?

Significance of the Study

This study is significant for several reasons. First, unlike most studies on summarization instruction, it focuses on a specific student population lagging behind peers in the area of reading achievement. Second, it can provide evidence of the impact of two distinct summarization approaches, GIST and Rule-based, on the reading comprehension and summary writing of urban, Title 1 students. Third, this study may further contribute to research focused on narrowing the reading achievement gap that presently exists among our students. Fourth, the evidence gained from this research may inform future research investigating effective instructional approaches for specific student subgroups who struggle with reading. Fifth, the results of this study may provide evidence of the importance of higher-order thinking in improving reading achievement for all students. Sixth, this study addresses a concern stated in the report of the National Reading Panel (National Institute of Child Health and Human Development, 2000, p. 4 - 52), "More information is needed on the effective ways to teach teachers how to use

proven strategies for instruction in text comprehension. This information is crucial to situations where teachers and readers interact over texts in real classroom contexts.”

Definition of Terms

Cognitive strategy – An action that is intentionally selected by the reader in order to achieve a specific goal (Paris, Wasik, & Turner, 1996).

Explicit instruction – A type of instruction that not only tells students what they will be learning, but also gives them the procedural and conditional knowledge needed for understanding (Pearson & Leys, 1985).

Expository text – A genre that is informative, non-fiction, and not predominately narrative in style (Dreher, 2002). It provides an explanation of facts and concepts. Its main purpose is to inform, persuade, or explain.

Maryland School Assessment (MSA) – A test that meets the requirements of the federal No Child Left Behind Act. Norm-referenced and criterion-referenced scores are reported in reading and mathematics. The criterion-referenced test measures student proficiency on the Maryland content standards. A scale score is used to determine a performance level: basic, proficient, and advanced. Students scoring at the basic level are described as unable to adequately read and comprehend grade appropriate literature and informational selections. Proficient level describes students as able to read grade appropriate text and demonstrate the ability to comprehend literature and informational selections. Advanced level students are those who can regularly read above grade-level text and demonstrate the ability

to comprehend complex literature and information selections (Maryland State Department of Education, 2003).

NAEP – National Assessment of Educational Progress, also known as "the Nation's Report Card," is a nationwide assessment that measures student progress in reading, mathematics, science, writing, U. S. history, civics, geography, and the arts. It is administered every two years to a selected sample of students in grades 4, 8, and 12. No individual student or school scores are provided, but more general results regarding academic achievement, instructional experiences, and school environment for populations of students and subgroups of those populations (National Center for Educational Statistics, 2000).

No Child Left Behind Act (NCLB) - The NCLB Act, which reauthorizes the ESEA, incorporates the principles and strategies proposed by President Bush. These include increased accountability for states, school districts, and schools; greater choice for parents and students, particularly those attending low-performing schools; more flexibility for states and local educational agencies (LEAs) in the use of Federal education dollars; and a stronger emphasis on reading, especially for the youngest children (United States Department of Education, 2002).

Reading comprehension - Reading requires an individual to comprehend or construct meaning from text. Comprehension is an active and complex process that involves interaction between the text and the reader (Durkin, 1978; Kucer, 2001; Rosenblatt, 1978). Both the information from the text and the

knowledge possessed by the reader are needed for construction of meaning.

Summary – Short statements that condense information and reflect the gist of discourse (Hidi & Anderson, 1986).

Title I – A federally funded assistance program for economically and educationally Title 1 students. Title 1 refers to a section of Public Law 107 – 110 (and predecessor, P. L. 103 – 382), “Improving the Academic Achievement of the Disadvantaged.” Title 1 reaches about 12.5 million students enrolled in both public and private schools. 65 percent of funds serve students in grades 1 through 6. Schools in which low-income children make up at least 40 percent of enrollment are eligible to use Title I funds for schoolwide programs that serve all children in the school (United States Department of Education, 2006)

Limitations of the Study

One limitation of this study was that students were not randomly selected for each condition group. Students were instructed with their homeroom classes which were heterogeneously mixed. I, as teacher and researcher, instructed one fourth- grade class and one-fifth grade class. A colleague instructed the other fourth- grade and fifth-grade classes. Even though students could not be randomly assigned, teachers were randomly assigned to an instructional approach. Measures were taken to ensure the equivalence of both groups in each condition, but it was possible that differences existed between them. In addition, it was not possible to control any summarization practices that may have occurred in the students’ homes.

Assumptions

One assumption of this study was that all fourth- and fifth- grade students would receive comparable reading instruction using social studies content based on the school system's curriculum.

Another assumption was that none of the students would have been exposed to an explicit procedure for summarizing expository text. I assumed that they have had a perfunctory exposure to one that was briefly written in the reading teacher's guide that explained to the student that they should write a summary using the main idea and details from the selection. No explicit directions were given to the teacher about instructing students on the "how" component.

A final assumption was that both teachers would accurately record beginning and ending times, and that they would only check off the steps on the lesson plans that were actually completed.

Chapter 2

Review of the Literature

The purpose of this study was to examine the effects of two summarization strategies, GIST and rule-based, on the reading comprehension and summary writing of fourth- and fifth-grade students attending an urban, Title 1 school. This review of the literature will begin with an overview of reading comprehension as defined by three influential groups of people, National Reading Panel (NRP), RAND Reading Study Group (RRSG), and National Assessment of Educational Progress (NAEP), and other leading experts in the area of reading. The next section will overview research related to reading achievement in the United States, comprehension instruction in today's classrooms, and the status of achievement and comprehension instruction in the intermediate grades and in urban schools. This section will be followed by a review of pertinent summarization studies, and research related to comprehension strategy instruction. Finally, the importance of expository text comprehension in classroom instruction will be discussed.

Defining Reading Comprehension

Reading requires an individual to comprehend or construct meaning from text. Comprehension is an active and complex process that involves interaction between the text and the reader (Durkin, 1978; Kucer, 2001; Rosenblatt, 1978). Both the information from the text and the knowledge possessed by the reader are needed for construction of meaning. The term "reading comprehension" has been defined in various ways by groups of people and leading researchers who have been influential in this field. These groups include the National Reading Panel (NRP), the RAND Reading Study Group (RRSG),

and the National Assessment of Educational Progress (NAEP) with leading individual researchers of Gambrell, Block, Pressley, and McNeil.

In 1997, the Director of the National Institute of Child Health and Human Development (NICHD) charged the National Reading Panel (NRP) with providing a report assessing the current state of reading research. The Panel was to include information related to the effectiveness of different reading approaches used in teaching students. Shanahan (2004), a member of the National Reading Panel, later wrote that these findings could eventually be used by educators to help close the achievement gaps between groups of students by improving their reading ability.

The NRP (2000) report stated that reading comprehension was critical to the development of reading skills and the ability to obtain an education. The Panel defined the term as a complex, cognitive, and active process that requires intentional and thoughtful thinking between the reader and the text. Readers gain meaning from text when they “engage in problem solving thinking processes” that allow them to “actively relate the ideas represented in print to their own knowledge and experiences and construct mental representations in memory” (p. 14). The Panel’s definition of reading comprehension is based primarily on those expressed by Durkin (1993) and Harris and Hodges (1995).

In 1999, the Office of Educational Research and Improvement of the U. S. Department of Education asked the RAND Reading Study Group (RRSG) to develop a proposed research agenda that would address core problems existing in reading education. The decision was made to focus on reading comprehension due to several factors including the need for high school graduates to comprehend complex texts,

unacceptable achievement gaps among groups of students, and little direct attention given to teachers to help develop skills that will improve comprehension and content learning. RRSRG began its work by defining the term reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p.11). This process requires three components: the reader, the text, and the activity or purpose for reading. The reader encompasses “all the capacities, abilities, knowledge, and experiences that a person brings to the act of reading” (p. 11). The text includes any printed or electronic material, and the activity encompasses purposes (why readers read), processes (what mental activities are occurring while reading), and consequences (what is learned or experienced because of the reading). These three elements are dynamic and exist within a sociocultural context that extends beyond the classroom.

Administered by the U. S. Department of Education, the National Assessment of Educational Progress (NAEP), also known as the “Nation’s Report Card,” measures the reading achievement of the nation’s students in selected grades. NAEP draws from a variety of sources to explain its meaning of reading comprehension. In developing the NAEP Reading Framework, many individuals and groups involved in reading education identified behaviors used by proficient readers: active, strategic, knowledgeable, and motivated to read. This type of reader was described in the research summarized in the Report of the National Reading Panel (2000): “In the cognitive research, reading is purposeful and active. According to this view, a reader reads a text to understand what is read, to construct memory representations of what is understood, and to put this

understanding to use” (p. 4-39). NAEP’s broad reading goals were based on these processes.

The National Reading Panel (2000) also reported that readers utilize their knowledge of the world that includes both language and print to construct meaning. This premise is reflected in the NAEP Reading Framework that states: “Readers develop understanding in a different ways. They focus on general topics or themes, interpret and integrate ideas within and across texts, make connections to background knowledge and experiences, and examine the content and structure of the text” (p. 11).

The NAEP Reading Framework also incorporates the characteristics of good readers identified in the National Research Council’s report *Preventing Reading Difficulties in Young Children* (Snow, Burns, and Griffin, 1998). These researchers report that proficient readers are able to summarize main points in both fiction and expository texts, read longer fictional selections and chapter books independently, discuss themes in fictional text, and distinguish cause/effect, fact/opinion, main idea and supporting details in expository text.

The RAND Reading Study Group, National Reading Panel, and NAEP Governing Board have all defined “reading comprehension” according to their interpretations. Whereas the Rand Reading Study Group emphasizes the major influence that sociocultural factors have on a student’s comprehension, the National Reading Panel views the text and reader as sources of variability. The NAEP Board has incorporated research from the National Reading Panel and the National Research Council’s report *Preventing Reading Difficulties in Young Children*, but has defined comprehension in ways that can be assessed.

Leading experts in the field of reading have also defined reading comprehension. Block, Gambrell, and Pressley (2002) defined comprehension as acquiring meaning from written text that can vary from traditional books to computer programs. In order to comprehend, the reader must interact with print in order to make sense of the message. The reader, the text, and the context are all involved in this interactive process. At times, the reader may focus on the text-based information, or at other times may attend to the text with his own experiences. Whether the text dominates or the reader dominates, social context influences what one reads, how one reads, and why one reads. “Readers comprehend text by acquiring meaning, confirming meaning, and creating meaning” (Gambrell, Block, & Pressley, p.5). Reading comprehension is a complex process involving more than 30 cognitive and metacognitive processes including clarifying meaning, summarizing, drawing inferences, identifying the gist, and paraphrasing (Block & Pressley, 2002).

McNeil (1992) stated that reading comprehension “is acquiring information from context and combining disparate elements into a new whole” (p. 16). Comprehension is not a product, but a process that requires the reader to construct meaning by using existing knowledge to interpret the text. Readers must interpret what they read and must arrive at their own meaning of the text. They must be able to understand the information in the text, and change the knowledge needed in order to gain this understanding.

Even though the term “reading comprehension” may be defined in similar and even slightly dissimilar ways by leading groups of people or individuals, teaching students to read and understand what they are reading is of paramount importance. Reading comprehension, a complex and interactive process, is considered to be the most

critical academic skill learned in school (Mason, 2004; Mastropieri & Scruggs, 1997). It not only affects the student's progress today, but also success in the future.

Reading Achievement in the United States

In the United States, however, not all students are successful in comprehending text that they read. As reported in the National Assessment for Educational Progress (Donahue, Daane, & Grigg, 2003), a gap in reading achievement exists among fourth-grade students. In particular, the reading achievement of urban, Title 1 students lags behind that of their national peers living in rural and suburban areas. Fifty-two percent of students residing in large cities scored below the "basic" level as compared to 34% residing on the fringes of urban areas. Fifty-six percent of students receiving Title 1 services in 2002 scored below the "basic" level with 28% of Non-Title 1 students scoring at that same level.

The NAEP results are mirrored in state reading scores such as the Maryland School Assessment administered to fifth graders (MSA, 2004). The Maryland School Assessment suggests that 50% of city students scored at the "basic" or lowest level as compared to 32% statewide. Fifty-three percent of these students receiving Title 1 services performed at the "basic" level as compared to 47% statewide; 52% receiving free/reduced meals scored at the "basic" level as compared to 50% statewide. However, 43% of urban fifth graders who were classified as non-free/reduced meals scored at the "basic" level as compared to 21% statewide. Even though these results showed improvement over previous years, a reading achievement gap continues to exist between urban, Title 1 learners and their suburban and rural peers.

With the signing of the No Child Left Behind Act of 2001 (NCLB, 2001), Federal and State Education officials have made accountability a top priority. This Act is designed to help close the achievement gap and to ensure that all students, including those who are Title 1, achieve academic competence by the academic year 2013 – 2014. Therefore, it is crucial for schools to identify instructional practices that influence the reading achievement of all students.

Over the past 20 years, researchers have overwhelmingly concluded that effective instruction has a great impact on students' learning and achievement (Darling-Hammond, 1999; Duffy, 1997; RAND Reading Study Group, 2002; Rosenshine and Furst, 1971). In fact, effective classroom instruction has been identified as a critical factor in promoting student achievement (Marzano, 2003; Snow, Barnes, Chandler, Goodman, & Hemphill, 1991; Wright, Horn, & Sanders, 1997).

Reading Comprehension Instruction in Today's Classrooms

What do we know about reading comprehension instruction in classrooms throughout the nation? Unfortunately, in many instances, reading researchers have found that classroom reading instruction includes minimal instruction on teaching students how to comprehend (Durkin, 1978-79; Moody, Vaughn, Hughes, & Fisher, 2000). Even though understanding of text is emphasized in some classrooms, there can be an almost complete absence of direct instruction on comprehension strategies (Taylor, Pearson, Clark, & Walpole, 2000). Little or no support on how to use comprehension strategies is evident (Bos & Vaughn, 1998). Comprehension instruction appears to be a time when more assessment than actual teaching is occurring.

In a seminal study, Durkin (1978-79) observed instruction that occurred during reading and social studies classes in grades three through six. Three consecutive days were spent in 39 classrooms in 14 different school systems throughout one school year.

Durkin made several assumptions prior to the observations:

- 1.) Intermediate grades were selected based on the premise that less decoding skills would occur with this age group, and comprehension instruction would be needed to teach the students the required content material.
- 2.) Durkin requested to observe the best teachers in the schools believing that they would be more likely to teach comprehension.
- 3.) Social studies, in addition to the reading, was observed. Due to the difficulty of the content material, she believed that comprehension instruction would have to occur in order for the students to gain meaning.

Nevertheless, even with specific parameters, Durkin found very little comprehension instruction occurring in the classrooms. During the reading sessions, comprehension instruction was observed for 45 minutes out of approximately 12,000 minutes with only 12 reported instances. No comprehension instruction was observed during the social studies time that accounted for another 6,000 minutes. Durkin and her assistants did observe teachers as “interrogators” (p. 520) who asked many questions without any type of instruction, and as “assignment-givers” (p. 520) who spent much time having students complete worksheets and workbook pages. During social studies,

teachers appeared to be more concerned with covering the content and having students memorize facts. However, no attention was given to whether those facts were indeed important or merely trivial.

A decade later, Wendler, Samuels, and Moore (1989) observed reading instruction in grades three through five that was delivered by three distinct groups of teachers: award-winning teachers, those with master's degrees, and others. These teachers taught in public school systems located in urban, suburban, and small town/rural areas in the Midwest. Researchers observed that the award-winning teachers allocated more time to giving comprehension-related assignments and assisting the students with them than the other groups of teachers. However, when all teachers were asked to prepare ideal comprehension instruction lessons, no significant differences were noted among the groups. Teachers merely increased the percentage of time spent asking assessment questions, listening to answers, and giving feedback. The questions that teachers asked their students did not include those that could be considered instructional ones.

Many other researchers report that in typical classrooms across the nation the majority of tasks assigned to students stress copying, remembering, and reciting with few engaging students in thinking about what they've read (Knapp, 1995; Pressley, et al., 2001). It appears from classroom observations that teachers may actually lack the knowledge of how to teach comprehension, not understand the difference between strategy teaching and instructional practices, and confuse assessment and direct comprehension instruction (Dowhower, 1999).

Reading Achievement and Instruction in the Intermediate Grades

Researchers suggest that many students in the intermediate grades struggle with challenging reading instruction, declining motivation to read, and low reading achievement (Allington, 2002; Chall, Jacobs, & Baldwin, 1990; McKenna, Kear, & Ellsworth, 1995). Beginning at the intermediate level and continuing throughout their schooling, students spend much of their time reading and learning from informational texts. The emphasis on instruction begins to focus more on reading for information and less on learning how to read and reading for pleasure (Allington, 2002; Dreher, 2000). The students move from “learning to read” to “reading to learn.”

Moving from “learning to read” to “reading to learn” is a critical time in the students’ reading development. With the shift to expository reading, they encounter textbooks that contain both abstract concepts and difficult vocabulary (Allington, 2002; Chall, 1983; Chall, Jacobs, & Baldwin, 1990). They face greater comprehension demands than in their earlier grades. In addition, students must deal with the pressure to perform well on high-stakes tests that contain numerous expository selections.

At the fourth-grade level, some children who were making good reading progress in earlier grades begin to experience comprehension problems (Chall, Jacobs, & Baldwin, 1990). These problems then result in declining reading achievement test scores particularly with low-income and minority students. Sometimes referred to as the “fourth-grade slump,” some researchers have attributed this to problems with informational reading: difficult vocabulary, poorly written texts, or lack of adequate background knowledge (Chall, Jacobs, & Baldwin, 1990; Leach, Scarborough, & Rescorla, 2003; RAND, 2002). Other researchers suggest that this decline in achievement may be due to

the change in school tasks and assessment tasks between third and fourth grade or possibly that, at this level, the students are reading more nonfiction selections that now appear more often on assessments (Snow, Burns, & Griffin, 1998). Unfortunately, students who encounter reading problems at this level often continue to struggle throughout the rest of their school years (Allington, 2002). Large proportions of American students face the difficulties of reading informational text with low-income and minority students more likely to struggle.

Results from 2003 NAEP revealed that 37% of fourth graders scored below the “basic” level and the percentage is even higher among low-income and minority children (Donahue, Daane, & Grigg, 2004). The “basic” level is defined as “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade level.” These students read at the most literal level and frequently lack the basic skills that are needed to learn from content-area textbooks.

Because many students especially those who are less proficient readers find expository text difficult to understand, educators need to identify instructional approaches that will benefit them (Saenz & Fuchs, 2002). Establishing effective instructional methods for strategic expository reading comprehension has been identified as a research priority (National Institute of Child Health and Human Development, 2000; RAND Reading Study Group, 2002).

Reading Achievement and Instruction in Urban Schools

In the United States about 16% of children live below the poverty level. However, that percentage rises to almost 25% for children living in urban areas (U. S. Census Bureau, 2000). Not only do these children live in low socioeconomic communities, but

they may also experience less academic success than those living in other communities. They experience failure to a greater extent in their primary years, and often leave school unprepared for adult life (Knapp, Turnbull, & Shields, 1990).

Many challenges face both teachers and students in urban schools. Inexperienced teachers, high teacher attrition rate, low parental support, and school and community violence are some of the problems encountered (Taylor, 2002). Children living in poor, urban environments must also cope with “real-world” issues: sufficient food, secure shelter, adequate clothing, and safe travel around their neighborhoods. Additionally, in many instances they readily assume adult-like responsibilities at home.

With all the adversities in their lives, these students are also at a greater risk for low reading achievement than their peers (Delpit, 1995; Hart & Risley, 1995; Ogbu, 2003). The NAEP (2003) confirms this trend of lower reading achievement for children in inner-city schools than for those living in suburban and rural areas. Fifty-four percent of children in “large central cities” scored below basic level compared to 38% of children in suburban schools and 35% of children in rural schools. Only 46% of fourth graders from low-income families were reading at or above the basic level, compared with 77% of fourth graders who were not from low-income families. Only 16% of low-income fourth graders scored at the proficient level with about 60% of urban, African-American students scoring below the basic level. Table 1 shows the differences in NAEP scale scores between groups of students.

Table 1

Differences on NAEP Scale Scores between Groups of Students

	African - American/ Caucasian Gap		Latino/Caucasian Gap		Poverty/Nonpoverty Gap	
	National	Urban	National	Urban	National	Urban
Grade 4						
2005	29	32	27	29	27	32
2003	30	34	28	30	28	26

Urban areas have large numbers of students who have distinct reading needs. There are high numbers of students attending urban schools who do not speak or read English, live in generational poverty, or are immigrants with little or no formal education. In addition, urban public schools tend to have students with high mobility rates, inadequate resources, and special reading needs (Strickland & Alvermann, 2004). One major issue facing urban areas is socioeconomic status (SES).

The SES of students plays a major role in their reading development. Snow, Burns, and Griffin (1998) state that low SES is both an individual risk factor and a group risk factor for learning to read. Low SES students who attend the same schools as students from a higher SES are more likely to have trouble learning to read. Also, groups of students from low SES neighborhoods are more likely to have difficulty reading than students from more affluent areas. Because most urban areas have large numbers of low SES students, many problems can affect the child's reading ability. Delayed language development and types of available environmental print are two obstacles that can hinder reading instruction.

Language Development

The language development of young children is a significant predictor of success in school (Snow, 1991). According to the U.S. Department of Education's Early Childhood Longitudinal Study (2001), children enter school with varying levels of language exposure, ability, and knowledge. This situation contributes to the beginning of the achievement gap that exists among students. In addition, many children in urban areas show language delays that prevent them from making average gains in language learning.

A related predictor of reading achievement is the number and type of verbal interactions within families. Heath (1983) found differences between the types and number of interactions between low and middle SES families. Even though this did not make a difference in the children's homes, it did have an impact in the school. Children were more successful in school if the patterns of interaction at home were similar to those experienced in school. By understanding various communication patterns that can exist among groups of people, teachers can help students transition between interaction patterns at home and interaction patterns expected at school. Helping students to make this transition can have great impact on their learning.

Environmental Print

By seeing print in their environment, children learn about language. The words that surround them in the home, outside of the home, and at school play an important role in their reading development (Clay, 1979; Teale & Sulzby, 1986). The types of print children are exposed to may be very different according to where they live. Because there tends to be more shops, malls, and businesses in middle-income suburban areas, children in these communities are more apt to see print on displays such as billboards and business

signs. Typically, children from lower-income urban areas are exposed to fewer business signs, but more murals and graffiti found in their neighborhoods (Aguilar, 2000).

The accessibility of print material also plays an important role in a child's reading development. Neuman and Celano (2001) studied the availability of print material in two low-income and two middle-income communities. They found that children living in middle-income areas had much more print materials such as books and magazines available to them in their homes and schools than children living in low-income neighborhoods. Children in low-income areas relied more on public establishments such as libraries to obtain the print resources they needed.

Reading Instruction

Some researchers suggest that many teachers, particularly those who work in the urban, Title 1 school setting or with children at-risk, may have a cursory understanding of current educational ideas such as strategic learning and metacognition, and even less knowledge on how to incorporate them into classroom practice (Comer, 1988; Delpit, 1995; Jackson, 1995; Strickland, 2000). Others state that even though administrators and teachers may be cognizant of the knowledge that exists to help increase student achievement, the process that is required to pull the pieces together remains a challenge (Taylor et al., 2002).

Many urban school systems mandate what instructional practices will be used in classrooms. Too often professional development ends before teachers can actually feel comfortable using them and assessing their effect on students. As a result, many teachers will continue to use a strategy without a complete understanding of how it can be modified to best fit students' needs (Duffy, 1993; Levine et al., 2000; Strickland, 1994,

2000; Taylor et al., 2002). Additionally, pressure from various groups of people from administrators to parents to keep a particular program can stifle the professional decisions made by teachers regarding strategy use, especially those working in schools where underachievement is the norm (Cooter, 2003). This practice can prevent well-meaning teachers from trying other strategies that may prove to be effective and motivating for their students (Jackson, 2001).

For some urban students, as with others, comprehension problems seem to become worse after third grade (Chall, Jacobs, & Baldwin, 1990). They begin to read more expository texts that are far different from the narrative texts that are more familiar. A lack of vocabulary necessary for understanding (Tomesen & Aarnoutse, 1998), and the inability to use multiple reading comprehension strategies can be two of the problems that some urban students face in understanding expository text (Anderson & Roit, 1993).

Taylor, Pearson, Clark, and Walpole (2000) observed primary-grade reading instruction in low-income schools located in Virginia, Minnesota, Colorado, and California. They studied teachers in least, moderately, and most effective schools. Teachers stated that strategy instruction was an important component in their curriculum, but almost no strategy instruction was observed. Even though teachers mentioned a strategy and several were modeled, there was no evidence that teachers taught or encouraged students to coordinate various ones in order to understand text. Across all the schools, comprehension instruction was found to be minimal. Only 16% of all teachers observed emphasized comprehension. This instruction consisted of asking primarily literal questions about the story children read, and then having them write in response to

their reading. Only five teachers out of 70 were frequently observed providing instruction (not including worksheet completion) on a comprehension skill or strategy.

Duke (2004) identified effective strategies to help students having difficulty with comprehension. These strategies can assist the urban learner especially with expository text. Among them were generating questions, thinking aloud, monitoring and adjusting, attending to text structure, activating and applying relevant background knowledge, drawing inferences, constructing visual representations, and summarizing. In addition, teachers must include extensive modeling, feedback to the students, and clear purposes for reading so that the reader is active and engaged (Gersten, et al., 2001).

Summarization: An Effective Strategy

Summarization is a higher-level comprehension strategy that can improve long-term retention of information and impact positively on students' learning whether taught alone or as one of several strategies (NRP, 2000, Rinehart, Stahl, & Erickson, 1986). Teaching students to summarize not only improves the quality of their written summaries, but also significantly impacts student achievement (Bean & Steenwyk, 1984; Brown & Day, 1983; Cunningham, 1982; Duke & Pearson, 2002; Hare & Borchardt, 1984; McNeil & Donant, 1982; Rinehart, Stahl, & Erickson, 1986; Taylor, 1982; Taylor & Beach, 1984). Summarization training and practice is especially beneficial to the comprehension and recall of lower-achieving students and those with learning disabilities (Gajria & Salvia, 1992; Jitendra, Cole, Hoppes, & Wilson, 1998; Malone & Mastropieri, 1992). In addition, it plays an important role in programs seeking to train students in better comprehension and learning strategies (Baumann, 1984; Bean and Steenwyk,

1984; Brown & Palinscar, 1989). Few tasks require coordinating both comprehension and writing to the extent that summarizing does (Tierney & Shanahan, 1991).

Summarization is an important comprehension strategy that can also serve as a key method for assessing whether or not learning is occurring. A student's summary can furnish the teacher with valuable information pertaining to the student's understanding or lack of understanding. This can help the teacher provide the student with additional instruction that may be needed. Summarizing can also assist students in self-assessing their own learning. Additionally, teaching summarization is essential because today's assessment methods such as the Scholastic Aptitude Test and Maryland School Assessment emphasize open-ended essays and summary writing tasks.

Summarizing helps readers to focus on main ideas or other key concepts and disregard irrelevant ones. It is a complex activity that requires the student to paraphrase and reorganize text. It not only encourages a deeper engagement with a text, but also encourages rereading as students construct a summary (Kamil, 2004).

Many of the studies focused on summarization (Bean & Steenwyk, 1984; Brown & Day, 1983; Cunningham, 1982; McNeil & Donant, 1982) are grounded in the work of Kintsch and van Dijk (1978) who developed a model for text comprehension. Their model represented a significant shift in theory; one that viewed understanding resting with the text itself to one that stated there was an interaction occurring between the reader's knowledge and the text.

Kintsch and van Dijk (1978)

Kintsch and van Dijk (1978) developed a text comprehension model in which they hypothesized that a reader proceeded through a series of mental operations in order

to gain understanding. They proposed that readers structure the text on two levels: macrostructure and microstructure.

The macrostructure is a global view, or mental gist, of the text as a whole; the microstructure consists of individual propositions containing predicates and arguments. As the text is read, the reader condenses and organizes the individual parts, or microstructure, into the gist, or macrostructure. This is accomplished through a series of internal transformations known as macro operators or macrorules.

The macrorules are (Kintsch & van Dijk, 1978):

1. **Deletion:** Each proposition may be deleted if it is neither a direct nor an indirect interpretation condition of a subsequent proposition.

For example, the sentence “A girl with a purple purse passed by” can be divided into three propositions.

Proposition 1: A girl passed by.

Proposition 2: She had a purse.

Proposition 3: The purse was purple.

Propositions 2 and 3 can be deleted because they are not needed for a direct or indirect interpretation of the text.

2. **Generalization:** Each sequence of propositions may be substituted by the general proposition denoting an immediate superconcept.

For example, the propositions “Lisa was painting a picture.

William was skipping. Tony was building a tower using shoe boxes” could be generalized to one proposition “The children were playing.”

3. **Construction:** Each sequence of propositions may be substituted by a proposition denoting a global fact of which the facts denoted by the microstructure propositions are normal conditions, components, or consequences.

For example, “Tom arrived at the station, and bought a ticket.

When he saw the time, he started running. By the time he reached the platform, it was too late.” The proposition “Tom missed the train” could be constructed or substituted based on the reader’s general knowledge.

The reader uses these macrorules to determine deletions, generalizations, and substitutions within the text. These rules help the reader to extract the important information. However, these rules are dependent upon the reader’s knowledge, or schema, which consequently impacts text comprehension.

Brown and Day (1983)

Based on the macrorules developed by Kintsch and van Dijk (1978), Brown and Day (1983) developed a model whereby students were instructed to follow a set of rules in order to construct summaries. The rules were:

1. deletion of unimportant or trivial information;
2. deletion of redundant information;
3. substitution of superordinate term for a list of similar items (e.g., items such as daisy, rose, aster could be replaced with the word “flowers”);

4. substitution of a superordinate action for a list of “components” of that action (e.g., “Beth got ready for school.” for Beth woke up. Beth ate breakfast. Beth washed her face and brushed her teeth);
5. selection of a topic sentence if it is provided by the author;
6. invention of a topic sentence if one does not appear in the text.

Brown and Day altered the theoretical rules proposed by Kintsch and van Dijk into more practical and specific rules that could be used for summarization instruction with students. Table 2 shows the correlation between Kintsch and van Dijk’s macrorules and Brown and Day’s specific rules.

Table 2

Correlation between Kintsch and van Dijk’s Macrorules and Brown and Day’s Specific Rules

Kintsch and van Dijk’s Macrorules	Brown and Day’s Specific Rules
Deletion	Rules 1 and 2
Generalization	Rules 3 and 4
Construction	Rules 5 and 6

By teaching their summarization rules to various ages of children, Brown and her colleagues (Brown & Day, 1983; Brown, Day, & Jones, 1983; Brown, Campione, & Day, 1981) were able to document developmental trends in summaries as explained in Chapter 1. They began to put into practice the model of text comprehension set forth by Kintsch and van Dijk.

Brown and Day (1983) studied the use of summarization rules with 18 fifth graders, 16 seventh graders, 13 tenth graders, and 20 college students. Two geography texts were rewritten to serve the purposes of the study and used for instruction. The fifth, seventh, and tenth graders participated in two 40-minute sessions, and college students participated in one 1-hour session. All students were asked to read the text, write an unconstrained summary, put that summary aside, and then write a constrained summary of 60 words. The second session followed the same procedure, but with a different text. Brown and Day found that deletion rules were used effectively at all ages, but older students outperformed younger ones in the use of more complex condensation rules. When required to use the superordinate substitution rule, college students and tenth graders produced good superordinates, but younger children used the rule less frequently, and were ineffective when they attempted to use it. The use of the selection rule gradually increased with age as did the invention rule. Invention was the most difficult rule with very little use of the rule by fifth and seventh graders.

Brown and Day's work was significant because it showed that through practical application and specific attention to metacognition, students could learn how to summarize by following a set of rules. Brown and her colleagues focused their attention on improving summary writing through the use of explicit rules. Subsequent researchers began to investigate the effects of summarization instruction on student recall and comprehension.

McNeil and Donant (1982)

Drawing upon previous work (Kintsch & van Dijk, 1978; Brown, Campione, & Day, 1982; Brown & Day, 1983), McNeil and Donant (1982) used a similar set of rules

for summarization to examine its effect not only on summary writing, but also on reading comprehension. Their rules were as follows:

Rule 1: Delete unnecessary information.

Rule 2: Delete redundant information.

Rule 3: Compose a word to replace a list of items.

Rule 4: Compose a word to replace individual parts of an action.

Rule 5: Select a topic sentence.

Rule 6: Invent a topic sentence if one is not available.

McNeil and Donant randomly assigned 23 fifth-grade students to one of three groups: a summary rule training group, a summary writing group, and a non-instructional control group. Eight students who were in the summary rule training group received instruction in the rules using contrived selections of about third-grade difficulty. These students met for about 25 minutes daily learning each of the rules. They were introduced to one of the six rules each day through teacher modeling and whole-class application. Students practiced using all six rules as a class, then worked in small groups, and finally on an individual basis. Student summaries could not be more than 10 words and could not contain unimportant details. Students in the summary writing group and non-instructional group followed their daily classroom activities with no special treatment.

The post test consisted of two selections similar to those found on a standardized test. Prior to answering the questions, the students in the summary rule training group were asked to apply the six rules and write a summary. Students in the summary writing group received a card listing each of the rules with no direct instruction explaining how to use them, and asked to write a summary. Students in the non-instructional control

group were asked to read the selections, and to be prepared to answer questions. The group receiving direct summarization instruction, summary rule training group, improved in both summary writing and comprehension as measured by a reading selection with 12 questions.

Hare and Borchardt (1984)

Hare and Borchardt (1984) extended Brown and Day's (1983) rules by including two extra rules: paragraphs combining and polishing. They believed that "paragraphs combining" differentiated the mature summarizer from the immature one. They also believed that some type of "polishing" strategy moved the summarizer from a good, rough summary to a finished product. These rules were then written as a rulesheet (see Table 3), and used by students.

The rulesheet contained four general self-management steps (first four rules), four specific summarization rules (last four rules), and one polishing rule. Brown and Day's rules for deletion became "get rid of unnecessary detail," superordination rules became "collapse lists," and the selection and invention rules were combined to make a "use topic sentences" rule.

Table 3

Hare and Borchardt's Rulesheet

Four General Steps to Help with the Four+ Specific Rules for Writing a Summary

1. *Make sure you understand the text.* Ask yourself, "What was this text about?"

"What did the writer say?" Try to say the general theme to yourself.

Table 3

Hare and Borchardt's Rulesheet (continued)

2. *Look back.* Reread the text to make sure you got the theme right. Also read to make sure that you really understand what the important parts of the text are. Star important parts.

Now Use the Four Rules for Writing a Summary

3. *Rethink.* Reread a paragraph of the text. Try to say the theme of that paragraph to yourself. Is the theme a topic sentence? Have you underlined it? Or is the topic sentence missing: If it is missing, have you written one in the margin?
4. *Check and double-check.* Did you leave in any lists? Make sure you don't list things out in your summary. Did you repeat yourself? Make sure you didn't. Did you skip anything? Is all the important information in the summary?

Four Rules for Writing a Summary

1. *Collapse lists.* If you see a list of things, try to think of a word or phrase name for the whole list. For example, if you saw a list like eyes, ears, neck, arms, and legs, you could say "body parts." Or if you saw a list like ice skating, skiing, or sledding, you could say "winter sports."
2. *Use topic sentences.* Often authors write a sentence that summarizes a whole paragraph. It is called a topic sentence. If the author gives you one, you can use it in your summary. Unfortunately, not all paragraphs contain topic sentences. That means you may have to make up one for yourself. If you don't see a topic sentence, make up one of your own.

Table 3

Hare and Borchardt's Rulesheet (continued)

3. *Get rid of unnecessary detail.* Some text information can be repeated in a selection. In other words, the same thing can be said in a number of different ways, all in one selection. Other text information can be unimportant, or trivial. Since summaries are meant to be short, get rid of repetitive or trivial information.
4. *Collapse paragraphs.* Paragraphs are often related to one another. Some paragraphs explain one or more other paragraphs. Some paragraphs just expand on the information presented in other paragraphs. Some paragraphs are more necessary than other paragraphs. Decide which paragraphs should be kept or gotten rid of, and which might be joined together.

A Final Suggestion

- + *Polish the summary.* When a lot of information is reduced from an original selection, the resulting concentrated information often sounds very unnatural. Fix this problem and create a more natural-sounding summary. Adjustments may include but are not limited to paraphrasing, the insertion of connecting words like “and” or “because” and the insertion of introductory or closing statements. Paraphrasing is especially useful here, for two reasons: one, because it improves your ability to remember the material, and two, it avoids using the author's words, otherwise known as plagiarism. (p. 66)
-

Hare and Borchardt randomly assigned 44 low-income, minority high-school juniors to either inductive or deductive summarization instruction for the purpose of testing the rulesheet. The students attended five sessions each 2 hours in length. Pretesting was conducted during the first session, and post testing during the last session. From pretest to post test, students received no other reading or study skills instruction. Fourteen additional students were assigned to a control group that did not attend any sessions. They were only administered pre- and post tests, and asked to summarize one selection without any instruction.

In the two classes for session one, one teacher taught summarization inductively; the other taught it deductively. In the two classes for session two, teachers switched strategies. In the inductive class, teachers used extremely directed questioning to have students describe and explain how to use the rules on the rulesheet. In deductive classes, teachers directly provided students with a definition of a summary, explained the rulesheet and its use, and modeled the rules. The students then read a high-school selection and wrote summaries of 80 words or less. Two weeks after the instruction, students summarized a selection, and then were asked to write some rules they might tell someone else to use.

No significant differences in process and product were observed between the inductive and deductive groups following instruction. However, the two groups were significantly different from a control group in summarization efficiency and rule usage. These differences were maintained 2 weeks after instruction had ended.

Rinehart, Stahl, and Erickson (1986)

Rinehart, Stahl, and Erickson (1986) studied the effects of direct and explicit summarization instruction on reading and study skills of 70 sixth-grade students. Two classes received the instruction from their classroom teachers for five consecutive days for a period of 45 to 50 minutes each day. Four summarization operations were directly taught: identifying/selecting main information, deleting trivial information, deleting redundant information, and relating main and important supporting information. The first three were derived from Brown and Day (1983); the last one was derived from Taylor and Beach's (1984) hierarchical summarization training procedure in which students were taught to relate superordinate and subordinate information. This procedure had proven effective for improving studying behavior. Based on the four summarization operations, Rinehart, Stahl, and Erickson developed a checklist for student use (see Table 4).

