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Importance of teaching reading comprehension with nonfiction texts

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Importance of teaching reading comprehension with nonfiction texts

Abstract

Can comprehension strategies be taught as a learning skill for expository text reading in content area? What strategies in combination best benefit the reading comprehension of students who struggle with reading? How can reading comprehension strategies be taught so that skills are maintained and transferred across settings? In her book *Exploring the Literature of Fact*, Barbara Moss (2003) suggests that the items needed to be successful in reading nonfiction include accessing quality literature, learning reading strategies, understanding the use of text structure, and responding to the literature.

The following literature review will define reading comprehension using nonfiction material. The research that shows the current state of developing comprehension in nonfiction will increase student knowledge base. The literature review will show how understanding the use of text structure can give students a strategy in understanding how to read nonfiction reading material. There is a difference in reading material in a fiction book and reading a science textbook. Students need to be taught how to use those strategies in order to understand what he/she has read. This literature review will state strategies that can assist with comprehending what a student has read and taking the time to apply those strategies in order to build a deeper understanding of the material.

IMPORTANCE OF TEACHING READING
COMPREHENSION WITH NONFICTION TEXT

A Graduate Review

Submitted to the

Division of Elementary Education

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Valeria Jo Frey

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Abstract

Can comprehension strategies be taught as a learning skill for expository text reading in content area? What strategies in combination best benefit the reading comprehension of students who struggle with reading? How can reading comprehension strategies be taught so that skills are maintained and transferred across settings? In her book Exploring the Literature of Fact, Barbara Moss (2003) suggests that the items needed to be successful in reading nonfiction include accessing quality literature, learning reading strategies, understanding the use of text structure, and responding to the literature.

The following literature review will define reading comprehension using nonfiction material. The research that shows the current state of developing comprehension in nonfiction will increase student knowledge base. The literature review will show how understanding the use of text structure can give students a strategy in understanding how to read nonfiction reading material. There is a difference in reading material in a fiction book and reading a science textbook. Students need to be taught how to use those strategies in order to understand what he/she has read. This literature review will state strategies that can assist with comprehending what a student has read and taking the time to apply those strategies in order to build a deeper understanding of the material.

Introduction

Many students' school districts respond to every increasing challenge of meeting state and national standards in the content areas, while at the same time improving literacy skills. The process of reading parallels the process of scientific inquiry: both areas require skills in questioning, setting purpose, analyzing and drawing conclusions. Content literacy instructional practices help shape the comprehension strategies students need to think deeper. Some studies have found that when students had more opportunities to read and teachers integrated literacy instruction in content areas the results were: increased reading comprehension, conceptual knowledge, problem solving, skills in science and social studies and a motivation to read.

Literature Review

Reading Comprehension

Definition of comprehension. The RAND Reading Study Group (Pardo, 2004) stated that comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. Comprehension is a process in which readers construct meaning by interacting with text through a combination of prior knowledge and previous experience the information in the text and the stance the reader takes in relationship to the text will also assist in the comprehension. The process of connecting known information to new information takes place through a series of networkable connections known as schema. In schema theory, individuals organize their world knowledge into categories and systems that make retrieval easier. When a key word or concept is encountered, readers are able to access this information system, pulling forth the ideas that will help them make connections with the text so they can create meaning.

The reader brings many things to the literacy event, the text has certain features and

meanings emerge only from the engagement of the reader with the text at that moment. The most important element in comprehension is world knowledge. The more background knowledge a reader has that connects with the text being read, the more likely the reader will be able to make sense of what is being read.

The understanding of the reader is one important piece of the comprehension puzzle, but features of the text also influence the transaction where comprehension happens. (Pardo, 275) The structure of the text, its genre, vocabulary, language, even the specific word choices works to make each text unique. Readers take the written word and construct meaning based on their own thoughts, knowledge and experiences. The novelist E. L. Doctorow says, “Any book you pick up, if it’s good, is a printed circuit for your own life to flow through - so when you read a book, you are engaging in the events of the mind of the writer. You are bringing your own creative faculties into sync. You’re imagining the words, the sounds of the words and you are thinking of the various characters in terms of people you’ve known – not in terms of the writer’s experience, but your own” (Plimpton, 1988).

When readers interact with the texts they read, reading becomes important. Reading shapes and even changes thinking. Getting readers to think when they read, to develop awareness of their thinking, and to use strategies that help them comprehend are the primary goals of comprehension instruction.

