This report describes a program for increasing student comprehension of nonfiction text by incorporating picture books into the social science curriculum, teaching students to use text elements, to generate questions about the content, and to make connections while reading. The targeted population consisted of fifth grade students in a middle-class community located in a western suburb of a large midwestern city. The problems of comprehension were documented through student surveys, teacher surveys, and teacher observation. The instructional strategies that were taught were understanding text elements, creating questions to construct meaning, and making connections to the text. The researcher also incorporated the use of picture books to have an additional resource from which students can learn social science content. In conclusion, the implementation of teaching students text elements, teaching students to create questions, and teaching students to make connections to the text had a positive effect on the students. The students' self-perception remained virtually the same, but there were gains in their academic achievement. There was an increase in students correctly responding to higher level questions from the pretest to the posttest. Students were more successful in summarizing the text, making comparisons, and making inferences. (Contains 35 references, and 17 figures and a table of data. Appendixes contain teacher and student survey instruments, a nonfiction student assessment, a learning log, lesson plans, a list of books used for the lessons, and modified lesson plans for teaching students to make connections.) (RS)
IMPROVING STUDENT COMPREHENSION IN SOCIAL SCIENCE BY TEACHING READING STRATEGIES

Beth Bauman

An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

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ABSTRACT

This report describes a program for increasing student comprehension of non-fiction text by incorporating picture books into the social science curriculum, teaching students to use text elements, to generate questions about the content, and to make connections while reading. The targeted population consisted of fifth grade students in a middle class community located in a western suburb of a large Midwestern city. The problems of comprehension were documented through student surveys, teacher surveys, and teacher observation.

The researcher will collect data from students and teachers to reveal that this is an existing problem at the research site. Students will be given a questionnaire at the onset of the research that will reveal how students feel about their ability to comprehend social science content and use the different instructional strategies. Students will reflect on their learning once a week during the last month to show what strategies are being used. Students will be given three non-fiction assessments throughout the study. At the end of the research, students will reevaluate their ability to comprehend non-fiction text and ability to use text elements, questioning, and connections to construct meaning.

Literature review of solutions name instructional strategies and usage of instructional materials as ways to create solutions to the existing problem. The researcher focused on using both instructional strategies and the usage of instructional materials. The instructional strategies that were taught were understanding text elements, creating questions to construct meaning, and making connections to the text. The researcher also incorporated the use of picture books to have as an additional resource from which students can learn social science content.

In conclusion the implementation of teaching students text elements, teaching students to create questions, and teaching students to make connections to the text had a positive effect on the students. The students' self-perception remained virtually the same, but there were gains in their academic achievement. There was an increase in students correctly responding to higher level questions from the pretest to the posttest. Students were more successful in summarizing the text, making comparisons, and making inferences.
This project was approved by

Sister Jeanne Marie Timmer, OSF, PhD
Advisor

[Signature]

Advisor

[Signature]

Beverly Bulley
Dean, School of Education
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CHAPTER I

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

This study will focus on improving comprehension skills of targeted fifth grade students in the content area of social science. Different comprehension techniques will be taught to the students to help implement the change. Evidence of this problem includes personal observation in the classroom, low standardized reading scores, comments from colleagues, as well as student perception.

Immediate Problem Context

This study will be conducted in an elementary school located in a western suburb of a large Midwestern city. This two story brick building has serviced the community since 1979. The interior has three stairwells, with two located at each end of the building, and an elevator located in the middle of the school. The 28 classrooms have brick walls that separate each classroom. A library learning center is located on the second floor of the building. There is a computer lab that houses 15 networked computers giving students access to the Internet. In addition, each classroom has at least one computer, with some classes having up to three computers. Located on the
school grounds is an outdoor playground area that includes a separate slide, swings and a jungle gym, as well as a baseball field.

Prior to the 2000-2001 school year, the school was an early childhood through fourth grade school. Currently the building services 543 students from early childhood through fifth grade. The average class size for the school from kindergarten through fifth grade is 22 students. The average class size for the early childhood classes is five students. The ethnic background of the students is 63.2% White non-Hispanic, 8.7% African American, 12.3% Hispanic, and 15.8% Asian/Pacific Islander. The percent of limited-English-proficient students is 6.4%. The percent of students who are categorized as low-income is 3.4%.

All students are within walking distance to the school. There are five day care buses that service the school both before and after school. The school also has a before and an after school program that is run by the local park district. The average daily attendance rate is 95.5%, with a chronic truancy rate of 1.1%. The mobility rate of the school is 18.1%.

Of the third grade students who took the Illinois Standard Achievement Test (ISAT) during the 2000 school year, 70% of the students met or exceeded the state goals in reading, 71% of the students met or exceeded the state goals in writing, and 79% of the students met or exceeded the state goals in mathematics. Of the fourth grade students who took the ISAT tests during the 2000 school year, 81% of the students met or exceeded the state goals in science and 73% of the students met or
exceeded the state goals in social science. (School Report Card 2000.)

The students' day begins at 9:00 A.M. with dismissal at 3:30 P.M. Students have physical education three days a week for 25 minutes, music two days a week for 25 minutes, and art one day a week for one hour. Library check out is one day a week for 30 minutes. Students have the opportunity to go to the library at other times during the week with the teacher's permission. At the fifth grade, students receive 300 minutes of math per week, 200 minutes of social science, 200 minutes of science, and 600 minutes of reading, which includes language and spelling.

In addition to the district curriculum, the school utilizes several supplemental technology programs to assess, facilitate, and enhance learning. One such program is the Student Testing and Achievement in Reading (STAR) test. Students take this test in the fall, winter, and spring. The STAR test gives a benchmark for the reading level of individual students. This helps the students choose books at their appropriate reading level. To support reading, the school also has purchased the Accelerated Reader program. Students are able to take comprehension tests on books read using the computer. In addition to the use of technology to further enhance comprehension and develop higher level thinking skills, teachers in all grade levels have been trained to use the Junior Great Books program. This allows the teacher and the students to monitor individual reading comprehension.

The school is in a pilot year for using Accelerated Math. This program allows the teacher to design an individualized plan with math objectives that the students
should be working on to master. There are levels available from third through fifth grade so the teacher is able to choose the appropriate level for each child. The computer individualizes each child's paper and pencil assignment. Then based on the answers the child puts on the scantron answer sheet, the computer scores the assignment and prints out the next assignment. In order for the school to meet the needs of its students, its staff consists of one principal, one assistant principal, 26 classroom teachers, and support staff. The support staff consists of one full time and one part time physical education teacher, one music teacher, six art teachers who service the school on Fridays, and one library director who is assisted by two aides. Students may be placed in small groups for additional help in the area of reading by a reading specialist and/or aide. Students who need speech/language meet with the speech pathologist on a regular basis. The school also has a full time social worker that works with students on a weekly basis as needed. One nurse is employed full time to assist students with medical needs. The school also employs five aides who work with early childhood or inclusion students. To supervise the children during lunch, the school employs four lunchroom supervisors.

Students have opportunities to participate in a variety of clubs and activities before, during, and after school. Fifth grade students have the opportunity to join band. Small groups of students meet with the band director once a week during the school day for 30 minutes and before school to practice for 45 minutes once a week. Fifth grade students also can participate in the Bookworm Club. These students volunteer
one day a week during their recess to help in the library. Often times they are found shelving books or checking to make sure books are in their appropriate places.

The school sponsors a Character Counts Club for kindergarten through second grade and also for third grade through fifth grade. These two clubs focus on the pillars of respect, trustworthiness, citizenship, caring, fairness, and responsibility. Volunteer students in fourth grade are in charge of the Wee Deliver Post Office. Students are encouraged to write letters to friends or staff in the building. The letters are then delivered every Thursday after school. In order to do this, each classroom has an address and there is a listing available to the students, similar to a phone book. Patrol is another way fourth and fifth grade students can be involved in their school. Patrols are on duty before school, after school, and help with the afternoon kindergarten lineup, which takes place during their lunchtime.

The Surrounding Community

This school is part of a district that has 6 elementary schools and 2 middle schools. The average teaching experience in the district is 9.6 years with the average teacher earning $40,285. Of these teachers, 49.2% have a Bachelor's Degree; 50.8% have a Master's Degree or above. The following is a list of expenditures by fund from 1998 - 1999: education $21,105,207, operations and maintenance $2,798,725, transportation $1,541,671, bond and interest $2,520,324, municipal retirement/social security $558,506, site and construction/capital improvement $6,046,750, for a total of $34,571,183. The district employs a superintendent and an assistant superintendent
who focuses on curriculum. Each elementary school has a principal, as well as an assistant principal. The two middle schools employ two assistant principals. (School Report Card 2000.)