Table 4

Checklist Developed by Rinehart, Stahl, and Erickson

Student Checklist

Have I found the overall idea that the paragraph or group of paragraphs is about?

Have I found the most important information that tells more about the overall idea?

Have I used any information that is not directly about the overall idea?

Have I used any information more than once? (p. 438)

Instruction included modeling and guided practice before the students wrote summaries independently. Students moved from working with single social studies paragraphs to summarizing sections from a fifth-grade social studies textbook. The control group did their usual reading group work with no lessons on summarization or main idea identification.

The summarization training had a significant effect on the recall of major information in a studying task of notetaking, but did not significantly affect recall of minor information. The training appeared to have improved subjects' ability to summarize short paragraphs, but also appeared to have had differential effects for different types of paragraphs. It had its strongest effects for paragraphs with main idea stated within the paragraph, but had little effect for paragraphs for which the main idea statement had to be invented. However, the students were not explicitly taught the invention rule. It was only modeled by the teachers.

Cunningham (1982)

Instead of teaching an explicit set of rules, Cunningham (1982) developed an intuitive approach to summarization that he called GIST (Generating Interactions between Schemata and Text). He randomly assigned 28 fourth-grade students to two groups, experimental and placebo, and taught both groups in a small room in the school. The experimental group was taught to use the GIST procedure to produce gist statements for paragraphs. The placebo, or control, group was taught by a variety of strategies which focused their attention to the word level of the paragraphs and had them do the same amount of writing as the experimental group.

The GIST group was restricted on the number of words their summaries could contain which indirectly had them delete, generalize, and substitute to arrive at the gist. These students wrote 15-word summaries after reading single paragraphs written on a third-grade level. As in explicit approaches to summarization, this inductive approach included direct instruction with teacher modeling, guided practice, and then student independence. The students also received constant feedback pertaining to the appropriateness of their summaries. After nine 25-minute training sessions spanning three weeks, the students trained in GIST wrote better summaries than those not trained in this procedure. There was no provision made for measuring the influence of the procedure on reading comprehension.

Bean and Steenwyk (1984)

Bean and Steenwyk (1984) examined the effects McNeil and Donant's rule-based approach and Cunningham's intuitive technique (GIST) on students' summary writing and reading comprehension. Sixty sixth-grade students in three classes were randomly

assigned by class to one of three groups: rule-based, GIST, and control. Instructional materials consisted of 16 paragraphs at the sixth-grade level that averaged five sentences in length and 50 words per paragraph. Each group met for 12 sessions of 25 to 30 minutes each over five weeks. All three groups were taught by Steenwyk, the researcher.

The rule-based group followed the procedures outlined by McNeil and Donant (1982). Students were introduced to one of the six rules each day, and provided with teacher modeling, small group practice, and then independent work with feedback from the teacher. The students' summaries ranged from 15 to 30 words in length.

The GIST group followed the procedures outlined by Cunningham (1982). The students were also provided with teacher modeling, small group practice, and independent work with feedback from the teacher. The students composed 15-word summaries.

The control group students received the same amount of instruction, but were simply told to write summaries by identifying the main idea of the paragraph. They were provided with whole-group summary writing, small group writing, and individual writing. No explicit instruction was given to these students.

The summary writing post test consisted of summarizing a five-sentence paragraph in 15 or fewer words. Reading comprehension was measured using Form B of the Nelson Reading Test (1962). The comprehension subtest consisted of 75 multiple-choice items that measured students' understanding of main ideas and details at only the paragraph level. Both treatment groups outperformed the control group in summary writing and on the standardized reading comprehension test. No differences were noted between the two treatment groups.

Gajria and Salvia (1992)

Gajria and Salvia (1992) investigated the effects of direct instruction of summary rules on the comprehension of students with learning disabilities. Thirty students from sixth to ninth grades were randomly assigned to an experimental or control group. The selected students were identified as adequate decoders, but poor comprehenders.

Instructional materials included ten short paragraphs that were developed to teach the five summarization rules, and six expository selections rewritten to facilitate instruction of all five rules together. These six selections ranged from the 4.0 to 4.6 reading levels. Instructional sessions were 35 to 40 minutes long, and conducted with small groups of three to four students. Each rule was introduced separately, and after all five had been mastered in isolation, students received instruction in using all five rules. During the last six sessions, students in the experimental group constructed oral summaries using all five rules.

On the post test, students read a selection, constructed an oral summary using a tape recorder, and then answered 10 multiple-choice questions. Post tests showed that the experimental group outperformed the control group on number of questions answered correctly. A delayed post test was administered to the experimental group about four weeks later which showed that they maintained improved performance on multiple-choice items. Even though students constructed oral summaries, they were not scored as testing measures.

Jitendra, Hoppes, and Xin (2000)

Jitendra, Hoppes, and Xin (2000) investigated the effects of a direct instruction main idea summarization strategy and a self-monitoring technique on the reading

comprehension of thirty-three middle school urban students with learning disabilities. Eight lessons that were each between 30 – 40 minutes took place during reading instruction. The reading selections, developed by Hoppes, ranged from three to five sentences with a mean readability level of 2.88. The experimental group, taught in small groups of six to eight students, was instructed in the school cafeteria by Hoppes, and the control group continued to receive their reading instruction from the special education teachers in the resource classroom. The teacher of the experimental group presented a component of the strategy to the students, modeled its application, and demonstrated how to use a prompt card to generate or select main idea sentences. Following teacher modeling, the students received guided practice and then independent practice. In addition to the prompt card, they were taught to use a self-monitoring card during independent practice to check their use of the strategy.

Three test forms were developed for testing which included one pretest, one post test, and one delayed post test. Each form included 36 main idea comprehension items based on narrative and expository reading selections. Of the 36 items, 12 were similar to the training items, 12 were based on narrative selections from basal reading texts and assessed near-transfer effects of the instruction, and 12 items based on expository selections from social studies texts were used to assess far-transfer effects. Eighteen questions were multiple choice items, and 18 questions were production items requiring the students to write the answers.

Results indicated that students in the experimental group outperformed students in the control group on the post test training items with both types of questions, and maintained their performance on delayed measures six weeks later. On near- and far-

transfer measures, the experimental group outperformed the control group on the post test and delayed post test with multiple choice items. They maintained their strategy usage six weeks later on multiple choice items on the near-transfer measure, but not on the far-transfer measure. However, students in both groups on post test items requiring written responses decreased from pretest scores.

Friend (2001)

Friend (2001) examined the summarization processes of macroprocessing and microprocessing as described by VanDijk and Kintsch (1983) with 147 college students attending a large urban university. Students in a prefreshman writing course were randomly assigned to one of three conditions for two 90-minute sessions on writing a summary. Sixty students were assigned to the “argument repetition” group which represented the microprocessing process, 53 students were assigned to the “generalization” group which represented the macroprocessing process, and 34 students were assigned to the control group.

Initially, students in all groups received a written definition of a summary and its importance for studying. The definition stated that a summary must tell what is most important to the author, be short, be in your own words, and state the important information so that it can be used for studying. Each group received a set of guidelines for writing a summary pertinent to the strategy that would be taught to them. As an introduction, the “argument repetition” group heard an anecdote and read a simple paragraph in which they could identify repeated references. Students in the “generalization” group heard the same anecdote and then read two short lists and a simple paragraph which could be transformed into a generalization. The control group

read the paragraphs used by each of the other groups and practiced self-reflection, relating the author's ideas to their own experiences and feelings.

Instructional procedures used followed the direct instruction procedure as outlined by Day (1980). Five expository texts on social studies topics were used for the study. Their readability levels ranged from 5.3 to 6.98. With the first text, the instructor modeled writing a summary. The whole group worked together in writing a summary for the second text. The students worked alone with assistance if needed with the third text. Individual summaries were collected at the end of the first session and returned at the beginning of the second with written feedback and a copy of a model summary of the text. For the second session, the teacher reviewed the definition of a summary, relating it to the guidelines and the model summary of the third article. The group worked together constructing a summary of the fourth article. Then each student wrote an individual summary of the last article which served as a test.

Summaries were scored for thesis statement, content inclusion, content exclusion, and sentence transformation. A score was also given for overall summarization which combined all four indicators.

The "generalization" group was significantly more effective for stating a thesis statement. Both strategy groups were significantly more effective than the control group in judging the importance of content. These two groups were similar in content inclusion and exclusion. Overall summarization showed the two groups scoring significantly higher than the control group with the "generalization" group scoring higher than the "argument repetition" group.

Relationship between Reading Comprehension and Summarization

One theory for explaining the relationship between summarization and comprehension is that summarizing text promotes active reading and reduces passive reading which can affect comprehension (Paris, Wasik, & Turner, 1991; Rinehart, Stahl & Erickson, 1986). Active readers are engaged readers who are able to process and manipulate text information. They use their schema to organize new information, retrieve prior knowledge, and focus their attention on important concepts (Pearson & Fielding, 1991; Wittrock & Alesandrini, 1990). Readers must analyze the text not only for important concepts, but also for information that can be deleted, condensed, and combined. Time is needed to process and reflect on what has been read so that the reader can rearrange information to see how individual ideas are related to each other, and to see how it relates to their own knowledge (Baker & Brown, 1984; Brown & Day, 1983; Palinscar & Brown, 1984; Rinehart, Stahl, & Erickson, 1986). In addition, summarization encourages active reading by requiring students to use other cognitive comprehension strategies such as predicting, rereading, and questioning that are critical to comprehension (Brown & Day, 1983; Brown, Day, & Jones, 1983).

Kintsch and Kintsch (2005) have argued that getting readers to comprehend what they read at the level required for summarization is a problem not adequately addressed in our schools. Passive reading depicts many students' experiences with text which results in lost or unusable knowledge. Summarization encourages students to attend to the text which promotes active reading and learning. This type of instruction is especially important for less-able readers because they tend to be less attentive than good readers (Allington, 2001; Pressley, 1998).

Another theory for explaining the relationship between summarization and comprehension is that summarization requires intense processing of text allowing readers to self-test, or monitor, their level of comprehension (Baker & Brown, 1984; Brown & Day, 1983; Garner, 1987; Palinscar & Brown, 1984). When readers monitor comprehension, they stop to assess what they do and do not understand. A lack of understanding signals the need to return to the text with fix-up strategies that help with comprehension. In writing a summary, a student must distinguish between important and unimportant ideas. If this task cannot be accomplished, it reveals to the reader that there is a lack of understanding, and the need for fix-up strategies to gain understanding (Winne & Hadwin, 1998).

Comprehension Strategy Instruction

Comprehension strategies are cognitive, or mental, activities which assist the reader in processing text and fostering comprehension (Block, 1999; Block, Gambrell, Pressley, 2002; Dole, Duffy, Roehler, & Pearson, 1991). These strategies are specific, learning procedures that promote active, competent, self-regulated, and intentional reading (Trabasso & Buchard, 2002). The teaching of comprehension strategies has been shown to be effective in improving reading comprehension (Collins, 1993; National Institute of Child Health and Human Development, 2000). Dole, Duffy, Roehler, and Pearson (1991) identified five strategies that they deemed important for comprehension: determining importance or main idea, summarizing information, drawing inferences, generating questions, and monitoring comprehension. The National Reading Panel (2000) identified important strategies to be comprehension monitoring, graphic and semantic organizers, generating and answering questions, using text structure, and summarizing.

Strategy instruction can empower readers to take control of their own learning through a series of steps to organize, retain, and convey content knowledge (Katims & Harmon, 2000). In particular, strategy instruction that is provided within the context of content area subject matter has been shown to improve reading achievement (Malone & Mastropieri, 1991; Rinehart, Stahl, & Erickson, 1986; Taylor & Beach, 1984). Teaching lower-achieving students when and how to use reading strategies, as well as teaching them that strategy use can promote reading achievement, can lead them to independent and successful strategy use (Sinatra, Brown, & Reynolds, 2002). Establishing methods for effective instruction in strategic reading comprehension has been established as a research priority (National Institute of Child Health and Human Development, 2000).

Roehler and Duffy (1984) hypothesized that comprehension strategy instruction should begin with a teacher explanation of the strategy and mental modeling of its use. Students then practice using the strategy in the context of authentic reading. The strategy practice is monitored by the teacher with additional explanations and modeling provided as needed. The teacher continues to offer feedback and instruction until the students become more independent in using the strategy. Teachers encourage the transfer of the strategy by reviewing with the students when and where it can be used. They cue the use of the strategy, and prompt students to utilize it when the situation arises. This process continues until strategy use becomes automatic.

Tierney, Readence, and Dishner (1995) argued that explicit teaching of reading comprehension provides a framework for developing reading comprehension skills and strategies that readers use to make meaning of text without teacher support. The most important features of explicit teaching include:

1. Relevance: students are made aware of the purpose of the skill or strategy - the why, when, how and where of the strategy.
 2. Definition: students are informed as to how to apply the skills by making public the skill or strategy, modeling its use, discussing its range of utility, and illustrating what it is not.
 3. Guided practice: students are given feedback on their own use of the strategy or skill.
 4. Self-regulation: students are given opportunities to try out the strategy for themselves and develop ways to monitor their own use of the strategy or skill.
 5. Gradual release of responsibility: the teacher initially models and directs the students' learning; as the lesson progresses, the teacher gradually gives more responsibility to the student.
 6. Application: students are given the opportunity to try their skills and strategies in independent learning situations, including nonschool tasks.
- (p. 280)

Research has shown that explicit teaching is particularly effective for comprehension strategy instruction (Brown & Palincsar, 1989; Pressley, 2000). Explicit and extensive strategy instruction that provides scaffolding, practice, and feedback can help readers make gains in reading comprehension (Brown, Pressley, VanMeter, & Schuder, 1996; NICHD, 2000; Pressley, 2000; Vaughn, Chard, Bryant, & Pedrotty, 2000). Unfortunately, explicit strategy instruction is not evident in many schools today (Block & Pressley, 2002; Ogle & Blachowicz, 2002).

Several studies that have incorporated explicit teaching with comprehension strategy instruction have shown positive results. Duffy et al. (1987) investigated the effects of explicit strategy instruction on the reading of third graders over the course of an academic year. Skills that were typically taught in reading instruction were taught as strategies. By the end of year, the students outperformed the control students on standardized reading measures. Baumann and Ivey (1997) conducted a year-long qualitative case study to explore the nature of a combined literature and strategy-based instructional program on second graders' reading and writing development. Baumann, the full-time teacher, integrated strategy and skill instruction within the context of literature, reading, and writing. The students' progress was measured through teacher and students' reflections, students' work samples, videotapes of activities and assessments, grades, progress reports, and an informal reading inventory. The content analysis showed that the students not only improved in overall reading achievement, but also demonstrated high levels of engagement with books, developed skills in word identification, fluency, and comprehension, and improved in writing abilities.

Explicit comprehension strategy instruction is especially beneficial for the reading of expository text since its structure is significantly different from that of narrative text (Bakken & Whedon, 2002; Bryant, Ugel, Thompson, & Hamff, 1999; Saenz & Fuchs, 2002). Guastello, Beasley, and Sinatra (2000) stated that the transition students must make from reading narrative texts to expository texts is often overlooked in schools. Students are frequently expected to develop the necessary comprehension strategies for reading expository material on their own.

Expository Text Comprehension

Expository texts primarily convey factual information (Weaver & Kintsch, 1991). This type of text generally contains more unfamiliar vocabulary and concepts, fewer ideas related to a student's personal experience, and a variety of text structures. Students encounter expository text in textbooks, newspapers, trade books, magazines, and Internet resources that they read on a daily basis.

When students reach upper elementary and middle grades, reading demands on them increase. They move away from narrative texts that they have become very comfortable with in primary grades toward more complex expository texts found in textbooks. The reading emphasis changes from "learning to read" to "reading to learn" (Chall, et al., 1990). Researchers have found that middle-grade students spend about 90% of their homework time and 75% of their class time engaged in textbook-related learning (Katims & Harmon, 2000; Venezy, 2000). Reading comprehension becomes increasingly important in many subject areas with information from expository texts becoming the student's primary source of knowledge (Smagorinsky, 2001).

Students not only face a large percentage of expository selections in classroom reading, but also on standardized reading assessments (Calkins, Montgomery, Santman, & Falk, 1998). NAEP data indicate that students generally have reading skills needed to perform simple reading tasks, but very few are able to comprehend more complex content-related selections (Brozo & Simpson, 2002; NAEP, 2003). Many factors can contribute to a student's difficulty with expository text. A student may lack the ability to identify the structure of the text, or lack the prior knowledge needed for understanding. The concepts presented in the text can be so dense, or the vocabulary can be completely

unfamiliar. A student may spend so much time trying to “plow” through the words that there is no energy left to figure out the main idea. (Dymock, 1998; Dymock & Nicholson, 1999).

Although students are required to use content-area reading sources in the middle grades, they do not seem to have the reading skills and strategies needed for comprehension. Expository material is especially difficult for students who struggle with reading (Saenz & Fuchs, 2002). Students need meaningful experiences with teachers engaged in using effective reading comprehension strategies with expository texts.

Text Structure

Text structure refers to the semantic and syntactic organizational arrangements used to present information (Meyer & Rice, 1984). Expository texts can be written with various types of organizations or structures. Knowing the organization of a text can help with comprehension because it can give the reader an idea of how the text will develop. This knowledge can, in turn, help with summarization.

Five basic text structures common in school reading material are: description, sequence, cause/effect, problem/solution, and compare/contrast (Meyer, Young, & Bartlett, 1989). These structures represent the different types of logical connections among the important and less important ideas in expository text. Each of these structures can suggest certain questions to the reader which can guide him through the reading process. For example, if the reader has identified the text structure to be compare/contrast, while reading he might think, “Let me be aware and note the similarities and differences presented here.” This process can help the reader to tie together ideas contained in the text.

A reader must be able to not only make connections between ideas in a text, but also discriminate between important and unimportant content. In order to accomplish this task, the reader must recognize the semantic and syntactic cuing systems within a text structure (Meyer & Rice, 1984). Different structures usually have specific key words or phrases that signal their presence. These signals make text easier to process by making the connections within the text explicit. They help readers to see how the ideas in the text are related without requiring the readers to generate the relationship themselves (Britton, Glynn, Meyer, & Penland, 1982). Signals do not add new content, but give emphasis to the topics by highlighting the structure of the text. (Meyer, 1985). They serve as the best indicators of the text's organizational structure (Lorch & Lorch, 1995).

Research indicates that readers' awareness of text structure is highly related to text comprehension and recall (Pearson and Dole, 1987; Smolkin & Donovan, 2002). Text comprehension is improved when students are taught to recognize the structure of the text with material that they are able to read (Dimino, Gersten, Carnine, & Blake, 1990; Pressley, 1998; Williams, 2005). Teaching students to understand how information is structured will help them summarize what they read.

Taylor and Beach (1984) examined the effects of text structure instruction on seventh graders' comprehension and summary writing. Using three classes with a total of 114 students, one class was randomly assigned to the treatment condition, a second class was assigned to conventional instruction, and a third class served as the control group. The treatment group received instruction in producing and studying hierarchical summaries of social studies material that they read. The conventional group received instruction in the form of a directed reading lesson using the same material read by the

treatment group. After reading, they answered and discussed questions focused on main idea and details. The control group followed the regular curriculum with no special reading instruction. The students in the treatment and conventional groups received special reading instruction one hour a week for seven weeks.

On post test measures, students in the treatment group had significantly higher recall test scores than the conventional and control groups. The treatment and conventional groups had significantly higher short-answer test scores than the control group. The treatment group scored significantly higher on overall quality of their summary writings than the other two groups

Ambruster, Anderson, and Ostertag (1987) found that teaching fifth-grade students to identify text structure helped them to create a macrostructure and write better summaries. Four heterogeneous classrooms in two schools (N = 82) were assigned to either a text structure training or traditional instruction group. Workbooks for the text structure group contained a definition and description of the problem/solution text structure and a graphic organizer, explicit rules for writing a summary of problem/solution texts, 13 social studies reading selections, and multiple copies of the problem/solution graphic organizer. Workbooks for the traditional instruction group contained the same problem/solution selections with five questions accompanying each selection. Some of the questions pertained to the problem/solution structure. Both groups were instructed in their classrooms by one of the researchers for 11 consecutive school days with each lesson 45 minutes long. Testing measures included an essay question, short-answer test, and the writing of two summaries that could not be more than 50

words. For the first summary, the students could use the text that was read; the second summary was written without text present.

Significant main effects were found for the text structure training group with the essay question. Compared to the traditional instruction group, the text structure group recalled about 50% more of the macrostructure ideas of selections read independently. No main or interaction effects were found with the short-answer test scores. With the summaries, a significant main effect for importance level was found. Students in the text structure training group included a significantly higher percentage of idea units that were considered “most important,” and a significantly fewer “least important” idea units when text was present. Their summaries tended to be graded higher in organization, focus, and integration. However, when text was absent, the text structure group tended to include more “least important” idea units.

In two studies, Hare, Rabinowitz, and Schieble (1998) investigated the effects of selected text features on students’ comprehension of main idea which is essential for summarization. Seventy-five fourth graders, 78 sixth graders, and 107 eleventh graders participated in both studies. In the first study, students were asked to identify the main idea in two types of text with a listing structure. One type of text was contrived instructional text as found in basal readers, and the other was naturally occurring text as found in content-area textbooks. One difference between the two types of text was the position of the main idea. In the contrived text, the main idea was usually explicit and clearly located at the beginning of the text. In the naturally occurring text, the main idea was more difficult to identify because it was embedded in a structurally more complex text that often contained extraneous information. The results of the first study showed

that readers were better able to identify the main idea when it was located in the first sentence of the text, and better able to identify it in contrived text than naturally occurring text. Developmental differences were also evident. Fourth graders were least proficient in identifying the main idea when it occurred in the medial or final position. Eleventh graders were more adept at identifying the main idea in all positions.

In the second study, the same students identified the main ideas of texts of four different structures: listing, sequence, cause/effect, and compare/contrast. Students again identified significantly fewer main ideas in the naturally occurring texts than in the contrived texts. Identifying main ideas when they were implicit was difficult for all participants with all text structures. Students had more difficulty identifying the main idea in cause/effect and compare/contrast text structures than in listing and sequence structures. Developmental differences were also noted. The sixth graders and eleventh graders outperformed the fourth graders with the listing and sequence texts. The eleventh graders outperformed the fourth and sixth graders with compare/contrast texts. All students had difficulty at identifying the main idea in cause/effect texts. The authors suggested that students who have been taught to identify main ideas using only contrived texts will experience difficulty transferring this ability to naturally occurring texts. Students must be given instruction and practice in locating the main idea in naturally occurring texts as found in content-area textbooks that are prevalent in today's classrooms. In order for students to engage in the summarization process, they must be adept at identifying the main idea of the text.

These studies have shown the effects of teaching text structure with expository text. This instruction is even more crucial today because one piece of text can include a

variety of structures (Meyer, 2003). This means that students must not only process new content, but also navigate through multiple text structures. Providing meaningful learning experiences with expository text is critical for today's students. Despite the fact that much of their early experiences have probably been with narrative text (RAND, 2002), expository text plays an important part in the knowledge students gain throughout their school years and for learning that occurs throughout their lives (Ornstein, 1994).

Summary

In this review of literature, reading comprehension has been defined by various groups and individuals who all agree that it is an active and complex process. It is not a product, but a process involving an interaction that occurs between the text, the reader, and the context. A student's ability to comprehend what is read can significantly impact their success in school and adult life.

In the United States, not all students are successful in comprehending what they have read as reported by NAEP. Students from low-income families living in urban areas lag behind their peers in reading achievement. With the signing of the No Child Left Behind Act of 2001 (NCLB, 2001), a top priority is increasing achievement so that the disparity that exists among groups of students is eliminated. It is expected that by 2013 – 2014 all students will achieve academic competence.

In general, reading instruction in today's schools shows little evidence of the teaching of comprehension strategies, even though there is ample research to support their use. Comprehension appears to be more of a question and answer format: the teacher asks the questions and the students respond with the answers. In general, teachers

appear to lack the knowledge of how to teach comprehension and strategies that would assist in understanding.

In the intermediate grades, students move from “learning to read” to “reading to learn.” It is a time when some students struggle with expository reading where they encounter difficult vocabulary, abstract concepts, and sometimes lack of prior knowledge needed for comprehension. Students who struggle at this level often continue to struggle throughout the rest of their school years.

In addition, students living in low-income families attending urban schools can encounter numerous problems. Coping with “real-world” problems such as sufficient food, secure shelter, safety, and violence in their streets, these students also face a greater risk for low reading achievement that impacts their lives. As reported by NAEP, 54% of children living in large central cities scored below basic level. Only 46% of fourth graders from low-income families were reading at or above the basic level. About 60% of urban, African-American students scored below the basic level. Socioeconomic status plays a crucial role in reading development with delayed language development and types of environmental print available to them also hindering their reading progress.

The teaching of comprehension strategies has been shown to be effective in improving reading comprehension, even though it has not been evident in classrooms (Collins, 1993; National Institute of Child Health and Human Development, 2000). Dole, Duffy, Roehler, and Pearson (1991) identified five strategies that they deemed important for comprehension: determining importance or main idea, summarizing information, drawing inferences, generating questions, and monitoring comprehension. The National Reading Panel (2000) also identified important strategies to be comprehension

monitoring, graphic and semantic organizers, generating and answering questions, using text structure, and summarizing. In particular, strategy instruction that is provided within the context of content-area subject matter, expository text, has been shown to improve reading achievement.

Studies have shown summarization to be a highly effective strategy that impacts reading achievement and retention. Many of the studies are grounded in the work of Kintsch and van Dijk who developed a model for text comprehension structuring a text on two levels: macrostructure and microstructure. Using the macrorules of Kintsch and van Dijk, Brown and Day (1983) developed a set of rules that students could follow in order to write summaries, and found it had positive effects on the summary writing of students at various grade levels. McNeil and Donant (1982), using a similar set of rules, found that students not only improved in summary writing, but also in reading comprehension. Hare and Borchardt (1984) extended Brown and Day's rules, and reported positive results with summary writing of urban, high-school students. Rinehart, Stahl, and Erickson (1986) examined the effects of four summarization rules with sixth – grade students. The students improved in recalling major information from texts that they read, and in summarizing paragraphs with an explicit main idea. Cunningham (1982) did not teach rules, but developed a holistic procedure where fourth graders had to intuitively develop their own rules for summarizing. His method, GIST, had positive effects on the summary writing of the students. Bean and Steenwyk (1984) examined the effects of rule-based and GIST instruction with sixth-grade students. Students in the rule-based and GIST groups outperformed a control group in both summary writing and reading comprehension. Gajiria and Salvia (1992) examined the effects of direct instruction of

summary rules on the comprehension of students with learning disabilities. Sixth to ninth graders outperformed a control group on number of questions answered correctly. Even though students' oral summaries were recorded, they were not scored. Jitendra, Hoppes, and Xin (2000) investigated effects of direct instruction main idea summarization strategy and a self-monitoring technique on reading comprehension of middle school, urban students with learning disabilities. Results showed that students outperformed a control group on a reading post test and maintained their performance six weeks later. Friend (2001) examined the summarization process with college students. One group was taught to summarize through generalization, and the other through argument repetition. Results showed that the two groups scored significantly higher than the control group with the "generalization" group scoring higher than the "argument repetition" group.

This literature review showed the importance of reading for success in school, and throughout one's life. Because a reading achievement gap currently exists with students attending urban, Title 1 schools, it is critical to provide them with highly effective strategies that will promote comprehension. The summarization studies discussed in this chapter showed summarization to be a highly effective strategy with positive results on reading comprehension and summary writing. By explicitly teaching this particular comprehension strategy using expository text and knowledge of text structure, students can become more successful readers and learners.

Chapter 3 describes the methods used to examine the effects of two summarization approaches on the reading comprehension and written summaries of students attending an urban, Title 1 school.

Chapter 3

Methods

The purpose of my study was to compare the effects of two summarization approaches, GIST and Rule-based, on the reading comprehension and quality of written summaries of fourth- and fifth-grade urban, Title 1 students. The study used a pretest/post test quasi-experimental design with the instructional approach, GIST or Rule-based, as the independent variable. Reading comprehension and written summaries were the dependent variables. Teachers were randomly assigned to one of the summarization approaches.

In this chapter, I will describe the methodology that was used to conduct this research study. First, demographics pertaining to the school system, participating school, and participants are provided. Second, issues related to instruction are described: description, procedures, instructors, and materials.

Demographics

The demographics of the school system, participating school, and participants are detailed in this section.

School System

A large urban school system located in the Middle Atlantic region was selected for this study. For the academic year 2007 – 2008, this system had an enrollment of approximately 82,000 students. With a total of 192 schools, 113 were classified as Title I. At the elementary school level, the student mobility rate was 17.1% with an attendance rate of 94.7%. The school system's reading levels on a mandated state assessment are shown in Table 5.

Table 5

2007 Proficiency Levels on a Mandated State Assessment of Reading for the School

District of the Participating School

Grade	% Advanced	% Proficient	% Basic
3	9.0	59.8	31.2
4	8.8	64.5	26.6
5	14.8	45.5	39.7

Participating School

Based on student eligibility for the school lunch program, the participating school was classified as Title I with 93.2% of student body eligible for free/reduced lunch as shown in Table 6. For the academic year 2007 – 2008, there was an enrollment of 286 students spanning grades prekindergarten through fifth with 153 males and 133 females. The school’s student population was 96% African-American, 3% Caucasian, and 1% Hispanic. For the 2007-2008 school year, the student attendance rate was 93.2% with a mobility rate of 12.5%.

Table 6

Student Enrollment by School Lunch Program Eligibility for Participating School

School Lunch Eligibility	Enrollment	Percent of Students
Free	253	89.7%
Reduced	18	6.4 %
Paid	11	3.9 %

Table 7 shows the 2007 state assessment levels in reading for grades 3 through 5 for the participating school. About one-half of the students in all three grades performed at the basic level in reading.

Table 7

2007 State Assessment Proficiency Levels in Reading for Participating School

Grade	% Advanced	% Proficient	% Basic
3	6.1	51.0	42.9
4	2.3	52.3	45.5
5	10.0	40.0	50.0

Participants

Fourth- and fifth-grade students from one urban public school were selected for my study. Students came from heterogeneous self-contained classes consisting of two fifth grades and two fourth grades. The total number of participants was 64 of which 37 were fourth-graders and 27 were fifth-graders. For my pilot study (Appendix M), only fifth graders were included which totaled 35 participants. One recommendation that I made was to increase the sample size for my dissertation study, therefore, both fourth- and fifth-grade students were included.

One fourth grade and one fifth grade designated as 4A and 5A received GIST strategy instruction; the other fourth grade and other fifth grade designated as 4B and 5B received instruction using the rule-based approach to summarization. Only data from students with parental consent was analyzed for the study. The characteristics of the participants are shown in Table 8.

Table 8

Characteristics of Participants for Each Grade and Intervention

Class	4A	4B	5A	5B
Number of Participants	17	20	13	14
Chronological Age Mean	10.48	10.18	11.15	11.18
Gender				
Male	10	11	9	6
Female	7	9	4	8
Free/Reduced Lunch Program (n)	17	19	13	14
Special Education Services	1	2	0	0

These four classes were intact and heterogeneously-mixed. There was only a slight chronological age mean difference between the two fourth-grade classes, and between the two fifth-grade classes. Grade 4A had three more males than females, Grade 4B had two more males than females, Grade 5A had five more males than females, and Grade 5B had two more females than males. All students except one were part of the free/reduced lunch program. One student in Grade 4A and two students in Grade 4B received special education services in reading. No fifth-grade student received these services.

To clarify the context in which this study occurred, it should be noted that both fourth grades were taught by experienced teachers for the entire school year. They were

also the teachers who delivered the summarization instruction in both fourth and fifth grade for this study. However, neither fifth-grade class had regular teachers. Throughout the school year, both fifth-grade classes were taught by a variety of substitutes, teachers with no experience at the elementary level, or “teachers” with no experience and new to the profession. Even though this provided challenging situations in our school, the fifth graders were extremely receptive and appreciative of the summarization instruction they received.

Instruction

In this section, instructional components are described: general description of procedures and instruction, instructors, and materials. In addition, an instructional overview and procedures related to both intervention groups will be discussed.

General Description of Procedures

One fourth-grade class and one fifth-grade class was instructed on the summarization strategy of GIST (Generating Interactions between Schemata and Text). The other fourth-grade class and the other fifth-grade class were instructed on the Rule-based approach to summarization. All classes received fifteen lessons, 40 - 60 minutes in duration, spanning five weeks.

During my pilot study (Appendix M), the students received twelve lessons that were approximately 30 minutes each. Increasing the length of the lesson would allow the students the time to reread selections and revise their summaries without being constantly rushed to finish. In addition, three more instructional lessons were included for both groups to allow more time for independent practice. This gave the students opportunities to read and comprehend three additional pieces of text. The expository selections used for

instruction were based on the content required by the school system's social studies curriculum for fourth- and fifth-graders. Maryland is the focus of the fourth-grade curriculum; the United States is the focus of the fifth-grade curriculum.

Table 9 summarizes the procedures for each type of instruction across all sessions. Pretests were administered about one to two weeks prior to the start of the instructional intervention. Pretesting commenced as soon as parental consent was received. Post tests were administered about one to two weeks after the completion of the intervention.

Table 9

Overview of Procedures

Instructional Intervention

Session	4 A and 5 A: GIST	4 B and 5 B: Rule-based
	Pretests: <ul style="list-style-type: none"> • Qualitative Reading Inventory - 4 • Summary Writing Assessment • Student Attitude Survey 	Pretests: <ul style="list-style-type: none"> • Qualitative Reading Inventory - 4 • Summary Writing Assessment • Student Attitude Survey
1	Introduce and model strategy to class	Introduce approach to class; Teacher modeling rules 1 and 2
2	Teacher modeling	Review rule 1 and 2; Teacher modeling rules 3, 4, and 5
3	Teacher modeling	Teacher modeling rules 1, 2, 3, 4, and 5
4	Guided practice	Guided practice with all rules
5	Guided practice	Guided practice with all rules
6	Guided practice	Guided practice with all rules
7	Partner support	Partner support
8	Partner support	Partner support
9	Partner support	Partner support
10	Independent use	Independent use
11	Independent use	Independent use
12	Independent use	Independent use
13	Independent use	Independent use
14	Independent use	Independent use
15	Independent use	Independent use
	Post tests: <ul style="list-style-type: none"> • Qualitative Reading Inventory - 4 • Summary Writing Assessment • Student Attitude Survey 	Post tests: <ul style="list-style-type: none"> • Qualitative Reading Inventory - 4 • Summary Writing Assessment • Student Attitude Survey

General Description of Instruction

The instruction for both intervention groups was designed to examine the effects on students' reading comprehension and quality of written summaries. Cognitive modeling by the teachers was used to introduce the use of the GIST strategy and Rule-based approach to summarization. All students were given the same amount of instructional time regardless of group. Teacher modeling, guided practice, partner practice, and independent practice were included with both intervention groups.

Based on my pilot study results, this summarization study also incorporated the identification of text structure with each reading selection. Through teacher modeling and "think-alouds," students learned how to identify the text structures of description, problem/solution, sequence, cause/effect, and compare/contrast. Teachers taught students how to recognize signal words that helped with identification of text structure and comprehension. The students utilized a "Text Structures for Expository Text" chart (Appendix K) to help them through all the phases of instruction. This chart was especially useful when the students worked with partners and independently.

In each group, students received folders for storing materials and selections, and notebooks for writing. They were distributed at the beginning of each lesson, collected at the end of each lesson, and stored in containers placed in the classrooms of the two instructors.

All four classes were instructed in their own classrooms by fourth-grade teachers who taught at the school. The two teachers were randomly assigned to only one of the instructional approaches, GIST or Rule-based. In this way, the two distinct approaches remained separate without components of one method inadvertently being taught during

the other. My colleague, Teacher A, instructed Grade 4 A and Grade 5 A using the GIST approach. I, Teacher B, instructed Grade 4 B and Grade 5 B using the Rule-based approach.

All instruction for both grades took place in the morning during the language arts block. This was not supplementary instruction, but rather the comprehension segment of the reading instruction block. For the fourth graders, the language arts block was broken up by a resource class (library, physical education, or art) which both classes had at the same time. This meant that the students received approximately an hour of language arts instruction, then went to the resource class, and received the remaining language arts instruction when they returned. The fourth graders received their summarization instruction at the beginning of that block of time before they were taken to their resource classes. After the fourth-grade teachers took their own students to library, physical education, or art, they then went into the classrooms to teach the fifth graders.

Instructors

My colleague and I delivered all instruction to the fourth- and fifth-graders. He instructed Grades 4 A and 5 A using the GIST strategy. I instructed Grades 4 B and 5 B using the rule-based approach to summarization. Both of us were fourth-grade classroom teachers at the participating school for that academic year. We instructed the fifth-grade students during the physical education, library, or art periods of our own homeroom classes. This procedure ensured that fourth-grade students did not lose any instructional time during the study.

My colleague and I have taught together for 15 years at the participating school. He taught at the college level for a number of years before deciding to move to the

elementary level where he hoped to make a difference in the lives of younger children. He came to our school as part of an alternative certification program, and worked with me as a student teacher for one year. When I left the school to work as a curriculum specialist, he became my replacement in the fourth grade. We both became fifth-grade teachers when I decided to return to the school. I have been at this particular school for most of my teaching career working as classroom teacher, reading specialist, high-intensity reading teacher, and mentor. We worked together well because we both had high expectations, and shared similar goals for our students. We planned all of our lessons together, and discussed each student's strengths and weaknesses regularly. We both have gained the respect of students, parents, teachers, and administrators at our school.

Instructors' Training. Two weeks prior to the start of the study, I trained Teacher A who used the GIST strategy for teaching summarization. This training was delivered over four sessions with more sessions available if needed. The training initially involved discussion of general background knowledge related to GIST and its rationale. I then explicitly reviewed the step-by-step procedure that would be followed for GIST strategy lessons. I modeled the first lesson for the teacher, and then had him model it for me. Lessons two through four for both fourth- and fifth-graders were reviewed over the next two sessions so that questions could be answered prior to instruction. Model summaries were developed together during the training sessions. I reviewed each week's lessons with the teacher the week prior to instruction, and model summaries continued to be developed. Finally, I reviewed with him treatment fidelity as explained below.

For my training as Teacher B, I discussed the general background knowledge related to the rule-based approach to summarization with a colleague. I then explicitly reviewed the procedure that would be followed for the lessons. I explained the specific rules governing this approach, and modeled the first lesson that I would be teaching. Over the next two sessions, I discussed lessons two through four for both grades, and developed summaries for those lessons. I reviewed each week's lessons with my colleague prior to instruction, and model summaries continued to be developed. I also reviewed treatment fidelity that is explained below.