The school district services students from three local communities. The main community that the district services had an estimated population of 39,100 for the year 2000. The racial makeup of the community is White 88.5%, African American 3.8%, American Indian .2%, Asian or Pacific Islander 7.8%, Hispanic 6.6%, and other .3%. The types of housing available in the community are 70.8% being owner occupied and 29.2% being renter occupied. Of these homes, the single-family detached home selling price in 1993 was $155,966. The projected average household income for 1997 was $72,723, with a median household income of $62,155. The median family income projected for 1997 was $69,464, as cited on the municipality’s website.

The school has a close working relationship with the police department from one of the local communities. Students in fifth grade go through the 17-week Drug Abuse Resistance Education (D.A.R.E.) program. The officer meets with the students once a week for 50 minutes. At the conclusion of the program the students participate in a graduation held at the local high school. The school also has a Junior Achievement program. This program is seven weeks and conducted by a volunteer from the surrounding areas. The children learn about different aspects of business including supply and demand. The volunteers that help with this program include parents, as well as, volunteers from local businesses. Many parents volunteer their time in the
school or with school related functions. Volunteers in the school photocopy materials for teachers, help younger students take Accelerated Reader tests, and also can be found working with small reading groups in the primary grades. The school’s Parent Teacher Association (PTA) also sponsors monthly skating parties at the local roller-skating rink. This allows the students from all grade levels to interact with each other.

The local community has several parks with the largest having 72 acres of land that feature fields for baseball, soccer, and football. Basketball, tennis, and outdoor volleyball courts also can be found there. A bike/walking path surrounds this park. Located near this park is the indoor swimming pool.

The community also has a recreation center that includes a fitness center, teen center, batting cage, stage, dance room, meeting rooms, and a kitchen. In addition, the location has an outdoors-aquatic park that has a full-service concession stand and a sand volleyball area.

The local library has summer reading programs to encourage reading among children as well as adults. Throughout the school year there are different activities sponsored through the library such as a chess club. The library also offers several different story times for preschool age children.

National Context of the Problem

Reading and comprehending non-fiction text is a widespread problem for students not only in the social sciences, but also in science and math. As students progress from elementary school to middle school, a shift appears.
longer focuses on learning how to read, but now focuses on reading to learn (Bryant, Ugel, & Thompson, 1999). Metacognition, the conscious awareness and control of your learning, is not always evident in readers. Younger and inexperienced readers may continue to read the text and not realize their comprehension is not where it should be (Bulgren & Scanlon, 1998). Reading the words does not ensure comprehending the text.

Another problem that lies within the ability of students to learn is the transfer of skills. Often times students do not transfer the skill of comprehension of listening and reading to other areas (Snow, Burns, & Griffin, 1998). When students are taught new skills, at times there may be little carry over to other content areas. It has been found that some students do not generalize learned content or skills to other areas unless they are directly told to do so (Bulgren & Scanlon, 1998). A skill that a reader learns in reading may not transfer over to being used in other content areas unless the teacher directly makes the connection for the student.

This transference of skill and knowledge creates a challenge for low readers. Low readers often do not possess the skills such as being able to "integrate new information with prior knowledge, remember what they read, and obtain important information from the text" (Bryant et al., 1999, p. 2). The problem lies in the fact that there may be too many skills for students to focus on. Sometimes just reading and pronouncing the words correctly is taking everything the child has. By the time students struggle to pronounce a word, comprehension of what had been read up to
that point is lost. When teaching content areas like social science, teachers assume that students can read the text and know how to process the needed information. Some teachers may present the information and then leave it up to the student to decide how to learn, thinking the student knows what is best. Unfortunately, students do not always know how to learn effectively (Bulgren & Scanlon, 1998).

Another factor that leads to students having a difficult time comprehending non-fiction text is that students are not aware of textual features of non-fiction text (Pressley and Wharton-McDonald, 1997). Students lack knowledge of interpreting text structure and do not realize the impact that this expository structure and its features have on learning. Students need to recognize structure of writing such as cause and effect, definition, chronological order, comparison/contrast, and question and answer (Roe, Stoodt, & Burns, 1987).

In addition to content material text features, often times in the social sciences students are learning about abstract concepts, which may affect their ability to be successful in understanding the material being read. This becomes a problem when the learner does not have experiences or background knowledge relating to the concept. Often times these concepts build upon key concepts that were taught earlier. If a child did not understand a concept the first time and then later needs to build upon that concept, he will not be able to develop an understanding of the new information (Roe et al., 1987).
Finally, vocabulary also may be an area of concern when it comes to comprehension.

According to Wayne Herman, a student must comprehend 75 percent of the ideas and 90 percent of the vocabulary of a social studies selection to read it on an instructional level. This level of understanding is necessary for the student to learn and avoid frustration. (Roe et al., 1988, p. 216).

Students need to be able to learn and remember these words for future reference as well, since concepts build upon one another. When reading content material there may be many words a student does not understand in the text. Not all the words are vital for comprehension of the concepts, but students do not necessarily have the skill to decide which words affect understanding and which do not. This, in turn, can hinder student comprehension.

These findings support that students struggle with reading and comprehending non-fiction text for a variety of reasons. Reading is a difficult process for some students regardless of what grade they are in and decoding the words may prove taxing for the student and comprehension is not thought about. Add to this the idea of more difficult vocabulary and that the students are not sure how the words relate to the content. Students in the upper grades are now faced with the challenge of reading to learn and carrying over skills they may have learned in reading class. Whether the students are elementary, middle school, or high school it is important for students to understand text structure and how to use reading strategies. These are skills that not
all students are instructed on how to use to help them be successful readers.
CHAPTER 2
PROBLEM DOCUMENTATION

Problem Evidence

In order to document the difficulty students have comprehending social science text, the researcher used four tools. These tools were: 1) a teacher survey, 2) a student survey showing how students viewed their reading strategies, 3) a non-fiction reading content assessment that showed what skills students used at the beginning of the year, (Appendix A), and 4) Illinois Standard Achievement Test scores from third grade reading.

The first tool used by the researcher was the teacher survey. This tool was created by the researcher and was administered to teachers the last week in August 2001. This tool would help identify the problem as being school wide. Social science teachers from third grade through fifth grade participated in the teacher survey. The teachers rated the students in their classes from the previous year on skills that students used when reading social science text. Figure 1 shows the results from that survey.
As shown in Figure 1, the teachers feel that 0% of the students always use before-reading strategies, 16% feel students usually use before-reading strategies, 67% feel students sometimes use before-reading strategies, and 17% feel students hardly ever use before-reading strategies. Before-reading strategies include skimming the section before reading it, understanding text elements such as chapter titles and section headings, and looking at vocabulary words in bold typeface.

In regards to using strategies when reading, teachers feel that 8% of the students always use reading strategies while reading, 22% feel students usually use reading strategies while reading, 67% feel students sometimes use reading strategies while reading, while 3% feel students hardly ever use reading strategies while reading.

The last bar shows teachers' opinions of after-reading strategies of summarization. Sixty-seven percent feel students usually can summarize what they read, and the remaining 33% feel students sometimes can summarize what they read.
It is clearly evident from the 67% who responded that students sometimes use during-reading strategies and the 3% that responded that students hardly ever use during-reading strategies, that students need to be taught how to use reading strategies while reading more often.

Figure 2. Teacher survey on direct instruction of reading strategies

Figure 2 shows if teachers spend time on direct instruction for before-reading strategies, during-reading strategies, and after-reading strategies. Fifty-eight percent of the teachers said that they do spend time teaching before-reading strategies and 42% said they do not spend time teaching before-reading strategies. Sixty-seven percent of the teachers said that they spend time teaching during-reading strategies and 33% said they do not spend time teaching before-reading strategies. In the last bar, 67% of the teachers said they spend time teaching after-reading strategies and 33% said they do not spend time teaching after-reading strategies.
The second tool administered by the researcher was the student survey. This survey was created by the researcher and was administered to the targeted fifth grade students the last week in August 2001. Students rated themselves on their use of before-reading strategies, during-reading strategies, and after-reading strategies. Students rated themselves using the terms hardly ever, sometimes, usually, and always.

![Bar chart showing student self-reflection on using reading strategies](image)

**Figure 3.** Student self-reflection on using reading strategies

The data represented in Figure 3 show that 11% of the fifth grade students feel that they always use before-reading strategies, 40% feel they usually use before-reading strategies, 43% feel they sometimes use before-reading strategies, and 6% feel they hardly ever use before-reading strategies. The second bar shows how fifth grade students perceive themselves using during-reading strategies. Thirty-one percent feel they always use strategies while reading, 31% feel they usually use strategies while reading, 26% feel they sometimes use strategies while reading, and 12% feel they...
hardly ever use strategies while reading. The last bar shows how students perceive themselves in terms of using after-reading strategies such as summarizing. Twelve percent of the fifth grade students feel they always summarize what they read, 32% feel they usually summarize what they read, 44% feel they sometimes summarize what they read, while 12% feel they hardly ever summarize after they read. The high response of 49% of the students responding that they sometimes or hardly ever use before reading strategies demonstrates that students are not using the strategies that could help them be more successful readers. The response of 56% of the students saying that they sometimes or hardly ever summarize what they have read shows that students may not be rehearsing the information and comprehending what has been read.

The third tool used was the non-fiction reading content material assessment. The students were given a fifth grade text and were asked ten different questions. The written text came from "Our United States," published by Silver Burdett Ginn. The questions were created by the researcher and were given to the targeted fifth grade students the first week in September 2001. The questions were categorized into pre-reading questions, questions where the answer is located in the text, and questions that require higher level thinking. Figure 4 shows the different responses given by students about how they dealt with the assignment.
Figure 4. Number of strategies students used when given an assignment

As Figure 4 shows, 28% of the students used one strategy which was solely to read the text, 36% of the students used two strategies which were read the directions before reading the text. Twenty-seven percent of the students used three strategies, which could be a combination of read the directions, read the questions, skim the selection and then read the text. Finally, 9% of the students used four strategies. These students read the directions, read the questions, skimmed the selection, and then read the text. This information shows that 36% of the students use before-reading skills such as reading through the questions or skimming through the section to help guide their reading.

In the same assessment, students were also asked three questions where the answer could be found in the text. One question focused on the title of a map, another question required the students to read a chart, and the last question required students to read the caption of a picture.
Figure 5 shows that 92% of the students were able to read a map title correctly, 60% were able to read a chart, and 100% were able to answer a question about a caption of a picture. The majority of the students, who were unable to answer the question regarding information in the chart, used information that was in the text and misread the question. Overall, the students did not seem to have a problem with questions when the answers could be found in the text, pictures, or maps.

The last type of questions that were included in the assessment was higher level thinking questions. These questions include being able to make a comparison of information located in the text with information outside of the text, using inference skills, and summarizing what was read. The results of this type of question, as shown in Figure 6, are quite different than the results in Figure 5.
Making Comparisons | Using inference | Summarizing
--- | --- | ---
20% | 40% | 40%

This information shows that less than half of the targeted fifth grade class performed at a satisfactory level in regards to questions that required higher level thinking. In the student survey more than half the students said they usually or always summarize, but when asked to perform the task only 40% of the students were able to complete the summary with success.

The last method the researcher used to show that the problem exists was to look at Illinois Standard Achievement Test results for the targeted fifth grade students. The scores that were used were taken from when the students were in third grade and the scores represent what the students scored in reading comprehension.
As is shown in figure 7, only 12% of the students exceeded the state standards for reading. Forty-four percent of the students met the state standards and 44% fell below the state standards. When over 40% of the students are below the state standards it appears that the targeted group needs additional help with reading comprehension skills. Students who score low in reading comprehension also will have a difficult time reading non-fiction text as is required in social science.

Probable Causes

Literature suggests several causes for students having difficulty comprehending non-fiction text. Many social science classrooms are driven by the curriculum presented in a textbook. When teachers teach social science solely through the use of a textbook, student comprehension can be affected. Using a single textbook can be too challenging for students due to the structure, content specific vocabulary, high readability level, and writing styles that do not appeal to students. Seeing these challenges presented to students with using a textbook, teachers need to tailor their instruction in such a way where students learn techniques and strategies to
successfully read expository text. Unfortunately, this direct instruction in reading expository text is not being done in many social science classrooms.

One problem that affects student comprehension is learning social science content through a textbook. The manner in which a textbook is presented, teachers lecturing from the textbook, and the fact that textbooks present historical information in a non-engaging format can hinder student comprehension of social science content. Textbooks frequently are written at a higher readability level with unfamiliar vocabulary and have text structure and elements with which students are unfamiliar. As stated in Katims and Harmon (2000), textbooks make comprehension difficult (Webb), provide inadequate instructional designs (Armbruster), and offer little help with reaching the diversity of students (Schumm and Vaughn). According to Camp (2000), Schumm, Vaughn and Alexandra (1994), textbooks contain a density of facts and a large amount of unfamiliar vocabulary in a short amount of text. Students who have a difficult time decoding words and identifying between important and unimportant facts will have a difficult time with a standard textbook. Collins (1994) also pointed out that ambiguous words or confusions can affect cognitive processing in students.

Besides expecting the students to read and understand the textbook, another problem that Palmer and Stewart (1997) mention is that teachers lecture from the textbook, which often times is too difficult a book for the students to understand. The problem of comprehension may be compounded when a teacher lectures from a textbook and does not present the information at a level and in a manner that makes
sense to the students. Lecturing does not give students the opportunity to take an active role in learning nor does it provide them with the chance to rehearse key information.

In addition, many textbooks lack the stimulating content that entices students. The textbook states the facts and important content, but lacks the writing style to attract the students' attention. As stated by Edgington (1998), textbooks do not give the detail, passion, or interest that a story can generate, and the content in a textbook is not stimulating to students. Students are more interested in a topic if it is something that relates to them in some way, especially if it is a narrative story. The expository text structure of social science textbooks does not provide students with such a connection. Teachers may recognize these weaknesses of using a textbook to teach social science, yet believe they are bound to using a textbook adopted by their district. Lack of training or resources may limit a teacher's ability to supplement social science curriculum with other resources and strategies that may foster better understanding of key ideas in non-fiction text.

Vocabulary and readability found in the social science textbook also can affect whether a student can successfully comprehend the material being presented. Katims and Harmon (2000, p. 1) state:

Some argue that contemporary content-area textbooks are "inconsiderate" texts written in ways that make comprehension difficult (Webb, 1984). Others contend that textbook manuals provide inadequate instructional
designs (Armbruster & Gudbrandsen, 1986) and offer little help with student diversity (Schumm & Vaughn, 1992).

Students are presented with a wealth of new vocabulary in a short amount of text, which makes comprehension difficult. Moats states in Bryant, Ugel, & Thompson (1999, p. 2), “Many secondary-age students with reading disabilities continue to struggle with word identification skills, which adversely affects their ability to read fluently and understand text.” When students are unable to read fluently, their brains expend energy on word recognition, which disrupts the ability to comprehend, let alone remember, what has been read. Pressley and Wharton-McDonald (1997, p. 2) also state:

Of course when children cannot decode at all, there is little chance of comprehension. When they can decode but it requires a considerable effort, decoding competes with comprehension efforts for the limited capacity available for processing of text, so that effortful decoding consumes capacity that might otherwise be used to understand text.

Knowing that textbooks often have new and content specific vocabulary, being able to decode unfamiliar words can be a challenge for students in the social science classroom.

Unfamiliar words may pose another challenge for students. Students may not have the skills necessary to decipher their meanings. Students often equate understanding word meaning with looking up definitions in a dictionary or glossary, yet
this may not be the most effective strategy. Students may try to figure out the meaning of a word by looking it up in a dictionary or glossary, but have a difficult time understanding the meaning because there are other unfamiliar words in the definition. In reality, a passage found in a social science textbook might simply have too many unfamiliar words that may make a student feel frustrated and result in the student simply skipping over the words. When too many words are skipped over, comprehension is affected. Debugging the text for unfamiliar words prior to having students read the text independently is one strategy that teachers need to model to assist students in being able to process non-fiction text more successfully.