Table 10 outlines the training sessions that were provided to both Teacher A and Teacher B.

Table 10

Outline for Training Sessions

Session	Teacher A: GIST Approach	Teacher B: Rule-based Approach
1	<ul style="list-style-type: none"> • Discuss general knowledge and background about GIST • Show models of summaries written by using GIST • Questions/concerns 	<ul style="list-style-type: none"> • Discuss general knowledge and background about rule-based approach • Discuss the five specific rules for summary writing • Questions/concerns
2	<ul style="list-style-type: none"> • Discuss step-by-step procedure for implementation • Model first lesson • Questions/concerns 	<ul style="list-style-type: none"> • Discuss step-by-step procedure for implementation • Model first lesson • Questions/concerns
3	<ul style="list-style-type: none"> • Teacher A will practice first lesson • Review lesson 2 and write model summary for it • Questions/concerns 	<ul style="list-style-type: none"> • Review lesson 2 and write model summary for it • Questions/concerns
4	<ul style="list-style-type: none"> • Review lessons 3 - 4 and write model summaries for them • Treatment fidelity reviewed • Questions/concerns 	<ul style="list-style-type: none"> • Review lessons 3 – 4 and write model summaries for them • Treatment fidelity reviewed • Questions/concerns
End of each week	<ul style="list-style-type: none"> • Preview next week’s lessons • Write model summaries for them • Questions/concerns 	<ul style="list-style-type: none"> • Preview next week’s lessons • Write model summaries for them • Questions/concerns

Treatment fidelity measures. As an estimate of treatment fidelity, both instructors checked each step of the lesson as it was completed in each session. Instructors also maintained a log for comments (Appendix A). The beginning time and ending time of each lesson was recorded on each lesson plan to ensure that both intervention groups received equivalent instructional time. Those times were then recorded on a chart (Appendix B). Each teacher also recorded student attendance for each session on a

student attendance report (Appendix C). A “✓” check mark meant that the student was present; a “0” zero meant that the student was absent for that session. Additionally, an administrator or teacher periodically observed lessons and checked off the steps listed on the lesson plan as they were completed by the teacher.

Steps were also taken to insure that the two types of instruction did not become mixed. Each teacher only taught one of the summarization approaches so that methods could not be inadvertently mixed. In addition, all charts and other pertinent materials were taken down and stored after each lesson was completed. During the study, the summarization rules used by the Rule-based groups were not shared with the GIST students or teacher, and the GIST method was not shared with the Rule-based groups.

Instructional Materials

Seventeen expository selections were used for the fourth-grade instruction and testing (Appendix D). Table 11 outlines the text, its readability level, and instructional purpose for the fourth-grade groups. Table 12 contains text information related to fourth-grade pretesting and post testing for summary writing. Table 13 lists each fourth-grade text title and its text structure.

Seventeen expository selections were also used for fifth-grade instruction and testing (Appendix E). Table 14 outlines the text, its readability level, and instructional purpose for each fifth-grade group. Table 15 contains text information related to fifth-grade pretesting and post testing for summary writing. Table 16 lists each fifth-grade text title and its text structure.

Each expository selection was selected on its possible appeal to a diverse student population and correlation with topics in the social studies curriculum for fourth and fifth

grades. The selections came from textbooks or resource books currently used in the school. The Flesch-Kincaid readability formula was used to estimate the readability of each selection. Upon completion of my pilot study (Appendix M), I conducted a survey with the fifth-grade students assessing each selection's appeal to them. All reading selections received favorable responses. The selections were also evaluated by two teachers who gave them favorable reviews.

For each grade level, a total of seventeen selections were used: fifteen for instruction, one for pretesting of summary writing, and one for post testing of summary writing. Table 17 summarizes the number of reading selections at the various readability levels for both grades.

Table 11

Grade 4: Text Number, Text Length, Title of Text, Level, and Instructional Purpose for Both Intervention Groups

Text No.	Text Length	Title of Text	Level	Instructional Purpose: GIST	Instructional Purpose: Rule-based
1	123	Maryland's Fishing Industry	5.0	Modeling	Modeling Lesson 1 Rules 1 – 2 Lesson 2 Rules 3 – 5
2	122	Making Things from Nature	4.9	Modeling	
3	168	Early Baltimore	5.0	Modeling	Modeling Rules 1 - 5
4	142	Colonists in Maryland	5.0	Guided practice	Guided practice
5	105	Woodland Indians and Their Villages	4.2	Guided practice	Guided practice
6	118	The Food of the Woodland Indians	5.0	Guided practice	Guided practice
7	130	The Woodland Indians' Shelter	3.4	Partner support	Partner support
8	99	Native Americans Use of Animals	4.0	Partner support	Partner support
9	154	Life in Maryland's Waterways	4.5	Partner support	Partner support
10	176	Woodland Indians Made Their Tools	3.7	Independent practice	Independent practice
11	162	The Ark and the Dove	4.4	Independent practice	Independent practice
12	131	Maryland's First Town	3.6	Independent practice	Independent practice
13	101	The Colony Grows	4.3	Independent practice	Independent practice
14	155	Education	4.8	Independent practice	Independent practice
15	139	Maryland's Frontier	4.4	Independent practice	Independent practice

Table 12

Grade 4: Text Letter, Text Length, Title of Text, Level, and Testing Purpose

Text Letter	Text Length	Title of Text	Level	Testing
A	139	Native American Farmers in Maryland	4.2	Pretest for Summary Writing
B	145	Maryland Birds	4.2	Post Test for Summary Writing

Table 13

Grade 4: Text Number/Letter, Title of Text, and Text Structure

Text Number/ Letter	Title of Text	Text Structure
1	Maryland's Fishing Industry	Description
2	Making Things from Nature	Description
3	Early Baltimore	Compare/Contrast
4	Colonists in Maryland	Problem/Solution
5	Woodland Indians and Their Villages	Description
6	The Food of the Woodland Indians	Description
7	The Woodland Indians' Shelter	Problem/Solution
8	Native Americans Use of Animals	Sequence
9	Life in Maryland's Waterways	Cause/Effect
10	Woodland Indians Made Their Tools	Compare/Contrast
11	The Ark and the Dove	Description
12	Maryland's First Town	Problem/Solution
13	The Colony Grows	Problem/Solution
14	Education	Compare/Contrast
15	Maryland's Frontier	Problem/Solution
A: Pretest	Native American Farmers in Maryland	Cause/Effect
B: Post test	Maryland Birds	Description

Table 14

Grade 5: Text Number, Text Length, Title of Text, Level, and Instructional Purpose forBoth Intervention Groups

Text No.	Text Length	Title of Text	Level	Instructional Purpose: GIST	Instructional Purpose: Rule-based
1	148	The Stamp Act	6.0	Modeling	Modeling Lesson 1: Rules 1 - 2 Lesson 2: Rules 3 - 5
2	155	The Statue of Liberty	5.8	Modeling	
3	127	The Constitution	5.7	Modeling	Modeling Rules 1 - 5
4	126	The Trail of Tears	5.5	Guided practice	Guided practice Rules 1 - 5
5	108	Moving West	5.5	Guided practice	Guided practice
6	154	The Boston Tea Party	4.4	Guided practice	Guided practice
7	152	The Star-Spangled Banner	5.4	Partner support	Partner support
8	139	The Journey West	5.4	Partner support	Partner support
9	120	Buffalo	4.7	Partner support	Partner support
10	165	The Buffalo and the Plains Indians	4.7	Independent practice	Independent practice
11	101	The Anasazi	5.0	Independent practice	Independent practice
12	127	Westward, Ho!	5.5	Independent practice	Independent practice
13	124	The Railroad	4.4	Independent practice	Independent practice
14	115	Thanksgiving	5.6	Independent practice	Independent practice
15	99	American Symbols	5.3	Independent practice	Independent practice

Table 15

Grade 5: Text Letter, Text Length, Title of Text, Level, and Testing Purpose

Text Letter	Text Length	Title of Text	Level	Testing
A	121	Life in the Colonies	5.3	Pretest for Summary Writing
B	124	Buffalo Soldiers	5.3	Post test for Summary Writing

Table 16

Grade 5: Text Number/Letter, Title of Text, and Text Structure

Text Number/ Letter	Title of Text	Text Structure
1	The Stamp Act	Cause/Effect
2	The Statue of Liberty	Sequence
3	The Constitution	Description
4	The Trail of Tears	Cause/Effect
5	Moving West	Cause/Effect
6	The Boston Tea Party	Cause/Effect
7	The Star-Spangled Banner	Cause/Effect
8	The Journey West	Description
9	Buffalo	Description
10	The Buffalo and the Plains Indians	Cause/Effect
11	The Anasazi	Description
12	Westward, Ho!	Cause/Effect
13	The Railroad	Description
14	Thanksgiving	Cause/Effect
15	American Symbols	Description
A: Pretest	Life in the Colonies	Description
B: Post test	Buffalo Soldiers	Description

Table 17

Number of Reading Selections at Their Readability Levels

Grade 4

	3.4	3.6	3.7	4.0	4.2	4.3	4.4	4.5	4.8	4.9	5.0
Number of Instructional Selections	1	1	1	1	1	1	2	1	1	1	4
Pretest					1						
Post test					1						

Grade 5

	4.4	4.5	4.6	5.0	5.1	5.2	5.3	5.5	5.6	5.7	6.0
Number of Instructional Selections	2	1	1	2	1		2	3	1	1	1
Pretest						1					
Post test						1					

Instructional Overview and Procedures for GIST Groups

Grade 4 A and Grade 5 A were taught to summarize expository text by using a systematic and holistic approach termed GIST (Generating Interactions between Schemata and Text). Without learning specific rules, the students learned to summarize through explicit instruction that included teacher modeling and think-alouds. Students

practiced the GIST strategy collaboratively with the teacher and with partners before practicing it independently.

To introduce the strategy, the teacher began by reading aloud the first paragraph of the selection as the students followed along. Then the teacher demonstrated by thinking-aloud how to summarize it by writing a sentence or two of no more than 20 words. Using a chart or transparency that had 20 word-size lines drawn on it (Appendix F), each word was recorded on a separate line.

When that single paragraph had been summarized, the teacher moved to the remaining text. It was read and then summarized in one or two sentences using no more than 20 words. A chart was provided to the students as a reminder of the guidelines to follow (Appendix G).

The purpose of each GIST summarization session is shown below. Instructional lesson plans for each session were provided to Teacher A (Appendix H). These plans were examined by a panel of expert teachers who gave them favorable reviews.

Purpose for Each Session of GIST Instruction

Prior to week 1 of instruction: Pretesting

Week 1:

Session 1: The purpose of this lesson is to introduce the GIST summarization strategy to the class. As an introduction, the teacher will model the strategy with the class.

Session 2: The purpose of this lesson is to have the teacher again model the use of the GIST strategy with the class.

Session 3: The purpose of this lesson is to have the teacher again model the use of the GIST strategy with the class.

Week 2:

Session 4: The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Session 5: The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Session 6: The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Week 3:

Session 7: The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Session 8: The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Session 9: The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Week 4:

Session 10: The purpose of this lesson is to have students independently use the GIST strategy.

Session 11: The purpose of this lesson is to have students independently use the GIST strategy.

Session 12: The purpose of this lesson is to have students independently use the GIST strategy.

Week 5:

Session 13: The purpose of this lesson is to have students independently use the GIST strategy.

Session 14: The purpose of this lesson is to have students independently use the GIST strategy.

Session 15: The purpose of this lesson is to have students independently use the GIST strategy.

Week 6:

Post testing

Instructional Overview and Procedures for Rule-based Approach Groups

Grade 4 B and Grade 5 B were taught to summarize expository text by using the Rule-based approach. This approach teaches the students a set of rules to follow in order to write a summary. The rules are: (1) delete information that is not important to the overall understanding of the selection, (2) delete redundant or repeated information, (3) identify a list of items or actions that can be replaced with a general term, (4) identify the topic sentence, and (5) invent a topic sentence, if one is not there. The students learned to summarize through explicit instruction that included teacher modeling and think-alouds. The teacher used reading selections displayed on transparencies to teach the rules for summarization. Students practiced this summarization approach collaboratively with the teacher and with partners before practicing it independently.

The explicit rules for summarization were used to teach the students to write summaries. Students used yellow highlighters to mark topic sentences. The students

crossed out information that was trivial or repeated. They also circled words that could be combined into general terms. A chart was provided to the students as a reminder of the rules (Appendix I).

During session one, the teacher modeled rule one, deleting information that was not important to the overall understanding of the paragraph, and rule two, deleting redundant or repeated information. She read the first selection aloud while the students followed. Using think-aloud, the teacher showed the students how to identify and then cross out information that was not necessary for understanding. She then reread the selection and demonstrated to the students the process of identifying and crossing out information that is repeated in the selection.

During session two, the teacher used the previous selection to teach rules three, four, and five. Rule 3 required them to identify a list of items or actions that could be replaced with a general term. For example, if the selection stated ice skating, sledding, and skiing, the students would replace those actions with the term winter sports. Rule four guided the students to identify a topic sentence, and rule five asked them to construct one, if a topic sentence was not there.

The purpose of each Rule-based instructional session is shown below. Instructional lesson plans for Teacher B, the researcher, were provided (Appendix J). These plans were examined by a panel of teacher experts who gave them favorable reviews.

Purpose for Each Session of Rule-based Instruction

Prior to week 1 of instruction: Pretesting

Week 1:

Session 1: The purpose of this lesson is to introduce the Rule-based approach to summarization. The teacher will model rules one and two with the class.

Session 2: The purpose of this lesson is to have the teacher model rules three, four, and five.

Session 3: The purpose of this lesson is to have the teacher model rules one through five.

Week 2:

Session 4: The purpose of this lesson is to provide the students with guided practice in using the five rules.

Session 5: The purpose of this lesson is to provide the students with guided practice in using the five rules.

Session 6: The purpose of this lesson is to provide the students with guided practice in using the five rules.

Week 3:

Session 7: The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule-based approach to summarization.

Session 8: The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule-based approach to summarization.

Session 9: The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule-based approach to summarization.

Week 4:

Session 10: The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Session 11: The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Session 12: The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Week 5:

Session 13: The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Session 14: The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Session 15: The purpose of this lesson is to have students independently use the Rule-based approach to summarization

Week 6:

Post Testing

Measures

Students were assessed for pretesting and post testing with the Qualitative Reading Inventory-4 (Leslie & Caldwell, 2006) and Summary Writing Assessment. In addition, each student was administered a Student Attitude Survey. The Qualitative Reading Inventory – 4 (QRI-4) was used to specifically measure expository reading comprehension. In addition, the Summary Writing Assessment (Appendices D and E) measured each student's ability to write a summary for an expository reading selection

that was read independently. Students also completed a Student Attitude Survey (Appendix L) that was used to measure knowledge, importance, and attitudes toward summarization.

Qualitative Reading Inventory - 4

The Qualitative Reading Inventory-4 (Leslie & Caldwell, 2006) is an informal reading assessment that is individually administered to students. It provides diagnostic information pertaining to (1) word identification in isolation, (2) student's reading behaviors, and (3) comprehension. Both narrative and expository selections are provided from the pre-primer level through high school levels. Expository selections are descriptive science and social studies materials that are highly representative of the structure and topics found in content-area textbooks. The QRI-4 assesses comprehension in several ways: analysis of student's retelling, responses to both explicit and implicit questions, and use of look-backs and think-alouds.

To address validity, Leslie and Caldwell (2006) examined their reading inventory for correlation with comprehension tests that have multiple-choice or cloze formats. They examined the correlation between the QRI's instructional level and the student's national curve equivalent (NCE) or standard score on a group administered standardized reading test. For grades one, two, and three the California Achievement Test or Iowa Test of Basic Skills was used. For grades three through eight, Terra Nova tests were used. For expository text for grade five, the correlation was .53 with $n = 35$ and $p < .01$. Even though correlations were not listed for expository text below grade five, narrative text for grade four had a correlation of .66 with $n = 31$ and $p < .01$, and grade five had a correlation of .44 with $n = 31$ and $p < .01$. The authors did not acknowledge why the

California Achievement Test or Iowa Test of Basic Skills was used for grades one through three, and Terra Nova tests for grades three through eight.

To address reliability, Leslie and Caldwell (2006) assessed estimates of inter-scoring reliability of total miscues, acceptable miscues, and explicit and implicit comprehension by analyzing data from 122 readings. The data were collected across all levels and for both narrative and expository text. Those estimates indicated an extremely high degree of consistency between scorers. Specifically, alpha reliability estimates were .99 for total miscues, .99 for acceptable miscues, .98 for implicit comprehension, and .98 for explicit comprehension.

Administering the QRI-4. A recently retired teacher administered the QRI-4 to individual students in a quiet, vacant room in the school. She began by administering the graded word list, two grade levels below current grade as recommended by Leslie and Caldwell (2006). The graded word list score determined the appropriate starting level for the comprehension selection. A score of 90% and above constitutes the independent level, 70% - 89% is the instructional level, and below 70% is the frustration level. Each student began reading the expository selections at his instructional level as determined by the graded word list score.

The teacher who was seated across from the student began by reading the title of the selection to the student and then asking him a few questions to find out what he already knew about the topic. As the student orally read the selection, the tester used the student's scoring sheet to make notations above words designating miscues, substitutions, insertions, or omissions. After the student finished reading, the tester asked him to retell the story, and recorded the information on the student's scoring sheet. The student's

retelling was not be used to determine an independent, instructional, or frustration level. It provided valuable information by comparing the idea units recalled by the student with those listed on the scoring sheet. The student's ability or inability to identify main ideas or most important information and supporting details was very useful in delivering the class instruction and selecting partners for the lessons that required partner support.

Scoring the QRI-4. Using the QRI-4, each student was assessed with the graded word list, total reading accuracy, and comprehension questions. The graded word list was a test that required the student to read a list of twenty words in isolation. The score on this test was the percentage of words decoded correctly out of the twenty words. This percentage determined the students' level for identifying words in isolation as shown in Table 18.

Table 18

Students' Level for Identifying Words in Isolation

Level	Percentage
Independent	98% accuracy
Instructional	90% to 97% accuracy
Frustration	Less than 90% accuracy

Each student then began reading the oral graded expository selections at his instructional level as determined by the graded word list score. The oral graded selections were used to determine total reading accuracy and comprehension. Table 19 displays the selections that were used for each reading level. These expository selections were selected because of their length and possible appeal to the readers.

Table 19

Qualitative Reading Inventory – 4 Oral Graded Reading Selections Used for Testing

Sessions

QRI – 4 Level	Selection Title
Pre-Primer	People at Work
Primer	Who Lives Near Lakes?
First	Air
Second	Whales and Fish
Third	Where Do People Live
Fourth	The Busy Beaver
Fifth	The Octopus
Sixth	The Lifeline of the Nile
Upper Middle School	Immigration: Part 1

The total reading accuracy was the score that represented the student’s ability to identify words in context. It required the tester to record all miscues made by the student during the oral reading of the graded selection. This score was obtained by first subtracting the number of miscues from the total number of words in the selection. Then this difference was divided by the number of words in the selection, rounding upward to find the percentage. For example, the reading selection “Where Do People Live” contains 228 words. A student made a total of 16 miscues. Therefore, $228 - 16 = 212$, and $212/228 = 93\%$ total accuracy. This percentage then corresponded to a level for total reading

accuracy or word identification in context as shown in Table 20. This score was later combined with a comprehension score from the oral reading selection to obtain an overall reading level.

Table 20

Students' Level for Total Reading Accuracy – Word Identification in Context

Level	Percentage
Independent	98% accuracy
Instructional	90% to 97% accuracy
Frustration	Less than 90% accuracy

The student's reading comprehension score was assessed using the oral reading selections. Each selection was followed by questions consisting of two types: implicit and explicit. Implicit questions required the student to make inferences; explicit ones had answers that were directly stated in the text. The questions were scored using the acceptable answers provided on the scoring sheet of the QRI-4. To increase the construct validity of the QRI-4, the tester allowed for "look-backs" as the questions were asked. Scoring of these questions followed the guidelines indicated by the Leslie and Caldwell, authors of Qualitative Reading Inventory – 4. This percentage was used to determine the student's reading level following criteria displayed in Table 21.

Table 21

Criteria for Determining Students' Reading Levels

Level	Percentage
Independent	90% and above
Instructional	67% to 89%
Frustration	Below 67%

A student's overall reading level was then determined by combining students' level for total reading accuracy and comprehension scores. Table 22 displays this scoring. For example, if the total reading accuracy score was instructional and the comprehension score was at the frustration level, then the overall reading level for that student would be at the frustration level.

Table 22

Overall Reading Level for a QRI-4 Selection

Total Accuracy Score	Comprehension Score	Overall Reading Level
Independent	Independent	Independent
	Instructional	Instructional
	Frustration	Frustration
Instructional	Independent	Independent
	Instructional	Instructional
	Frustration	Frustration
Frustration	Independent	Independent
	Frustration	Frustration

The student’s retelling was not be used to determine an independent, instructional, or frustration level. It provided valuable information by comparing the idea units recalled by the student with those listed on the scoring sheet. The student’s ability or inability to identify main ideas or most important information and supporting details was very useful in delivering the class instruction and selecting partners for the lessons that required partner support.

Assigning scores for the QRI-4. A continuous numeric scale devised by Russell (2005) during her dissertation study drew upon the work of Paris and Paris (2003) to assign scores to reading levels for the QRI-4. This scale increased measurement sensitivity by assigning a different numeric score for the same selection at both the

instructional and independent levels. Since this instrument is still considered a work in progress, reliability and validity have not been fully established

Each student received a numeric score based on his highest instructional or independent level. For example, one student scored at the independent level for both total accuracy and comprehension after answering eight out of eight questions correctly at Level Two. When Level Three was administered, he still scored at the independent level on total accuracy, but at the frustration level for comprehension with answering only four out of eight questions correctly. Because his comprehension score at Level Two was at the independent level, he would receive the numeric score of 3.0 for Level Two – Independent.

A second student scored at the independent level for total accuracy and at the instructional level for comprehension after answering six out of eight questions correctly at Level Two. When Level Three was administered, he still scored at the independent level for total accuracy, but at the frustration level for comprehension with answering only four out of eight questions correctly. Because his comprehension score at Level Two was at the instructional level, he would receive the numeric score of 2.0 for Level Two – Instructional.

These scores were used to obtain pretesting and post testing data. Table 23 indicates the numeric scale score corresponding to each selection level of the QRI-4.

Table 23

QRI-4 Continuous Numeric Scale

QRI-4 Selection Level	Assigned Numeric Score
Pre-Primer – Instructional	.1
Pre-Primer – Independent	.1
Primer – Instructional	.1
Primer – Independent	.1
Level 1 – Instructional	.5
Level 1 – Independent	1.0
Level 2 – Instructional	2.0
Level 2 – Independent	3.0
Level 3 – Instructional	4.0
Level 3 – Independent	5.0
Level 4 – Instructional	6.0
Level 4 – Independent	7.0
Level 5 – Instructional	8.0
Level 5 – Independent	9.0
Level 6 – Instructional	10.0
Level 6 – Independent	11.0
Upper Middle School – Instructional	12.0
Upper Middle School – Independent	13.0

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional approach (GIST vs. Rule-based) as the between-subjects factor was used to compare numeric scale scores on the Qualitative Reading Inventory – 4.

Summary Writing Assessment

The Summary Writing Assessment was a test that assessed the student’s ability to write a summary. The students independently read an expository selection based on social studies content, and then wrote a summary. For the pretest, the fourth-grade classes read and wrote a summary for “Native American Farmers in Maryland,” and “Maryland Birds” for the post test. The fifth-grade classes read and wrote a summary for “Life in the Colonies” for the pretest, and “Buffalo Soldiers” for the post test.

Administering the Summary Writing Assessment. The Summary Writing was administered by my colleague and myself. He administered both pretest and post test assessments to Grade 4A and Grade 5A. I administered both pretest and post test assessments to Grade 4B and Grade 5B. This procedure allowed us to establish rapport with the classes prior to instruction, and allowed the students to feel at ease for the post test.

We distributed a copy of the reading selection to each student, and explained to them that they were to read the selection, and then write a summary of it on lined paper that was provided. The assessment was not timed. The copies of the selections and summaries were collected from the students and given to me at the end of each testing session.

Scoring the Summary Writing Assessment. This assessment was scored using a rubric that was developed during the pilot study (Table 24). Two expert raters, one current teacher with 38 years of elementary school experience and one retired teacher with 41 years of elementary school experience, scored the summaries. Training for the raters took approximately 60 minutes, and occurred two weeks before pretesting began. The raters graded 37 of the 74 pilot study summaries to establish interrater reliability which is the percentage of exact agreement between the raters. When discrepancies occurred, both raters would discuss their differences and reach agreement through consensus. Interrater reliability was 97%.

Table 24

Summary Writing Rubric

Score	Descriptors
5	Clearly identifies main idea Uses relevant details to support main idea Does not include irrelevant information Briefly stated in own words All ideas are in a logical order
4	Clearly identifies main idea Uses relevant details to support main idea Does not include irrelevant information Most of ideas are in a logical order
3	Main idea is unclear or partially identified Does not use relevant details to support main idea Includes irrelevant information Copies some sentences from the text Ideas are not in a logical order
2	Does not identify the main idea Includes irrelevant information Copies almost all sentences directly from text Ideas are not in logical order
1	No response or response does not correlate with the text

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional approach (GIST vs. Rule-based) as the between-subjects factor was used to compare rubric scores on the Summary Writing Assessment.

Student Attitude Survey

Each student was asked to complete a Student Attitude Survey. The survey consisted of 12 statements that fell into three categories: knowledge of summary writing, importance of summary writing, and personal attitude toward writing summaries. Table 25 displays each survey statement and its category.

Table 25

Student Attitude Survey

Statement from Student Attitude Survey	Category
1. A long summary with many sentences is better than a short one that only has a few sentences.	Knowledge
2. I like writing summaries.	Personal Attitude
3. Summary writing is an important skill to learn.	Importance
4. Writing a summary helps me to better understand what I've read.	Importance
5. I know how to write a summary.	Personal Attitude
6. I think a summary is hard to write.	Personal Attitude
7. Writing a summary helps me to remember the information.	Importance
8. It is important to include as many details as I can in my summary.	Knowledge
9. I copy sentences from the selection when I write a summary.	Knowledge
10. Summary writing can help me in subjects other than reading.	Importance
11. I have written summaries in my spare time.	Personal Attitude
12. The selection's main idea is included in a summary.	Knowledge

Each statement was measured using a five-point Likert Scale. A "1" indicated "Strongly Agree," a "2" indicated "Agree," a "3" indicated "Not Sure," a "4" indicated "Disagree," and a "5" indicated "Strongly Disagree." The survey was given as a pretest and post test to determine any student change.

Administering the Attitude Survey. The Student Attitude Survey was administered by my colleague and myself. He administered the survey to Grade 4A and

Grade 5A. I administered the survey to Grade 4B and Grade 5B. This procedure allowed us to establish rapport with the classes prior to instruction, and allowed the students to feel more comfortable for the post test. We reassured the students that there were no correct answers, and no grade would be given for the survey. We explained that their responses would help teachers provide better instruction to students. We read each statement followed by the five-point scale to the students, and paused while the students circled one response for each statement. We circulated around the rooms making sure that the students circled only one response per statement, and clarifying instructions as needed.

All surveys were returned to me immediately following the pre- and post testing sessions. They were separated and placed in folders labeled 4A, 4B, 5A, and 5B.

Scoring the Attitude Survey. The 12 statements on the Student Attitude Survey were scored individually, and then in the three categories of knowledge of summary writing, importance of summary writing, and personal attitude toward writing summaries.

This survey was analyzed using descriptives of mean and standard deviation.

Data Analysis

My study was guided by three research questions: (1) Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension with Title 1, urban learners?, (2) Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of Title 1, urban learners?, and (3) Does either instructional approach, GIST or Rule-based, appear to affect the attitude of students toward summarization? Table 26 shows the measure and data analysis that was used for each research question.

Table 26

Outline of Research Question, Measure, and Analysis

Research Question	Measure	Analysis
1. Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension with Title 1, urban learners?	<ul style="list-style-type: none"> • Qualitative Reading Inventory - 4 	Mixed ANOVA using numeric scale scores
2. Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of Title 1, urban learners?	<ul style="list-style-type: none"> • Summary Writing Assessment 	Mixed ANOVA using rubric scores
3. Does either instructional approach, GIST or Rule-based, appear to affect the attitude of students toward summarization?	<ul style="list-style-type: none"> • Student Attitude Survey 	Descriptives (mean and standard deviation) using Likert scale scores

To address the first question, the Qualitative Reading Inventory – 4 was utilized to assess the students’ reading comprehension of expository text. A mixed ANOVA was used to analyze numeric scale scores with time (pretest vs. post test) as the within-subjects factor and instructional approach (GIST vs. Rule-based) as the between-subjects factor.

The second question which was related to summary writing was measured using the Summary Writing Assessment. A rubric developed during the pilot study was used to score pretests and post tests. A mixed ANOVA was used to analyze the rubric scores with

time (pretest vs. post test) as the within-subjects factor and instructional approach (GIST vs. Rule-based) as the between-subjects factor.

The third question related to attitude was measured using the Student Attitude Survey. Using the Likert scale scores for each individual statement, descriptives of mean and standard deviation were analyzed both before and after instruction. Next, the 12 questions were categorized into three groups: knowledge of summary writing, importance of summary writing, and personal attitude toward summary writing. Questions 1, 8, 9, and 12 were used to assess the category of “Knowledge of Summary Writing.” Questions 3, 4, 7, and 10 were used to assess the category of “Importance of Summary Writing,” Questions 2, 5, 6, and 11 were used to assess the category of “Personal Attitude toward Writing Summaries.”

Summary

This chapter provided a detailed description of the methods that were utilized in this study. First, the demographics of the sample population were detailed including school system, participating school, and participants. Next, instructional procedures, instructors, materials, and instructional groups were described. Finally, the measures that were used to assess instruction were discussed.

Chapter 4 will explain the results of the measures used to assess instruction.

Chapter 4

Results

This study examined the effects of two summarization strategies, GIST and Rule-based, on the reading comprehension and summary writing of fourth- and fifth- grade students attending an urban, Title I school using expository text. In addition, students' concepts, views, and attitudes toward summarization were investigated. This chapter summarizes the findings from the analyses used to answer the following research questions:

1. Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension using expository text with urban, Title 1 learners?
2. Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners?
3. Does either instructional approach, GIST or Rule-based, appear to affect the students' concepts, views, or attitudes toward summarization?

The results are presented in three sections that correspond to the above research questions. First, treatment fidelity measures will be discussed. Next, any initial differences between the two instructional groups for each grade level will be described using pretesting data. Then descriptive statistics and results of statistical analyses will be presented and discussed.

Treatment Fidelity Measures

Several treatment fidelity measures were used to ensure that the designed intervention was implemented as planned. First, an estimate of treatment fidelity, both

instructors checked each step of the lesson as it was completed for each session. On all 15 lessons for both interventions, each step was checked by the instructor as having been completed.

Second, the beginning time and ending time of each lesson was recorded on each lesson plan to ensure that both intervention groups received equivalent instructional time. Those times were then recorded on a chart (Appendix B). Table 27 displays the number of instructional minutes recorded for each group.

Table 27

Number of Instructional Minutes Recorded for Each Group

<u>Lesson Number</u>	<u>Grade 4A</u>	<u>Grade 4B</u>	<u>Grade 5A</u>	<u>Grade 5B</u>
1	55	58	42	45
2	43	50	50	55
3	43	50	44	45
4	70	56	43	43
5	60	60	45	44
6	57	60	45	41
7	60	54	55	60
8	60	60	45	45
9	60	60	44	45
10	60	60	42	48
11	60	60	43	41
12	55	52	45	42
13	53	58	38	44
14	60	59	47	38
15	60	58	42	36
Total Number Of Instructional Minutes	856	855	670	672

The fourth-grade students in both intervention groups received approximately the same amount of instructional time with a difference of only one minute. The fifth-grade students in both intervention groups also received approximately the same amount of

instructional time with a difference of only two minutes. Results from this treatment fidelity measure suggest that both fourth-grade groups and both fifth-grade groups received equivalent instructional time.

Third, each teacher recorded student attendance for each session on a student attendance report (Appendix C). A “✓” check mark meant that the student was present; a “0” zero meant that the student was absent for that session. The attendance rates were as follows:

Grade 4A = 91.7%

Grade 4B = 93.3%

Grade 5A = 93.8%

Grade 5B = 92.8%

Results suggest that both fourth-grade groups and both fifth-grade groups had student attendance rates that were approximately equivalent.

Fourth, an administrator or teacher periodically observed lessons and checked off the steps listed on the lesson plan as they were completed by the teacher. Two unannounced observations were conducted with each intervention teacher for each grade. The week before the study began, I met with the school’s administrator and instructional support teacher to explain their role in treatment fidelity. I reviewed the lesson format of the instructional plans and also reviewed several lessons with them. I explained that each of them would make one unannounced visit to each group. I gave them a schedule that listed the study’s instructional days, times, room numbers, and lesson numbers. They were told that an extra set of instructional lessons could be found on top of each teacher’s desk. When the observers entered the room, they were to pick up the lesson plan and sit

in an unobtrusive place in the classroom. As the teacher delivered the instruction, they were to check off each step as it was completed and make any notes of additional information that was given to the students. They also recorded the beginning and ending times of the lesson. Each set of lesson plans returned to me had all steps checked with no additional information listed. The beginning and ending times were the same times listed by both intervention teachers.

Grade 4A was observed by the administrator for lesson 6 and the instructional support teacher for lesson 11. Grade 4B was observed by the administrator for lesson 9 and the instructional support teacher for lesson 3. Grade 5A was observed by the administrator for lesson 14 and the instructional support teacher for lesson 7. Grade 5B was observed by the administrator for lesson 10 and the instructional support teacher for lesson 2. Both teachers stated that the students appeared to be unaware of the observers' presence in the rooms. Observers reported that all steps of the lesson plans were completed as written. They noted that teachers taught "exactly what was on the plan step-by-step. The teachers stuck to the plans, and did not stray from them giving students additional information that might have comprised the study." Results from this treatment fidelity measure suggest that both fourth-grade groups and both fifth-grade groups received equivalent instructional time.

Finally, steps were taken to insure confidentiality of instruction. Each teacher only taught one of the summarization approaches so that methods could not be inadvertently mixed. In addition, all charts and other pertinent materials were taken down and stored after each lesson was completed. During the study, the summarization rules

used by the Rule-based groups were not shared with the GIST students or teacher, and the GIST method was not shared with the Rule-based groups.

Analysis of Reading Comprehension Using Expository Text

This section reports results pertinent to research question one: Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension using expository text with urban, Title 1 learners? First, pretest data were analyzed to determine any initial differences that may have existed between the instructional groups prior to instruction. Then descriptive statistics and analysis of a mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor will be presented. Fourth-grade data will be presented followed by fifth-grade results.

The Qualitative Reading Inventory - 4 was the primary measure used to determine the effects of the summarization instruction on the expository reading comprehension of the students. It was administered as described in Chapter 3. Each student's highest overall reading level on the QRI-4 was ascertained and then assigned a number on a continuous numeric scale as described in Chapter 3. This overall reading level was composed of both a miscue analysis score and a score for the comprehension questions that followed the oral reading of a selection. Both instructional and independent scoring options within each level were aligned on the numeric scale. For example, if a student's highest reading level on the QRI-4 was Instructional Level 2, the scale score was 2.0.

Analysis of Qualitative Reading Inventory-4 for Grade 4

Using the pretest numeric scale scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances

had been violated. The results of Box’s Test of Equality of Covariance Matrices showed that $p = .434$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

The scale score means and standard deviations were calculated for the fourth graders. Table 28 displays these results.

Table 28
Scale Score Means and Standard Deviations on Qualitative Reading Inventory- 4 for GIST (N = 17) and Rule-based (N = 20) Instructional Groups for Grade 4

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST	2.21 (1.929)	4.62 (2.571)	+ 2.41
Rule-based	2.26 (2.745)	4.96 (3.849)	+ 2.70
Total	2.24 (2.373)	4.80 (3.284)	+ 2.56

In addition, the instructional pretest QRI-4 reading levels for students in the GIST group ranged from primer to fourth with the mode at first grade level. The instructional pretest reading levels for the students in the Rule-based group ranged from pre-primer to fifth with the mode at primer level at pretesting time.

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was used to compare reading scale scores on the QRI-4. Table 29 reports these results for Grade 4.

Table 29
Mixed ANOVA for QRI – 4 Continuous Numeric Scale Score for Grade 4

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.704	.046	.832	.001
Error	35		15.331			
Within-Subjects						
Time	1		119.823	78.633	.000	.692
Wilks' Lambda	1	.308		78.633	.000	.692
Time * Group	1		.369	.242	.626	.007
Wilks' Lambda	1	.993		.242	.626	.007
Error	35		1.524			

This analysis indicated that there was no statistically significant time by group interaction, Wilks' Lambda = .993, $F(1, 35) = .242$, $p = .626$, partial eta squared = .007. However, it did indicate a statistically significant main effect for time, Wilks' Lambda = .308, $F(1, 35) = 78.633$, $p < .001$, partial eta squared = .692. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a very large effect size. This finding meant that student scores increased significantly from pretest to post test regardless of the type of summarization instruction they received. The main effect for group was not statistically significant, $F(1, 35) = .046$, $p = .832$, partial eta squared = .001. These results indicated that there was no difference in the effectiveness of the two

different interventions. Both interventions were effective in increasing the students' reading comprehension with expository text.

Students in both groups improved considerably in their expository reading comprehension as measured by the QRI-4 from pretesting time to post testing time. Descriptive statistics in Table 27 show that the scale score mean for the GIST instructional group increased by 2.41 with a pretest mean of 2.21 and a post test mean of 4.62. The scale score mean for the Rule-based instructional group increased by 2.70 with a pretest mean of 2.26 and a post test mean of 4.96. For the total number of fourth-grade students, the mean increased by 2.56 with a pretest mean of 2.24 and a post test mean of 4.80.

In addition, the instructional QRI-4 pretest reading levels for students in the GIST group ranged from primer to fourth with the mode at first grade level; at post testing the levels ranged from primer to fifth with the mode at third grade level. The instructional QRI-4 pretest reading levels for the students in the Rule-based group ranged from pre-primer to fifth with the mode at primer level, and at post testing the levels ranged from pre-primer to upper middle with the mode at second grade level.