Another problem with the text is the readability level of the textbook. Schumm, Vaughn, and Alexandra (1994) state that textbooks do not meet the spectrum of learners that are found in a classroom. A classroom may have students who have limited English proficiency, who are identified as gifted, who read below grade level, or who have limited background knowledge on the topic. The textbooks offer few suggestions for reaching these different groups of individuals. Howe in Edgington (1998, p. 2) states, “Since they are writing for a mass audience, textbook authors cannot take into account the different reading abilities of the students who will be using the texts.” When this occurs, the responsibility falls on teacher to find text and supplemental materials to meet the individual needs of his/her students. Unfortunately, limits of time, resources, and training may not allow teachers to provide the necessary materials for students at a level that would provide optimal learning.
With the limits provided by a textbook, students need to be given direct instruction in how to read expository text. As Bulgren and Scanlon (1997/1998) state, when students reach the middle grades, it is assumed that they are coming to class knowing how to process information. Some students have not learned these skills effectively or do not realize that the skills learned in one class can be transferred to another class. If teachers do not provide direct instruction on how to read expository text, students will find reading and comprehending a social science textbook challenging. Students may not be reading at the grade level of the textbook that they are using, therefore teachers need to be teaching strategies to help the student identify important information. Teachers may fail to realize this because they believe their goal is to teach social science content, not reading strategies. Collins (1994), Schumm, Vaughn, and Alexandra (1994) state that students do not always know that the purpose for reading is to construct meaning. Social science lessons are often undifferentiated for students. In the social science classroom students are often seen reading the text and answering questions. This becomes difficult for students who have not mastered reading skills and have a difficult time deciding what is important and what is not. Teachers are not spending the time to teach these skills; rather time is spent trying to teach the concepts of social science. In 1995-1996 (Pressley & Wharton-McDonald 1997), Mistretta and Echevaria observed ten 4th and 5th grade classrooms in New York. During their observation, they found little teaching of comprehension strategies. They saw that the teachers may have described the strategies, but there was no time
spent on direct instruction of the strategies.

There are many different strategies to reach each individual student. According to Spor and Schneider (1999), teachers are not always familiar with the different strategies or they do not use the strategies. Quiocho (1997) agrees with this adding that few teachers model the variety of learning strategies. Students need constant reminders of what skills they should be actively incorporating into their reading. At the middle grades and high school level, the traditional style of teaching social science content is to lecture from the text and have the students read the text to prepare for weekly tests as stated in Bryant, Ugel, and Thompson (1999) by Kinder and Bursuck. Skills in identifying the main idea and also how to prepare for weekly tests are something that teachers need to spend more time teaching. The content from the social science textbook can be the vehicle used to model these essential skills.

In addition to textbooks and teacher instruction, another problem that stands in the way of comprehending social science text is student perception. Students do not see social science as being related to their lives and do not see how the content is relevant to them. Edgington (1998) stated that social science is not high on the subject preference list of students and students do not see the material as being useful to their present or their future needs. Students are coming to class with limited background experience in regards to the content being taught. Bryant, Ugel, and Thompson (1999, p. 1) state, “Content-area reading means that students interact with text to interpret and construct meaning before, during, and after reading by using their prior knowledge and
the skills and strategies developed during early reading instruction." If students come with limited background knowledge, they are not able to construct meaning before or during the reading because the material is new to them. They need to have multiple exposures to the material before they have background knowledge in the topic.

In summary, there are several reasons that students have a difficult time reading and comprehending social science content. Textbooks can be one part of the problem. Textbooks do not help teachers address the needs of all their students. Social science textbooks are designed and structured in such a manner that content specific vocabulary and high readability levels hinder the ability of some students to successfully comprehend key ideas. Another problem stems from teachers not providing direct instruction in how to read expository text. Teachers assume that the students already possess the skills needed to be successful in content area comprehension because that is the job of the teacher in the reading classroom. Teachers are not taking the time to teach students strategies that will help them understand the information more clearly. If students have experienced difficulty or frustration in understanding social science content in the past, their lack of background knowledge also can affect comprehension. The perception that social science is hard and does not directly relate to their lives interferes with the ability of students to see the purpose and reason behind mastering the meaning of social science material.

It is clearly evident, looking at the tools used by the researcher and the previous research found in the probable causes, that students are not receiving the instruction of
how to use reading skills effectively in the social science classroom. In the teacher survey teachers felt that students did not use during reading strategies, but 60% of the teachers felt that they are teaching students these skills in the social science classroom. Research shows that students have a difficult carrying over skills from one classroom to the next. The teachers who were surveyed teach all subject areas. The problem may be that the teachers are teaching these strategies, but they are not being taught during the social science block of time. As documented by the content area assessment, over 50% of the targeted fifth grade students began the assignment without previewing the questions or skimming the selection. In doing this, the students do not have a chance to process what the material will be about nor do they activate their prior knowledge. When asked to use higher level thinking on this assessment, only 20% of the students were able to make comparisons with information located in the text to information outside of the text. In addition only 40% of the students were able to answer the question that required inferential thinking and only 40% were able to succinctly summarize what they had read. Teachers need to teach and model to students how to read expository text. Students need to have the skills to read for information and begin using their higher level thinking skills.
CHAPTER 3
THE SOLUTION STRATEGY

Literature Review

There are many ways to help students become more successful and confident in reading non-fiction text. Students need to learn what it takes to be a good reader. Pressley and Wharton-McDonald (1997) state that good readers interact with the text and process the information as they go along. For example, good readers know why they are reading, will preview the text to look for important sections, will look for relevant information and read at a slower pace to process that information, and also will construct hypotheses and make conclusions. Teachers need to teach a variety of strategies that the students can incorporate into their reading on their own and help them become good readers. These strategies may include using picture books or trade books, teaching students text elements, teaching students to create questions as they read, and using guided reading. These are just a few of the strategies that teachers can and should be using. Although students may not always transfer these skills that they are taught in reading class, if the skills are taught in the content area the students will be more likely to use the skills.
One way to pique the students' interest in social science is to use picture books or trade books. Picture books/trade books can be used for students to read on their own or as a read aloud to the whole group. Giving students the choice of choosing what they want to read will give them more excitement rather than merely assigning books. Trade books are non-fiction books that are written at a specific reading level. Since they were babies and toddlers, children have been told stories in the narrative form. "While the non-fiction book answers questions in a more straightforward manner, the story structure of a fiction book may be less difficult for children to comprehend" (Camp, 2000, p. 1). Using picture books follows the narrative format that children are used to and the stories make the historical time and events come alive. "Picture books lend themselves to presenting sometimes difficult or sensitive concepts to children in a palatable manner" (Farris & Fuhler, 1994, p. 2). Farris and Fuhler go on to explain that picture books add depth to an event that may not be in the textbooks. Edgington's (1998, p. 1) statement, "A textbook cannot lend itself to the same sort of detail, passion, or interest a story can generate," parallels Farris' and Fuhler's thought. Picture books/trade books provide historical information in a stimulating content that students may not find in a textbook. An example is the historic flight of Charles Lindbergh. Where many textbooks include this event, few go into the depth that may reach the student's interest. Students may find it interesting to learn that during Lindbergh's solo flight he experienced fear, and that his plane lacked a radio and a parachute. Adding the human element is something that a picture book/trade book can do for students that
a social science textbook does not provide.

There are many picture books that explain events through a student’s perspective. Looking at the time period through student’s eyes helps them to understand the time, place, and event, according to Smith and Johnson (1994). Students can relate to the characters, and the students create more of a connection to what the student has experienced. A quote from Edgington (1998, p. 2) seems to describe the use of picture books/trade books the best.

Trade books bring a human element to the lesson (Finn and Ravitch); children can put themselves in place of the characters and develop feelings and understand the characters and the era (Levstik, Banks). Students can also see similarities and relevance between the story and their own lives (Guzzett, Kowalinski, McGowan & Gallo, Barksdale & Levstik).

Using picture books/trade books will provide the students with multiple exposures to the topic being taught. Students will become more comfortable when discussing the material in a large group because it will be something they have knowledge about. Using different resources gives the students the background they need about the topic to begin making connections to the information.

Today students need to be able to use a variety of sources and synthesize the information. Trade books/picture books create that variety of sources because they have visual appeal and they encourage students to pick up the book to find information (Palmer & Stewart, 1997). Picture books/trade books may be found written at a reading
level appropriate for the students working with the book. Students continue to learn about the historical content being taught, but the readability level is more suited to their individual needs. This is a way for students to learn about different aspects of a topic and then meet with other trade book groups and discuss what those groups have learned. This allows students to internalize what they have learned and become the experts on their topic. Students can then begin to see similarities and differences among the books that are being used.

Teaching students about expository text structure is key to fostering comprehension of social science content. Collins (1994, p. 1) states the importance of knowledge of text structure.

Knowledge of text structure is critical for reading to learn, it is a requisite for efficient use of study time. By detecting the organizational patterns or structures of texts, students can observe how authors arrange ideas and determine which kinds of structures are used to interrelate ideas.

There are five expository text patterns: description/enumeration, sequence, compare/contrast, cause/effect, and problem solution. These text patterns are embedded within the text of social science textbooks. Once students begin to recognize these patterns while reading, students can organize and chunk information. This, in turn, can lead to improved comprehension. Taylor (in McMackin, 1992) goes on to add to this idea of text structure. When students understand expository text structure and are aware of how a writer weaves together the relationships among
concepts through text patterns, the students' comprehension will improve.

Using picture books/trade books related to a topic in the social science classroom can be used to build background knowledge and teach students about text structure. McMackin (1998) states that using picture books allows the teacher to use the picture book to teach text structure. Many picture books have an underlying "expository" text pattern in addition to their narrative text structure. Reading these stories to the students and discussing the text pattern will help the students to identify these patterns. The goal for students is to transfer this knowledge of text patterns to their independent reading of textbooks. Since their early interactions with the printed word, students have been read stories in a narrative form. They are aware of setting, problem, solution, and the characters. As the students become older, the texts they read shift from narrative to expository. Using picture books/trade books is a useful tool to help the students move from narrative texts to expository texts.

Students also need to be aware of different text elements in expository text. Text elements include titles, headings, subheadings, bold print, graphics, and captions. Learning to read the title of a section will help students set the purpose for reading. Looking at section headings will help the students see the "big picture" of the section being read. Turning subheadings into questions is a strategy students can use to help set the purpose for reading as well. Previewing the pictures, graphics, and captions before reading can give students information about the subject and add additional detail not found in the text. Teachers need to provide direct instruction in how to use
text elements to assist in comprehending expository text. Students need to recognize how important these elements are for assisting them in comprehending material found in their social science textbook.

In addition to teaching students about text structure and its elements, another strategy that helps student comprehension is teaching students to create questions related to the material they are reading. Students should not only create questions before reading, but also during reading, and when they finish reading. Ciardiello (1998) states that questions help the students to focus on the material. It is a way to metacognitively check to see if the material that is being read is being understood. Bryant, Ugel, & Thompson (1999) agree that questioning is a way for students to monitor their understanding and also gives the learner time to reflect. Questioning encourages more content area learning since the students are interacting with the text. "Questions stimulate divergent thinking and encourage independent learning," (Ciardiello, 1998, p. 4). Students need to learn to be independent readers in the social science classroom. Creating questions is one way to ensure students are responsible and accountable for their own learning. Ciardiello (1998) continues by adding that when students ask questions, they are prompted to look for and learn the answers. Creating questions can be done by looking at the section headings. These questions can simply focus on who, what, where, when, and why. After reading the section, students can refer back to their original questions and answer them. If students are unable to answer the questions, they will need to reflect on why. Was it that they did
not understand what they read? Was it that the answer was not in that part of the text? Students need to become responsible and accountable for their own learning and comprehension. This is the first step to have students become good questioners.

Anthony Manzo's ReQuest helps students to work on their questioning skills. Hurst (2001) explains how in ReQuest both the teacher and students read the passage. After the reading, the students are the ones responsible for asking questions of the teacher. During this time, the teacher can look back into the text and model good reading strategies. After the initial questions are given by the students, the teacher and students both begin to ask questions. This allows the teacher to model how to ask higher level questions. This strategy helps students to become better questioners and they can begin to do this in small groups. Modeling and rehearsing questioning in the classroom can help students to develop this skill and become more comfortable using it while reading independently.

In addition to questioning, another strategy to help improve comprehension is to work with students in guided reading groups. In a small group setting, the teacher can work with the students to model and practice essential reading strategies. Working in smaller groups allows students to have more direct practice and can give the teacher a better understanding of what processes the student is using to comprehend what he/she is reading. Armbruster states in Palmer and Stewart (1997, p. 2) that "...children need extensive practice reading nonfiction in order to become proficient at reading to learn." Teaching students how to read this type of text in a small group will help the
child to feel more successful when reading independently.

Trade books are a good way to provide this opportunity to the students. Trade books related to a unit of study in the social science classroom can be gathered to meet the individual reading levels and interests of the students. Using this method, all students get the same content, but it is delivered to the students using text that is appropriate to their reading levels and interests. Mooney (1995) made the analogy of guided reading to a trampoline. The students have the guidance to spring them towards success, but they have the safety net for support.

When teaching students in guided reading groups it is important to ask questions that require them to look beyond the obvious. Students have the capability to look back at the text, but students need to develop the higher level thinking skills such as making inferences. Mooney (1995) also states that students can be given different purposes for rereading the text. Some students may look at the illustrator, other students may look at the character they can most relate to, or students may also look for the event that has the most impact on what has happened in the text. There may be times that students choose not to respond. According to Mooney (1995) this is also acceptable as long as it is not being used consistently by the same students.

In summary, there are many reading strategies that teachers can teach to their students. Teachers need to spend instructional time teaching students about text elements and text structure. Using picture books is one resource to use to teach students about the different types of texts. Students also need to be taught how to
create meaning in what they have read. Teaching students questioning skills can help
them monitor their comprehension. Bulgren and Scanlon (1997/1998) state that for
these strategies to be successful, students need to be aware of the strategies and be
involved in the learning process. Both teachers and students need to know their roles
in the strategies and teachers should share their expectations with the students.
Katims and Harmon (2000) add that the place to teach these strategies is in the content
area where the students can learn to be strategic learners. No matter what strategy is
used, Pressley states in Bryant, Ugel, and Thompson (1997/1998) that in order to help
the students better understand and comprehend the text, the teacher must teach one
strategy at a time, model the strategy by thinking aloud, and give students several texts
to practice the strategy. Vacca, Vacca, and Grove share similar beliefs in Hurst (2001).
They state that new strategies should follow this sequence: 1) awareness to the
strategy, 2) modeling of the strategy, 3) practicing the strategy, and 4) applying the
strategy.

Project Objectives and Processes

As a result of implementing trade/picture books in the social science
curriculum during the period of September 2001 to January 2002, the targeted fifth
grade students will learn to make connections to text as measured by the student
survey and the text/question assessment tool.

As a result of implementing trade/picture books in the social science curriculum
during the period of September 2001 to January 2002, the targeted fifth grade students
will improve their questioning skills as measured by the student survey.

As a result of teaching students how to understand text structure and text elements during the period of September 2001 to January 2002, the targeted fifth grade students will increase comprehension in reading non-fiction text as measured by the student survey, learning log, and the text/question assessment tool.

As a result of implementing trade/picture books in the social science curriculum during the period of September 2001 to January 2002, the targeted fifth grade students will increase their knowledge of text elements in social studies as measured by the student survey, learning log, and text/question assessment tool.

ease comprehension in reading non-fiction text as measured by the student survey, learning log, and the text/question assessment tool.

As a result of teaching students how to make connections to the text during the period of September 2001 to January 2002, the targeted fifth grade students will increase comprehension in reading non-fiction text as measured by the student survey, learning log, and text/question assessment.

As a result of teaching students how to generate questions to help construct meaning during the period of September 2001 to January 2002, the targeted fifth grade students will increase comprehension in reading non-fiction text as measured by the student survey, the text/question assessment tool, and a learning log.

In order to accomplish the project objectives, the following processes are necessary:
1) Gathering picture books and trade books for topics in the social studies curriculum.

2) Creating a series of learning activities that teach students to understand text elements.

3) Creating a series of learning activities that teach students questioning skills and how to make meaningful connections.

4) Instruct students on the characteristics and strategies that good readers use.

5) Plan lessons that leave time for the instructor to work with small guided reading groups.