Analysis of Qualitative Reading Inventory-4 for Grade 4 by Gender. Using the pretest numeric scale scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .312$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

Scale score means and standard deviations by gender were analyzed to note any similarities and differences between the two instructional groups. These results are displayed in Table 30.

Table 30

Scale Score Means and Standard Deviations on Qualitative Reading Inventory- 4 for GIST (N = 17) and Rule-based (N = 20) Instructional Groups for Grade 4 by Gender

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Male (N = 10)	1.85 (1.313)	4.40 (1.838)	+ 2.55
Female (N = 7)	2.71 (2.612)	4.93 (3.517)	+ 2.22
Rule-based			
Male (N = 11)	3.03 (2.752)	5.37 (4.370)	+ 2.34
Female (N = 9)	1.32 (2.575)	4.44 (3.283)	+ 3.12

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) and gender as the between-subjects factors was used to compare reading scale scores on the QRI-4. Table 31 reports these results for Grade 4.

Table 31

Mixed ANOVA for QRI – 4 Continuous Numeric Scale Score for Grade 4 by Gender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.084	.005	.942	.000
Gender	1		1.729	.111	.741	.003
Group * Gender	1		18.219	1.166	.288	.034
Error	33		15.619			
Within-Subjects						
Time	1		117.665	75.239	.000	.695
Wilks' Lambda	1	.305		75.239	.000	.695
Time * Group	1		.556	.356	.555	.011
Wilks' Lambda	1	.989		.356	.555	.011
Time * Gender	1		.219	.140	.711	.004
Wilks' Lambda	1	.996		.140	.711	.004
Time * Gender * Group	1		1.391	.889	.352	.026
Wilks' Lambda	1	.974		.889	.352	.026
Error	33		1.564			

This analysis indicated that there was no statistically significant time by gender interaction, Wilks' Lambda = .996, $F(1, 33) = .140$, $p = .711$, partial eta squared = .004.

However, it did indicate a statistically significant main effect for time, Wilks' Lambda = .305, $F(1, 33) = 75.239$, $p = .000$, partial eta squared = .695. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a very large effect size. This finding meant that male and female scores increased significantly from pretest to post test regardless of the type of summarization instruction they received. The main effect comparing group and gender was not statistically significant, $F(1, 33) = 1.166$, $p = .288$, partial eta squared = .034. Both interventions were effective in increasing the students' reading comprehension with expository text regardless of gender.

Analysis of Qualitative Reading Inventory-4 Comprehension Questions for Grade

4. I examined the students' responses to the comprehension questions, explicit and implicit, on the Qualitative Reading Inventory – 4 to note any changes in types of questions answered correctly between pretest and post test times. Table 32 shows the number of explicit and implicit questions for each reading level of the test.

Table 32

Number of Explicit and Implicit Questions for Each Reading Level on the QRI-4

Level	No. of Explicit Questions	No. of Implicit Questions
Pre-Primer	1	4
Primer	4	2
1	4	2
2	4	4
3	4	4
4	4	4
5	4	4
6	4	4
Upper Middle School	5	5

Using the pretest scores for explicit questions, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .967$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

Using pretest scores for implicit questions, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .162$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated. The means and standard deviations were

calculated for number of explicit and implicit questions answered correctly on the pretest and post test (Table 33).

Table 33

Means and Standard Deviations for Instructional Groups on Types of Questions Answered Correctly on QRI-4 for Grade 4

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST (N = 17)			
Explicit	3.29 (.772)	3.35 (.702)	+ .06
Implicit	1.88 (.857)	2.82 (.728)	+ .94
Rule-based (N = 20)			
Explicit	2.80 (.834)	3.35 (.671)	+ .55
Implicit	2.15 (.745)	2.50 (1.000)	+ .35

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was used to compare the number of explicit questions answered correctly on the QRI-4. Table 34 reports these results for Grade 4.

Table 34

Mixed ANOVA for Explicit Questions Answered Correctly on the Qualitative ReadingInventory

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		1.027	1.807	.188	.052
Error	33		.568			
Within-Subjects						
Time	1		1.927	3.340	.077	.092
Wilks' Lambda	1	.908		3.340	.077	.092
Time * Group	1		.816	1.415	.243	.041
Wilks' Lambda	1	.959		1.415	.243	.041
Error	33		.577			

This analysis indicated that there was no statistically significant time by group interaction for explicit questions, Wilks' Lambda = .959, $F(1, 33) = 1.415$, $p = .243$, partial eta squared = .041. There was also no statistically significant main effect for time, Wilks' Lambda = .908, $F(1, 33) = 3.340$, $p = .077$, partial eta squared = .092. The main effect comparing time and group was not statistically significant, $F(1, 33) = 1.807$, $p = .188$, partial eta squared = .052. The main effect for group was not statistically significant, $F(1, 33) = 1.807$, $p = .188$, partial eta squared = .052. These results indicated

that there was no difference in the effectiveness of the two different interventions in reference to explicit questions.

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was then conducted to compare the number of implicit questions answered correctly on the QRI-4. Table 35 reports these results for Grade 4.

Table 35

Mixed ANOVA for Implicit Questions Answered Correctly on the Qualitative Reading Inventory

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.014	.026	.872	.001
Error	33		.544			
Within-Subjects						
Time	1		7.660	8.720	.006	.199
Wilks' Lambda	1	.801		8.720	.006	.199
Time * Group	1		1.606	1.828	.185	.050
Wilks' Lambda	1	.950		1.828	.185	.050
Error	33		.878			

This analysis indicated that there was no statistically significant time by group interaction for implicit questions, Wilks' Lambda = .950, $F(1, 33) = 1.828$, $p = .185$, partial eta squared = .050. However, there was a statistically significant main effect for time, Wilks' Lambda = .801, $F(1, 33) = 8.720$, $p = .006$, partial eta squared = .199. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a large effect size. This finding meant that student scores increased significantly from pretest to post test regardless of the type of summarization instruction they received. The main effect comparing time and group was not statistically significant, $F(1, 33) = .026$, $p = .185$, partial eta squared = .001. The results also indicated that there was no difference in the effectiveness of the two different interventions in reference to implicit questions.

Analysis of Qualitative Reading Inventory-4 Comprehension Questions for Grade 4 by Gender. Next, I examined the relationship between type of question and gender to note any differences that may have existed. Table 36 displays the results for both instructional groups.

Table 36

Means and Standard Deviations for Explicit and Implicit Questions Answered Correctly on QRI-4 by Gender for GIST and Rule-based Instructional Groups

	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Males (N = 10)			
Explicit	3.50 (.527)	3.30 (.675)	- .20
Implicit	1.70 (.823)	2.14 (.900)	+ .44
Females (N = 7)			
Explicit	3.00 (1.000)	3.43 (.787)	+ .43
Implicit	2.14 (.900)	2.57 (.976)	+ .43
Rule-based			
Males (N = 11)			
Explicit	2.82 (.874)	3.45 (.688)	+ .63
Implicit	2.45 (.688)	2.27 (1.104)	- .18
Females (N = 9)			
Explicit	2.78 (.833)	3.22 (.667)	+ .44
Implicit	1.78 (.667)	2.78 (.833)	+ 1.00

A mixed ANOVA was then conducted with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) and gender (male vs. female) as the between-subjects factors. Table 37 displays the results for explicit questions, and Table 38 shows the results for implicit questions.

Table 37

Mixed ANOVA for Qualitative Reading Inventory Explicit Questions for Grade 4 byGender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		1.027	1.807	.188	.052
Gender	1		.466	.821	.371	.024
Group * Gender	1		.011	.019	.890	.001
Error	33		.568			
Within-Subjects						
Time	1		1.927	3.340	.077	.092
Wilks' Lambda	1	.908		3.340	.077	.092
Time * Group	1		.816	1.415	.243	.041
Wilks' Lambda	1	.959		1.415	.243	.041
Time * Gender	1		.214	.371	.546	.011
Wilks' Lambda	1	.989		.371	.546	.011
Time * Group * Gender	1		.757	1.311	.260	.038
Wilks' Lambda	1	.962		1.311	.260	.038
Error	33		.577			

This analysis indicated that there was no statistically significant time by group by gender interaction for explicit questions, Wilks' Lambda = .962, $F(1, 33) = 1.311$, $p = .260$, partial eta squared = .038. There was also no statistically significant main effect for time, Wilks' Lambda = .908, $F(1, 33) = 3.340$, $p = .077$, partial eta squared = .092. The main effect comparing group and gender was not statistically significant, $F(1, 33) = .019$, $p = .890$, partial eta squared = .001. The results also indicated that there was no difference in the effectiveness of the two different interventions in reference to explicit questions.

Table 38

Mixed ANOVA for Qualitative Reading Inventory Implicit Questions for Grade 4 byGender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.019	.034	.855	.001
Gender	1		.028	.048	.827	.001
Group * Gender	1		.039	.068	.796	.002
Error	33		.568			
Within-Subjects						
Time	1		7.290	9.351	.004	.221
Wilks' Lambda	1	.779		9.351	.004	.221
Time * Group	1		.932	1.195	.282	.035
Wilks' Lambda	1	.965		1.195	.282	.035
Time * Gender	1		.108	.139	.712	.004
Wilks' Lambda	1	.996		.139	.712	.004
Time * Group * Gender	1		4.738	6.078	.019	.156
Wilks' Lambda	1	.844		6.078	.019	.156
Error	33			.780		

This analysis indicated that there was a statistically significant time by group by gender interaction for implicit questions, Wilks' Lambda = .844, $F(1, 33) = 6.078$, $p = .019$, partial eta squared = .156. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a large effect size. The main effect comparing the two types of instruction was not significant, $F(1, 33) = .068$, $p = .282$, and partial eta squared = .002.

The line graph in Figure 1 shows the change in mean in the number of implicit questions answered correctly between pretesting and post testing for GIST group by gender. The line graph in Figure 2 shows the results for the Rule-based group.

Figure 1

Gender by Time Interaction for GIST Group

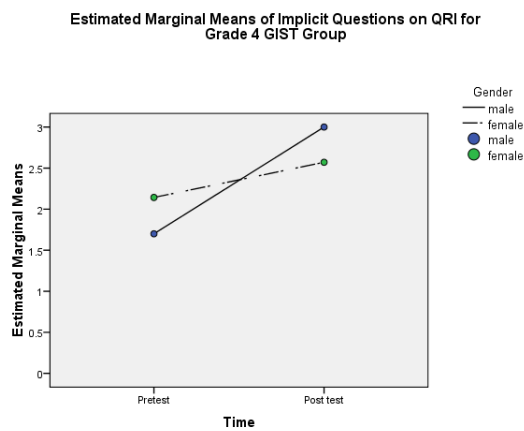
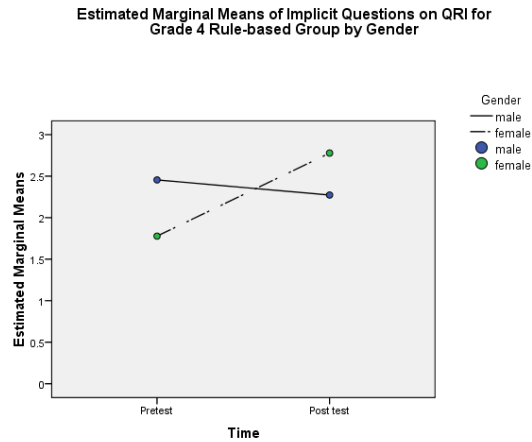


Figure 2

Gender by Time Interaction for Rule-based Group



It appeared that the males in the GIST group improved in the number of implicit questions answered correctly on pretesting and post testing as compared to the females in the same group. It also appeared that the females in the Rule-based group improved in the number of implicit questions that they answered correctly on the two testing times as compared to the males in that same group.

Analysis of Qualitative Reading Inventory-4 for Grade 5

Using the pretest numeric scale scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box’s Test of Equality of Covariance Matrices showed that $p = .301$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

The scale score means and standard deviations were calculated for the fifth graders. Table 39 displays these results.

Table 39

Scale Score Means and Standard Deviations on Qualitative Reading Inventory - 4 for GIST (N = 13) and Rule-based (N = 14) Instructional Groups for Grade 5

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST	5.46 (2.504)	8.15 (2.410)	+ 2.69
Rule-based	5.38 (2.925)	8.50 (2.345)	+ 3.12
Total	5.41 (2.678)	8.33 (2.337)	+ 2.92

In addition, the instructional QRI-4 pretest reading levels for students in the GIST group ranged from second to fifth with the mode at third grade level. The pretest reading levels for the students in the Rule-based group ranged from second to sixth with the mode at fourth grade level.

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was used to compare reading scale scores on the QRI – 4. Table 40 reports these results for Grade 5.

Table 40

Mixed ANOVA for QRI – 4 Continuous Numeric Scale Score for Grade 5

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.097	.018	.895	.001
Error	25		11.126			
Within-Subjects						
Time	1		114.758	59.470	.000	.704
Wilks' Lambda	1	.296		59.470	.000	.704
Time * Group	1		.684	.355	.557	.014
Wilks' Lambda	1	.986		.355	.557	.014
Error	25		1.930			

This analysis indicated that there was no statistically significant time by group interaction, Wilks' Lambda = .986, $F(1, 25) = .355$, $p = .557$, partial eta squared = .014. However, it did indicate a statistically significant main effect for time, Wilks' Lambda = .296, $F(1, 25) = 59.470$, $p = .000$, partial eta squared = .704. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a very large effect size. This finding meant that students' reading scores increased significantly from pretest to post test regardless of the type of summarization instruction they received. The main effect for group was not statistically significant, $F(1, 25) = .018$, $p = .895$, partial eta

squared = .001. These results indicated that there was no difference in the effectiveness of the two different interventions. Both interventions were equally effective in increasing reading comprehension with expository text for fifth-grade students.

Students in both groups improved considerably in their expository reading comprehension as measured by the QRI-4 on pretesting and post testing.

Descriptive statistics in Table 39 show that the scale score mean for the GIST instructional group increased by 2.69 from pretest to post test. The mean for the Rule-based instructional group increased by 3.12. For the total number of fifth-grade students, the mean increased by 2.92.

In addition, the instructional QRI-4 pretest reading levels for students in the GIST group ranged from second to fifth with the mode at third grade level; at post testing the levels ranged from third to upper middle with the modes at fourth and fifth grade levels. The instructional QRI-4 pretest reading levels for the students in the Rule-based group ranged from second to sixth with the mode at fourth level, and at post testing the levels ranged from third to upper middle with the mode at fifth grade level.

Analysis of Qualitative Reading Inventory-4 for Grade 5 by Gender. Using the pretest numeric scale scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .570$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

Scale score means and standard deviations by gender were analyzed to note any differences between the two instructional groups. These results are displayed in Table 41.

Table 41

Scale Score Means and Standard Deviations on Qualitative Reading Inventory- 4 for
GIST (N = 13) and Rule-based (N = 14) Instructional Groups for Grade 5 by Gender

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Male (N = 9)	6.44 (2.555)	8.33 (3.000)	+ 1.89
Female (N = 4)	4.75 (1.500)	7.25 (0.957)	+ 2.50
Rule-based			
Male (N = 6)	5.50 (4.183)	7.67 (3.141)	+ 2.17
Female (N = 8)	5.25 (1.832)	9.13 (1.458)	+ 3.88

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) and gender as the between-subjects factors was used to compare reading scale scores on the QRI-4. Table 42 reports these results for Grade 5.

Table 42

Mixed ANOVA for QRI – 4 Continuous Numeric Scale Score for Grade 5 by Gender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		2.383	.213	.649	.009
Gender	1		5.057	.452	.508	.019
Group * Gender	1		19.043	1.703	.205	.069
Error	23		11.180			
Within-Subjects						
Time	1		93.384	51.317	.000	.691
Wilks' Lambda	1	.309		51.317	.000	.691
Time * Group	1		.831	.457	.506	.019
Wilks' Lambda	1	.981		.457	.506	.019
Time * Gender	1		.384	.211	.650	.009
Wilks' Lambda	1	.991		.211	.650	.009
Time * Group * Gender	1		5.618	3.087	.092	.118
Wilks' Lambda	1	.882		3.087	.092	.118
Error	23		1.820			

This analysis indicated that there was no statistically significant time by gender interaction, Wilks' Lambda = .991, $F(1, 23) = .211$, $p = .650$, partial eta squared = .009.

However, it did indicate a statistically significant main effect for time, Wilks' Lambda = .309, $F(1, 25) = 51.317$, $p = .000$, partial eta squared = .691. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a very large effect size. This finding meant that students' reading scores increased significantly from pretest to post test regardless of the type of summarization instruction they received. The main effect comparing the two types of instruction was not statistically significant, $F(1, 23) = 1.703$, $p = .506$, partial eta squared = .069. These results indicated that there was no difference in the effectiveness of the two different interventions. Both interventions were equally effective in increasing reading comprehension with expository text for fifth-grade students.

The mean results also indicated that reading comprehension scale scores improved considerably for males and females in both instructional groups (Table 41). In Grade 5, the scale score mean increased by 1.89 for the males and by 2.50 for the females in the GIST group. In the Rule-based group, the mean increased by 2.17 for the males and by 3.88 for the females. These results indicated that both males and females in the Rule-based group showed a greater increase in mean than those in the GIST group.

In addition, the instructional QRI-4 pretest reading levels for male students in the GIST group ranged from second to fifth with the mode at fourth grade level. At post testing, the reading levels ranged from fourth to upper middle with the mode at fourth grade level. The instructional QRI-4 pretest reading levels for female students in the GIST group ranged from second to fifth with the mode at third grade level, and at post testing the levels ranged from third to fifth with the mode at fifth grade level.

The instructional QRI-4 pretest reading levels for male students in the Rule-based group ranged from second to sixth with the mode at second grade level, and at post testing levels ranged from third to upper middle with the mode at fifth grade level. For female students in the Rule-based group, the pretest reading levels ranged from second to fifth with the mode at fourth grade level. For post testing, their reading levels ranged from third to upper middle with the mode at fifth grade level.

Analysis of Qualitative Reading Inventory-4 Comprehension Questions for Grade

5. I examined the students' responses to the comprehension questions, explicit and implicit, on the Qualitative Reading Inventory – 4 to note any changes in types of questions answered correctly between pretest and post test times.

Using pretest scores for explicit questions, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .859$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

Using pretest scores for implicit questions, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .760$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

The means and standard deviations were then calculated for number of explicit and implicit questions answered correctly on the pretest and post test. Table 43 displays the results for Grade 5.

Table 43

Means and Standard Deviations for Instructional Groups on Types of QuestionsAnswered Correctly on QRI-4 for Grade 5

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST (N = 13)			
Explicit	3.46 (.519)	3.62 (.650)	+ .16
Implicit	2.62 (.768)	2.38 (.768)	- .24
Rule-based (N = 14)			
Explicit	3.29 (.469)	3.43 (.514)	+ .14
Implicit	2.86 (.663)	3.21 (.579)	+ .65

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was used to compare the number of explicit questions answered correctly on the QRI-4. Table 44 reports these results for Grade 5.

Table 44

Mixed ANOVA for Explicit Questions Answered Correctly on the Qualitative ReadingInventory

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.443	1.404	.247	.053
Error	25		.316			
Within-Subjects						
Time	1		.297	1.107	.303	.042
Wilks' Lambda	1	.958		1.107	.303	.042
Time * Group	1		.000	.002	.969	.000
Wilks' Lambda	1	1.000		.002	.969	.000
Error	25		.268			

This analysis indicated that there was no statistically significant time by group interaction for explicit questions, Wilks' Lambda = 1.000, $F(1, 25) = .002$, $p = .969$, partial eta squared = .000. There was also no statistically significant main effect for time, Wilks' Lambda = .958, $F(1, 25) = 1.107$, $p = .303$, partial eta squared = .042. The results also indicated that there was no difference in the effectiveness of the two different interventions in reference to explicit questions.

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) as the between-subjects factor was then conducted to compare the number of implicit questions answered correctly on the QRI-4. Table 45 reports these results for Grade 5.

Table 45

Mixed ANOVA for Implicit Questions Answered Correctly on the Qualitative ReadingInventory

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		3.869	10.220	.004	.290
Error	25		.379			
Within-Subjects						
Time	1		.054	.091	.765	.004
Wilks' Lambda	1	.996		.091	.765	.004
Time * Group	1		1.165	1.973	.172	.073
Wilks' Lambda	1	.927		1.973	.172	.073
Error	25		.590			

This analysis indicated that there was no statistically significant time by group interaction for implicit questions, Wilks' Lambda = .927, $F(1, 25) = 1.973$, $p = .172$, partial eta squared = .073. There was also no statistically significant main effect for time, Wilks' Lambda = .996, $F(1, 25) = .091$, $p = .765$, partial eta squared = .004. The main effect for group was significant, $F(1, 25) = 10.220$, $p = .004$, and partial eta squared = .290, suggesting a difference in the effectiveness of the two instructional approaches in reference to implicit questions.

Analysis of Qualitative Reading Inventory-4 Comprehension Questions for Grade

5 by Gender. Next, I examined the relationship between type of question and gender to note any differences that may have existed. Table 46 displays the results for both instructional groups.

Table 46

Means and Standard Deviations for Explicit and Implicit Questions Answered Correctly on QRI-4 by Gender for GIST and Rule-based Instructional Groups

Type of Question	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Males (N = 9)			
Explicit	3.44 (.527)	3.89 (.601)	+ .45
Implicit	2.67 (.866)	2.33 (.866)	- .34
Females (N = 4)			
Explicit	3.50 (.577)	3.00 (.000)	- .50
Implicit	2.50 (.577)	2.50 (.577)	.00
Rule-based			
Males (N = 6)			
Explicit	3.33 (.516)	3.33 (.516)	.00
Implicit	2.83 (.753)	3.33 (.516)	+ .50
Females (N = 8)			
Explicit	3.25 (.463)	3.50 (.535)	+ .25
Implicit	2.88 (.641)	3.12 (.641)	+ .24

These results suggest that the females in the GIST group had a slightly higher pretest mean on explicit questions than the males, but that males had a slightly higher pretest mean on implicit questions than the females.

These results also suggest that the males had a slightly higher pretest mean on explicit questions than the females, and the females had a slightly higher mean on implicit questions.

A mixed ANOVA was then conducted with time (pretest vs. post test) as the within-subjects factor and instructional group (GIST vs. Rule-based) and gender as the between-subjects factors. Table 47 displays the results for explicit questions, and Table 48 shows the results for implicit questions.

Table 47

Mixed ANOVA for Qualitative Reading Inventory Explicit Questions for Grade 5 byGender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.133	.442	.513	.019
Gender	1		.431	1.433	.244	.059
Group * Gender	1		.644	2.140	.157	.085
Error	23		.301			
Within-Subjects						
Time	1		.029	.124	.728	.005
Wilks' Lambda	1	.995		.124	.728	.005
Time * Group	1		.072	.307	.585	.013
Wilks' Lambda	1	.987		.307	.585	.013
Time * Gender	1		.369	1.585	.221	.064
Wilks' Lambda	1	.936		1.585	.221	.064
Time * Group * Gender	1		1.093	4.688	.041	.169
Wilks' Lambda	1	.831		4.688	.041	.169
Error	23		.233			

This analysis indicated that there was a statistically significant time by group by gender interaction for explicit questions, Wilks' Lambda = .831, $F(1, 23) = 4.688$, $p = .041$, partial eta squared = .169. According to guidelines proposed by Cohen (1988), this partial eta squared value suggested a very large effect size.

The line graph in Figure 3 shows the mean change in the number of explicit questions answered correctly between pretesting and post testing for the GIST group by gender. The line graph in Figure 4 shows the mean change for the Rule-based group.

Figure 3

Mean Change for Number of Explicit Questions Answered Correctly on the QRI-4 for the GIST Group by Gender

Estimated Marginal Means of Explicit Questions Answered Correctly on the QRI-4 for GIST Group by Gender

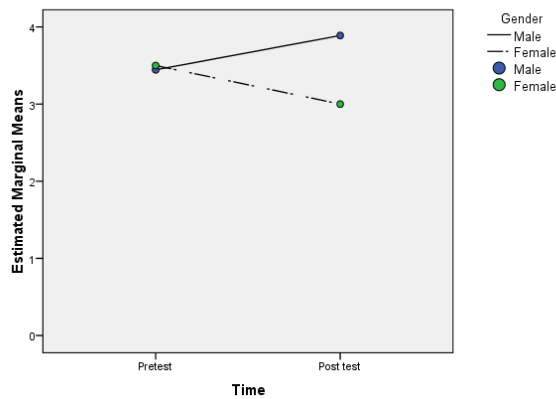


Figure 4

Mean Change for Number of Explicit Questions Answered Correctly on the QRI-4 for the Rule-based Group by Gender

Estimated Marginal Means of Explicit Questions Answered Correctly on the QRI-4 for Rule-based Group by Gender

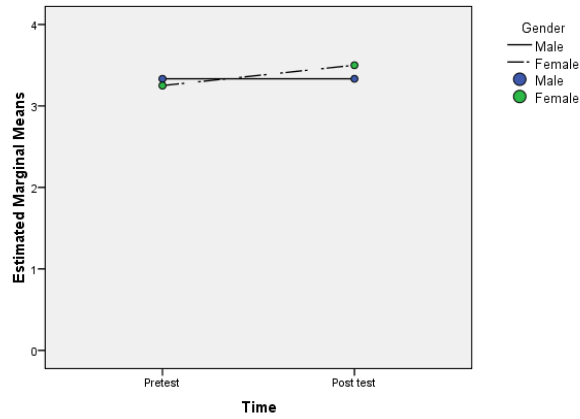


Table 48

Mixed ANOVA for Qualitative Reading Inventory Implicit Questions for Grade 5 byGender

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.019	.034	.855	.001
Gender	1		.028	.048	.827	.001
Group * Gender	1		.039	.068	.796	.002
Error	33		.568			
Within-Subjects						
Time	1		.133	.211	.650	.009
Wilks' Lambda	1	.991		.211	.650	.009
Time * Group	1		.899	1.426	.245	.058
Wilks' Lambda	1	.942		1.426	.245	.058
Time * Gender	1		.005	.008	.928	.000
Wilks' Lambda	1	1.000		.008	.928	.000
Time * Group * Gender	1		.261	.413	.527	.018
Wilks' Lambda	1	.982		.413	.527	.018
Error	23		.630			

This analysis indicated that there was no statistically significant time by group by gender interaction for implicit questions, Wilks' Lambda = .982, $F(1, 23) = .413$, $p = .527$, partial eta squared = .018. There was also no statistically significant main effect for time, Wilks' Lambda = .991, $F(1, 23) = .211$, $p = .650$, partial eta squared = .009. The main effect for group was not significant, $F(1, 23) = .034$, $p = .855$, and partial eta squared = .001.

Anecdotal Reports Pertaining to the QRI-4

During QRI-4 pretesting, the testers noted that the students struggled through oral reading and answering comprehension questions even when they were encouraged to look back to locate an answer. Reading levels on the pretests were relatively low for most students, and many were not able to perform satisfactorily on more than two selections. On QRI-4 post tests, the testers observed that the students were more nervous than before and stated that they wanted to do really well. When asked a comprehension question, the students were more apt to take their time and look back in the selection for the answer. There was less guessing on the post test, and students progressed much further through the selections than on the pretests. After the post tests, the students asked the testers how they did, and also asked the testers to tell their teachers about their progress.

Summary of Results for Research Question 1

This section presented results from analyses that were conducted to answer research question one: Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension using expository text with urban, Title 1 learners? The Qualitative Reading Inventory - 4 was the measure used to

determine the effects of the summarization instruction on the expository reading comprehension of fourth- and fifth-grade students.

For the fourth graders, the analysis indicated that there was no significant interaction between time and summarization instruction group. However, there was a significant main effect for time with a very large effect size. Student scores increased from pretest to post test regardless of gender or type of summarization instruction they received. Both interventions were effective in increasing the students' reading comprehension with expository text. A significant time by group by gender interaction was indicated on the analysis for implicit questions. The males in the GIST group outperformed the females in that group, and the females in the Rule-based group outperformed the males in the same group.

For the fifth graders, the analysis also indicated that there was no significant interaction between time and summarization instruction group. However, there was a significant main effect for time with a very large effect size. Student scores increased from pretest to post test regardless of gender or type of summarization instruction they received. Both interventions were effective in increasing the students' reading comprehension with expository text. A significant time by group by gender interaction was indicated on the analysis for explicit questions. The males in the GIST group outperformed the females in that group, and the females in the Rule-based group outperformed the males in the same group. In addition, the main effect for group was significant suggesting a difference in the effectiveness of the two instructional approaches in reference to implicit questions. The Rule-based students outperformed the GIST students with implicit questions.

Analysis of Summary Writing

This section reports results pertinent to research question two: Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners? First, pretest data were analyzed to determine any initial differences that may have existed between the instructional groups prior to instruction. Then descriptive statistics and analysis of a mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor will be presented. Fourth-grade data will be presented followed by fifth-grade results.

The Summary Writing Assessment was the measure used to determine the effects of the summarization instruction on the quality of the summary writing of the students. It was administered as described in Chapter 3.

Analysis of Summary Writing Assessment for Grade 4

Using the pretest rubric scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .427$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

For this analysis, each summary received a score ranging from one to five based on the following rubric for the pretest and then the post test (Table 24).

Using these rubric scores, the means and standard deviations were calculated for both instructional groups. These results are displayed in Table 49.

Table 49

Means and Standard Deviations on Summary Writing Assessment Rubric Scores for GIST (N = 17) and Rule-based (N = 20) Instructional Groups for Grade 4

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST	2.06 (.243)	3.06 (.899)	+ 1.00
Rule-based	1.85 (.366)	3.80 (.834)	+ 1.95
Total	1.95 (.329)	3.46 (.931)	+ 1.51

A mixed ANOVA was conducted with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor to compare summary rubric scores. Table 50 reports these results for Grade 4.

Table 50

Mixed ANOVA for Summary Writing Assessment for Grade 4

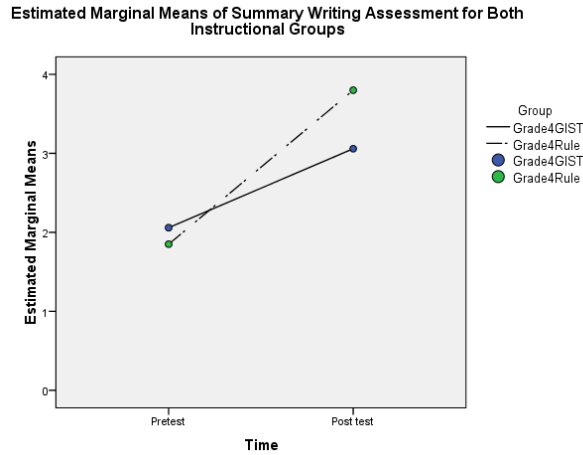
Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		1.302	3.007	.092	.079
Error	35		.433			
Within-Subjects						
Time	1		39.984	96.681	.000	.734
Wilks' Lambda	1	.266		96.681	.000	.734
Time * Group	1		4.147	10.026	.003	.223
Wilks' Lambda	1	.777		10.026	.003	.223
Error	35		.414			

These results indicate that there was a statistically significant time by group interaction, Wilks' Lambda = .777, $F(1, 35) = 10.026$, $p = .003$, partial eta squared = .223. This result, partial eta squared = .223, indicates a very large effect size.

The line graph in Figure 5 shows this interaction. As can be seen in the figure, the Rule-based group made a larger improvement in summary writing on pretesting and post testing than the GIST group.

Figure 5

Instructional Group by Time Interaction for Grade 4



Descriptive statistics in Table 49 show that the mean for the GIST instructional group increased by 1.00 from pretest to post test. The mean for the Rule-based instructional group increased by 1.95. The mean for the total number of fourth-grade students increased by 1.51.

Analysis of Summary Writing Assessment for Grade 4 by Gender. Using the pretest numeric scale scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box’s Test of Equality of Covariance Matrices showed that $p = .956$ for the fourth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

Scale score means and standard deviations by gender were analyzed to note any similarities and differences between the two instructional groups. These results are displayed in Table 51. The pretest means indicated that the males and females in both

groups were relatively equal in summary writing assessment rubric scores prior to instruction.

Table 51

Means and Standard Deviations on Summary Writing Assessment for GIST (N = 17) and Rule-based (N = 20) Instructional Groups for Grade 4 by Gender

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Male (N = 10)	2.00 (.000)	3.10 (.994)	+ 1.10
Female (N = 7)	2.14 (.378)	3.00 (.816)	+ 1.14
Rule-based			
Male (N = 11)	1.82 (.405)	3.82 (.751)	+ 1.00
Female (N = 9)	1.89 (.333)	3.78 (.972)	+ 1.89

A mixed ANOVA was conducted with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor to compare summary rubric scores by gender. The results are displayed in Table 52.

Table 52

Mixed ANOVA for Summary Writing Assessment by Gender for Grade 4

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Gender	1		.006	.013	.910	.000
Group	1		1.263	2.751	.107	.077
Gender * Group	1		.000	.000	.984	.000
Error	33		.459			
Within-Subjects						
Time	1		38.411	88.498	.000	.728
Wilks' Lambda	1	.272		88.498	.000	.728
Time * Gender	1		.141	.324	.573	.010
Wilks' Lambda	1	.990		.324	.573	.010
Time * Group	1		4.194	9.663	.004	.226
Wilks' Lambda	1	.774		9.663	.004	.226
Time * Group * Gender	1		.020	.045	.833	.001
Wilks' Lambda	1	.999		.045	.833	.001
Error	33		.434			

This analysis indicated that there was no statistically significant time by gender interaction, or time by group by gender interaction. There was a statistically significant

time by group interaction with Wilks' Lambda = .774, $F(1, 33) = 9.663$, $p = .004$, partial eta squared = .226. The results indicated the males did equally as well as females regardless of their instructional group. The main effect for group was not significant, $F(1, 33) = 2.751$, $p = .107$, partial eta squared = .077, suggesting no difference in the effectiveness of the two instructional approaches in reference to gender.

Analysis of Summary Writing Assessment for Grade 5

Using the pretest rubric scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .092$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

For this analysis, each summary received a score ranging from one to five based on the rubric in Table 24 for the pretest and then the post test. Using these rubric scores, the means and standard deviations were calculated for both instructional groups as displayed in Table 53.

Table 53

Means and Standard Deviations on Summary Writing Assessment Rubric Scores for

GIST (N = 13) and Rule-based (N = 14) Instructional Groups for Grade 5

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST	2.54 (.660)	3.77 (.599)	+ 1.23
Rule-based	2.14 (.363)	3.86 (.535)	+ 1.72
Total	2.33 (.555)	3.81 (.557)	+ 1.48

A mixed ANOVA was conducted with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor to compare summary rubric scores. Table 54 reports these results for Grade 5.

Table 54

Mixed ANOVA for Summary Writing Assessment for Grade 5

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Group	1		.319	.701	.410	.027
Error	25		.455			
Within-Subjects						
Time	1		29.232	203.999	.000	.891
Wilks' Lambda	1	.109		2.040	.000	.891
Time * Group	1		.788	5.499	.027	.180
Wilks' Lambda	1	.820		5.499	.027	.180
Error	25		.143			

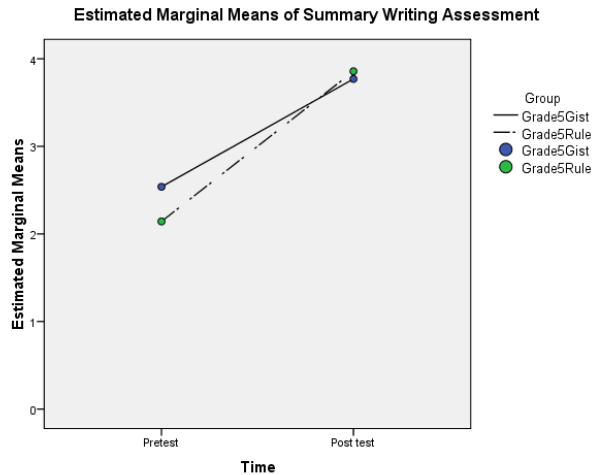
These results indicate that there was a statistically significant time by group interaction, Wilks' Lambda = .820, $F(1, 25) = 5.499$, $p = .027$, partial eta squared = .180.

This result, partial eta squared = .180, indicates a very large effect size.

The line graph in Figure 6 shows this time by group interaction. As can be seen in the figure, the Rule-based group made a larger improvement in summary writing on pretesting and post testing than the GIST group.

Figure 6

Instructional Group by Time Interaction for Grade 5



Analysis of Summary Writing Assessment for Grade 5 by Gender. Using the pretest rubric scores for this measure, an Analysis of Variance (ANOVA) was conducted to determine if the assumption of homogeneity of variances had been violated. The results of Box's Test of Equality of Covariance Matrices showed that $p = .805$ for the fifth graders. Since this value is not statistically significant, the test of homogeneity of variance has not been violated.

The means and standard deviations were analyzed to note any gender differences between the two instructional groups. These results are displayed in Table 55.

Table 55

Means and Standard Deviations on Summary Writing Assessment for GIST (N = 13) and Rule-based (N = 14) Instructional Groups for Grade 5 by Gender

Instructional Group	Pretest Mean (SD)	Post test Mean (SD)	Change in Mean
GIST			
Male (N = 9)	2.67 (.707)	3.89 (.601)	+ 1.22
Female (N = 4)	2.25 (.500)	3.50 (.577)	+ 1.25
Rule-based			
Male (N = 6)	2.17 (.408)	3.67 (.516)	+ 1.50
Female (N = 8)	2.13 (.354)	4.00 (.535)	+ 1.87

A mixed ANOVA was conducted with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor to compare summary rubric scores by gender. Results are displayed in Table 56.

Table 56

Mixed ANOVA for Summary Writing Assessment by Gender for Grade 5

Source	df	Value	MS	F	p	Partial Eta Squared
Between-Subjects						
Gender	1		.202	.450	.509	.019
Group	1		.092	.205	.655	.009
Gender * Group	1		.922	2.051	.166	.082
Error	23		.450			
Within-Subjects						
Time	1		26.188	180.322	.000	.887
Wilks' Lambda	1	.113		1.803	.000	.887
Time * Gender	1		.124	.856	.365	.036
Wilks' Lambda	1	.964		.856	.365	.036
Time * Group	1		.624	4.298	.050	.157
Wilks' Lambda	1	.843		4.298	.050	.157
Time * Group * Gender	1		.092	.636	.433	.027
Wilks' Lambda	1	.973		.636	.433	.027
Error	23		.145			

This analysis indicated that there was no statistically significant interaction between time and gender with Wilks' Lambda = .964, $F(1, 23) = .856$, $p = .365$, partial

eta squared = .036. There was also no statistically significant interaction between time, group, and gender with Wilks' Lambda = .973, $F(1, 23) = .636$, $p = .433$, partial eta squared = .027. However, there was a statistically significant main effect for time with Wilks' Lambda = .113, $F(1, 23) = 1.803$, $p < .001$, partial eta squared = .887. This result, partial eta squared = .887, indicates a very large effect size.