Project Action Plan

The tables on the following pages describe the timeline for the implementation of the intervention.
<table>
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<tr>
<th>PROJECT OBJECTIVES</th>
<th>INTERVENTION</th>
<th>TARGETED GROUP BEHAVIOR</th>
<th>TEACHER/RESEARCHER BEHAVIOR</th>
<th>MATERIALS</th>
<th>TIME, FREQUENCY, AND DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase students’ comprehension while reading non-fiction text by using picture books</td>
<td>Collect social science content related picture books</td>
<td>None</td>
<td>Researcher reviews and collects materials for non-fiction text</td>
<td>Supplementary picture books</td>
<td>August 2001 during three day planning period</td>
</tr>
<tr>
<td>To increase students’ comprehension while reading non-fiction text by using picture books</td>
<td>Collect picture books that can be used to teach reading strategies of identifying text elements, asking questions and making connections</td>
<td>None</td>
<td>Researcher reviews and collects picture books that lend themselves to targeted reading strategies</td>
<td>Supplementary picture books</td>
<td>August 2001 during three day planning period</td>
</tr>
<tr>
<td>To increase students’ comprehension of non-fiction text by teaching students text elements</td>
<td>Develop lessons that teach students the different text elements</td>
<td>None</td>
<td>Researcher organizes materials into teaching units and individual lessons</td>
<td>Collected picture books and piloted textbook series</td>
<td>August 2001 during three day planning period</td>
</tr>
<tr>
<td>To increase students’ comprehension of non-fiction text by teaching students to make connections</td>
<td>Develop lessons that teach students how to make personal, text, and world connections</td>
<td>None</td>
<td>Researcher organizes materials into teaching units and individual lessons</td>
<td>Collected picture books and piloted textbook series</td>
<td>August 2001 during three day planning period</td>
</tr>
<tr>
<td>To increase students’ understanding of strategies they should be using</td>
<td>Develop lessons that leave time for guided reading instruction</td>
<td>None</td>
<td>Researcher develops lessons that allow for small group instruction</td>
<td>Picture books, trade books, text books</td>
<td>August 2001 during three day planning period</td>
</tr>
<tr>
<td>To increase students’ comprehension while reading non-fiction text</td>
<td>Administer teacher survey</td>
<td>None</td>
<td>3rd-5th grade teachers and researcher complete survey on student characteristics while reading</td>
<td>Social science teacher survey</td>
<td>One ten minute session the last week of August</td>
</tr>
<tr>
<td>PROJECT OBJECTIVES</td>
<td>INTERVENTION</td>
<td>TARGETED GROUP BEHAVIOR</td>
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<tr>
<td>To increase students' comprehension while reading non-fiction text</td>
<td>Administer text/question assessment tool</td>
<td>5th grade students will read text and answer questions</td>
<td>Researcher administers assessment tool on Our Country</td>
<td>Text/question assessment tool on Our Country</td>
<td>Week 1 of research project (30 minutes of one 50 minute class)</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text</td>
<td>Assess student activity while reading non-fiction text</td>
<td>5th grade students will read non-fiction text and complete student learning log</td>
<td>Researcher administers student learning log</td>
<td>Student learning log</td>
<td>Once a week during the last four weeks of research</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text</td>
<td>Administer student survey</td>
<td>5th grade students will take survey</td>
<td>Researcher administers student survey to 5th grade students</td>
<td>Student survey</td>
<td>Week 1 &amp; 16 of research project (15 minutes of one 50 minute class period)</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text by using text structure</td>
<td>Teach unit on text elements</td>
<td>5th grade students use text elements to comprehend social science text</td>
<td>Researcher teaches unit</td>
<td>Unit on text structure</td>
<td>Week 2-5 of research project. Review skills as necessary during week 6-16</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text by making connections</td>
<td>Teach unit on making connections</td>
<td>5th grade students make connections to text to comprehend social science text</td>
<td>Researcher teaches unit</td>
<td>Unit on making connections</td>
<td>Week 6-8 of research project. Review skill as necessary during week 9-16</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text</td>
<td>Administer text/question assessment tool</td>
<td>5th grade students will read text and answer questions</td>
<td>Researcher administers assessment tool on Making a Nation</td>
<td>Text/question assessment tool on Making a Nation</td>
<td>Week 8 of research project (30 minutes of one 50 minute class period)</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text by creating questions</td>
<td>Teach unit on how to generate questions that help construct meaning</td>
<td>5th grade students create questions to better understand the social science text</td>
<td>Researcher teaches unit</td>
<td>Unit on generating questions that construct meaning</td>
<td>Week 9-11 of research project. Review skill as necessary during week 12-16</td>
</tr>
<tr>
<td>To increase students' comprehension while reading non-fiction text</td>
<td>Administer/text question assessment tool</td>
<td>5th grade students will read text and answer questions</td>
<td>Researcher administers assessment tool</td>
<td>Text/question assessment tool on The Great War</td>
<td>Week 16 of research project (30 minutes of one 50 minute class)</td>
</tr>
</tbody>
</table>
Methods of Assessment

The researcher will use several different methods of assessment at the conclusion of the research. The following assessments are all researcher-created: text/question assessment, student questionnaire, and student learning logs. The text/question assessment and student questionnaires are administered to the students prior to the intervention and also at the end of the intervention. By looking at the pre-assessment and post-assessment, the researcher will be able to identify if the intervention was successful.

The first assessment is the text/question assessment. The students, through the course of the research, will take three similar assessments. All three assessments will be set up in the same format. Students will be asked to explain what they do prior to reading the selection, what skills they use when they come to unfamiliar words. There are questions where the answers are found in the text and higher level questions where the students must use more advanced skills such as inference skills and summarizing skills.

The student questionnaire will be used for the students to self-assess how they view themselves in terms of reading social science content material. Prior to the research the students will answer questions on their confidence in social science, the skills they use before reading, during reading, and after reading. At the end of the intervention the students will rate themselves using the same questionnaire that was used prior to the research.
Finally, on a weekly basis during the last month of the research, students will be filling out learning logs. These logs will show what skills the students are using on their own. Students will have the opportunity to explain what they learned during the week or specific day and what skills they used during this intervention to help them better understand the material.
CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this research project was to improve student comprehension skills in the content area of social science. The researcher implemented two strategies during the research. The first strategy included teaching students about text elements, teaching students to make connections to the reading, and teaching students to ask questions about their reading. The second strategy was the use of trade books and picture books to practice the strategies and to help improve student comprehension in social science.

The first steps were taken by the researcher in August. During this time lesson plans were created to ensure the instruction in the two teaching interventions (Appendix C). The researcher constructed lesson plans for teaching the students about text elements, how to make connections to the text, and finally how to generate questions about the text. Another step that was taken in August was to find reading selections for the three assessment tools and to create questions that the students would answer for each of the assessments.
During the last week in August the researcher conducted a teacher survey to see how teachers viewed their students' skills from the previous year, as well as to ask the teachers what strategies they used through direct instruction. The student survey was administered to the students during the first week of school. The students rated themselves in terms of confidence when reading social science text, strategies the students use before reading, while reading, and after reading a selection.

The intervention implemented by the researcher was to teach the students about text elements. This took place approximately ten minutes, four days a week, during the first three weeks of the research. The first two days during this time were spent identifying the different text elements that were in the students' social science textbook. These elements included chapter titles, section headings, boldfaced words, pictures and their captions, charts, and tables. Each day prior to reading or discussing a section, the students would look at these text elements and begin making predictions and generalizations about what the text would be about. The researcher would ask questions based on these text elements prior to having the students read the selection. Periodically, the researcher would review these text elements during weeks six through 16, prior to doing a whole class discussion.

In addition to teaching the students how to use the text elements, the researcher also implemented a unit on making connections during weeks six through eight (Appendix C). The original lesson plans included using picture books to help the students create connections. Hoping to have the students see more of a connection to
the different content areas this plan changed and the researcher saw the opportunity to
use literature that the students were reading in another subject area to teach the
students about making connections (Appendix D). The teaching of the unit lasted for	hree weeks. During this time period the students were introduced to text to text
connections, text to self connections, and text to world connections. Thus, when
reading a portion of the novel Shiloh, the students were able to connect to the main
caracter because many students currently have animals. Students also were able to
make text to world connections with this story in terms of animal rights and animal
protection. The second and third weeks, while still making connections in literature, the
students were introduced to making connections to information they read in their social
science texts. Making connections in social science proved to be more challenging for
most students because they did not have the background to make connections to the
topics being studied. Many students were able to make connections to movies they
had seen that related to history. When given verbal examples by the researcher,
students were able to draw upon the ideas given in order to make their own
connections. During weeks nine through 16 the students were periodically asked to
make connections to the social science content that was being studied. The learning
logs that students completed during the last four weeks of research asked them to
make connections to what had been read in class that day.

The researcher also taught a unit on generating questions that would help the
students construct meaning from what they read (Appendix C). During weeks nine
through 11, the students learned about creating questions that would help ensure their comprehension. The instruction started with the students creating questions based on the section headings and focusing on who, what, where, when, why, and how. Before reading a section, the students created their own questions. When the reading was completed, they were asked to go back and answer their self-created questions. At the point of answering the questions, there were two options with which the students were faced. If a question could be answered it was, while questions that could not be answered had to be revised. If the latter occurred the students had to justify why their question had to be changed. Students then would go back to the text to ensure that the question was not answered. This strategy helped the students monitor their comprehension. Students then would create a new question based on the information that was found in the text.

Presentation and Analysis of Results

The information presented in the following figures shows the changes that were made by the students. The information was gathered through the post survey that the students filled out. Additional information was obtained through the student non-fiction assessment that the students completed in January. The figures show how students did on a posttest and also shows how students these scores compared to the scores on the pretest.
Figure 8 shows what the students did prior to completing the posttest. Forty percent of the students used one strategy and began reading the text without looking at any of pictures, graphs, directions or questions. Twelve percent of the students used two strategies and began by reading the directions and then proceeding on to the text. Twenty-eight percent of the students used a combination of three different strategies, which included a combination of reading the directions, reading the questions, skimming the selection, and then reading the text. Finally, 20% of the students used four strategies of skimming the selection in addition to reading the directions and questions before reading the text.
Figure 9. Comparison of pre / post Self-assessment of strategies students used when given an assignment.

Figure 9 shows the comparison of what students did before reading during the pretest which was given in September and the posttest which was given in January. In September, 28% of the students used one strategy compared to 40% in January. The strategy these students used was reading the text. In September, 36% of the students used two strategies, which were reading the directions and reading the text, whereas 12% read the directions before reading the text in January. In September, there was 27% who used three strategies, compared to 28% percent in January. The three strategies were a combination of reading the directions, reading the questions, reading the text, and skimming the text. The last group of students used four strategies. The strategies included reading the directions, reading questions, skimming the text, and reading the text. In September, nine percent of the students used four reading strategies, compared to 20% of the students in January. There was an increase of
students using multiple strategies before reading the text from 36% in September to 48% in January.

Figure 10. Percent of correct responses to questions where the answer is contained in the text.

The information in figure ten shows the percent of students who correctly answered different literal questions. In the posttest in January, 68% of the students correctly answered a question dealing with reading a map title. Sixty-eight percent of the students were able to correctly answer a question about a chart. Finally, 88% of the students were able to correctly answer a question where the answer could be found in the caption of a picture.
Figure 11. Comparison of correct responses to pretest and posttest of questions where the answer is contained in the text.

Figure 11 compares the percentage of students who correctly answered literal questions from the text. In September, more students were able to answer a question in regards to reading a map title. Ninety-two percent of the students answered the question correctly and in January only 68% of the students answered the question correctly. The posttest in January saw an increase in the amount of students who correctly answered a question relating to reading a chart. In January, 68% answered the question correctly and in September only 60% were able to answer correctly. The last literal question was answering a question from a caption. In September, 100% of the students answered the question correctly and in January 88% of the students...
answering a question from the caption correctly.

Figure 12. Posttest results of higher level thinking questions

The information in Figure 12 shows the percentage of students who were able to answer higher level thinking questions wherein the students had to make comparisons, use inference, and summarize. Eighty percent of the students were able to accurately make comparisons, 56% were able to use inferences, and 48% were able to clearly summarize a section.
The information in Figure 13 shows the growth the students made in answering higher level questions. In September, 20% were able to make comparisons and in January 80% were able to make comparisons. In September, 40% of the students were able to use inferences, whereas in January 56% of the students were able to make inferences. For summarizing, 40% of the students were able to accurately summarize a section and in January that number increased to 48%.
Figure 14. Student post-survey self reflection on using reading strategies

Figure 14 shows how students viewed themselves in terms of using before, during, and after reading strategies. Thirty percent of the students said they always use before reading strategies, 34% said they usually use before reading strategies, 30% said they sometimes use before reading strategies, and six percent said they hardly ever use before reading strategies. In regards to using different strategies during the reading of a text, 22% always use these strategies, 34% usually use these strategies, 30% sometimes use these strategies, and 14% said they hardly ever use these strategies. Students also were asked to rate themselves in terms of using an after reading strategy of summarizing what had been read. Sixteen percent of the students said they always summarize, 12% said they usually summarize, 44% said they sometimes summarize, and 28% said they hardly ever summarize after reading.
Figure 15 shows the comparison on how students rated themselves in terms of using before reading strategies. On the pre-survey 11% of the students replied that they always use before reading strategies and on the post-survey 30% said they always use before reading strategies. This shows an increase of 19%. Forty percent of the students on the pre-survey said they usually use before reading strategies compared to 34% on the post-survey. Forty-three percent of the students on the pre-survey replied to sometimes using before reading strategies versus 30% on the post-survey. Finally, six percent on the pre-survey and on the post-survey said they hardly ever use before reading strategies.
Figure 16. Comparison from pre to post survey on using during reading strategies

Figure 16 shows the comparison from the pre-survey to post-survey on students' perception of their use of reading strategies. On the pre-survey, 31% of the students always use during reading strategies and on the post-survey only 22% said they always use these reading strategies. On the pre-survey, 31% said they usually use during reading strategies and on the post-survey 34% replied to usually using these strategies. Twenty-six percent of the students on the pre-survey said they sometimes use during reading strategies and 30% said this on the post-survey. Finally, 12% of the students on the pre-survey responded that they hardly ever use during reading strategies and 14% responded this way on the post-survey. In conclusion, there was not a significant change students' perception of their use of during reading strategies.
Figure 17. Comparison from pre-survey to post-survey on using after reading strategies

Figure 17 shows the comparison of students' perception of use of after reading strategy of summarizing what had been read. On the pre-survey, 12% of the students said they always summarize, compared to 16% who summarize on the post-survey. Thirty-two percent on the pre-survey said they usually summarize compared to only 12% on the post-survey. The amount of students on the pre-survey who said they sometimes summarize was 44%; this was the same amount of students on the post-survey. Finally, 12% on the pre-survey said they hardly ever summarize and on the post-survey this number rose to 28%. It is the researcher's belief that the drop in percentage of students summarizing is due to the fact that the pre-survey was given at the beginning of the year. Often times students have a more positive outlook on their skills and throughout the year they realize they may not always use the skills they should be implementing.
Conclusions and Recommendations

During the course of the research, the researcher used actual social science textbooks or reading text to model and practice the strategies. Picture books were used as a supplement to the information the students were learning about. This was a deviation from the original action plan. The researcher felt this was a necessary change seeing that students needed assistance in learning ways to improve comprehension in required readings. The social science text and reading text required more of a guided reading approach where the researcher was there to model and rehearse the skill, providing the necessary support to students when needed. Picture books were seen more as a supplement that students could practice independently the skills that were taught.

The researcher saw a positive growth in the fifth grade students in terms of the amount of correct responses that students gave when responding to higher level questions, as well as in the number of strategies students used when given an assignment. Even though there was not a significant increase in students' self perception of the skills they used as seen in the student survey, the students' success in achievement increased. The researcher attributes this change in student achievement to the implementation of teaching the students to identify different text elements, make connections to what was read, and to create questions to help set a purpose for reading.
By teaching the students about different text elements, the researcher saw students begin to preview the text by looking at the title, headings, pictures, captions, or graphs. Recognizing text elements and using these elements can help to foster better comprehension when students read the written word. By previewing the text, it can allow students to retrieve previously learned information as well as to begin a foundation for understanding. Another strategy used to help build student achievement was teaching students how to make connections to the text. In order to make meaning of the text, students need to hook the information to prior learning or other experiences. Learning cannot be done in isolated bits. When students were asked to make connections to their own lives, other text, or to the world, the text became more meaningful to them. As a result, understanding and student success increased. As was shown in figure 12, there was an increase of 60% from September to January in regards to the amount of students who were able to make comparisons with information that was read. Increased comprehension may in part be attributed to the students being able to make connections that are relevant to them. For transference of this skill to other reading experiences, the researcher would suggest that teachers who are not in self-contained classrooms to collaborate with other content area teachers to implement this strategy. Teaching students to create questions before reading the text was the third component used. When students create their own questions, it sets a purpose for their reading and makes them accountable for what they are reading. Students become engaged readers because now they want to find out answers to those
questions that intrigue them. Active questioning alerts students to the need to read for a purpose.