Analysis of Students' Dialogue during Partner Summary Writing Instructional Lesson

In order for students to write a summary, they must first be able to extract and construct meaning from the text. This comprehension process involves three elements: the reader, the text, and the activity. However, these components interact within a larger sociocultural context that affects them and the interactions that occur among them.

I wanted to capture this dynamic aspect of reading comprehension while the students were working with their partners on extracting meaning from the text. Students with parental consent and student assent were paired together for the instructional lessons that involved partner support. Only these pairs of students were audiotaped as they read the text, constructed meaning, and worked together on writing a summary. Their dialogues with each other help us to better understand the process that students go through in order to arrive at a finished product – a summary.

I wanted to capture the conversations that were representative of how the majority of students responded to the task of writing a partner summary. Three pairs of students were recorded each time which totaled nine recordings for each class. While listening to each recording, I examined the process the partners used to arrive at their summaries by noting how closely they could replicate the instruction they had received. Would they

able to transfer the knowledge gained during teacher modeling and guided practice with their partners?

I present two examples of students engaged in this process. These excerpts demonstrate how the readers worked together to construct meaning from the text, and how summaries were developed using each of the summarization approaches: Rule-based and GIST. Each one is representative of how the majority of students responded to the task of writing a partner summary. The fourth-grade excerpt is from the second partner-support session; the fifth-grade excerpt is from the third partner-support session. The fourth graders were students who both scored below grade level on system-wide reading benchmark tests. The fifth graders were students who scored on grade level on the tests. Both excerpts show the students using the procedure and terms modeled by the teachers during the modeling and guided practice lessons. Figure 7 is an excerpt from the fourth-grade Rule-based group, and Figure 8 is an excerpt from the fifth-grade GIST group.

Figure 7

Fourth-Grade Rule-based Students' Dialogue

Reading Selection 7: *The Woodland Indians' Shelter*

After students read the text twice, the partners proceeded to go through the process of summarizing using the rules.

Student 1: Okay, let's think what the text structure is.

Student 2: Description.

Student 1: I don't know. Read the definitions from our text chart. (Student 2 read all the definitions for the different text structures).

Student 2: I still think description.

Student 1: Okay, it describes the walls, what the houses were made of, what was inside.

Student 2: Okay, so let's go to rule 4 and see if a topic sentence is there.

Student 1: I think Woodland Indians needed shelter like all of us to survive.

Student 2: I think it's they lived in wigwams or longhouses. Wait, no, that's a detail because that describes a shelter. Okay, we found the topic sentence so highlight it in yellow.

Student 1: The story had a topic sentence so we can skip rule 5. So let's go to rule 1 and cross out information that's not important. (They read each sentence to decide what to delete).

Student 2: I think we should keep what they made their homes of.

Student 1: Cross out the chief's house was the largest.

Student 2: Not important not much furniture. We don't want to know what is inside.

Student 1: I'm not sure about covering the hole in the roof so let's keep it for now.

Student 2: They sat on the platforms. Oh, that's why they built platforms. They were like chairs.

Student 1: Fire should go.

Student 2: They used it for heat and cooking. Oh, so keep the fire because that talks about surviving.

Student 1: Now rule 2. Do we have anything that is repeated? Let's cross out some of the words they.

Student 2: Now let's do rule 3. Look for lists. Wood, bark, and other natural materials. Circle that and we'll just put natural materials.

Student 1: We found our topic sentence and highlighted it in yellow. Let's see if we can write the summary in two or three sentences. Don't we have to put the topic sentence or main idea first?

Student 2: Woodland Indians needed shelter like all of us to survive. They used natural materials they found nearby to build their houses.

Student 1: We can't copy from the story remember.

Student 2: We changed wood, bark, and grasses to things in nature or natural materials.

Their finished summary was:

The Woodland Indians needed shelter to survive. They used the natural materials found nearby to make the shelter. They also made platforms to sit and sleep on, and they built fires for warmth and cooking.

This excerpt shows how the students internalized the process that was modeled for them by the teacher during the modeling and guided practice lessons. Before they started to use the rules for summarization, they read the selection twice and then discussed its text structure. Because Student 1 wasn't sure if the text structure was description, both students referred back to a chart that listed all the text structures with definitions and key words/phrases. Student 1 assured himself that it is description by giving supporting evidence from the selection - describes the walls, what the houses were made of, what was inside. When the students began the guided practice lessons, they quickly discovered that going to Rule 4 first was very important because it helped them to identify the text's main idea. They verbalized that you have to know the main idea so you know what information is important or unimportant. In the above excerpt, after the students identified the text structure, they immediately proceeded to Rule 4 which was to identify a topic sentence if one was there. After they highlighted the topic sentence, they knew one didn't have to be created so Rule 5 was skipped. They then started at the beginning of the text, read each sentence, and discussed whether to keep it or cross it out employing Rule 1. If the partners weren't sure about information, they kept it and revisited it at a later time as was modeled for them. After completing Rule 1, the students then proceeded to use Rules 2 and 3 with the text. They also reminded each other that a summary should be short, and sentences should not be copied directly from the text. The

students wrote a draft copy of their summary and revised it twice to produce the finished product as was modeled by the teacher during the initial lessons.

The students' dialogue also shows where meaning was gained from the text. Student 1 stated that the information about a fire in the middle of the wigwam should be deleted. Student 2 read the next sentence that stated the fire was used for heat and cooking then immediately said that the fire information had to stay because it referred to survival. On the first reading, Student 2 was confused about platforms in the wigwams. With rereading, he then compared their platforms to our chairs in that they gave them a place to sit.

Figure 8

Fifth-Grade GIST Students' Dialogue

Reading Selection 7: *The Star-Spangled Banner*

After students read the text twice, the partners proceeded to go through the process of summarizing in 20 or fewer words.

Student 1: Let's underline the key words first. In the first sentence I think we should underline Baltimore and national anthem because that's going to be part of our main idea, or gist.

Student 2: We need to underline Great Britain and the year 1814.

Student 1: I don't think we need to keep the ship attacked the fort, but we need to keep Francis Scott Key because he wrote the national anthem. Do you think we need the year 1814?

Student 2: I think we need important dates because they're related to our main idea, or gist.

Student 1: Maybe U.S. Army and 1895.

Student 2: I'm not sure about that. Keep it for now.

Student 1: 1931, and the Star-Spangled Banner became the national anthem.

Student 2: Let's start to write the summary and we'll use process of elimination to take out words we don't need. We have to get down to 20 words.

Student 1: In 1814 a ship from Great Britain had attacked the United States. Francis Scott Key then wrote the Star-Spangled Banner. In 1931 the Star-Spangled Banner was the national anthem.

Student 2: We have to eliminate because we're over 20 words. In the first sentence we don't need ship or had so cross it out. Should we cross out Great Britain?

Student 1: I don't think so because that's important.

Student 2: I got it! Let's change Great Britain to British and say the British attacked. Okay, let's write this down.

Student 1: Do we need Francis Scott Key?

Student 2: Of course, he wrote it. But I don't think we need all three names. Let's just put Key. The national anthem was written in.... Wait a minute, we can use a comma instead of and.

Their finished summary was:

Star-Spangled Banner, written in Baltimore in 1814 by Key when the British attacked, became the national anthem in 1931.

This excerpt also shows how the students internalized the process that was modeled for them by the teacher during the modeling and guided practice lessons. In order to help the students focus on important information, the teacher taught them to underline key words in the selection after reading it. This step was not included in previous studies involving the GIST method. After discussions during the pilot study with the teacher who taught this approach, we knew this was crucial in helping the students to focus on important information which helped them to identify the gist of the selection.

After reading the selection twice, the partners began to identify and underline key words in the text. If they were not sure, they underlined it and revisited it later as was modeled. Even though this approach to summarization did not include rules, students with teacher assistance began to eliminate unimportant information (Rule 1) and words that were repeated (Rule 2). They also began to collapse lists into general terms (Rule 3) in order to reach the 20-word goal. The students learned quickly that every word in their summaries had to be important as stressed by the teacher during the initial lessons.

During the modeling and guided practice lessons, the teacher allowed the students to dictate as much information as they thought necessary for a summary. The students then counted the number of words and realized that they had far more than 20 words. The teacher then emphasized that they had to use the process of elimination to get down to the 20 most important words. The fifth-grade students in the above excerpt used this term to reduce their number of words.

In Figure 8, the students decided that some dates were important and had to be included in their summary. Student 2 used his prior knowledge to change “Great Britain”

to “British,” and “had attacked” to just “attacked.” He also knew that Francis Scott Key was an important fact from the selection, but knew it could be revised to the last name, Key. In order to reach the 20-word mark, Student 2 also realized that a comma could replace the word “and” and not be counted as a word as modeled by the teacher. Therefore, these students were able to write a summary with only 20 words after three revisions.

Summary of Results for Research Question 2

This section presented results from analyses that were conducted to answer research question two: Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners? The Summary Writing Assessment was the measure used to determine the effects of the summarization instruction on the quality of summaries written by fourth- and fifth-grade students.

Fourth-grade students in both groups improved in the quality of summaries written on pretesting and post testing. However, the analysis indicated that there was a significant interaction between time and summarization instruction group with a very large effect size. Students in the rule-based group outperformed students in the GIST group in the quality of summaries they produced. The analysis also indicated that there was no statistically significant interaction between time and gender, or time, group, and gender.

Fifth-grade students in both groups improved considerably on pretesting and post testing. Similarly to fourth graders, the analysis indicated that there was a statistically significant interaction between time and instructional group with a very large effect size. Students in the rule-based group again outperformed students in the GIST group in the

quality of summaries they wrote. The analysis also indicated that there was no statistically significant interaction between time and gender, or time, group, and gender.

Analysis of Student Attitude Survey

This section reports results pertinent to research question three: Does either instructional approach, GIST or Rule-based, appear to affect the students' concepts, views, or attitudes toward summarization? The Student Attitude Survey was the measure used to determine the effects of the instruction on students' attitudes toward summarization. This survey consisted of 12 statements that fell into three categories: Knowledge of summary writing, importance of summary writing, and personal attitude toward writing summaries (see Table 25)

Each student was asked to complete the survey both before and after instruction. Each statement was measured using a five-point Likert Scale. A "1" indicated "Strongly Agree," a "2" indicated "Agree," a "3" indicated "Not Sure," a "4" indicated "Disagree," and a "5" indicated "Strongly Disagree." After each statement was orally read by the teacher, the students circled one of the Likert Scale numbers. Using the Likert Scale scores for each individual statement, percentages and descriptives of mean and standard deviation were analyzed both before and after instruction.

Student Attitude Survey Statement Results for Grade 4

Table 57 displays the percentages corresponding to the fourth graders Likert Scale responses for each statement. The top percentages represent student responses before instruction. The bottom percentages represent their responses after instruction.

Table 57

Grade 4 Percentages Corresponding to Likert Scale Responses

	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
Statement	1		2		3		4		5	
	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules
1. A long summary with many sentences is better than a short one that only has a few sentences.	65%	30%	23%	35%	12%	20%	0 %	15%	0 %	0%
	5%	5%	12%	0%	0%	0%	12%	5%	71%	90%
2. I like writing summaries.	24%	5%	44%	45%	24%	10%	8%	30%	0%	10%
	70%	60%	18%	30%	12%	5%	0%	0%	0%	5%
3. Summary writing is an important skill to learn.	65%	70%	35%	20%	0%	5%	0%	0%	0%	5%
	65%	85%	30%	10%	0%	5%	5%	0%	0%	0%
4. Writing a summary helps me to better understand what I've read.	65%	65%	35%	35%	0%	0%	0%	0%	0%	0%
	90%	35%	5%	45%	5%	15%	0%	5%	0%	0%
5. I know how to write a summary.	47%	35%	48%	15%	5%	35%	0%	15%	0%	0%
	65%	90%	35%	0%	0%	5%	0%	0%	0%	5%
6. I think a summary is hard to write.	0%	55%	12%	15%	5%	10%	24 %	10%	59%	10%
	12 %	75%	0 %	10%	5%	0%	12 %	10%	71%	5%

Table 57

Grade 4 Percentages Corresponding to Likert Scale Responses (continued)

	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
Statement	1		2		3		4		5	
	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules
7. Writing a summary helps me to remember the information.	24%	35%	64%	40%	12%	20%	0%	0%	0%	0%
	64%	60%	24%	30%	12%	5%	0%	0%	0%	5%
8. It is important to include as many details as I can in my summary.	100%	55%	0%	30%	0%	10%	0%	5%	0%	0%
	18%	10%	12 %	5%	0%	5%	5 %	5%	65 %	75%
9. I copy sentences from the selection when I write a summary.	29%	10%	49 %	10%	5%	0%	12 %	25%	5 %	55%
	5%	5%	18 %	5%	5%	0%	36 %	10%	36 %	80%
10. Summary writing can help me in subjects other than reading.	39%	30%	18%	30%	18%	25%	25%	5%	0%	10%
	72%	75%	18%	10%	0%	15%	5%	0%	5%	0%
11. I have written summaries in my spare time.	12%	20%	12%	25%	5%	0%	32%	10%	39%	45%
	12%	40%	12%	30%	5%	10%	32%	5%	39%	15%
12. The selection's main idea is included in a summary.	35%	50%	48%	15%	12%	30%	5%	0%	0%	5%
	88%	90%	12%	10%	0%	0%	0%	0%	0%	0%

For some statements, fourth-grade GIST participants showed considerable changes in their responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 88% of the students strongly agreed or agreed.
 - After instruction, 83% strongly disagreed or disagreed.
- Statement 2, “I like writing summaries.”
 - Before instruction, 42% strongly agreed or agreed.
 - After instruction, 88% strongly agreed or agreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 100% strongly agreed.
 - After instruction, 70% strongly disagreed or disagreed.
- Statement 9, “I copy sentences from the selection when I write a summary.”
 - Before instruction, 78% strongly agreed or agreed.
 - After instruction 72% strongly disagreed or disagreed.
- Statement 10, “Summary writing can help me in subjects other than reading.”
 - Before instruction, 57% strongly agreed or agreed with 18% not sure.
 - After instruction, 90% strongly agreed or agreed.

- Statement 12, “The selection’s main idea is included in a summary.”
 - Before instruction, 83% strongly agreed or agreed.
 - After instruction, 100% strongly agreed or agreed.

Fourth-grade Rule-based participants also showed considerable changes in some of their responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 65% of the students strongly agreed or agreed with 20% not sure.
 - After instruction, 95% strongly disagreed or disagreed.
- Statement 2, “I like writing summaries.”
 - Before instruction, 50% strongly agreed or agreed with 40% disagreeing or strongly disagreeing.
 - After instruction, 90% strongly agreed or agreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 85% strongly agreed or agreed.
 - After instruction, 70% strongly disagreed or disagreed.
- Statement 9, “I copy sentences from the selection when I write a summary.”
 - Before instruction, 80% strongly agreed or agreed.
 - After instruction, 90% strongly disagreed or disagreed.

- Statement 10, “Summary writing can help me in subjects other than reading.”
 - Before instruction, 60% strongly agreed or agreed with 25% not sure.
 - After instruction, 85% strongly agreed or agreed.
- Statement 12, “The selection’s main idea is included in a summary.”
 - Before instruction, 65% strongly agreed or agreed with 30% not sure.
 - After instruction, 100% strongly agreed or agreed.

Similarities were evident between the two groups of fourth-grade students. Before instruction, the majority of them stated that they knew how to write a summary, even though they verbally expressed that they were never taught how to write a summary in school. They overwhelmingly agreed that long summaries containing as many details as possible were better than short ones. They also stated that they copied their summary sentences directly from the text. After instruction, they again stated that they knew how to write a summary, but overwhelmingly stated that a long one was not better than a short one. They also agreed that a summary should not include as many details as possible, and sentences should not be copied directly from the text. After instruction, the percentage of students who liked writing summaries increased. Even before instruction, students knew that summary writing was an important skill to learn, and could help with understanding and remembering information that they read. Prior to instruction, the majority of students stated the main idea was to be included in a summary, but very few included it in the summary writing pretest assessment.

Next, means were calculated for each survey statement for both instructional groups. These results are displayed in Table 58. The top number represents the pretest mean; the bottom number represents the post test mean.

Table 58

Means for Grade 4 Instructional Groups per Survey Statement

Statement	GIST	Change in Mean	Rule-based	Change in Mean
1. A long summary with many sentences is better than a short one that only has a few sentences.	1.47 4.29	2.82	2.20 4.75	2.55
2. I like writing summaries.	2.12 1.41	0.71	2.95 1.60	1.35
3. Summary writing is an important skill to learn.	1.35 1.47	0.12	1.50 1.20	0.30
4. Writing a summary helps me to better understand what I've read.	1.35 1.18	0.17	1.90 1.35	0.55
5. I know how to write a summary.	1.59 1.35	0.24	2.30 1.30	1.00
6. I think a summary is hard to write.	4.35 4.29	0.06	3.95 4.40	0.45
7. Writing a summary helps me to remember the information.	1.88 1.47	0.41	1.95 1.60	0.35
8. It is important to include as many details as I can in my summary.	1.00 3.88	2.88	1.65 4.30	2.65
9. I copy sentences from the selection when I write a summary.	2.18 3.76	1.58	4.05 4.55	0.50
10. Summary writing can help me in subjects other than reading.	2.24 1.59	0.65	2.40 1.40	1.00
11. I have written summaries in my spare time.	3.76 3.76	0	3.35 2.25	1.10
12. The selection's main idea is included in a summary.	1.88 1.12	0.76	1.95 1.10	0.85

Both groups showed the greatest change in mean with statement eight - It is important to include as many details as I can in my summary. The GIST group had a 2.88 change and the Rule-based group 2.65. The second greatest change for both groups was with statement one - A long summary with many sentences is better than a short one that only has a few sentences. The GIST group showed a 2.82 change with the Rule-based a 2.55 change. The GIST group showed its third largest change in mean with statement nine – I copy sentences from the selection when I write a summary – with an increase of 1.58. The Rule-based group showed its third largest mean change with statement two – I like writing summaries – with an increase of 1.35.

The fourth graders in both the GIST group and Rule-based group showed the greatest change in the category of “Knowledge of Summary Writing” which consisted of Questions 1, 8, 9, and 12. They learned that a summary does not have to be long filled with as many details as possible. They also learned that the main idea must be included in a summary, and it should be written in the writer’s own words. A slight change was made in the category of “Importance of Summary Writing” which consisted of Questions 3, 4, 7, and 10. Students seemed to know that summary writing was important skill to learn, and that it helped them to understand and remember information across the subject areas. Even though summary writing had not been taught to them previously, they understood its importance. A slight change was also evident in the category of “Personal Attitude toward Summary Writing” which consisted of Questions 2, 5, 6, and 11. Before instruction, the students stated that they knew how to write summaries, and they were not hard to write. This prior knowledge was not evident in the pretest summary assessment or

beginning instructional lessons. After instruction, there was little change in their responses, hopefully, because they gained the ability to write a summary.

Student Attitude Survey Statement Results for Grade 5

Table 59 displays the percentages corresponding to the fifth graders Likert Scale responses for each statement. The top percentages represent student responses before instruction. The bottom percentages represent their responses after instruction.

Table 59

Grade 5 Percentages Corresponding to Likert Scale Responses

	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
Statement	1		2		3		4		5	
	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules
1. A long summary with many sentences is better than a short one that only has a few sentences.	64%	21%	21%	42%	15%	15%	0%	15%	0%	7%
	21%	7%	7%	7%	21%	0%	21%	29%	30%	57%
2. I like writing summaries.	50%	0%	50%	64%	0%	15%	0%	0%	0%	21%
	57%	28%	43%	28%	0%	29%	0%	0%	0%	15%
3. Summary writing is an important skill to learn.	85%	86%	15%	0%	0%	7%	0%	7%	0%	0%
	57%	57%	43%	43%	0%	0%	0%	0%	0%	0%
4. Writing a summary helps me to better understand what I've read.	86%	86%	14%	14%	0%	0%	0%	0%	0%	0%
	57%	57%	43%	43%	0%	0%	0%	0%	0%	0%
5. I know how to write a summary.	63%	63%	37%	37%	0%	0%	0%	0%	0%	0%
	63%	63%	37%	37%	0%	0%	0%	0%	0%	0%
6. I think a summary is hard to write.	0%	0%	0%	0%	7%	7%	21%	21%	72%	72%
	0%	0%	0%	14%	0%	21%	29%	29%	71%	36%

Table 59

Grade 5 Percentages Corresponding to Likert Scale Responses (continued)

	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
Statement	1		2		3		4		5	
	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules	GIST	Rules
7. Writing a summary helps me to remember the information.	79%	35%	21%	40%	0%	20%	0%	5%	0%	0%
	50%	58%	50%	21%	0%	7%	0%	14%	0%	0%
8. It is important to include as many details as I can in my summary.	79%	63%	21%	21%	0%	16%	0%	0%	0%	0%
	7%	0%	29 %	0%	0%	7%	14%	30%	50 %	63%
9. I copy sentences from the selection when I write a summary.	42%	14%	14%	58%	0%	7%	22%	14%	22%	7%
	0%	0%	0%	14%	7%	7%	35%	21%	58%	58%
10. Summary writing can help me in subjects other than reading.	79%	28%	14%	37%	7%	28%	0%	0%	0%	7%
	14%	35%	21%	44%	50%	14%	0%	7%	14%	0%
11. I have written summaries in my spare time.	35%	14%	12%	22%	0%	0%	30%	50%	21%	14%
	37%	7%	12%	35%	0%	0%	21%	35%	21%	23%
12. The selection's main idea is included in a summary.	86%	35%	14%	42%	0%	16%	0%	7%	0%	0%
	86%	72%	7%	28%	0%	0%	0%	0%	7%	0%

For some statements, fifth-grade GIST participants showed considerable changes in their responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 85% of the students strongly agreed or agreed with 15% not sure.
 - After instruction, 51% strongly disagreed or disagreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 100% strongly agreed or agreed.
 - After instruction, 64% strongly disagreed or disagreed.
- Statement 9, “I copy sentences from the selection when I write a summary.”
 - Before instruction, 56% strongly agreed or agreed.
 - After instruction 93% strongly disagreed or disagreed.

Fifth-grade Rule-based participants also showed considerable changes in some of their responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 63% of the students strongly agreed or agreed with 15% not sure.
 - After instruction, 86% strongly disagreed or disagreed.

- Statement 3, “Summary writing is an important skill to learn.”
 - Before instruction, 86% strongly agreed.
 - After instruction, 100% strongly agreed or agreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 84% strongly agreed or agreed with 16% not sure.
 - After instruction, 93% strongly disagreed or disagreed.
- Statement 9, “I copy sentences from the selection when I write a summary.”
 - Before instruction, 72% strongly agreed or agreed.
 - After instruction, 79% strongly disagreed or disagreed.
- Statement 12, “The selection’s main idea is included in a summary.”
 - Before instruction, 35% strongly agreed, 42% agreed with 16% not sure.
 - After instruction, 72% strongly agreed with 28% agreeing.

Similarities were evident between the two groups of fifth-grade students. As with the fourth graders, before instruction, the majority of fifth graders stated that they knew how to write a summary, even though they too verbally expressed that they were never taught how to write a summary in school. They agreed that long summaries containing as many details as possible were better than short ones, and also stated that they copied their summary sentences directly from the text. After instruction, fifth graders stated that they knew how to write a summary, but overwhelmingly responded that a long one was not

better than a short one. They also agreed that a summary should not include as many details as possible, and sentences should not be copied directly from the text. Even before instruction, students knew that summary writing was an important skill to learn, and could help with understanding and remembering information that they read. Prior to instruction, the majority of students stated the main idea was to be included in a summary, but as with fourth graders, very few included it in the summary writing pretest assessment.

Next, means were calculated for each survey statement for both instructional groups. These results are displayed in Table 60. The top number represents the pretest mean; the bottom number represents the post test mean.

Table 60

Means for Grade 5 Instructional Groups per Survey Statement

Statement	GIST	Change in Mean	Rule-based	Change in Mean
1. A long summary with many sentences is better than a short one that only has a few sentences.	1.50 3.29	1.79	3.00 4.21	1.21
2. I like writing summaries.	1.50 1.43	0.07	2.79 2.43	0.36
3. Summary writing is an important skill to learn.	1.14 1.43	0.29	1.36 1.36	0
4. Writing a summary helps me to better understand what I've read.	1.14 1.43	0.29	1.43 1.50	0.13
5. I know how to write a summary.	1.36 1.36	0	2.00 1.57	0.43
6. I think a summary is hard to write.	4.64 4.71	0.07	3.50 3.86	0.36
7. Writing a summary helps me to remember the information.	1.21 1.50	0.29	1.79 1.64	0.15
8. It is important to include as many details as I can in my summary.	1.21 3.71	2.50	1.50 4.57	3.07
9. I copy sentences from the selection when I write a summary.	2.64 4.50	1.86	2.43 4.21	1.78
10. Summary writing can help me in subjects other than reading.	1.29 2.79	1.50	2.21 1.93	0.28
11. I have written summaries in my spare time.	2.86 2.71	0.15	3.29 3.29	0
12. The selection's main idea is included in a summary.	1.14 1.36	0.22	1.93 1.29	0.64

Both fifth-grade groups showed the greatest change in mean with statement eight - It is important to include as many details as I can in my summary. The GIST group had a 2.50 change and the Rule-based group 3.07. The second greatest change for both groups was with statement nine – I copy sentences from the selection when I write a summary – with the GIST showing a mean increase of 1.86 and the Rule-based group 1.78. The third greatest change in mean for both groups was with statement one - A long summary with many sentences is better than a short one that only has a few sentences. The GIST group showed a 1.79 change with the Rule-based a 1.21 change.

The fifth graders in both the GIST group and Rule-based group also showed the greatest change in the category of “Knowledge of Summary Writing” which consisted of Questions 1, 8, 9, and 12. They learned that a summary can be written in a few sentences as long as the main idea and important details are included. They also learned that sentences should not be directly copied from the text, but written in the writer’s own words. A slight change was made in the category of “Importance of Summary Writing” which consisted of Questions 3, 4, 7, and 10. Students seemed to know that summary writing was important skill to learn because it could help them to understand and remember information in all subject areas. Even though summary writing had not been taught to them previously, they understood its importance. A slight change was also evident in the category of “Personal Attitude toward Summary Writing” which consisted of Questions 2, 5, 6, and 11. Before instruction, the students stated that they knew how to write summaries, and they were not hard to write. This prior knowledge was not evident in the pretest summary assessment or beginning instructional lessons. After instruction,

there was little change in their responses, perhaps because they gained the ability to write a summary.

Summary of Results for Research Question 3

This section presented results from analyses that were conducted to answer research question three: Does either instructional approach, GIST or Rule-based, appear to affect students' concepts, views, or attitudes toward summarization? The Student Attitude Survey was the measure used to determine the effects of the summarization instruction on the knowledge, importance, and attitude toward summarization.

Both fourth and fifth graders increased their knowledge of summary writing. Prior to the instruction, the majority of students believed that long summaries with many details from the text were better than shorter ones. They also believed that summaries could be composed of sentences that were copied directly from the text. They knew that the main idea should be included, but most of the students in both grades did not include it in their summary pretests. After instruction, it was evident from the summary writing post tests and responses to survey questions that the students not only had the knowledge, but also were able to demonstrate it.

Slight changes were made in both grades in reference to the importance of summary writing. Even though the students had not been taught to summarize in previous grades, they appeared to know the importance of it prior to instruction. For both grades, the greatest increase in this category was with statement ten – Summary writing can help me in subjects other than reading. In grade four, the GIST group increased by .65 and the Rule-based group 1.0. In grade five, the GIST group increased by 1.5 and the Rule-based

group .28. I think because social studies content was used for the study, students realized that summarizing could be applied to various subject areas.

Changes also occurred in both grades in the category of personal attitude toward summary writing. For both fourth grades, statement two – I like writing summaries – showed the greatest increase with the GIST group increasing by .71 and the Rule-based group 1.35. The Rule-based group also showed an increase of 1.10 with statement 11 – I have written summaries in my spare time. These students began to use their knowledge of summary writing with writing book reports. The fifth graders in the Rule-based group showed the greatest increase, .43, in this category with statement five – I know how to write a summary. The students in the GIST group showed the greatest increase, .15, with statement 11 – I have written summaries in my spare time.

Conclusions

It is evident that both approaches to summarization, GIST and Rule-based, had an impact on the fourth and fifth graders who participated in this study. Changes occurred in their knowledge of summary writing, the importance of summary writing, and their personal attitudes toward summary writing.

In the next chapter, I will discuss the results that were presented in this chapter and share implications for future research and instruction. In addition, the limitations of the study will also be addressed.

Chapter 5

Discussion

The purpose of this study was to investigate the effects of two summarization approaches, Generating Interactions between Schemata and Text (GIST) and Rule-based, on reading comprehension and summary writing of fourth- and fifth-grade students who attend an urban, Title 1 school. Using a quasi-experimental design, this study provided students in each intervention with 15 lessons, 40 - 60 minutes in duration, over a course of five weeks.

This investigation extended the findings of studies conducted by Cunningham (1982) and Bean and Steenwyk (1984) who examined the effects of these two summarization strategies on the reading comprehension and summary writing of fourth- and sixth-grade students. My study extended their findings by 1) examining the effects of these two approaches with urban, Title 1 students, (2) examining the effects when using authentic expository text correlated with the school system's social studies curriculum, and not altered to meet the demands of the task, (3) examining whether students can effectively summarize expository text involving multiple paragraphs, and (4) investigating students' performance on pretest and post test reading assessments when assessments consisted of expository text with multiple paragraphs.

I examined three research questions: (1) Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension using expository text with urban, Title 1 learners? (2) Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners? (3) Does either instructional approach, GIST or Rule-based, appear to affect the students' concepts, views, or attitudes toward summarization? This chapter discusses the

findings and answers to the three research questions. In addition, implications for future research and instruction are explained.

Research Question 1: Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension with urban, Title 1 learners using expository text?

I became interested in summarization after reading numerous studies that found it effective in improving reading comprehension. As a classroom teacher, reading resource teacher, and curriculum specialist, I, like many other teachers, “taught” children to summarize by following what was furnished in teachers’ guides - write a summary by locating the main idea and details. No guide that I have ever used went beyond that, even though state assessments ask students to write summaries. I was intrigued that there were actually step-by-step ways to teach summarization. Most of the studies that I read centered around the Rule-based approach, but soon found two studies that used the GIST approach. The more reading I did, the more I also became aware that the participants of these studies were not urban, Title 1 children. If teaching summarization had such benefits across curricula with other populations, why wouldn’t it have the same effect on the urban, Title 1 student? With this population lagging behind others in reading achievement, summarization instruction was definitely worth trying. I had a very positive experience with my pilot study, and wanted to try the instruction with a larger number of students. I hypothesized that teaching the students to summarize would have a positive impact on their reading comprehension with expository text. I wanted to examine both approaches carefully to see if one method would produce better results than the other. I

also chose authentic text that was from social studies materials used by the fourth and fifth graders. I did not alter it to suit the demands of the study.

The Qualitative Reading Inventory - 4 was the measure used to determine the effects of the summarization instruction on the expository reading comprehension of fourth- and fifth-grade students. I used only nonfiction selections for pretesting and post testing. I used both a miscue analysis score and comprehension score to determine an overall reading level for each student. In order to increase measurement sensitivity, a continuous numeric scale was used to align each reading level, instructional or independent, to a scale score. I used this system because in my pilot study, I found that the scoring guide for the Qualitative Reading Inventory-4 was not sensitive enough to detect all progress made by the students. This numeric scale was developed during a dissertation study by Sharon Russell (2005) with guidance from Paris and Paris (2003). A scale of this type is essential for capturing improvement made by students. If a student's pretest score is at instructional level two and the post test score is at independent level two, that student has made improvement. If the QRI-4's scoring guide would be used, the student would show no progress because he did not move up to the next reading level. Moving from instructional level to independent level is certainly showing improvement. Since this instrument is still considered a work in progress, reliability and validity has not been fully established.

During QRI-4 pretesting, the testers noted that the students struggled through oral reading and answering comprehension questions even when they were encouraged to look back to locate an answer. Reading levels on the pretests were relatively low for most students, and many were not able to perform satisfactorily on more than two selections.

On QRI-4 post tests, the testers observed that the students were more nervous than before and stated that they wanted to do really well. When asked a comprehension question, the students were more apt to take their time and look back in the selection for the answer. There was less guessing on the post test, and students progressed much further through the selections than on the pretests. After the post tests, the students would ask the testers how they did, and would ask the testers to tell their teachers about their progress.

Results showed that both summarization approaches, GIST and Rule-based, were equally effective in improving the reading comprehension with urban, Title 1 learners using expository text. For both grades, student reading scores increased from pretest to post test regardless of instructional group or gender.

In fourth grade, the mixed ANOVA showed that there was a statistically significant main effect for time, Wilks' Lambda = .308, $F(1, 35) = 78.633$, $p = .000$, partial eta squared = .692. According to guidelines proposed by Cohen (1988), this partial eta squared value indicates a very large effect size. In addition, a significant time by group by gender interaction was indicated on the analysis for implicit questions, Wilks' Lambda = .844, $F(1, 33) = 6.078$, $p = .019$, partial eta squared = .156. The males in the GIST group outperformed the females in that group, and the females in the Rule-based group outperformed the males in the same group for implicit questions on the QRI-4.

In fifth grade, the mixed ANOVA analysis indicated that there was a significant main effect for time, Wilks' Lambda = .296, $F(1, 25) = 59.470$, $p = .000$, partial eta squared = .704. This partial eta squared value indicates a very large effect size. In addition, a significant time by group by gender interaction was indicated on the analysis for explicit questions. The males in the GIST group outperformed the females in that

group, and the females in the Rule-based group outperformed the males in the same group for explicit questions on the QRI-4.

The results from this study were much different than the QRI-4 results of the pilot study. The pilot study which included only fifth graders also showed no statistically significant time by intervention interaction, Wilks' Lambda = .956, $F(1, 33) = 1.527$, $p = .225$, partial eta squared = .044, and it also showed no statistically significant main effect for time, Wilks' Lambda = .999, $F(1, 33) = .043$, $p = .837$, partial eta squared = .001.

As a result of analyzing the data from the pilot study, two major changes were implemented for this study. The first change was to increase the number of lessons. The pilot study consisted of 12 lessons with the final three used for independent practice. This study had a total of 15 lessons with the final six lessons devoted to independent practice. All of the lessons involved teacher to student, student to teacher, and student to student dialogue in which the text was discussed in order to gain understanding. Both explicit and implicit questioning was utilized to further construct meaning from all the texts that were read. This type of instruction spanning 15 lessons provided the students with a very concentrated block of time that was focused solely on comprehension.

The second change that was made was to have the students identify the text structure of each reading selection. Using a chart that I developed after the pilot study, students learned the text structures of problem/solution, cause/effect, compare/contrast, sequence, and description, and key words or phrases associated with each of them. Since they had not been taught this previously, the students were very hesitant, at first, to take the risk of attempting to identify the structure of texts that we read. My colleague and I agreed that for students to be able to identify and discuss text structure involved a high-

level of comprehension. Initially, we wondered whether some of our students, especially fourth graders, would be up for such a challenge in a relatively short period of time. For the first three lessons, we modeled through “think-alouds” how to identify the structure of a text. For the next three lessons which were guided practice lessons, we worked together with the students in helping them to distinguish the text structure of each reading selection. Both of us noticed that by the third or fourth lesson of the study, many of the students were becoming more comfortable in volunteering to identify and discuss the structure of a text. By the time they were working with partners, the students would actually debate each other about it. In reflecting on the reading improvement made by both fourth and fifth graders, I believe including the teaching of text structure as part of summarization had a great impact on their comprehension.

Some comments made by the students in reference to their reading were:

- I think this really helped my comprehension get better.
- I now know how to find the main idea in a story. I always had trouble with that.
- I did like learning about text structure because I never knew what it was. I think it helped me to understand the stories better.
- This helped me to read better and break up a story to understand it. I didn't know it was important to find a topic sentence.
- I learned that rereading is important if you really want to understand what you're reading. It helps to read slower too. I always read fast and never went back to read it again.
- Identifying key words helped me to find the main idea, or gist.

- I learned about different kinds of text structures which I never heard of before. I'm going to try to find the TS when I read on my own [in class we called the text structure – TS].
- I liked when we talked about the stories a lot and asked questions. This helped me understand better.
- This helped me to be a better reader by finding the main idea and knowing the text structure.
- I learned how to find the main idea. Now I think I read better.

Reflecting on Question 1 Results

Both grades showed a statistically significant main effect for time. I believe providing the students with focused comprehension strategy instruction using expository text resulted in their significantly improved reading achievement as measured by the QRI-4. These fourth- and fifth-grade results support the literature on the importance of strategy instruction. Katims and Harmon (2000) noted that strategy instruction can empower readers to take control of their own learning through a series of steps to organize, retain, and convey content knowledge. These students were provided with a method for summarizing text, either GIST or Rule-based. Strategy instruction that is provided within the context of content area subject matter has been shown to improve reading achievement (Malone & Mastropieri, 1991; Rinehart, Stahl, & Erickson, 1986; Taylor & Beach, 1984). The students in this study worked with selections that were from social studies textbooks and resources used in the classrooms. Teaching students when and how to use reading strategies, as well as teaching them that strategy use can promote reading achievement, can lead them to independent and successful strategy use (Sinatra,

Brown, & Reynolds, 2002). Even after the study was completed, the students continued to summarize especially with book reports. Instruction which promotes active reading and reduces passive reading can affect comprehension (Paris, Wasik, & Turner, 1991; Rinehart, Stahl & Erickson, 1986).

Students also had to identify the text structure for each reading selection. Research indicates that readers' awareness of text structure is highly related to text comprehension and recall (Pearson & Dole, 1987; Smolkin & Donovan, 2002). Text comprehension is improved when students are taught to recognize the structure of the text with material that they are able to read (Dimino, Gersten, Carnine, & Blake, 1990; Pressley, 1998; Williams, 2005). Teaching students to understand how information is structured is likely to help them summarize what they read, as suggested by the current study.