In conclusion, the researcher found that teaching students to preview the text by using the different text elements, teaching students to make connections, and teaching students to generate questions before reading fostered higher level comprehension. Students may not necessarily have identified changes or improvements in their reading during the research period, but student achievement in higher level thinking did increase. The fifth grade students demonstrated growth in the areas of making connections, using inference skills, and summarizing. It is with this information that the researcher believes that when these skills are taught with direct instruction, student comprehension and higher level thinking can increase.
References


Appendices
Appendix A

Teacher Survey
Student Survey
Non-Fiction Student Assessment
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1= always</th>
<th>2= usually</th>
<th>3= sometimes</th>
<th>4= hardly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Before reading, the students skim the section.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2) They understand the structure of the text.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3) When reading, they look at and think about the pictures.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4) They read the captions of the pictures.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5) They find out the meaning of the words that are unfamiliar.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6) They predict what will happen.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7) If they do not understand what they read, they reread it.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8) While reading, they generate questions they want answered.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9) When they finish reading, they can summarize what they read.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Each year I spend time on direct instruction to teach the students the following skills. (Circle numbers that correlate to the statements above.)
Social Studies Questionnaire

Rate the following statements. Use the scale below.
1= always 2= usually 3= sometimes 4= hardly

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>When reading social studies textbooks, I feel confident.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Before reading, I skim the section.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I understand the way text is organized.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When reading, I look at and think about the pictures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I read the captions of the pictures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I find out the meaning of words that are unfamiliar.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I predict what will happen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>If I do not understand what I read, I reread it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>While reading, I think of questions I want answered.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I create pictures in my mind that help me understand what I am reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I make connections to my own life when reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When I finish reading, I summarize what I read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Read the attached social studies selection. When you are finished answer the following questions or statements.

1. What was the first thing you did when you were given the task to read this assignment? Be specific.

2. What does the picture on the bottom of page 165 show you that the author does not tell you?

3. Give an example of one word that was unfamiliar to you. What did you do when you came to that word?

4. What section of paragraphs was most challenging for you to understand? Why?

5. Besides reading the words, what else was your brain doing while reading?
6. What is the closest city to where Paul Revere was captured?

7. In protest, what is one thing the Boston citizens did to the stamps during the Stamp Act?

8. How were the Sons of Liberty and the Daughters of Liberty alike?

9. Why was the British parliament going to tax the colonists in America?

10. Choose one section and summarize it in four sentences.

The preceding questions relate to text taken from:
Appendix B

Non-Fiction Student Assessment
Non-Fiction Student Assessment
Student Reflection
Read the attached social studies selection. When you are finished answer the following questions or statements.

1. What was the first thing you did when you were given the task to read this assignment? Be specific.

2. What does the map on page 9 show you?

3. Give an example of one word that was unfamiliar to you. What did you do when you came to that word?

4. What section of paragraphs was most challenging for you to understand? Why?

5. Besides reading the words, what else was your brain doing while reading?
6. What was the fastest growing state in the United States between 1980 through 1990?

7. What is the name of Emma Lazarus’s poem found on the Statue of Liberty?

8. Compare how natural resources were used by early European settlers to how Americans use natural resources today.

9. What attracted Americans to live in metropolitan areas?

10. Choose one section and summarize it in four sentences.

The preceding questions relate to text taken from:
Read the attached social studies selection. When you are finished answer the following questions or statements.

1. What was the first thing you did when you were given the task to read this assignment? Be specific.

2. What does the picture on the top of page 391 show you that the author does not tell you?

3. Give an example of one word that was unfamiliar to you. What did you do when you came to that word?

4. What section of paragraphs was most challenging for you to understand? Why?

5. Besides reading the words, what else was your brain doing while reading?
6. What group of people helped to collect peach pits during the war?

7. Why did Americans think that showing patriotism supported the war?

8. How were women and children alike when it came to supporting the war effort?

9. How did collecting peach pits save soldiers’ lives?

10. Choose one section and summarize it in four sentences.

The preceding questions relate to text taken from:
1. What did I learn today? _____________________________________________
   _____________________________________________
   _____________________________________________

2. What skills did I use to help learn the information? 
   _____________________________________________
   _____________________________________________
   _____________________________________________

3. What puzzled me about the topic? _________________________________
   _____________________________________________
   _____________________________________________
   _____________________________________________

4. (optional) While reading, I thought of the following connection. 
   _____________________________________________
   _____________________________________________
   _____________________________________________

5. (optional) The following two questions came to mind while reading. 
   _____________________________________________
   _____________________________________________
   _____________________________________________
Appendix C

Lesson Plans for Teaching Text Elements
Lesson Plans for Teaching Students to Create Connection
Lesson Plans for Teaching Students to Generate Questions
List of Books Used for Lessons
Teaching Text Elements

Objective: Students will preview the text by identifying the topic, the topic headings, the bold type words, the illustrations, the captions, and the charts.

Objective: Students will make predictions about the text by previewing the different text elements.

Procedure: Time spent daily (10 minutes)

Day 1:
Have students use the social science textbook to list the different parts included in a chapter.
List student ideas on the overhead.

Day 2:
Use student/teacher generated list to explain different text elements.
Explain how the title lets the reader know what the topic is.
Discuss how each group of paragraphs has their own topic heading and the topic supports the title of the selection.

Day 3:
Identify bold type words.
Discuss the importance and that they alert the reader to the importance of the meaning of the word.

Day 4:
Identify examples of illustrations, captions, and charts.
Discuss the information that can be obtained through these methods.

Days 5-12:
Preview text being used by identifying the different text elements and discussing what information can be gathered from the elements prior to reading.
Meet with students in small groups who need additional guidance and help.

Following Weeks of Research:
Have students use the skill a minimum of once a week.
Teaching Students to Make Connections

Objective: Students will connect to the text through use of other texts, personal experience, and the world.

Procedure: Time spent daily (10 minutes)

Day 1:
Teach students that they can make connections to what they read about in content areas to our own lives.
Model examples of personal connection to the content being read.
Ask students for any personal connections they may have to the content.

Day 2:
Teach students that they can make connections to what they read about in content areas to other texts.
Model examples of a text connection to the content being read.
Ask students for any text connections they may have to the content.

Day 3:
Teach students that they can make connections to what they read about in content areas to world events.
Model examples of world connections to the content being read.
Ask students for any world connections they may have to the text.

Days 4-12:
Have students make connections, when possible, to the information that is read in the text.
Meet with students in small groups who need additional guidance and help.

Following Weeks of Research:
Have students use the skill a minimum of once a week.
Teaching Students to Create Questions

Objective: Students will create questions about the topics prior to reading.

Procedure: Time spent daily (10 minutes)

Day 1:
Have students identify the five W's: who, what, where, when, why.
Model for students how they can create these types of questions from the section headings.

Day 2:
Prior to reading, the class will generate two questions for each section read.
Teach students the steps to take after reading the sections.
If the question can be answered then it should be answered. If the question is not answered students will create a new question that can be answered.

Day 3:
Prior to reading, each individual will generate two questions for each section read.
Students will answer questions that they have created, and they will adjust questions if they are not answered.

Days 4-12:
Students will create questions prior to reading.
Meet with students in small groups who need additional guidance and help.

Following Weeks of Research:
Have students use the skill a minimum of once a week.
List of Resources Used

Civil War Picture Books


Appendix D

Modified Lesson Plans for Teaching Students to Make Connections
Modified Plans:

In place of teaching the students the different strategies through the use of the picture books listed, the researcher used the textbooks as the primary resource for teaching students to use text elements, teaching students to create questions, and teaching students to make connections to the text. The main purpose of the picture books was shifted to giving the students background information about the topics.
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Printed Name/Position/Title: Beth A. Bauman Student/FBMP

Organization/Address: Saint Xavier University

Telephone: 708-802-6219 FAX: 708-802-6208

E-Mail Address: crannel@sxu.edu Date: April 15, 2002

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