The fourth-grade results also showed a statistically significant time by group by gender interaction for implicit questions on the QRI-4. The males in the GIST group outperformed the females in that group, and the females in the Rule-based group outperformed the males in the same group for implicit questions.

The fifth-grade results indicated that a statistically significant time by group by gender interaction for explicit questions. Again the males in the GIST group outperformed the females in that group, and the females in the Rule-based group outperformed the males in the same group for explicit questions.

Although, as noted, the teachers in this study were randomly assigned to instructional condition, both GIST groups were instructed by a male teacher who, after the study was completed, stated that he loved this method because he didn't have to

follow any “stiff” rules. He was motivated because he could basically “do his own thing.” It is possible that the males identified with the teacher and “caught” his enthusiasm. The teacher stated that when he explained to his classes that they were going to learn to write summaries with no more than 20 words, the males were pleased because “they wouldn’t have to write much.” On the other hand, the teacher observed that the females were not as pleased because “they wanted to write a lot.”

Both Rule-based groups were instructed by a female teacher who favored this method because it had rules that could be checked off when completed. It is possible that the females identified with this teacher and the enthusiasm displayed when using the Rule-based approach. It was noted that during guided practice females more readily participated in helping to use and learn the rules than males. During partner lessons it was observed that both males and females participated in using the rules and then checking them off when completed.

Studies on gender differences in reading have shown that females usually exceed males in overall reading achievement (Mullis, Martin, Gonzalez, & Kennedy, 2003; Mullis, Martin, Kennedy, & Foy, 2007). Guthrie and Schafer (1998) also reported that boys who were more engaged in reading had substantially higher text comprehension than girls who were less engaged readers. However, my results did not indicate that one gender outperformed the other in overall reading achievement. The male students who were taught by a male teacher outperformed the females in reference to implicit questions. The female students who were taught by a female teacher outperformed the males in reference to implicit questions. It is possible that the GIST results were influenced by the gender of the GIST teacher and his motivation for the method. It is also

possible that the Rule-based results were influenced by the gender of the Rule-based teacher and her motivation for the method. Both teachers might have had a role-model effect with male students identifying with the male teacher, and the female students identifying with the female teacher. However, if such an effect occurred, the results indicate that it influenced only certain aspects of performance.

What might account for fourth graders showing significant gains with implicit questioning, and fifth graders with explicit questioning? Both fourth grades had experienced teachers throughout the school year providing a sound reading program. These students were provided with many reading experiences that often incorporated explicit teaching. Throughout instruction the students were consistently challenged with various levels of questioning. It is possible that the results for implicit questioning were influenced by the concentrated summarization instruction and the classroom instruction the students had previously received.

In contrast, neither fifth-grade class had been instructed by an experienced teacher. Substitutes or teachers with very limited or no experience attempted to provide reading instruction to the students. These students lacked the opportunities for explicit teaching and higher-order questioning. It is possible that the results for explicit questioning were influenced by the focused summarization instruction the students received without the benefit of consistent classroom instruction as fourth graders received.

Research Question 2: Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title I learners?

This study investigated whether the GIST or Rule-based approach to summarization appeared to be more effective in the quality of summaries produced by the students. Both approaches followed the same format for teaching summarization. The first three lessons were teacher modeling, the next three were guided practice, the following three were partner support, and the final six were independent practice. Three more lessons were added based on observation and data from the pilot study. Having only three lessons of independent practice for the pilot study did not give the students sufficient time to become skilled at writing summaries. The additional three lessons allowed students to get more practice time and become more comfortable with the use of the summarization approach. This time also allowed the teachers to provide more individual feedback in helping the students to hone their skills.

The Summary Writing Assessment was the measure used to determine the effects of the summarization instruction on the quality of the summary writing of the students. Rubric scores were used to assess the summaries.

Fourth-grade students in both instructional groups improved the quality of summaries written between pretesting and post testing. However, the mixed ANOVA analysis indicated that there was a significant interaction between time and summarization instruction group, Wilks' Lambda = .777, $F(1, 35) = 10.026$, $p = .003$, partial eta squared = .223. A partial eta squared of .223, indicates a very large effect size. Fourth-grade students in the Rule-based group outperformed students in the GIST group in the quality of summaries they produced.

Fifth-grade students in both groups improved considerably between pretesting and post testing. Similarly to fourth graders, the analysis indicated that there was a statistically significant interaction between time and instructional group, Wilks' Lambda = .820, $F(1, 25) = 5.499$, $p = .027$, partial eta squared = .180. A partial eta squared of .180, indicates a very large effect size. Fifth-grade students in the Rule-based group outperformed students in the GIST group in the quality of summaries they wrote.

Some comments made by the students in reference to summary writing were:

- I learned to put things in categories. I never did that before. You sometimes have to do a lot of thinking about that.
- Writing a summary was good because it helped me to remember what happened in the story.
- I learned that a summary must have the main idea in it.
- I really liked the challenge of writing a short summary, but making sure the main idea is there.
- Summary writing helped me to remember what I read.
- I discovered that text structure and a summary go together. If the TS (text structure) is problem and solution, then my summary should show the problem and solution. If the TS is cause and effect, then I should write a summary that shows the cause and effect.
- I never thought you could write a summary for something in a social studies or science book.
- You really have to understand a story to write a summary for it.

Reflecting on Question 2 Results

The results stated above support the literature on summarization instruction. Teaching students to summarize not only improved the quality of their written summaries, but also their overall comprehension in content areas (Duke & Pearson, 2002; Taylor, 1982; Taylor & Beach, 1984). Summarization, a higher-level comprehension strategy, had a positive impact on the students' learning (NRP, 2000, Rinehart, Stahl, & Erickson, 1986). Summarizing not only encouraged a deeper engagement with the text, but also encouraged rereading as students constructed their summaries (Kamil, 2004).

The Rule-based approach represents a more traditional teaching method. Students are used to learning and following a series of steps or rules in order to accomplish a task. For example, they learn to follow certain steps in math with multiplication or division. In contrast, the GIST approach represents a less traditional teaching method. The students are not presented with rules to follow, but must internalize the process in order to develop rules. Through teacher modeling and guided practice, students in both grades began to delete, combine, and collapse information in order to summarize with a limited number of words. This approach was quite different for them. When working with partners or independently, some students, at times, became more focused on having 20 words than the actual content of the summary. This observation was made while listening to the audiotapes and reviewing summary post tests. If a student initially wrote a summary of 26 words, it appeared that words were sometimes randomly eliminated to reach the 20-word limit. This random elimination sometimes removed the main idea which, in turn, resulted in a lower rubric score on testing. I think with time the novelty of the GIST approach would subside, and the students would become more focused on the content of

their 20-words summaries, and not just 20 words. However, future research needs to investigate this hypothesis.

Steps were also taken to insure confidentiality of instruction. Each teacher only taught one of the summarization approaches so that methods could not be inadvertently mixed. In addition, all charts and other pertinent materials were taken down and stored after each lesson was completed. During the study, the summarization rules used by the Rule-based groups were not shared with the GIST students or teacher, and the GIST method was not shared with the Rule-based groups.

After the study was completed, I talked to the GIST teacher to get his reaction to that instructional approach. He said the students learned that every word had to be important in order to keep in the summary. Any word not important had to be deleted (Rule 1 in Rule-based). Students learned to combine information whenever possible (Rule 3 in Rule-based). The students learned quickly that a main idea sentence had to be included (Rule 4 in Rule-based). He also thought it was important to teach students that punctuation marks such as commas can sometimes be used in place of words. This was evident in the partner recordings when the students in the GIST group replaced the word “and” with a comma. This conversation with the GIST teacher proved to be extremely informative. As he was explaining that the students learned to delete irrelevant details, I stated, “Wow, that’s our rule 1.” As he explained how the students began to combine information, I stated, “That’s our rule 3.” Even though the GIST and Rule-based were different in their approaches to summarization, the students in both groups ultimately arrived at similar processes to produce their summaries.

Research Question 3: Does either instructional approach, GIST or Rule-based, appear to affect the students' concepts, views, or attitudes toward summarization?

This study investigated whether students' concepts, views, or attitudes toward summarization were affected by the instructional approach they received. The Student Attitude Survey was the measure used to determine the effects of the summarization instruction on the knowledge (concepts), importance (views), and attitude (attitudes) toward summarization. The students responded to 12 statements that were read to them by circling the appropriate Likert scale number for each: 1 – Strongly Agree, 2 – Agree, 3 – Not Sure, 4 – Disagree, or 5 – Strongly Disagree.

Grade 4

The fourth graders in both the GIST group and Rule-based group showed the greatest change in the category of “Knowledge of Summary Writing” which consisted of Statements 1, 8, 9, and 12. Both groups showed the greatest change in mean with the statement - It is important to include as many details as I can in my summary. On the pretest, the majority of students strongly agreed or agreed that many details should be included in their summaries. On the post test, almost all students strongly disagreed. With that statement, the GIST group had a 2.88 mean change and the Rule-based group 2.65 moving from agreeing to strongly disagreeing. The second greatest mean change for both groups was with the statement - A long summary with many sentences is better than a short one that only has a few sentences. On the pretest, almost all the students strongly agreed or agreed that a long summary with many sentences was better than a short one with a few sentences. On the post test, almost all the students strongly disagreed with that statement. The GIST group showed a mean change of 2.82 with the Rule-based a 2.55

change with that statement moving from agreeing to strongly disagreeing. The GIST group also showed its third largest change in mean in the category of knowledge with the statement – I copy sentences from the selection when I write a summary. This statement showed a mean increase of 1.58 with almost all students moving from strongly agreeing or agreeing on the pretest to the majority strongly disagreeing on the post test.

A slight change was made in the category of “Importance of Summary Writing” which consisted of Statements 3, 4, 7, and 10, and a slight change was also evident in the category of “Personal Attitude toward Summary Writing” which consisted of Statements 2, 5, 6, and 11.

Grade 5

The fifth graders in both the GIST group and Rule-based group also showed the greatest change in the category of “Knowledge of Summary Writing” which consisted of Statements 1, 8, 9, and 12. They showed the greatest change in mean with the statement - It is important to include as many details as I can in my summary. On the pretest, almost all students strongly agreed or agreed with that statement; on the post test, almost all students strongly disagreed or disagreed. The GIST group showed a 2.50 change and the Rule-based group a 3.07. The second greatest change for both groups was with the statement – I copy sentences from the selection when I write a summary. On the pretest, almost all students strongly agreed or agreed with that statement. On the post test, almost all strongly disagreed or disagreed resulting in the GIST group showing a mean increase of 1.86 and the Rule-based group a 1.78. The third greatest change in mean for both groups was with the statement - A long summary with many sentences is better than a short one that only has a few sentences. Almost all of the students strongly agreed or

agreed with that statement on the pretest. On the post test, almost all strongly disagreed or disagreed. The GIST group showed a 1.79 change with the Rule-based group a 1.21 change in mean.

A slight change was made in the category of “Importance of Summary Writing” which consisted of Statements 3, 4, 7, and 10, and a slight change was also evident in the category of “Personal Attitude toward Summary Writing” which consisted of Statements 2, 5, 6, and 11.

Reflecting on Research Question 3

Students’ knowledge of summary writing showed the greatest change. Before instruction, the students stated that they knew how to write summaries, and they were not hard to write. However, this prior knowledge was not evident in the pretest summary assessment or beginning instructional lessons. Their newly-gained knowledge about summary writing was evident in their post test writings.

Students seemed to know that summary writing was an important skill to learn, and it could help them to understand and remember information across the subject areas. Even though summary writing had not been taught to them previously, they intuitively understood its importance. The statement that showed the greatest change in this category was - Summary writing can help me in subjects other than reading. I believe that because content area reading selections were used in the study, students saw the connection between subject areas. In this case, social studies materials were used during the reading block of time. If fictional stories had been used, it is possible that the students would not have seen this connection.

Some changes occurred in the category of personal attitude toward summary writing. After instruction, the students reported that they enjoyed writing summaries because they now had a method to use. They also noted that they actually started to write summaries for class and home assignments.

Limitations of the Study

This study had several limitations. First, the number of participants was limited by the number of fourth and fifth graders attending our school. Each class had a total enrollment of 20 students. The participation rate for Grade 4A was 90%, Grade 4B was 100%, Grade 5A was 65%, and Grade 5B was 70%. Both instructors in the study were fourth-grade teachers which made it conducive to constantly remind students to return their parental consent forms. Both teachers frequently reminded the fifth graders to return the forms, but those reminders had to be when the students were entering or exiting the building, during resource times, or when the teachers saw them walking in the hallways.

Second, the study was limited as to the time of year when it could be conducted. It had to occur after state assessments were completed which was the end of March. The lessons did not begin until the middle of April due to spring vacation following the state assessments. At the end of this particular school year, we were challenged with local benchmark testing, fifth-grade graduation practice, and the possibility of a flu outbreak.

Third, the teachers were constrained as to when they could instruct their fifth-grade groups. They taught the fifth graders when their fourth graders went to resource classes - library, physical education, and art. After the fourth-grade teachers took their own classes to the resource room, they then went to work with the fifth graders until it was time to pick up their own classes from the resource teachers. This schedule was very

rushed, and, at times, the fourth-grade teachers had to combine their classes to allow each of them to have more instructional time with the fifth graders, or to make up time for a cancelled resource.

Finally, there was no comparison group in this study. Both groups of students were instructed in a summarization approach, GIST or Rule-based, so the students could have improved in reading comprehension, even with no summarization instruction.

Implications for Future Research

This research study suggests several possible directions for future research. In order to gain a further understanding of the effects of summarization instruction with urban, Title 1 students, it would be informative to replicate this study with similar populations in other schools and in other urban areas. Sample sizes could also be increased at the different grade levels with possible inclusion of sixth graders. Sixth graders are faced with gaining much information from a variety of textbooks, and they could profit from a reading strategy that may help them gain better understanding with expository text.

This study could also be replicated with less experienced teachers and new teachers to the profession. My colleague and I are both experienced teachers who have been at this particular school for quite some time and have gained the respect of students, staff, and parents. How would the results with less experienced teachers compare to the results I obtained in this study?

Another possible direction for future research would be to examine whether students maintained what they had learned after the initial instruction was over. How would later results (e.g., four or six weeks after initial study ended) compare to the

original results? Also longitudinal studies could be conducted to see how the students' reading achievement and summarizing abilities sustained over time (e.g., one year, two years). How would these results compare to the original results?

Future research could also extend the findings into other content areas such as science, history, or health especially at the middle-school level. How would the summarization approaches affect the reading achievement and summarizing abilities of the students with those types of text?

Intervention periods could also be extended in future research. Instead of teaching three lessons for five weeks, the lessons could be spread over seven or eight weeks with possibly only two lessons per week. The summarization lessons could also be taught once or twice a week spanning a semester or over a school year.

Implications for Instruction

These approaches offer teachers two different methods for teaching summarization not presently discussed in teachers' guides. The approaches could be matched to a student's preference or to the teacher's preference. Students and teachers may feel more comfortable with one particular approach over the other. Those who like structure and rules might be more apt to learn or teach the rule-based approach, whereas individuals who enjoy more of a discovery approach might be apt to learn or teach the GIST approach. Regardless of the method, students would still be learning to summarize text.

These summarization approaches require no additional materials or funding for the teacher or school, and can improve the reading comprehension and summarizing abilities of the students. Students are provided with concentrated periods of

comprehension instruction where teacher modeling, guided practice, and questioning help students to extract meaning from texts that are currently used by the students.

The GIST approach provides several instructional variations depending on the ability of the students, and density and length of the text. The students could write a constrained summary of 15 to 20 words for one or two paragraphs of text. They could also write a summary of no more than 15 words for each paragraph that is read. These summaries could then be condensed and revised to produce a final summary for the entire text.

Expository text can be challenging for students. Initially, a teacher could teach these summarization approaches, GIST and Rule-based, using fictional pieces of text until the students become comfortable with the procedure. Then the summarization approach could be applied to expository text.

A major implication for instruction is in the area of content area literacy instruction at the elementary level. Because of standardized tests, state standards, and technology, informational-text reading and instruction is critical for today's students. Unfortunately, a study of current basal readers found that only 20% of the pages in second, fourth, and sixth grade were informational text (Moss & Newton, 2002). In observations conducted by Fisher and Hiebert (1990), there was no evidence of teachers modeling strategies that would help the students to read expository text. Similarly, in observations of 192 fourth-grade social studies and science lessons, Armbruster et al. (1991) found no evidence of explicit instruction involving expository text.

This study provides teachers with strategies involving explicit instruction using expository text. The fourth and fifth graders worked with social studies text during the

traditional language arts block, but it could have easily occurred during the social studies period. Students are not confined to reading only at a certain time of day. Throughout the school day, they are reading to learn across content areas and need to be provided with effective instruction that will meet their needs.

Conclusions

In summary, this research study found that the two summarization approaches, GIST and Rule-based, had positive effects on the reading comprehension and summary writing of the fourth- and fifth-grade students in an urban, Title 1 school. The results provide evidence to encourage the teaching of summarization strategies to promote reading achievement especially with students who are lagging behind their peers in the area of reading. Providing an intense focus on the comprehension strategy of summarization proved to be beneficial to these students with no additional materials or funding needed to implement the instruction.

As Kucan and Beck (1997) stated, educators must work on ways to ensure that *all* students move from basic reading skills learned in the early grades to more demanding instruction that is required in later grades. However, several studies have reported that schools serving disadvantaged or lower achieving students often devote less time and emphasis to higher-order thinking skills than do schools serving more advantaged students (Allington & McGill-Franzen, 1989; Coley & Hoffman, 1990; Padron & Waxman, 1993). In addition, lower-achieving students often spend very little time on comprehension tasks, and frequently work on assignments focused on isolated word skills (Collins, 1986; Hiebert, 1983). These students typically receive the least amount of instruction and practice as they progress through school (Hall, Delquadri, Greenwood, &

Thurston, 1982). However, Mathes, Fuchs, Fuchs, Henley and Sanders (1994) reported that when low-achieving, at-risk students do receive effective reading instruction, they tend to experience greater success in their remaining school years.

Teaching the fourth- and fifth-grade students to summarize not only improved the quality of their written summaries, but also their overall comprehension with expository text. The summarization instruction provided them with a demanding task that required higher-order thinking skills. Their instructional time was concentrated on comprehension allowing them to gain meaning from expository text in order to write their summaries. The teaching of GIST and Rule-based summarization approaches had a positive impact on the reading comprehension and summary writing of intermediate-grade students who attend an urban, Title 1 school.

Appendix A

Teacher Log for GIST strategy: Grade 4A

Session	Date	Comments	Initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Teacher Log for Rule-based strategy: Grade 4B

Session	Date	Comments	Initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Teacher Log for GIST strategy: Grade 5A

Session	Date	Comments	Initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Teacher Log for Rule-based Approach: Grade 5B

Session	Date	Comments	Initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Appendix B

Instructional Time for Sessions: Grade 4A

Session Number	Beginning Time	Ending Time	Total Time
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Total Amount of Time Spent for all 15 Lessons	
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Instructional Time for Sessions: Grade 4B

Session Number	Beginning Time	Ending Time	Total Time
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Total Amount of Time Spent for all 15 Lessons	
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Instructional Time for Sessions: Grade 5A

Session Number	Beginning Time	Ending Time	Total Time
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Total Amount of Time Spent for all 15 Lessons	
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Instructional Time for Sessions: Grade 5B

Session Number	Beginning Time	Ending Time	Total Time
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Total Amount of Time Spent for all 15 Lessons	
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Appendix D

Fourth-Grade Reading Selections

Reading Selection 1: Maryland's Fishing Industry

Fishing is an important industry in Maryland. Shellfish are the core of this industry. Maryland ranks number one among all states in its oyster catch. This includes commercial fishing fleets and factories. Various centers shuck and process them. Others package and distribute them. Many crabs, both hard and soft-shell, are also caught in the Bay every year. Only the state of Maine leads Maryland in harvesting soft-shell crabs.

Many types of fish are caught along the coast and in the Bay. Local fish includes striped bass, rockfish, bluefish, and perch. Fishermen use different methods to catch fish. Seine nets are used to catch many fish near the water's surface. Trawls and gill nets are used to catch fish that live on the bottom.

Reference: Condensed from MSA Coach, Reading Grade 5: Triumph Learning, 2004

Readability Level: 5.0

Reading Selection 2: Making Things from Nature

Did you know that long ago Native Americans made their own clothing, make-up, and jewelry? Making clothes took much cooperation. The men and boys hunted. The women and girls used the animal skins to sew the clothing. Men made needles out of animal bones or antlers. Animal tendons were used as thread.

Face paint was used for special occasions. Both men and women used natural dyes from plants to tattoo their bodies. In the summer, they rubbed animal grease on their skin to keep away insects.

The people made jewelry too. They hung stones, shells, animal teeth, and claws around their necks. They used animal teeth and claws as ornaments for their ears. Sometimes they put a few feathers in their hair.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.9

Reading Selection 3: Early Baltimore

In the 1800's, Baltimore was the state's business center. Merchants shipped grain to other states and to the West Indies. New banks opened. Some merchants and bankers became very wealthy. The work of these men helped Baltimore grow.

Ship builders, captains, and sailors lived near the water. Workers hauled goods to and from the port. They loaded and unloaded the ships. They built roads, houses, warehouses, and wagons. Skilled craftspeople made more of the things people needed to live.

Some women worked to earn money. They ran boarding houses where newcomers to the city could live. Some did laundry. Some did sewing. Everyday jobs like cooking and cleaning took much longer than they do today, but they were just as necessary as they are today.

Many free black people came to Baltimore. There were lots of jobs there. Slaves escaped to Baltimore because they could disappear in the crowds. People from European countries and other states also came to Baltimore. It was the most diverse place in Maryland.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 5.0

Reading Selection 4: Colonists in Maryland

Many people who lived in colonial Maryland were poor. Many had small farms where they worked from early morning until late at night. They did not have money for servants or slaves, so they had to do everything themselves. Thread was spun on spinning wheels and was then woven on looms into cloth. From the cloth, clothing was made. Candles, soap, and furniture were all made in the home. Houses were small, often having only one or two rooms.

In spite of working hard, these early colonists had good times. Often work and pleasure were combined. Fishing and hunting were fun as well as sports which provided the family with food. Sometimes neighbors joined together for a barn raising. By each person doing his part, the barn was quickly built and then a party in the newly built barn would soon follow.

Reference: Condensed from Let's Learn about Maryland, Learning Well, 1996

Readability Level: 5.0

Reading Selection 5: Woodland Indians and Their Villages

Most Woodland Indians lived in small villages. They built as few as ten or as many as thirty houses. They made their villages near a river or stream. Freshwater rivers and streams gave them plenty of water to drink. People bathed there, too. They could catch fish to eat. Birds and animals came to the water to drink, so hunting was good there. The people also traveled in canoes on the rivers. It was faster than walking on the land.

Many American Indians lived near the Chesapeake Bay. They could not drink the salty water, but they found lots of good things to eat there.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.2

Reading Selection 6: The Food of the Woodland Indians

Woodland Indians ate many different kinds of foods. The men and older boys of the village hunted animals such as deer, rabbits, and squirrels. They also brought home birds such as pigeons and wild turkeys. They caught fish. In salt water, they gathered oysters, crabs, and clams.

Near today's Hagerstown there was a small grassy prairie. This was the only part of Maryland where bison lived and could be hunted.

Woodland Indians gathered wild berries. It must have been a special treat to find the sweet berries that were ripe only a few weeks during the spring and summer. People ate roots and leaves. Women and children gathered acorns and chestnuts that grew on oak and chestnut trees.

Reference: Adapted from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 5.0

Reading Selection 7: The Woodland Indians' Shelter

Woodland Indians needed shelter like all of us to survive. They learned to use the natural materials they could find nearby. They lived in wigwams or longhouses. They made their homes of wood, bark, and grasses. The chief or village leader usually had the largest home. Inside the wigwam, there was not much furniture. People built platforms around the walls. They covered these with grass mats or animal skins. They sat and slept on the platforms.

The people built a fire in the center of the wigwam. They used it for heat and cooking. They left an opening in the roof so the smoke could get out. When it rained or snowed, they covered the hole. The homes were hot and smoky. In good weather, people cooked and ate outdoors.

Reference: Adapted from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 3.4

Reading Selection 8: Native Americans Use of Animals

Native American used every part of the animals they hunted. After eating the meat from a deer, they used the skin for clothing. In the winter, people wore deerskin or bearskin with the fur towards they skin. They made warm leggings and long cloaks. For summer clothes, women tanned the deerskins. They scraped off the fur. Then they wet and stretched the skins so they would be smooth and light. During the hot summer, both men and women wore a kind of apron that they tied around their waists. Young children wore very little when the weather was warm.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.0

Reading Selection 9: Life in Maryland's Waterways

Because Maryland has so much water around it, fish, shellfish, and marine mammals live here. Some fish, such as trout, live in freshwater streams. Others, such as rockfish, bluefish, and flounder, live in salt water.

Some fish live in both fresh and salt water. For example, shad and herring are born in fresh water. They swim to the salty bay or ocean and live there for most of their lives. Then they return to the stream where they were born to have their young. These fish have a big problem when a dam blocks their route back upstream.

Shellfish live in our bay. This includes blue crabs, oysters, and clams.

Marine mammals such as dolphins travel along the Atlantic Coast and sometimes into the Chesapeake Bay. During the summer, if you sit on the beach and watch closely, you may see dolphins swim by. In cold weather, the dolphins migrate south to warmer waters.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.5

Reading Selection 10: Woodland Indians Made Their Own Tools

The Woodland Indians in Maryland made the tools that they needed. They made sewing needles from animal bones. They carved very hard stones to make knives and sharp points for arrows and spears. They stretched animal skins across the top of bowls to make drums. They used antlers to plow the gardens.

Men carved wood into many useful items. They carved ladles to serve soups and stews. They made bows from ash, hickory, and locust tress. They made axes by attaching stones to strong wooden handles. The men even made their own boats and canoes from the trees.

Women also made items that they needed. They grew gourds in the fields. They saved them until they were dry and hard. Then they used them in a number of ways. Gourds with dried seeds inside were musical instruments. You could hake them like a rattle. A dried gourd served as a bowl or bottle. Women also gathered grasses, reeds, and bark to make baskets. They made large and small clay pots for cooking and for storing food.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 3.7

Reading Selection 11: *The Ark and the Dove*

Two small sailing ships, named the *Ark* and the *Dove*, sailed into the Chesapeake Bay. After four long months at sea, they had finally arrived in Maryland. The ships stopped first at a small island in the Potomac River. The settlers named it St. Clement's Island.

Every man, woman, and child was glad the trip was over. Two storms had terrified them. The winds blew so hard and the waves rose so high that all the passengers were afraid their ship would sink. They were also afraid of a pirate attack. About twelve people died of a fever during the trip. Sailing the sea was dangerous.

The trip was also very uncomfortable. A few wealthy gentlemen had cabins, but most of the people lived all together on the lower deck. They ate and slept there. They had no privacy. Their bedding, spread out on the deck floor, was often wet. You can imagine how glad everyone was to get off the ship.

Reference: Condensed from *The Maryland Adventure*, Gibbs Smith Publisher, 2001

Readability Level: 4.4

Reading Selection 12: Maryland's First Town

The people who came on the *Ark* and the *Dove* had to find a place to live. They picked land where the Yaocomico Indians already had a village. The English gave the Indians cloth, hatchets, and hoes in exchange for the right to settle on the land.

The Indians were helpful to the settlers. They let them live in their wigwams. They gave them corn and other food to eat. They taught them to plant corn, beans, and squash together. They showed them where to find oysters and clams.

The settlers put up a high wooden fence and built houses. Most of the houses had only one room and a dirt floor. They planted fields outside the village. They called their town St. Mary's City. It was the colony's first capital.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 3.6

Reading Selection 13: The Colony Grows

Other settlers soon joined the passengers of the *Ark*. They brought indentured servants. The colony needed many workers to help clear land, plant crops, and build houses. Women began to join the men here. Children were born. Instead of being mostly men, Maryland became home to many families. They quickly settled land all along both sides of the Chesapeake Bay.

People grew their own food. They grew corn and vegetables. They raised cows and hogs. The Indians introduced the settlers to tobacco. The settlers grew the plant and sold the leaves to buyers in England. They called it “the stinking weed.”

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.3

Reading Selection 14: Education

Most children did not get the chance to go to school 200 years ago. Many children worked on farms, in mills, or at jobs in the cities. They did not have the time to go to school. Sometimes farm children went to school for just a few months during the winter when they did not have to help with the crops.

Books were expensive then, and most families owned only a few. If a family could afford one book, they usually had a Bible. Children learned to read by reading the Bible.

Wealthy children had tutors who came to their homes to teach them. They had their own libraries. Some of these children went to private schools. A private school is a school that the students' parents have to pay for.

In 1826, a new law allowed cities and counties to open public schools. However, none of the public schools let in African American children.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.8

Reading Selection 15: Maryland's Frontier

Settlers moved to the fertile hills and valleys in central and western Maryland. They grew wheat and some vegetables and fruits. Wheat was very important in the history of Maryland. Most families growing wheat lived on small farms and did most of the work themselves. They usually did not have slaves or indentured servants. Many towns became centers for shipping wheat to other colonies. They also shipped wheat to the West Indies. The people who built and owned the sailing ships that carried wheat made good money.

Before the wheat could be shipped, it had to be made into flour. This was done at a mill. Mills cost a lot of money to build, but their owners could earn a good living. Towns developed along the fall line, where there was rushing water. The waterfalls provided power for the mills.

The wheat farmers needed towns as central places to sell or ship their wheat. They also needed mills to grind their wheat into flour. They needed stores where they could buy supplies that were sent from the East. Towns grew to meet the need for mills and stores.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.4

Reading Selection A: Pretest for Summary Writing Assessment

Native American Farmers in Maryland

The Woodland Indians' most important new idea was farming. The people still hunted and gathered food, but they began to grow food, too. Because they grew crops, people could settle down in one place. They no longer had to travel all over to find enough to eat. However, they did still travel to find wild animals to hunt. Perhaps because there was more food, the population grew.

Woodland Indians cleared the forests to make their fields. The women planted the crops. They planted a small hill of corn. When the corn started to grow, they planted beans or peas that would climb the cornstalk. It helped the corn grow. Around the hills of corn, they also planted squash, pumpkins, and gourds. These vines covered the ground between the hills of corn and helped to keep weeds from growing there.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.2

Reading Selection B: Post test for Summary Writing Assessment

Maryland Birds

When you wake up in the morning, listen to the birds singing outside. Hundreds of different kinds of birds live in Maryland. Some of them stay here all year round. Some spend only the summer or winter here. Others pass through in the fall and spring as they migrate from Canada to places farther south.

Ducks, geese, swans, egrets, and herons live near the water. Much of their food comes from the water. Brown pelicans now live along the coast of Maryland during the summer. Seagulls live by the ocean and across much of our state.

Many birds in Maryland are birds of prey called raptors. They swoop down and catch small animals or fish in their beaks or claws. Then they take them to a safe place and eat them. Hawks, owls, peregrine falcons, ospreys, and bald eagles are raptors that live in Maryland.

Reference: Condensed from The Maryland Adventure, Gibbs Smith Publisher, 2001

Readability Level: 4.2

Appendix E

Fifth - Grade Reading Selections

Reading Selection 1: The Stamp Act

England wanted money from the colonies. They needed to pay for the British soldiers serving in America. So the British Parliament passed a new law in 1765 called the Stamp Act. It said that stamps must be purchased for all important papers in America. Legal papers, newspapers, and even playing cards needed stamps.

The colonists got angry! They did not think they should have to pay this tax. Colonists were not allowed to serve in the British Parliament. The slogan “no taxation without representation” became the colonists’ protest.

A group called the Sons of Liberty was formed. Its members fought against the Stamp Act. Sometimes they burned the stamps and bullied the British stamp agents. A few agents were tarred and feathered! Many agents quit. It was hard to sell the stamps in America. So the British gave up on the Stamp Act and cancelled it in 1766.

Reference: Fascinating Facts: Social Studies, Grades 4-5, The Mailbox, 2007

Readability level 6.0

Reading Selection 2: The Statue of Liberty

The Statue of Liberty is an American symbol. However, not everyone knows that it was made in France. The French people wanted to give Miss Liberty to America as a 100th birthday gift. It was too big to send all in one piece. They had to take it apart and carefully pack it in 214 boxes. Then they loaded the boxes onto a ship. During the trip, the ship almost sank in an ocean storm. After several weeks at sea, the Statue arrived in the United States.

Once it got here, the Statue needed a base, but there was no money to build one. So a New York newspaper offered to print the name of every person who gave money to build the base. People sent money until enough had been raised. Finally, the Miss Liberty was pieced back together and put in place. She stands proudly on Liberty Island in New York City.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.8

Reading Selection 3: The Constitution

The Constitutional Convention was a meeting held in Philadelphia, Pennsylvania. It began in May of 1787 and lasted about four months. Each state except for Rhode Island sent a representative. Sometimes these men agreed, and other times they disagreed. They argued and made changes. Step by step they wrote the United States Constitution. Today it is the supreme law of our land. It created the type of government we have and listed our basic rights.

Clerks used ink and feather quill pens to write the four pages of the Constitution. Then 39 men signed their names to it. This meant that they agreed with what it said. Some people believe that it is the most important document ever written. No wonder it took so long to write!

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.7

Reading Selection 4: The Trail of Tears

In 1830, the Cherokee Nation was ordered to move west. Land had been set aside for them in Indian Territory, now the state of Oklahoma. Most of the Cherokees refused to move. They didn't fight the order with bows and arrows. They fought in the courts and in Congress. After eight long years, they won their case in the U.S. Supreme Court. But President Andrew Jackson refused to carry out the law. The Cherokees' cause was lost.

In the winter of 1838, the U.S. Army drove some 14,000 Cherokees from their homes. The 800-mile journey west took 6 months. Most of the Cherokees had to travel on foot. Hunger, cold, and sickness became their deadly enemies. Dozens of men, women, and children died and were buried along the trail. About 4,000 Cherokees never reached Oklahoma. And ever since, this long, sad march of the Cherokees has been known as the Trail of Tears.

Reference: Reading for Comprehension Level E, Continental Press, 2007

Readability Level 5.5

Reading Selection 5: Moving West

America changed due to the swift movement of many people to the West. People made roads, built homes, and created new towns in a matter of months. This caused problems for the Native Americans. They did not want the settlers to come West. They wanted to go on with their way of life, following buffalo herds for food. The new roads went right through the areas where Native Americans lived and hunted. The settlers didn't want other people on their land. The Native Americans couldn't understand this. They did not believe that a person could own land. Unfortunately, the two groups usually did not work things out peacefully.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.5

Reading Selection 6: The Boston Tea Party

In 1773, the British government created the Tea Act to help a struggling British tea business. The law said that this tea company could sell its tea in colonies for a low price. This law would hurt the colonial merchants because a tax still had to be paid on the tea they sold. The colonists thought that if they agreed to pay this tax, they would be taxed even more. When three ships arrived in Boston, the colonists wouldn't let the tea on land. One night, a group of colonists in disguises boarded the ships. They threw 342 chests of tea into the harbor. This later became known as the Boston Tea Party.

Today, we still don't know all the names of the people who dumped the tea that night. The group members swore one another to secrecy. Partial lists of names do exist. And only one man, Francis Akeley, went to prison for this event.

Reference: Fascinating Facts: Social Studies, Grades 4-5, The Mailbox, 2007

Readability level 5.5

Reading Selection 7: The Star-Spangled Banner

Did you know that our national anthem was written right here in Baltimore?

America was at war with Great Britain in 1814. On September 13, a British ship attacked Fort McHenry in Maryland. An American named Francis Scott Key was near the fort. He watched bombs hit the fort during the night. He worried that the British might take control of the fort. When the sun came up, the American flag was still flying high! Key was so excited that he wrote a poem about the event.

The poem was published in Baltimore. A note explained that it should be sung to a tune what was popular at that time. Soon the song was printed in other cities. People liked it. In 1895, the U.S. Army decided to sing it each day when it raised and lowered the flag. Then, in 1931, Congress declared “The Star-Spangled Banner” the national anthem of the United States.

Reference: Fascinating Facts: Social Studies, Grades 4-5, The Mailbox, 2007

Readability Level: 5.5

Reading Selection 8: The Journey West

In the 1800's, pioneers began to move west to start a new life. They often traveled in covered wagons. Many of them traveled together forming wagon trains. This provided them with protection and assistance. Traveling in wagons did not make for a fast or comfortable journey. Often oxen were used to pull the wagons. They walked only 1 to 2 miles per hour. Wagon trains traveled 10 to 15 miles a day. They went less in bad weather or when the ground was rough or muddy. The wagons had to cross rivers, dry plains, and high mountains.

The wagons were filled with supplies for the long journey. This left little room for passengers. The only passengers who rode inside of the wagon were very old, young, or sick. Even the person driving the wagon often walked alongside the oxen.

Reference: Condensed from Our Nation, Grade 5, McGraw-Hill, 2003

Readability Level 5.4

Reading Selection 9: Buffalo

Buffaloes are very heavy animals. They are the largest land animals in North America. A male usually weights about 1,800 pounds. The female is smaller. It usually weights less than 1,000 pounds. Another name for the American buffalo is bison.

Buffaloes have cloven hooves. Their short, sharp horns are permanent. The horns curve out and then up. They have a keen sense of smell. They have very poor eyesight.

A buffalo has a hump over the front shoulders. They are covered with thick, dark hair. Buffaloes live in herds. A mother buffalo has only one calf at a time. The calf is reddish colored. A calf can keep up with the herd when it is only a few days old.

Reference: Condensed from Theme-Based Nonfiction Reading Comprehension, Grade 4, Instructional Fair, 2003

Readability Level: 4.5

Reading Selection 10: The Buffalo and the Plains Indians

Plains Indians hunted for buffalo on foot before they had horses. Scouts went out to look for herds. When the scout found a herd, he returned to tell the chief. The chief and the council prayed for the hunter's safe return. The hunt began. Sometimes the hunters drove the buffaloes off a cliff. Horses made buffalo hunting easier. But it wasn't safer. The hunters rode into the herd with bows and arrows and spears. After the hunt the women and children skinned the animals. Then they stripped off the meat. The women cooked the fresh buffalo meat. They dried the meat they didn't eat. A special ceremony celebrated the end of a successful hunt.

Buffaloes were very important to the Plains Indians. They were over 30 tribes in that region. They lived by hunting the buffalo. They never hunted the buffalo for sport. The buffalo was their major source of meat. It wasn't only a source of food. They had many uses for the buffalo. The hides of about 12 buffaloes covered a teepee. Native Americans used every part of the buffalo. They even used dried buffalo dung. Dung was called buffalo chips. The Native Americans used buffalo chips for fuel.

Reference: Condensed from Theme-Based Nonfiction Reading Comprehension, Grade 4, Instructional Fair, 2003

Readability Level 4.6

Reading Selection 11: The Anasazi

Eight hundred years ago Native Americans, called the Anasazi, lived in the American Southwest. Their land was very dry, yet they grew crops. They dug ditches that provided water to their plants. They built their villages by carving out the clay in the sides of cliffs. Their homes were so well made that many of them still stand today.

No one knows what became of the Anasazi. They just disappeared about 600 years ago. Their villages show no signs of a war. They left no graves to indicate a wave of serious illness. We may never know what happened to them.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.0

Reading Selection 12: Westward, Ho!

The size of our country was growing quickly. People were in search of land. Upon arriving in America, many headed west to settle. They were called pioneers. Pioneers were the first people to settle an area. They came across the mountains looking for good land.

Pioneers came by the thousands. Some traveled down the Ohio River, while others came down the Mississippi River. They traveled on flatboats. The flatboats could go through shallow places in the river without getting stuck. When enough people arrived, that state was given statehood.

As more and more people moved west, they came in contact with Indians. The Indians were not happy with the intruders. Tensions grew as the pioneers looked for new land and the Indians worked to keep their land.

Reference: [Daily Warm-Ups: Reading Grade 5 Teacher Created Resources](#)

Readability Level: 5.5

Reading Selection 13: The Railroad

The Transcontinental Railroad allowed people to travel by train across the entire width of the United States. Building it had taken years of work. Most of it had to be done by hand. The work was hard and often dangerous. Many men lost their lives blasting tunnels through mountains. Still, lots of men signed up to build the railroad.

Railroad crews started at each of America's coasts. One crew started laying tracks at the East Coast. They headed west as fast as they could. The other crew began laying tracks at the West Coast. They headed east as fast as they could. The crews met each other when the rails joined in Utah on May 10, 1869. A big celebration marked the railroad's completion.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 4.4

Reading Selection 14: Thanksgiving

The Pilgrims arrived in Plymouth, Massachusetts in December 1620. During that winter many of them died of the cold, illness, and a lack of food. Less than half of them lived until spring. That is when the Native Americans found the starving people. They showed them how to plant corn and beans. They showed them the best places to fish. The Pilgrims probably could not have survived without their help.

After their first harvest, the Pilgrims felt very grateful that they had food to make it through the next winter. So they held the first Thanksgiving in the fall of 1621. They invited the Native Americans to a meal that lasted for three whole days.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.6

Reading Selection 15: American Symbols

When people see American symbols, they think of the United States. America's oldest symbol is the Liberty Bell. It rang on July 4, 1776, when Americans first said that they were free from British rule.

Our flag is another symbol. It has one star for each state. It has a stripe for each of the first 13 states. The red stripes stand for bravery, and the white stripes stand for truth.

Congress chose the American bald eagle as our national bird in 1782. This bird lives only in North America. These birds stand for strength, beauty, and long life.

Reference: Main Idea: Grade 5, Teacher Created Materials, 2004

Readability Level: 5.3

Reading Selection A: Pretest for Summary Writing Assessment

Life in the Colonies

Life in the early colonies was simple. Farming was the main way the colonists earned a living. Most people lived and worked on a farm. Most families were large, and every member of the family had to help out.

Most colonists made their own clothes, grew their own food, and built their own homes. They also helped their neighbors build barns and houses. Because there was so much work to do, colonists often combined work with play. There were plowing and corn husking competitions, quilting bees, and foot races. The sports of the day included horse racing, bowling, hunting, and fishing.

Many colonists also made their own furniture or did without. At this time, it was very expensive to buy furniture.

Reference: Condensed from Our Nation, Grade 5, McGraw-Hill, 2003

Readability Level 5.2

Reading Selection B: Post test for Summary Writing Assessment

Buffalo Soldiers

Buffalo soldiers were soldiers in the United States Army. They were all African Americans who served from 1867 to about 1896. They explored new territory in the West. They built some of the first roads in the wilderness. They laid telegraph lines. The telegraph lines were laid across rough and dangerous lands.

Buffalo soldiers traveled in deserts. They found water holes there. They told new settlers where the water holes were. They built settlements where people came to live. They guarded the mail and kept the men carrying the mail safe from dangerous attacks. These men worked hard. They did not quit or run away. These men were named buffalo soldiers by the Native Americans who lived in the western part of the United States.

Reference: Nonfiction Reading: Social Studies Grade 4 Teacher Created

Resources

Readability Level: 5.3

Appendix F

GIST Chart



Meet the Challenge of

Writing a Summary in 20 Words or Less

Appendix G

Chart for Writing a GIST Summary

Remember the Guidelines for Writing a
GIST Summary



- 1. Read the selection several times if needed.**
- 2. Identify its text structure.**
- 3. Identify the gist of the selection with a partner or independently.**
- 4. Identify the key words that helped you to identify the gist.**
- 5. Follow the rules for writing a GIST summary:**
 - One or two sentences**
 - No more than 20 words**
 - Summary captures the gist of the selection, and not all the details.**

Appendix H

Instructional Lesson Plans for GIST Groups

Lessons for Week 1

Session 1

The purpose of this lesson is to introduce the GIST summarization strategy. The teacher will model the strategy for the class.

Materials

- Transparency with reading selection #1
- Overhead projector
- Chart with 20 blanks on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins with a discussion about what strategies good readers use after reading to check their understanding.
- _____ 2. The teacher asks the students what a summary is. He also asks how many of them have written summaries and examples of times when they've written them.
- _____ 3. The teacher discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas, helps you to remember important information, helps you find the main idea.
- _____ 4. The teacher explains that the students will learn a fun way to write a great summary of 20 or fewer words, and this is called the GIST way. He explains that when you find the *gist* of a selection, you want the main idea of it and not all the details.

Instructional Practice

- _____ 5. Using the transparency with reading selection #1, the teacher displays only the first paragraph to the students. The students silently read the paragraph followed by the teacher orally reading it.
- _____ 6. They will identify the main idea and explain what the paragraph is about.
- _____ 7. Using think-aloud, the teacher explains while modeling how to

summarize the paragraph in 20 or fewer words. He talks aloud identifying the gist of the paragraph and key words that helped him to decide. He writes one word per blank revising as he completes the summary.

- _____ 8. The teacher then reads the final summary to the class. This summary statement is then removed and not used again.
- _____ 9. The teacher then displays the entire reading selection. The students silently read the selection followed by the teacher orally reading it.
- _____ 10. Using the “Text Structures for Expository Text” chart, the teacher models through his “think-aloud” how to identify the text’s structure. The teacher asks the students to identify the main idea of the entire selection and explain what it was about.
- _____ 11. Using think-aloud, the teacher explains while modeling how to summarize the selection in 20 or fewer words. He talks aloud identifying the gist of the selection and key words that helped him to decide. He writes one word per blank revising as he completes the summary.
- _____ 12. The teacher reads the summary to the students, and the students discuss what makes it a good summary (contains the gist of the selection and not all the specific details).

Lesson Closure

- _____ 13. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.

Record Ending Time: _____

Session 2

The purpose of this lesson is to have the teacher model the use of the GIST summarization strategy with the class.

Materials

- Transparency with reading selection #1
- Transparency with reading selection #2
- Overhead projector
- Transparency or chart with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during session 1.
- _____ 2. The teacher again discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas, helps you to remember important information, helps to identify the main idea.
- _____ 3. The teacher has the students reread reading selection #1, and the summary that was written for it.
- _____ 4. The students discuss what made it a good summary (contains the gist of the selection and not all the specific details).

Instructional Practice

- _____ 5. Using the transparency with reading selection #2, the teacher displays it to the students. The students silently read the selection followed by the teacher orally reading it.
- _____ 6. Using the "Text Structures for Expository Text" chart, the teacher models through his "think-aloud" how to identify the text's structure, and discusses it with the students. The teacher asks the students to identify the main idea of the entire selection and explain what it was about.
- _____ 7. Using think-aloud, the teacher explains while modeling how to summarize the paragraph in 20 or fewer words. He talks aloud identifying the gist of the paragraph and key words that helped him to decide. He writes one word per blank revising as he completes the summary.
- _____ 8. The teacher then reads the final summary to the class, and the students discuss what makes it a good summary (contains the gist of the selection and not all the specific details).

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.

Record Ending Time: _____

Session 3

The purpose of this lesson is to have the teacher model the use of the GIST summarization strategy with the class.

Materials

- Transparency with reading selection #2
- Transparency with reading selection #3
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during session 2.
- _____ 2. The teacher records the student responses on the same chart paper as used during the previous session.
- _____ 3. The teacher has the students reread reading selection #2, and the summary that was written.
- _____ 4. The teacher asks the students what made it a good summary.

Instructional Practice

- _____ 5. Using the transparency with reading selection #3, the teacher displays it to the students. The students silently read the selection followed by a student orally reading it.
- _____ 6. Using the “Text Structures for Expository Text” chart, the teacher models through his “think-aloud” how to identify the text’s structure, and discusses it with the students. The teacher asks the students to identify the main idea of the entire selection and explain what it was about.
- _____ 7. Using think-aloud, the teacher explains while modeling how to summarize the paragraph in 20 or fewer words. He talks aloud identifying the gist of the paragraph and key words that helped him to decide. He writes one word per blank revising as he completes the summary.
- _____ 8. The teacher then reads the final summary to the class, and the students discuss what makes it a good summary (contains the gist of the selection and not all the specific details).

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during

the lesson by first recording their thoughts in their notebooks, and then sharing with the class. Their summaries can be no more than 20 words.

Record Ending Time: _____

Lessons for Week 2

Session 4

The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Materials

- Transparency with reading selection #3
- Transparency with reading selection #4
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher records the student responses on the same chart paper as used during the previous session.
- _____ 3. The teacher has the students reread reading selection #3, and the summary that was written.
- _____ 4. The teacher asks the students what made it a good summary.

Instructional Practice

- _____ 5. Using the transparency with reading selection #4, the teacher displays it to the students. The students silently read the selection followed by a student orally reading it.
- _____ 6. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying the text’s structure and discusses it. The students orally discuss as a class what the selection was about noting main idea and key words in the selection.
- _____ 7. Using the chart or transparency with 20 lines, the teacher calls on the students to help write the summary. The teacher records each of their words on one of the lines. Under no circumstance can a twenty-first word be recorded. The students must decide, with the teacher’s help, what words can be eliminated to make room for more important words.
- _____ 8. The teacher then reads the final summary to the class, and students decide if it captures the gist of the paragraphs. Revisions can be made if needed.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class. Their summaries must be no more than 20 words.

Record Ending Time: _____

Session 5

The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Materials

- Transparency with reading selection #4
- Transparency with reading selection #5
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher discusses why summarization is an important strategy to learn.
- _____ 3. The teacher has the students reread reading selection #4, and the summary that was written.
- _____ 4. The teacher asks the students what made it a good summary.

Instructional Practice

- _____ 5. Using the transparency with reading selection #5, the teacher displays it to the students. The students silently read the selection followed by a student orally reading it.
- _____ 6. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying the text’s structure and discusses it. The students orally discuss as a class what the selection was about noting main idea and key words in the selection.
- _____ 7. Using the chart or transparency with 20 lines, the teacher calls on the students to help write the summary. The teacher records each of their words on one of the lines. Under no circumstance can a twenty-first word be recorded. The students must decide, with the teacher’s help, what words can be eliminated to make room for more important words.
- _____ 8. The teacher then reads the final summary to the class, and students decide if it captures the gist of the paragraphs. Revisions can be made if needed.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class. Their summaries must be no more than 20 words.

Record Ending Time: _____

Session 6

The purpose of this lesson is to have the teacher provide students with guided practice in the use of the GIST strategy.

Materials

- Transparency with reading selection #5
- Transparency with reading selection #6
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher has the students reread reading selection #5 and the summary that was written.
- _____ 3. The teacher asks the students what made it a good summary.

Instructional Practice

- _____ 4. Using the transparency with reading selection #6, the teacher displays it to the students. The students silently read the selection followed by a student orally reading it.
- _____ 5. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying the text’s structure and discusses it. The students orally discuss as a class what the selection was about noting main idea and key words in the selection.
- _____ 6. Using the chart or transparency with 20 lines, the teacher calls on the students to help write the summary. The teacher records each of their words on one of the lines. Under no circumstance can a twenty-first word be recorded. The students must decide, with the teacher’s help, what words can be eliminated to make room for more important words.
- _____ 7. The teacher then reads the final summary to the class, and students decide if it captures the gist of the paragraphs. Revisions can be made if needed.

Lesson Closure

- _____ 8. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class. Their summaries must be no more than 20 words.

Record Ending Time: _____

Lessons for Week 3

Session 7

The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Materials

- Transparency with reading selection #6
- Transparency with reading selection #7
- Individual copies of reading selection #7 for each student
- Copies of chart with 20 lines on it: 1 for every pair of students
- Copies of guidelines and procedures to follow for GIST: 1 for every student
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

<p>Record Beginning Time: _____</p>
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Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher has the students reread reading selection #6 and the summary that was written.
- _____ 3. The teacher asks the students what made it a good summary.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will work with a partner to write a GIST summary.
- _____ 5. The teacher places the partners next to each other. Partners have been identified prior to this lesson.
- _____ 6. Using think-pair-share, the teacher has the students identify 3 important rules to follow when writing a GIST summary.
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. The teacher then writes the 3 rules on chart paper and reminds the students to refer to them when working together.
- _____ 8. The teacher distributes the individual copies of reading selection #7 to the students, and also displays its transparency.

- _____ 9. The teacher tells the students that they will work together to write a summary for the selection. The students will write the practice summaries in their notebooks. Their final summary will be written on the hand-out with the 20 lines on it.
- _____ 10. The teacher distributes copies to the students and reviews the procedure for writing a GIST summary.
1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 11. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 12. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. The class discusses them focusing on the number of words used, and if the summary contains the gist of the selection.

Lesson Closure

- _____ 13. The students write the 3 rules for GIST summarization in their notebooks.
- _____ 14. Students place reading selections in their folders. One of the partners places the finished summary in his/her folder. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 8

The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Materials

- Transparency with reading selection #8
- Individual copies of reading selection #8 for each student
- Copies of chart with 20 lines on it: 1 for every pair of students
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher asks the students to describe times when it would be helpful to write a summary.
- _____ 3. The teacher asks the students in what other subject areas besides reading would summarizing be helpful.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will again work with a partner to write a GIST summary.
- _____ 5. The teacher places the same partners next to each other.
- _____ 6. The students identify the rules for writing a GIST summary.
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. The teacher distributes the individual copies of reading selection #8 to the students, and also displays its transparency.
- _____ 8. The teacher tells the students that they will work together to write a summary for the selection. The students will write the practice summaries in their notebooks. Their final summary will be written on the hand-out with the 20 lines on it.
- _____ 9. The teacher reviews the procedure for writing a GIST summary. Students received a copy the previous day.
 - 1. Read the selection several times if needed.
 - 2. Identify its text structure.

3. Identify the gist of the selection.
4. Identify the key words that helped you to identify the gist.
5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.

_____ 10. As the students work, the teacher circulates around the room answering questions and offering help.

_____ 11. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. The class discusses them focusing on the number of words used, and if the summary contains the gist of the selection.

Lesson Closure

_____ 12. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.

_____ 13. Students place reading selections in their folders. One of the partners places the finished summary in his/her folder. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 9

The purpose of this lesson is to have the teacher provide students with partner support in the use of the GIST strategy.

Materials

- Transparency with reading selection #9
- Individual copies of reading selection #9 for each student
- Copies of chart with 20 lines on it: 1 for every pair of student
- Overhead projector
- Transparency with 20 lines on it
- Marker
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what they learned about summarizing during the previous sessions.
- _____ 2. The teacher asks the students what makes a good summary.
- _____ 3. The teacher asks the students their opinions about using the GIST strategy.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will work with a partner to write a GIST summary for the last time.
- _____ 5. The teacher places the same partners next to each other.
- _____ 6. The teacher distributes the individual copies of reading selection #9 to the students, and displays its transparency.
- _____ 7. The teacher tells the students that they will work together to write a summary for the selection. The students will write the practice summaries in their notebooks. Their final summary will be written on the hand-out with the 20 lines on it.
- _____ 8. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
 - 1. Read the selection several times if needed.
 - 2. Identify the gist of the selection.
 - 3. Identify the key words that helped you to identify the gist.
 - 4. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.

- _____ 9. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 10. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. The class discusses them focusing on the number of words used, and if the summary contains the gist of the selection.

Lesson Closure

- _____ 11. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 12. Students place reading selections in their folders. One of the partners places the finished summary in his/her folder. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Lessons for Week 4

Session 10

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #10
- Individual copies of reading selection #10 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what was learned about summarizing during previous session.
- _____ 2. The teacher randomly calls on students to finish this statement: A summary is _____.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will write GIST summaries by themselves.
- _____ 4. The teacher distributes reading selection #10 to each student, and displays its transparency.
- _____ 5. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 6. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 7. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. The class discusses them focusing on the number of words used, and if the summary contains the gist of the selection.

Lesson Closure

- _____ 8. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 9. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 11

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #11
- Individual copies of reading selection #11 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students how they felt about writing summaries in yesterday's lesson: Was it easy or hard to do, what did they learn from working alone on summarization., what kind of problems did they experience.
- _____ 2. The teacher asks the students how can knowing how to write a good summary help them become better students.

Instructional Practice

- _____ 3. The teacher explains to the students that today they write GIST summaries by themselves.
- _____ 4. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 5. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 6. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. The class discusses them focusing on the number of words used, and if the summary contains the gist of the selection.

Lesson Closure

- _____ 7. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 8. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 12

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #12
- Individual copies of reading selection #12 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what they have learned about writing a summary.
- _____ 2. The teacher asks the students how they will use the GIST strategy in the future.
- _____ 3. Using Think-Pair-Share, the teacher asks the students how they would explain the GIST strategy to a friend.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will again write GIST summaries by themselves.
- _____ 5. The teacher will distribute copies of reading selection #12 to each student, and display the transparency.
- _____ 6. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
 1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. Class discusses them focusing on the number of words used, and if the gist of the selection was stated.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Lessons for Week 5

Session 13

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #13
- Individual copies of reading selection #13 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what they have learned about writing a summary.
- _____ 2. The teacher asks the students how they will use the GIST strategy in the future.
- _____ 3. Using Think-Pair-Share, the teacher asks the students how they would explain the GIST strategy to a friend.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will again write GIST summaries by themselves.
- _____ 5. The teacher will distribute copies of reading selection #13 to each student, and display the transparency.
- _____ 6. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
 1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is

read orally and text structure identified. Students are called on to read their summaries. Class discusses them focusing on the number of words used, and if the gist of the selection was stated.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 14

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #14
- Individual copies of reading selection #14 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what they have learned about writing a summary.
- _____ 2. The teacher asks the students how they will use the GIST strategy in the future.
- _____ 3. Using Think-Pair-Share, the teacher asks the students how they would explain the GIST strategy to a friend.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will again write GIST summaries by themselves.
- _____ 5. The teacher will distribute copies of reading selection #14 to each student, and display the transparency.
- _____ 6. The teacher reviews the procedure for writing a GIST summary by referring students to their charts.
 1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. Class discusses them focusing on the number of words used, and if the gist of the selection was stated.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 15

The purpose of this lesson is to have students independently use the GIST strategy.

Materials

- Transparency with reading selection #15
- Individual copies of reading selection #15 for each student
- Overhead projector
- Student notebooks/folders

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students what they have learned about writing a summary.
- _____ 2. The teacher asks the students how they will use the GIST strategy in the future.
- _____ 3. The teacher asks the students why summarization is an important skill to learn.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will again write GIST summaries by themselves.
- _____ 5. The teacher will distribute copies of reading selection #15 to each student, and display the transparency.
- _____ 6. The teacher reviews the procedure for writing a GIST summary by referring the students to their charts.
 1. Read the selection several times if needed.
 2. Identify its text structure.
 3. Identify the gist of the selection.
 4. Identify the key words that helped you to identify the gist.
 5. Follow the rules for writing a GIST summary:
 - One or two sentences
 - No more than 20 words
 - Summary captures the gist of the selection, and not all the details.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is read orally and text structure identified. Students are called on to read their summaries. Class discusses them focusing on the number of words used, and if the gist of the selection was stated.

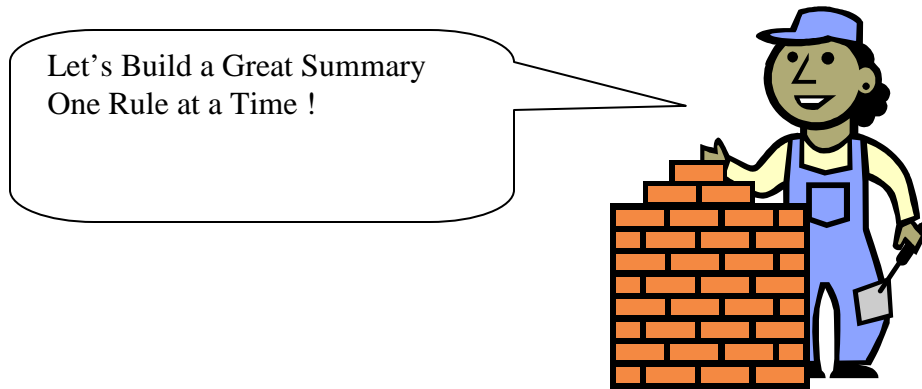
Lesson Closure

- _____ 9. The students summarize what they learned about summarization during all the lessons.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Appendix I

Chart for Rule-based Approach to Summarization



- Rule 1:** Cross out information that is not important for your understanding.
- Rule 2:** Cross out words that repeat information.
- Rule 3:** Circle terms or actions that can be changed into a general term.
(For example: red, yellow, orange can be changed to “colors”: pine, maple, oak can be changed to “trees.”)
- Rule 4:** Find a topic or main idea sentence. Highlight it in yellow.
- Rule 5:** If a topic sentence is not there, invent one.

Now you're ready to write a great summary with your topic sentence and
remaining important detail

Appendix J

Instructional Lesson Plans for Rule-based Groups

Lessons for Week 1

Session 1

The purpose of this lesson is to introduce the rule-based approach to summarization. The teacher will model Rule 1 and Rule 2 for the class.

Materials

- Transparency with reading selection #1
- Chart with rules
- Overhead projector
- Marker

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins with a discussion about what strategies good readers use after reading to check their understanding.
- _____ 2. The teacher asks the students what a summary is and examples of times when they've written them.
- _____ 3. The teacher discusses the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas.
- _____ 4. The teacher explains that the students will learn a fun way to write a great summary following five rules. The teacher displays the chart with the rules displayed.

Instructional Practice

- _____ 5. Using the transparency with reading selection #1, the teacher displays it to the students. The students silently read selection followed by the teacher orally reading it.
- _____ 6. Using the "Text Structures for Expository Text" chart, the teacher models through her "think-aloud" how to identify the text's structure. She also models how to identify the main idea and explains what the paragraph is about.
- _____ 7. The teacher explains to the students that she will show them how to use Rule 1 and Rule 2.
- _____ 8. Using think-aloud, the teacher models how to use Rule 1 with the

selection – one sentence at a time. As she is reading and rereading the selection, she crosses out information that is not important for understanding and gives an explanation.

_____ 9. The teacher asks the students to explain what they saw and heard the teacher do while showing Rule 1. She asks the students to explain how she decided what information to cross out.

_____ 10. Using think-aloud, the teacher models how to use Rule 2 with the same selection – one sentence at a time. As she is reading and rereading the selection, she crosses out words that repeat information and gives an explanation.

_____ 11. The teacher asks the students to explain what they saw and heard the teacher do while showing Rule 2. She asks the students to explain how she decided what information to cross out.

Lesson Closure

_____ 12. The students summarize through discussion what was learned from this lesson about summarization.

Record Ending Time: _____

Session 2

The purpose of this lesson is to have the teacher review Rule 1 and Rule 2, and model Rule 3, 4, and 5 with the class.

Materials

- Transparency with reading selection #1
- Overhead projector
- Chart with rules
- Marker
- Yellow highlighter

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins with a discussion about what was learned in the previous session concerning summarization.
- _____ 2. The teacher asks the students why summaries are helpful.
- _____ 3. The teacher reviews the five rules for summarizing, and explains that today they will review Rules 1 and 2, and learn how to use Rules 3, 4, and 5.

Instructional Practice

- _____ 4. Using the transparency with reading selection #1, the teacher displays it to the students. The students silently read selection followed by the teacher orally reading it.
- _____ 5. 6. Using the “Text Structures for Expository Text” chart, the teacher models through his “think-aloud” how to identify the text’s structure. She also models how to identify the main idea and explains what the paragraph is about.
- _____ 6. The teacher reviews with the students Rule 1 and Rule 2 by explaining why words, phrases, and sentences were crossed out (Information not important to understanding or repeated.)
- _____ 7. The teacher explains that they will now learn how to use Rule 3 (Circle terms or actions that can be changed into a general term.) The teacher displays the following phrases to the students on a chart:
Elm, birch, redwood = _____
Trout, salmon, halibut = _____
Men, women, children = _____
Pens, pencils, markers = _____
Skiing, skating, sledding = _____
- _____ 8. The teacher calls on students to read the words in the row. The teacher

asks the students what word or term could be used to replace the list of words. That word or term is then written on the line.

- _____ 9. Using think-aloud, the teacher then models how to use Rule 3 in reading selection #1 by searching for lists of words or terms that could be changed to a general term, and circling them. The general term is then written on the transparency.
- _____ 10. The teacher has the students read Rule 4 and Rule 5 from the chart. She has the students explain what a topic or main idea sentence is.
- _____ 11. Using think-aloud, the teacher returns to reading selection #1 to determine if a topic or main idea sentence is there. If it is, she highlights it with a yellow marker. If it is not there, she invents one that can be used in the summary, and writes it on the transparency.
- _____ 12. The teacher writes a summary of the selection on chart paper.

Lesson Closure

- _____ 13. The students summarize through discussion what was learned from this lesson about using rules for summarization.

Record Ending Time: _____

Session 3

The purpose of this lesson is to have the teacher model Rules 1, 2, 3, 4, and 5 with the class.

Materials

- Transparency with reading selection #2
- Transparency with reading selection #3
- Overhead projector
- Chart with rules
- Chart paper
- Marker
- Yellow highlighter

Record Beginning Time: _____

Introduction

- _____ 1. The students will discuss what makes a good summary.
- _____ 2. The teacher will review with the students Rules 1 through 5 by reading each one from the chart and discussing them.

Instructional Practice

- _____ 3. Using the transparency with reading selection #2, the teacher displays it to the students. The students silently read selection followed by a student orally reading it.
- _____ 4. 6. Using the “Text Structures for Expository Text” chart, the teacher models through his “think-aloud” how to identify the text’s structure. She also models how to identify the main idea and explains what the paragraph is about.
- _____ 5. Using think-aloud, the teacher models how to use Rules 1 through 5.
 - She crosses out information that is not important for understanding.
 - She crosses out words that repeat information.
 - She circles terms or actions that be changed to a general term.
 - She highlights the topic sentence.
 - If one is not there, she constructs a topic sentence.As she is using the rules to summarize, she explains the reasons for doing each step.
- _____ 6. The students discuss what they saw and heard during the teacher’s think-aloud.
- _____ 7. The teacher uses chart paper to write the summary for the reading selection.

_____ 8. The teacher then repeats the above steps using reading selection #3.

Lesson Closure

_____ 9. The students discuss how the rules helped in writing the summary.

Record Ending Time: _____

Lessons for Week 2

Session 4

The purpose of this lesson is to have the teacher provide students with guided practice in the use of Rules 1 through 5.

Materials

- Transparency with reading selection #4
- Individual copies of reading selection #4 for each student
- Overhead projector
- Chart with rules
- Chart paper
- Yellow highlighter
- Marker
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by having the students reading each rule for summarization from the chart.
- _____ 2. After it is read, the students explain what it means and why following the rule can help with summarization.

Instructional Practice

- _____ 3. Using the transparency with reading selection #4, the teacher displays it to the students, and distributes copies of it to each student. The students silently read selection followed by a student orally reading it.
- _____ 4. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying and discussing the text’s structure. She also guides the students in identifying the main idea of the selection.
- _____ 5. Going sentence by sentence, the teacher guides the students as Rules 1 through 5 are used with the reading selection.
- _____ 6. As the students identify information that is not needed for understanding, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 7. As the students identify information that is repeated in the selection, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 8. As the students identify and circle terms or actions that be changed to a general term, the teacher circles the words on the transparency. Then a general term is written on the transparency and students write the term on their copies

- _____ 9. The teacher guides the students to identify the topic sentence, and it is highlighted on the transparency and one the student copies. If one is not there, it is written.
- _____ 10. The teacher then guides the students to orally construct the summary as she records it on chart paper.

Lesson Closure

- _____ 11. The students discuss the steps that they followed in summarizing the selection. They record the summary in their notebooks to have a model available to them.
- _____ 12. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 5

The purpose of this lesson is to have the teacher provide students with guided practice in the use of Rules 1 through 5.

Materials

- Transparency with reading selection #5
- Individual copies of reading selection #5 for each student
- Overhead projector
- Chart with rules
- Chart paper
- Yellow highlighters
- Marker
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by having the students reading each rule for summarization from the chart.
- _____ 2. After it is read, the students explain what it means and why following the rule can help with summarization.

Instructional Practice

- _____ 3. Using the transparency with reading selection #5, the teacher displays it to the students, and distributes copies of it to each student. The students silently read selection followed by a student orally reading it.
- _____ 4. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying and discussing the text’s structure. She also guides them identifying the main idea.
- _____ 5. Going sentence by sentence, the teacher guides the students as Rules 1 through 5 are used with the reading selection.
- _____ 6. As the students identify information that is not needed for understanding, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 7. As the students identify information that is repeated in the selection, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 8. As the students identify and circle terms or actions that be changed to a general term, the teacher circles the words on the transparency. Then a general term is written on the transparency and students write the term on their copies
- _____ 9. The teacher guides the students to identify the topic sentence, and it is

highlighted on the transparency and student copies. If one is not there, it will be written.

- _____ 10. The teacher then guides the students to orally construct the summary as she records it on chart paper.

Lesson Closure

- _____ 11. The students discuss the steps that they followed in summarizing the selection. They record the summary in their notebooks to have a model available to them.
- _____ 12. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 6

The purpose of this lesson is to have the teacher provide students with guided practice in the use of Rules 1 through 5.

Materials

- Transparency with reading selection #6
- Individual copies of reading selection #6 for each student
- Overhead projector
- Chart with rules
- Chart paper
- Yellow highlighters
- Marker
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by having the students review what they learned about summarization from the previous lesson.
- _____ 2. The teacher asks the students why summaries are helpful.

Instructional Practice

- _____ 3. Using the transparency with reading selection #6, the teacher displays it to the students, and distributes copies of it to each student. The students silently read the selection followed by a student orally reading it.
- _____ 4. Using the “Text Structures for Expository Text” chart, the teacher guides the students in identifying and discussing the text’s structure. She also guides them in identifying the main idea and explaining what the paragraph is about.
- _____ 5. Going sentence by sentence, the teacher guides the students as Rules 1 through 5 are used with the reading selection.
- _____ 5. As the students identify information that is not needed for understanding, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 6. As the students identify information that is repeated in the selection, the teacher crosses it out on the transparency and the students cross it out on their copies.
- _____ 7. As the students identify and circle terms or actions that be changed to a general term, the teacher circles the words on the transparency. Then a general term is written on the transparency and students write the term on their copies
- _____ 8. The teacher guides the students to identify the topic sentence, and it is

highlighted on the transparency and student copies. If one is not there, it will be written.

- _____ 9. The teacher then guides the students to orally construct the summary as she records it on chart paper.

Lesson Closure

- _____ 10. The students discuss the steps that they followed in summarizing the selection. They record the summary in their notebooks to have a model available to them.

- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Lessons for Week 3

Session 7

The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule-based approach to summarization.

Materials

- Transparency with reading selection #7
- Individual copies of reading selection #7 for each student
- Overhead projector
- Chart with rules
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by having the students reading each rule for summarization from the chart.
- _____ 2. After it is read, the students explain what the rule means and why following the rule can help with summarization.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will work with a partner to write a summary using the five rules that they have learned.
- _____ 4. The teacher places partners next to each other.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes the individual copies of reading selection #7 to the students, and displays its transparency.
- _____ 7. The teacher tells the students that they will work together to identify the text's structure and write a summary for the selection. Students will write them in their notebooks.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, reading selection #7 is read orally and discussed. Students are called on to identify the text's structure and read their summaries. The class discusses them focusing on the students' use of the five rules.

Lesson Closure

- _____ 10. The students discuss the steps that they followed in summarizing the

selection.

- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 8

The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule- based approach to summarization.

Materials

- Transparency with reading selection #8
- Individual copies of reading selection #8 for each student
- Overhead projector
- Chart with rules
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by having the students discuss what they learned from the previous lesson about summarizing.
- _____ 2. The teacher has the students discuss the importance of summarization.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will again work with a partner to write a summary using the five rules that they have learned.
- _____ 4. The teacher places the same partners next to each other.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes the individual copies of reading selection #8 to the students, and displays its transparency.
- _____ 7. The teacher tells the students that they will work together to identify the text's structure and write a summary for the selection. Students will write them in their notebooks.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the selection is read orally and discussed. Students are called on to identify the text's structure and read their summaries. The class discusses them focusing on the students' use of the five rules.

Lesson Closure

- _____ 10. The students discuss the steps that they followed in summarizing the

selection.

_____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 9

The purpose of this lesson is to have the teacher provide students with partner support in the use of the Rule-based approach to summarization.

Materials

- Transparency with reading selection #9
- Individual copies of reading selection #9 for each student
- Overhead projector
- Chart with rules
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The students discuss what was accomplished during the previous session.
- _____ 2. The students discuss which rules are easier for them to follow, and which are harder for them.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will work with a partner to write a summary using the five rules that they have learned.
- _____ 4. The teacher places the same partners next to each other.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes the individual copies of reading selection #9 to the students, and displays its transparency.
- _____ 7. The teacher tells the students that they will work together to identify the text's structure and write a summary for the selection. Students will write them in their notebooks.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the reading selection is read orally and discussed. Students are called on to identify the text's structure and read their summaries. The class discusses them focusing on the students' use of the five rules.

Lesson Closure

- _____ 10. In their notebooks, the students explain what they have learned about writing summaries. Students are called on to share their thoughts.

_____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Lessons for Week 4

Session 10

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparency with reading selection # 10
- Individual copies of reading selection #10 for each student
- Overhead projector
- Chart with rules
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by reviewing with the students how they felt about writing summaries in yesterday's lesson: Was it easy or hard to do, what did they learn from working alone on summarization., what kind of problems did they experience.
- _____ 2. The teacher asks the students how can knowing how to write a good summary help them become better students.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with and identify the text's structure.
- _____ 4. The students review the rules for writing a summary by reading them from the chart.
- _____ 5. The teacher distributes reading selection #10 to each student, and displays its transparency.
- _____ 6. The teacher explains that they are to use the five rules to write a summary for the reading selection. Students will use their notebooks for their work.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is read orally and discussed. Students are called on to identify the text's structure and read their summaries. The students discuss them focusing on the students' use of the rules.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 11

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparency with reading selection # 11
- Individual copies of reading selection #11 for each student
- Overhead projector
- Chart with rules
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher begins by discussing with the students how they felt about writing summaries in yesterday's lesson: Was it easy or hard to do, what did they learn from working alone on summarization., what kind of problems did they experience, how would they change what they did yesterday.
- _____ 2. The teacher asks the students why it's important to learn how to summarize.

Instructional Practice

- _____ 3. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with. They will also identify the text's structure.
- _____ 4. The students review each of the five rules for writing a summary by reading them from the chart.
- _____ 5. The teacher distributes reading selection #11 to each student, and displays its transparency.
- _____ 6. The teacher explains again that they are to read the selection, and then use the five rules to write a summary. They will also identify the text's structure. Students will use their notebooks for their work.
- _____ 7. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 8. When the students are finished writing their summaries, the selection is read orally and students are called on to identify the text's structure and read their summaries. The class discusses the summaries by focusing on the students' use of the rules.

Lesson Closure

- _____ 9. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 10. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 12

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparency with reading selection # 12
- Individual copies of reading selections #12
- Overhead projector
- Chart with rules
- Notebook paper
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas.
- _____ 2. The teacher asks the students to express their opinions about using the five rules to write a summary.
- _____ 3. The teacher asks the students if they would be able to teach someone how to write a summary by using the five rules.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with. They will also identify the text's structure.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes reading selection #12 to the students, and displays its transparency.
- _____ 7. The teacher explains again that they are to use the five rules to write a summary for the reading selection. They will also identify the text's structure. Students will use their notebooks for their practice work. Final summaries will be placed on notebook paper that will be distributed and collected.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the selection is

read orally and discussed. Students are called on to identify the text's structure and read their summaries. Class discusses them focusing on the students' use of the rules.

Lesson Closure

- _____ 10. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Lessons for Week 5

Session 13

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparencies with reading selections # 13
- Individual copies of reading selections #13
- Overhead projector
- Chart with rules
- Notebook paper
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas.
- _____ 2. The teacher asks the students to express their opinions about using the five rules to write a summary.
- _____ 3. The teacher asks the students if they would be able to teach someone how to write a summary by using the five rules.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with. They will also identify the text's structure.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes reading selection #13 to the students, and displays its transparency.
- _____ 7. The teacher explains again that they are to use the five rules to write a summary for the reading selection. They will also identify the text's structure. Students will use their notebooks for their practice work. Final summaries will be placed on notebook paper that will be distributed and collected.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the selection is

read orally and discussed. Students are called on to identify the text's structure and read their summaries. Class discusses them focusing on the students' use of the rules.

Lesson Closure

- _____ 10. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 14

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparencies with reading selections # 14
- Individual copies of reading selections #14
- Overhead projector
- Chart with rules
- Notebook paper
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas.
- _____ 2. The teacher asks the students to express their opinions about using the five rules to write a summary.
- _____ 3. The teacher asks the students if they would be able to teach someone how to write a summary by using the five rules.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with. They will also identify the text's structure.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes reading selection #14 to the students, and displays its transparency.
- _____ 7. The teacher explains again that they are to use the five rules to write a summary for the reading selection. They will also identify the text's structure. Students will use their notebooks for their practice work. Final summaries will be placed on notebook paper that will be distributed and collected.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the selection is

read orally and discussed. Students are called on to identify the text's structure and read their summaries. Class discusses them focusing on the students' use of the rules.

Lesson Closure

- _____ 10. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Session 15

The purpose of this lesson is to have students independently use the Rule-based approach to summarization.

Materials

- Transparency with reading selection # 15
- Individual copies of reading selections #15
- Overhead projector
- Chart with rules
- Notebook paper
- Yellow highlighters
- Student notebooks/folder

Record Beginning Time: _____

Introduction

- _____ 1. The teacher discusses with the students the benefits of summarization: helps with understanding what you're reading, helps with learning in other subject areas.
- _____ 2. The teacher asks the students to express their opinions about using the five rules to write a summary.
- _____ 3. The teacher asks the students if they would be able to teach someone how to write a summary by using the five rules.

Instructional Practice

- _____ 4. The teacher explains to the students that today they will write summaries by themselves following the five rules that they have been working with. They will also identify the text's structure.
- _____ 5. The students review the rules for writing a summary by reading them from the chart.
- _____ 6. The teacher distributes reading selection #12 to the students, and displays its transparency.
- _____ 7. The teacher explains again that they are to use the five rules to write a summary for the reading selection. They will also identify the text's structure. Students will use their notebooks for their practice work. Final summaries will be placed on notebook paper that will be distributed and collected.
- _____ 8. As the students work, the teacher circulates around the room answering questions and offering help.
- _____ 9. When the students are finished writing their summaries, the selection is

read orally and discussed. Students are called on to identify the text's structure and read their summaries. Class discusses them focusing on the students' use of the rules.

Lesson Closure

- _____ 10. The students summarize what they learned about summarization during the lesson by first recording their thoughts in their notebooks, and then sharing with the class.
- _____ 11. Students place reading selections in their folders. Folders and notebooks are collected and placed into container.

Record Ending Time: _____

Appendix K

Text Structures for Expository Text

<i>Text Structure</i>	<i>Description</i>	<i>Signal Words</i>
Description	Giving information about a topic, concept, event, object, person, idea, etc. by listing important features or characteristics	for example for instance to begin with most important in fact also
Sequence	Putting facts, events, or concepts into an order	first after second then third now previously later next finally before actual use of dates
Cause/effect	Showing how facts or events happen (effects) because of other facts or events (causes)	so that because of as a result since so in order to therefore this led to consequently nevertheless if....then
Compare/contrast	Showing likeness and/or differences among facts, people, events, etc.	however but as well as yet on the other hand not only..... but also either.... or while although unless in comparison
Problem/solution	Showing a problem that develops and the solution or solutions	problem solution solve therefore * can be cause/effect signals

Appendix L



What Do You Think?

- 1. A long summary with many sentences is better than a short one with a few sentences.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

- 2. I like writing summaries.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

- 3. Summary writing is an important skill to learn.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

- 4. Writing a summary helps me to better understand what I've read.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

- 5. I know how to write a summary.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

- 6. I think a summary is hard to write.**

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

7. Writing a summary helps me to remember the information.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

8. It is important to include as many details as I can in my summary.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

9. I copy sentences from the selection when I write my summary.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

10. Summary writing can help me in subjects other than reading.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

11. I have written summaries in my spare time.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

12. The selection's main idea is included in a summary.

1	2	3	4	5
Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

Appendix M

Pilot Study

In the Spring of 2008 after the completion of the Maryland School Assessment, this pilot study investigated the effects of two summarization approaches, GIST and Rule-based, on the reading comprehension, summary writing, and attitude of fifth-grade students who attended an urban, Title 1 school. The study served two purposes. First, it was conducted to do an initial test of my research questions which are:

1. Which summarization approach, GIST or Rule-based, appears to be more effective in improving reading comprehension with urban, Title 1 learners?
2. Which summarization approach, GIST or Rule-based, appears to be more effective in the summary writing of urban, Title 1 learners?
3. Does either instructional approach, GIST or Rule-based, appear to affect the attitude of students toward summarization?

Second, this pilot study was also conducted to ascertain the effectiveness of the instruments, reading selections, and lesson plans.

Method

Participants

The participants were fifth-graders from two heterogeneous classes in an urban, Title 1 school. In Intervention Group A, there was a total of 18 students. One student did not return his parent consent form and, therefore, received the summarization instruction, but was not included in any form of testing. One student transferred from the school after the study had commenced. Out of the 18 students, 16 completed the study: 6 girls and 10 boys. In Intervention Group B, there was a total of 19 students. All students returned their

parent consent forms, and, therefore, were included in the summarization instruction and testing. All 19 students completed the study: 8 girls and 11 boys.

Materials

I selected 14 expository reading selections: 12 were used for instruction, 1 for pretesting, and 1 for post testing. These selections came from textbooks and resource books that students use in their classrooms during social studies instruction. Each selection was placed on a transparency for teacher use and copied so that students had their individual copies.

Both teachers received a binder that contained all material that would be needed for the duration of the study. On the cover of the binder was a reminder sheet that stated:

- (1) Mark students who are absent for a session.
- (2) Record beginning time of instruction.
- (3) Check off each step to show that it was completed.
- (4) Record ending time of instruction.
- (5) Record any comments.

The pocket on the inside front cover of the binder contained all of the transparencies – one transparency for each reading selection, transparency listing GIST procedure for Group A or rules for Group B. All of the other materials were placed in the rings of the binder: attendance sheet with students' names, teacher log where comments could be recorded for each session, time sheet showing beginning, ending, and total time for each session, and instructional lesson plans.

The teacher for Group A received chart paper that had 20 lines drawn on it for recording the summaries, a chart entitled "Procedure for Writing a GIST Summary," and

a chart entitled “Rules for Writing a GIST Summary.” The teacher for Group B received a chart entitled “Let’s Build a Summary One Rule at a Time.” Blank chart paper and transparencies were given to each teacher for recording summaries.

Each student received a folder where papers were kept, a notebook, and a highlighter. All student materials were kept in a storage container. Materials were distributed prior to the lesson and collected at the end.

Instruction

After pretesting was completed, summarization instruction immediately began in each of the classes. Twelve lessons were delivered to the students spanning a four-week period. The length of the lessons varied from 25 minutes to 40 minutes with the first three introductory lessons taking less time than later lessons requiring students to take on more responsibility. Table 1 displays specific information pertaining to instruction: Text number, length of text, title of text and its readability level, and the instructional purpose for each intervention group.

Table 1

Grade 5: Text Number, Text Length, Title of Text, Level, and Instructional Purpose for Both Intervention Groups

Text Number	Text Length	Title of Text	Level	Instructional Purpose: GIST	Instructional Purpose: Rule-based
1	148	The Stamp Act	6.0	Modeling	Modeling Lesson 1: Rules 1 - 2 Lesson 2: Rules 3 - 5
2	155	The Statue of Liberty	5.8	Modeling	
3	127	The Constitution	5.7	Modeling	Modeling Rules 1 - 5
4	126	The Trail of Tears	5.5	Guided practice	Guided practice Rules 1 - 5
5	108	Moving West	5.5	Guided practice	Guided practice
6	154	The Boston Tea Party	4.4	Guided practice	Guided practice
7	152	The Star-Spangled Banner	5.4	Partner support	Partner support
8	139	The Journey West	5.4	Partner support	Partner support
9	120	Buffalo	4.7	Partner support	Partner support
10	165	The Buffalo and the Plains Indians	4.7	Independent practice	Independent practice
11	101	The Anasazi	5.0	Independent practice	Independent practice
12	127	Westward, Ho!	5.5	Independent practice	Independent practice
A	133	Life in the Colonies	5.3	Pretest	Pretest
B	124	Buffalo Soldiers	5.3	Post test	Post test

Procedures

Parent consent/Student assent. Before testing and instruction began, information regarding the study was shared with students and parents/guardians of both intervention groups. I explained the parent/guardian consent form to the students in their individual classes, and stated that the parent's signature was needed for student participation. I read the student assent form to them and each student signed one. I collected the consent forms from both classes as they were returned, and placed all forms in folders.

Teacher training. Two weeks prior to the start of the study, I trained Teacher A who would be using the GIST strategy for teaching summarization. This training was delivered over five sessions. The training initially involved discussion of general background knowledge related to GIST and its rationale. I then explicitly reviewed the step-by-step procedure that would be followed for GIST strategy lessons. I modeled the first lesson for the teacher, and then had teacher A model it for me. Lessons two through four were reviewed over the next two sessions so that questions could be answered prior to instruction. Model summaries were developed with the other teacher during the training sessions. I reviewed each week's lessons with the teacher the week prior to instruction, and model summaries were developed. Finally, I reviewed with him treatment integrity.

For my training as Teacher B, I discussed the general background knowledge related to the Rule-based approach to summarization with a colleague. I then explicitly reviewed the procedure that would be followed for the lessons. I explained the specific rules governing this approach, and modeled the first lesson that I taught. Over the next two sessions, I discussed lessons two through four, and wrote summaries for those

lessons. I reviewed each week's lessons with my colleague prior to instruction, and model summaries were developed. I also reviewed treatment integrity with him.

Testing. Only students who signed the assent form and had parents to sign and return the consent form were included in testing. Pretesting began as soon as forms were returned, and post testing began immediately after the completion of the summarization instruction. Two retired educators who previously taught at our school consented to administer the tests to the students. One of them administered the Woodcock Reading Mastery Test: Selection Comprehension, and the second teacher administered the QRI – 4 (Informal Reading Inventory). The students were picked up and then returned to their classrooms by the testers. Testing took place in two adjacent rooms that were close to the students' classrooms. Testing signs were placed on the doors of both rooms to prevent distractions. The average time to administer the Woodcock Reading Mastery Test: Selection Comprehension was 15 minutes per student; the average time to administer the QRI – 4 was 20 minutes per student.

The Summary Writing Assessment was administered in both fifth-grade classrooms by the teachers who instructed the students. For both pre- and post tests, the students were given a reading selection and a sheet of lined paper. They were told to read the selection several times and then write a summary. The pretest took about 10 minutes to administer, and the post test took about 15 – 20 minutes to administer. I collected all assessments and placed them in folders.

The Student Attitude Survey was also administered by the teachers who instructed the students. The teachers reassured the students that there were no correct answers, and no grade would be given for the survey. Their responses would be used to help teachers

provide better instruction to students. The teachers read each statement followed by the five-point Likert scale to the students. The teacher paused while the students circled one response for each statement. Each teacher circulated around the room making sure that the students circled only one response per statement, and clarifying instructions as needed. All surveys were returned to me immediately following the pre- and post testing sessions, and placed in folders.

Results

Woodcock Reading Mastery Test: Selection Comprehension

The Woodcock Reading Mastery Test: Selection Comprehension was administered to measure the general reading comprehension of the students both before and after instruction. Table 2 contains the means and standard deviations for this measure.

An analysis of variance (ANOVA) using the pretest standard scores of the two intervention groups, GIST and Rule-based, showed that the two groups were equivalent before the intervention instruction, $F(1, 33) = 1.427$, $p = .241$ (not statistically significant).

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare standard scores on the Woodcock Reading Mastery Test: Selection Comprehension. There was no statistically significant time by intervention interaction $Wilks' \Lambda = .998$, $F(1, 33) = .082$, $p = .777$, partial eta squared = .002. There was also no statistically significant main effect for time, $Wilks' \Lambda = .989$, $F(1, 33) = .363$, $p = .551$, partial eta squared = .011. The main effect comparing the two types of

intervention was not statistically significant, $F(1, 33) = 1.902$, $p = .177$, partial eta squared = .054. These results indicate that there was no difference in the effectiveness of the two different interventions.

Table 2

Means and Standard Deviations for Standard Scores on the Woodcock Reading Mastery Test: Selection Comprehension Measure

Group	N	Pretest Mean (SD)	Post Test Mean (SD)	Change
A: GIST	16	91.75 (5.882)	92.12 (5.303)	+ 0.37
B: Rule-based	19	94.32 (8.387)	95.37 (7.960)	+ 1.05
Total	35	93.14 (7.361)	93.89 (6.974)	+ 0.75

QRI – 4: Informal Reading Inventory

The QRI – 4: Informal Reading Inventory was administered to measure the expository reading comprehension of the students both before and after instruction. Table 3 contains the means and standard deviations for this measure.

An analysis of variance (ANOVA) using the pretest comprehension scores of the two intervention groups, GIST and Rule-based, showed that the two groups were equivalent before the intervention instruction, $F(1, 33) = 0.372$, $p = .546$ (not statistically significant).

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to

compare scores on the QRI – 4: Informal Reading Inventory. There was no statistically significant time by intervention interaction, Wilks’ Lambda = .956, $F(1, 33) = 1.527$, $p = .225$, partial eta squared = .044. There was no statistically significant main effect for time, Wilks’ Lambda = .999, $F(1, 33) = .043$, $p = .837$, partial eta squared = .001. The main effect comparing the two types of intervention was not statistically significant, $F(1, 33) = .488$, $p = .490$, partial eta squared = .015. These results indicate that there was no difference in the effectiveness of the two different interventions.

Table 3

Means and Standard Deviations for Reading Levels on the QRI – 4: Informal Reading Inventory Measure

Group	N	Pretest Mean (SD)	Post test Mean (SD)	Change
A: GIST	16	2.94 (.680)	2.75 (1.065)	- 0.19
B: Rule-based	19	2.89 (.809)	3.16 (1.119)	+ 0.27
Total	35	2.91 (.742)	2.97 (1.098)	+ 0.06

Summary Writing Assessment

The Summary Writing Assessment was administered to assess the students’ ability to write a summary both before and after instruction. Table 4 contains the means and standard deviations for this measure.

An analysis of variance (ANOVA) using the pretest comprehension scores of the two intervention groups, GIST and Rule-based, showed that the two groups were

equivalent before the intervention instruction, $F(1, 33) = 3.183$, $p = .084$ (not statistically significant).

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare rubric scores on the Summary Writing Assessment. There was no statistically significant time by intervention interaction, Wilks' Lambda = .998, $F(1, 33) = .073$, $p = .789$, partial eta squared = .002. There was a statistically significant main effect for time, Wilks' Lambda = .334, $F(1, 33) = 65.671$, $p = .000$, partial eta squared = .666 with both groups showing change across the two time periods. Effect sizes are reported using partial eta squared which ranges from zero to one. According to the guidelines by Cohen (1988), .01 is considered a small effect size, .06 a medium effect size, and .14 a large effect size. This result, partial eta squared = .666, indicates an extremely large effect size. The main effect comparing the two types of intervention was not statistically significant, $F(1, 33) = .188$, $p = .668$, partial eta squared = .006. These results indicate that there was no difference in the effectiveness of the two different interventions.

Table 4

Means and Standard Deviations for Rubric Scores for the Summary Writing AssessmentMeasure

Group	N	Pre-test Mean (SD)	Post Test Mean (SD)	Change
A: GIST	16	1.81 (.403)	2.94 (.574)	+ 1.13
B: Rule-based	19	1.79 (.631)	2.84 (.602)	+ 1.05
Total	35	1.80 (.531)	2.89 (.583)	+ 1.09

Student Attitude Survey

The 12 statements on the student attitude survey were analyzed in several ways. First, the students' responses for each item were tallied and percentages were then calculated (see Tables 5 and 6). The percentages for the pretest and post test were compared to note changes that occurred during the interventions.

Table 5

Student Attitude Survey Group A: Pretest/Post Test Percentages

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. A long summary with many sentences is better than a short one with a few sentences.	25% 12%	31% 0%	44% 0%	0% 38%	0% 50%
2. I like writing summaries.	12% 31%	50% 63%	19% 6%	19% 0%	0% 0%
3. Summary writing is an important skill to learn.	69% 75%	12% 25%	19% 0%	0% 0%	0% 0%
4. Writing a summary helps me to better understand what I've read.	25% 25%	63% 75%	6% 0%	6% 0%	0% 0%
5. I know how to write a summary.	37% 75%	63% 25%	0% 0%	0% 0%	0% 0%
6. I think a summary is hard to write.	6% 0%	12% 0%	19% 6%	44% 56%	19% 38%
7. Writing a summary helps me to remember the information.	19% 31%	75% 57%	6% 12%	0% 0%	0% 0%
8. It is important to include as many details as I can in my summary.	56% 6%	44% 19%	0% 0%	0% 56%	0% 19%
9. I copy sentences from the selection when I write my summary.	12% 0%	56% 32%	19% 6%	6% 50%	6% 12%
10. Summary writing can help me in subjects other than reading.	0% 25%	38% 50%	44% 25%	12% 0%	6% 0%
11. I have written summaries in my spare time.	6% 0%	25% 38%	6% 0%	25% 56%	38% 6%
12. The selection's main idea is included in a summary.	31% 94%	56% 6%	13% 0%	0% 0%	0% 0%

For some statements, Group A participants showed considerable changes in responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 100% of the students strongly agreed, agreed, or were not sure.
 - After instruction, 88% strongly disagreed or disagreed.
- Statement 2, “I like writing summaries.”
 - Before instruction, 62% strongly agreed or agreed.
 - After instruction, 94% strongly agreed or agreed.
- Statement 3, “Summary writing is an important skill to learn.”
 - Before instruction, 81% strongly agreed or agreed.
 - After instruction, 100% strongly agreed or agreed.
- Statement 6, “I think a summary is hard to write.”
 - Before instruction, 63% strongly disagreed or disagreed.
 - After instruction, 94% strongly disagreed or disagreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 100% strongly agreed or agreed.
 - After instruction, 75% strongly disagreed or disagreed.
- Statement 9, “I copy sentences from the selection when I write a summary.”
 - Before instruction, 68% strongly agreed or agreed.
 - After instruction 62% strongly disagreed or disagreed.

- Statement 10, “Summary writing can help me in subjects other than reading.”
 - Before instruction, 38% agreed with 44% not sure.
 - After instruction, 75% strongly agreed or agreed.
- Statement 12, “The selection’s main idea is included in a summary.”
 - Before instruction, 87% strongly agreed or agreed.
 - After instruction, 100% strongly agreed or agreed.

Table 6

Student Attitude Survey Group B: Pretest/Post Test Percentages

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. A long summary with many sentences is better than a short one with a few sentences.	11% 0%	52% 0%	11% 0%	21% 11%	5% 89%
2. I like writing summaries.	21% 37%	15.5% 42%	11% 16%	37% 0%	15.5% 5%
3. Summary writing is an important skill to learn.	37% 74%	47% 16%	16% 5%	0% 0%	0% 0%
4. Writing a summary helps me to better understand what I've read.	21% 74%	48% 26%	26% 0%	0% 0%	5% 0%
5. I know how to write a summary.	42% 63%	37% 37%	16% 0%	5% 0%	0% 0%
6. I think a summary is hard to write.	5% 0%	11% 0%	16% 16%	42% 52%	26% 32%
7. Writing a summary helps me to remember the information.	11% 52%	73% 37%	16% 11%	0% 0%	0% 0%
8. It is important to include as many details as I can in my summary.	47% 0%	32% 0%	21% 0%	0% 26%	0% 74%
9. I copy sentences from the selection when I write my summary.	0% 0%	21% 0%	26% 0%	16% 26%	37% 74%
10. Summary writing can help me in subjects other than reading.	11% 84%	42% 16%	42% 0%	5% 0%	0% 0%
11. I have written summaries in my spare time.	21% 32%	32% 57%	26% 11%	0% 0%	21% 0%
12. The selection's main idea is included in a summary.	63% 68%	21% 21%	16% 11%	0% 0%	0% 0%

For some statements, Group B participants showed considerable changes in responses pertaining to knowledge, attitude, or importance after the instruction.

- Statement 1, “A long summary with many sentences is better than a short one with a few sentences.”
 - Before instruction, 63% of the students strongly agreed or agreed.
 - After instruction, 100% strongly disagreed or disagreed.
- Statement 2, “I like writing summaries.”
 - Before instruction, 36% strongly agreed or agreed.
 - After instruction, 79% strongly agreed or agreed.
- Statement 4, “Writing a summary helps me to better understand what I’ve read.”
 - Before instruction, 69% strongly agreed or agreed.
 - After instruction, 100% strongly agreed or agreed.
- Statement 5, “I know how to write a summary.”
 - Before instruction, 79% strongly agreed or agreed.
 - After instruction, 100% strongly agreed or agreed.
- Statement 8, “It is important to include as many details as I can in my summary.”
 - Before instruction, 100% strongly agreed, agreed, or were not sure.
 - After instruction, 100% strongly disagreed or disagreed.

- Statement 10, “Summary writing can help me in subjects other than reading.”
 - Before instruction, 53% strongly agreed or agreed with 42% not sure.
 - After instruction, 100% strongly agreed or agreed.
- Statement 11, “I have written summaries in my spare time.”
 - Before instruction, 53% strongly agreed or agreed.
 - After instruction, 89% strongly agreed or agreed.

Similarities in responses were evident for both groups. Overall, for most questions, the percentage of students responding with “Not Sure” dropped drastically after instruction. Even though the students responded on the survey’s pretest that they knew how to write a summary, they also overwhelmingly agreed that it should contain as many details as possible and that a long summary was better than a short summary. After instruction, both groups had a significant percentage increase to “I like to write summaries.”

Table 7 contains the means, standard deviations, and statistically significant interactions for each statement on the Student Attitude Survey. A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare scale scores on the Student Attitude Survey.

Table 7

Means and Standard Deviations for Each Statement on Student Attitude Survey Measure

Statement	Group	N	Pretest Mean (SD)	Post Test Mean (SD)
1	GIST	16	3.75 (.775)	4.12 (1.310)
	Rule-based	19	3.63 (1.012)	4.89 (.315)
	Total	35	3.69 (.900)	4.54 (.980)
2	GIST	16	2.31 (.873)	1.75 (.577)
	Rule-based	19	3.11 (1.449)	1.95 (1.026)
	Total	35	2.74 (1.268)	1.86 (.845)
3	GIST	16	1.50 (.816)	1.25 (.447)
	Rule-based	19	1.79 (.713)	1.47 (1.020)
	Total	35	1.66 (.765)	1.37 (.808)
4	GIST	16	1.94 (.772)	1.75 (.447)
	Rule-based	19	2.21 (.976)	1.26 (.452)
	Total	35	2.09 (.887)	1.49 (.507)
5	GIST	16	1.69 (.479)	1.25 (.447)
	Rule-based	19	1.84 (.898)	1.37 (.496)
	Total	35	1.77 (.731)	1.31 (.471)
6	GIST	16	3.56 (1.153)	4.31 (.602)
	Rule-based	19	3.95 (.970)	4.16 (.688)
	Total	35	3.77 (1.060)	4.23 (.646)

Table 7 (continued)

Means and Standard Deviations for Each Statement on Student Attitude Survey Measure

Statement	Group	N	Pretest Mean (SD)	Post Test Mean (SD)
7	GIST	16	1.81 (.544)	1.81 (.655)
	Rule-based	19	2.05 (.524)	1.58 (.692)
	Total	35	1.94 (.539)	1.69 (.676)
8	GIST	16	4.50 (.516)	3.75 (1.065)
	Rule-based	19	4.37 (.761)	4.79 (.419)
	Total	35	4.43 (.655)	4.31 (.932)
9	GIST	16	3.62 (1.025)	3.31 (1.138)
	Rule-based	19	2.32 (1.204)	4.74 (.452)
	Total	35	2.91 (1.292)	4.09 (1.095)
10	GIST	16	2.62 (.806)	2.00 (.730)
	Rule-based	19	2.42 (.769)	1.16 (.375)
	Total	35	2.51 (.781)	1.54 (.701)
11	GIST	16	3.44 (1.413)	3.31 (1.078)
	Rule-based	19	2.68 (1.416)	1.95 (.970)
	Total	35	3.03 (1.445)	2.57 (1.220)
12	GIST	16	1.87 (.619)	1.06 (.250)
	Rule-based	19	1.53 (.772)	1.42 (.692)
	Total	35	1.69 (.718)	1.26 (.561)

For statement 1, there was a statistically significant time by intervention interaction, Wilks' Lambda = .882, $F(1, 33) = 4.396$, $p = .044$, partial eta squared = .118. This result, partial eta squared = .118, indicates close to a large effect size.

For statement 2, there was a statistically significant time by intervention interaction, Wilks' Lambda = .882, $F(1, 33) = 4.396$, $p = .044$, partial eta squared = .037. This result, partial eta squared = .037, indicates between a small and medium effect size.

For statement 3, there was no statistically significant time by intervention interaction, Wilks' Lambda = .999, $F(1, 33) = .033$, $p = .856$, partial eta squared = .001. There was no statistically significant main effect for time, Wilks' Lambda = .930, $F(1, 33) = 2.473$, $p = .125$, partial eta squared = .070. The main effect comparing the two types of intervention was not statistically significant, $F(1, 33) = 1.689$, $p = .203$, partial eta squared = .049. These results indicate that there is no difference in the effectiveness of the two different interventions.

For statement 4, there was a statistically significant time by intervention interaction, Wilks' Lambda = .854, $F(1, 33) = 5.632$, $p = .024$, partial eta squared = .146. This result, partial eta squared = .146, indicates a large effect size.

For statement 5, there was no statistically significant time by intervention interaction, Wilks' Lambda = 1.000, $F(1, 33) = .014$, $p = .906$, partial eta squared = .000. There was a statistically significant main effect for time, Wilks' Lambda = .787, $F(1, 33) = 8.922$, $p = .005$, partial eta squared = .213, with both groups showing change across the two time periods. This result, partial eta squared = .213, indicates an extremely large effect size. The main effect comparing the two types of intervention was not statistically

significant, $F(1, 33) = .887$, $p = .353$, partial eta squared = .026. These results indicate that there is no difference in the effectiveness of the two different interventions.

For statement 6, there was no statistically significant time by intervention interaction, Wilks' Lambda = .957, $F(1, 33) = 1.485$, $p = .232$, partial eta squared = .043. There was a statistically significant main effect for time, Wilks' Lambda = .875, $F(1, 33) = 4.709$, $p = .037$, partial eta squared = .125, with both groups showing change across the two time periods. This result, partial eta squared = .125, indicates close to a large effect size. The main effect comparing the two types of intervention was not statistically significant, $F(1, 33) = 1.485$, $p = .232$, partial eta squared = .043. These results indicate that there is no difference in the effectiveness of the two different interventions.

For statement 7, there was no statistically significant time by intervention interaction, Wilks' Lambda = .914, $F(1, 33) = 3.101$, $p = .087$, partial eta squared = .086. There was no statistically significant main effect for time, Wilks' Lambda = .914, $F(1, 33) = 3.101$, $p = .087$, partial eta squared = .086. The main effect comparing the two types of intervention was not statistically significant, $F(1, 33) = .000$, $p = .983$, partial eta squared = .000. These results indicate that there is no difference in the effectiveness of the two different interventions.

For statement 8, there was a statistically significant time by intervention interaction, Wilks' Lambda = .713, $F(1, 33) = 13.265$, $p = .001$, partial eta squared = .287. This result, partial eta squared = .287, indicates a very large effect size.

For statement 9, there was a statistically significant time by intervention interaction, Wilks' Lambda = .519, $F(1, 33) = 30.567$, $p = .000$, partial eta squared = .481. This result, partial eta squared = .481, indicates an extremely large effect size.

For statement 10, there was no statistically significant time by intervention interaction, Wilks' Lambda = .914, $F(1, 33) = 3.118$, $p = .087$, partial eta squared = .086. There was a statistically significant main effect for time, Wilks' Lambda = .547, $F(1, 33) = 27.298$, $p = .000$, partial eta squared = .453, with both groups showing change across the two time periods. This result, partial eta squared = .453, indicates an extremely large effect size. The main effect comparing the two types of intervention was statistically significant, $F(1, 33) = 12.864$, $p = .001$, partial eta squared = .280. This result, partial eta squared = .280, indicates a very large effect size. These results indicate that there is a difference in the effectiveness of the two different interventions.

For statement 11, there was no statistically significant time by intervention interaction, Wilks' Lambda = .970, $F(1, 33) = 1.018$, $p = .320$, partial eta squared = .030. There was no statistically significant main effect for time, Wilks' Lambda = .942, $F(1, 33) = 2.019$, $p = .165$, partial eta squared = .058. The main effect comparing the two types of intervention was statistically significant, $F(1, 33) = 13.480$, $p = .001$, partial eta squared = .290. This result, partial eta squared = .290, indicates a very large effect size. These results indicate that there is a difference in the effectiveness of the two different interventions.

For statement 12, there was a statistically significant time by intervention interaction, Wilks' Lambda = .805, $F(1, 33) = 7.987$, $p = .008$, partial eta squared = .126. This result, partial eta squared = .126, indicates close to a large effect size.

Table 8 summarizes the results of the statements on the Student Attitude Survey.

Table 8

Summary of Statements for Main Effect for Time, Main Effect Comparing Groups, and Interaction

Statement	Main Effect for Time	Main Effect Comparing Groups	Interaction
1. A long summary with many sentences is better than a short one with a few sentences.			Yes
2. I like writing summaries.			Yes
3. Summary writing is an important skill to learn.			
4. Writing a summary helps me to better understand what I've read.			Yes
5. I know how to write a summary.	Yes		
6. I think a summary is hard to write.	Yes		
7. Writing a summary helps me to remember the information.			
8. It is important to include as many details as I can in my summary.			Yes
9. I copy sentences from the selection when I write my summary.			Yes
10. Summary writing can help me in subjects other than reading.	Yes	Yes	

Table 8

Summary of Statements for Main Effect for Time, Main Effect Comparing Groups, and Interaction

Statement	Main Effect for Time	Main Effect Comparing Groups	Interaction
11. I have written summaries in my spare time.		Yes	
12. The selection's main idea is included in a summary.			Yes

Next, the 12 statements from the Student Attitude Survey were categorized into three groups: knowledge of summary writing, importance of summary writing, and personal attitude toward summary writing (see Table 9).

Table 9

Student Attitude Survey: Statements and Categories

Statement from Student Attitude Survey	Category
1. A long summary with many sentences is better than a short one that only has a few sentences.	Knowledge
2. I like writing summaries.	Personal Attitude
3. Summary writing is an important skill to learn.	Importance
4. Writing a summary helps me to better understand what I've read.	Importance
5. I know how to write a summary.	Personal Attitude
6. I think a summary is hard to write.	Personal Attitude
7. Writing a summary helps me to remember the information.	Importance
8. It is important to include as many details as I can in my summary.	Knowledge
9. I copy sentences from the selection when I write a summary.	Knowledge
10. Summary writing can help me in subjects other than reading.	Importance
11. I have written summaries in my spare time.	Personal Attitude
12. The selection's main idea is included in a summary.	Knowledge

Category scores were calculated for each intervention group by adding the students' Likert scale scores for questions pertaining to that category. For example, the scores for statements 1, 8, 9, and 12 were added together to obtain a category score for "Knowledge of Summary Writing." Scores for statements 3, 4, 7, and 10 were added together to obtain a category score for "Importance of Summary Writing." Scores for

statements 2, 5, 6, and 11 were added together to obtain a category score for “Personal Attitude toward Summary Writing.”

Table 10 contains the means and standard deviations for the category “Knowledge of Summary Writing” of the Student Attitude Survey.

An analysis of variance (ANOVA) using the pretest scores of the two intervention groups, GIST and Rule-based, showed that the two groups were equivalent before the intervention instruction, $F(1, 33) = 1.509$, $p = .228$ (not statistically significant) for the category of “Knowledge of Summary Writing.”

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare scores for the category of “Knowledge of Summary Writing.” There was a statistically significant time by intervention interaction, Wilks’ Lambda = .715, $F(1, 33) = 13.150$, $p = .001$, partial eta squared = .285. Effect sizes are reported using partial eta squared which ranges in values from zero to one. According to the guidelines proposed by Cohen (1988), .01 is considered a small effect size, .06 a medium effect size, and .14 a large effect size. This result, partial eta squared = .285, indicates an extremely large effect size.

Table 10

Means and Standard Deviations for Student Attitude Survey: Knowledge of Summary Writing

Group	N	Pretest Mean (SD)	Post Test Mean (SD)
A: GIST	16	3.44 (1.220)	3.06 (1.562)
B: Rule-based	19	2.96 (1.455)	3.96 (1.553)
Total	35	3.18 (1.369)	3.55 (1.615)

Table 11 contains the means and standard deviations for the category “Importance of Summary Writing” of the Student Attitude Survey.

An analysis of variance (ANOVA) using the pretest scores of the two intervention groups, GIST and Rule-based, showed that the two groups were equivalent before the intervention instruction, $F(1, 33) = .007$, $p = .933$ (not statistically significant) in the category of “Importance of Summary Writing.”

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare scores on the category of “Importance of Summary Writing.” There was no statistically significant time by intervention interaction, Wilks’ Lambda = .929, $F(1, 33) = 2.508$, $p = .123$, partial eta squared = .071. There was a statistically significant main effect for time, Wilks’ Lambda = .578, $F(1, 33) = 24.114$, $p = .000$, partial eta squared = .422. The main effect comparing the two types of intervention was not statistically

significant, $F(1, 33) = 3.264$, $p = .080$, partial eta squared = .090. These results indicate that there is no difference in the effectiveness of the two different interventions.

Table 11

Means and Standard Deviations for Student Attitude Survey: Importance of Summary Writing

Group	N	Pre-test Mean (SD)	Post Test Mean (SD)
A: GIST	16	1.97 (.835)	1.70 (.634)
B: Rule-based	19	2.12 (.783)	1.37 (.690)
Total	35	2.05 (.808)	1.52 (.683)

Table 12 contains the means and standard deviations for the category of “Personal Attitude toward Summary Writing” on the Student Attitude Survey.

An analysis of variance (ANOVA) using the pretest scores of the two intervention groups, GIST and Rule-based, showed that the two groups were equivalent before the intervention instruction, $F(1, 33) = 3.738$, $p = .062$ (not statistically significant) in the category of “Personal Attitude toward Summary Writing.”

A mixed ANOVA with time (pretest vs. post test) as the within-subjects factor and intervention (GIST vs. Rule-based) as the between-subjects factor was used to compare scores on the category of “Personal Attitude toward Summary Writing.” There was statistically significant time by intervention interaction, Wilks’ Lambda = .882, $F(1, 33) = 4.415$, $p = .043$, partial eta squared = .118. Effect sizes are reported using partial eta

squared which ranges in values from zero to one. According to the guidelines proposed by Cohen (1988), .01 is considered a small effect size, .06 a medium effect size, and .14 a large effect size. This result, partial eta squared = .043, indicates between a small and medium effect size.

Table 12

Means and Standard Deviations for Student Attitude Survey: Personal Attitude toward Summary Writing

Group	N	Pre-test Mean (SD)	Post Test Mean (SD)
A: GIST	16	2.75 (1.285)	2.66 (1.417)
B: Rule-based	19	2.89 (1.410)	2.36 (1.344)
Total	35	2.83 (1.351)	2.49 (1.381)

Those categories that had a statistically significant time by intervention interaction were knowledge of summary writing and personal attitude toward summary writing.

Discussion

The enthusiasm shared by teachers, parents, and students was overwhelming. My colleague and I were pleased that the students continued to stay serious and focused throughout the duration of the study. With each lesson, we could see improvement in both verbal and written summarizations. The students were enthusiastic and very motivated to participate in the lessons. They wanted a summary lesson every day, and

were disappointed that we weren't able to we do one on a daily basis. At the end of the study, I told the students that if they wished, they could write comments expressing their thoughts and opinions on the summarization instruction. Some of their comments were:

- This helped me with my comprehension.
- This was a lot of fun.
- I found out that it is important to go back and read the story a few times to really understand it.
- This really helped me to find the main idea.
- I loved the gist summary. I usually put a lot of details in my summary and fill my pages up. This was fun and showed me to get to the point.
- At first I didn't like it because I could only use 20 words. I write really long summaries with lots of details and I repeat myself. This made me not write pages for my summary.
- I can use summary writing in everyday life in stories that I read on my own and next year in middle school.
- The rules were easy to follow and I feel like I can write a great summary now. Usually I hated summaries because they took me hours to write. Now I can write a summary in a short time.
- It helped my memory.
- I can use this with my book reports.
- I never knew that a short summary could be better than a long summary.
- I wish someone would have taught us this before now. I hated summaries, but with rules to follow it made it easy.

Parents were very supportive with only one parent consent form not returned. Parent comments were extremely positive. They were very appreciative of the type of instruction that their children received. Some stated that they knew summary writing was important to learn, and that they did not know how to help their children at home with it. A few parents commented that their children talked to them at home about the summarization lessons. Many expressed thanks for including their children in this study.

Recommendations for Future Research

The post test scores for the two intervention groups on the Woodcock Reading Mastery Test: Selection Comprehension and QRI-4 did show an increase, but were not statistically significant. This could possibly be attributed to a small sample size: Group A with 16 students and Group B with 19. The scores on the two measures could have also been affected by the time of year when the testing occurred. The students were administered the post tests at the end of May after many other tests had been given.

Even though previous studies allotted an average of 30 minutes per lesson, my colleague and I very quickly discovered that this amount of time was not sufficient for most lessons. When students were taking on more responsibility, they needed time not only to reread the texts, but also to revise their summaries. Learning takes time and practice.

To address these issues, I will implement changes to my dissertation study. First, two fourth grades, in addition to the two fifth grades, will be included in the next study. The sample size will then be approximately 80 participants, as compared to 35 in the pilot study. Second, instruction and testing will occur in late fall and early winter, in contrast to the end of the school year when students are administered a multitude of tests. Third,

when the QRI-4 is administered, the students will be allowed to use look-backs with comprehension questions that are initially answered incorrectly. This approach more closely replicates the type of reading instruction that occurs in the classroom. Also, the selections used at the third- and fourth- grade levels will be changed to alternative selections so that more students can draw upon their prior knowledge. Fourth, instructional lessons will be increased from 30 minutes to between 40 – 55 minutes. This additional time will allow the students to reread selections and revise their summaries without being constantly rushed to finish. Also, three more instructional lessons will be included for both groups to allow more time for independent practice. This will also give the students additional opportunities to read and comprehend three more pieces of text.

Conclusions

This study was conducted in order to field test two summarization approaches on the reading comprehension, summary writing, and attitude of fifth-graders who attend an urban, Title 1 school. Both intervention groups improved in their summary writing ability. They also showed improvement in their knowledge of summary writing, importance of summary writing, and personal attitude toward summary writing as measured by the Student Attitude Survey. These positive results can serve as a catalyst for future studies that examine rigorous reading instruction for our urban, Title 1 students.

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