Comprehension can be defined broadly as the process of construction and supportable understanding of a text. The comprehension process is seeking to understand the text in an active, intentional thinking process the reader constructs meaning (Alexander and Jetton, 2000; NOCHD, 2000). Also readers’ understandings of text are expected to vary as a result of differences in their background knowledge and experiences. The ideas conveyed through the

words printed in the text are important to the comprehension process.

Thinking process of comprehension. The job of comprehending a written text is a complex one that depends upon a number of different thinking processes within the reader. The ability to identify words quickly, accurately, effortlessly, and the knowledge of the meanings of key words are both essential abilities. The strategies can be described as special knowledge of how to comprehend that readers consciously use as they attempt to understand what they read. The reader's general knowledge of the word and specific knowledge of the topic which they are reading play a major role in the comprehension process.

Comprehension means that readers think not only about what they are reading but about what they are learning. When readers construct meaning, they are building their store of knowledge. Knowledge must come with understanding.

Research in reading comprehension took a different tack in the 1980s when researchers identified and systematically investigated the thinking strategies that proficient readers use to understand what they read. Building on this work, researchers explored ways to teach these strategies to students. Pearson, Dole, Duffy, and Roehler (1992) summarized the strategies that active readers use when constructing meaning from text. They found that proficient readers search for connections between what they know and the new information they encounter in the texts they read; they ask questions of themselves, the authors they encounter, and the texts they read; they draw inferences during and after reading; they distinguish important from less important text; they are adept at synthesizing information within and across texts and reading experiences; and they monitor the adequacy of their understanding and repair faulty comprehension. Pressley (2000) and Keene and Zimmermann (1997) added sensory imaging to the list of comprehension strategies. Proficient readers visualize and create images using the

different senses to better understand what they read.

Text Structures

Narrative text. Authors use different tools as they construct stories and informational texts. Most of the time stories are written in a narrative form, while informational books are written in expository form. Narrative and expository texts have different purposes. The main purpose of narrative text is to tell a story, while expository text is intended to inform, describe, or report. Authors who create people and events from their imaginations use narrative structures to create stories. When authors write informational books, they conduct research to gain information on the topic at hand. They organize the information as logically and interesting as they can use various expository text structures (Moss, 2004).

In the early grades of school, students are immersed in fiction 80% to 90% of the day (Duke and Bennett-Armistead, 2003). They read fantasy and folktales and create imaginative stories. They learn that stories have characters, a setting, and problem that the character tries to resolve during the story. It may be classified as fantasy, a story that could never happen; contemporary realistic fiction, a story that takes place in the present but is not a “true” story; or historical fiction, a story that takes place in the past and is not a “true” story.

Students’ early emphasis on fiction allows them to become familiar with how it sounds, how to read it, and how to write it. Fiction is structured as narrative text that typically follows a single general structural pattern. Students develop sensitivity to narrative structure early and use it to comprehend simple stories before they enter school. Narrative text is writing in which a story is told. The events described in narrative text are written sequentially. The primary purpose of narrative writing is to entertain.

Elements that are basic to narrative text include a setting, characters, plot, conflict, and

theme. Some literary authorities label these elements “story grammar”. That is, just as sentence grammar is used to explain and specify how sentences are constructed, story grammar delineates the basic parts of a story and how those work together to create a well-constructed tale (Vacca and Vacca, 1993).

Many children learn to read using basal readers. Young students are accustomed to reading narratives, which have a predictable structure that includes a goal or problem, attempts to solve the problem and some form of resolution. This structure is familiar to most young students even before their experiences with written language because narratives mirror human social interactions (Beck and McKeown, 1991). Because of its familiarity, narrative structure can serve as a framework for a readers’ comprehension

Expository Text. Some teachers call informational text expository text. Informational texts may take many different forms: pictures books, photo essay, chapter books, articles and essays, letters, diaries and journals, observational notes, fractural references (almanacs, books of statistics, books of world records), brochures and manuals. (Fountas and Pinnell, 2001) The information contained in these forms must be documented and verifiable from other sources. Accuracy is of supreme importance in the works of nonfiction (Fountas and Pinnell, 2001).

Reading and understanding expository text requires a high level of abstract thinking. Readers are called on not only to comprehend ideas, but also to extrapolate and remember the significant main ideas and to integrate them with other information from prior knowledge.

Another major difference between narrative and expository text is the vocabulary that the reader encounters. Each content area has its own specialized terms that students do not come up against in stories or in conversation either. Many of the terms have unfamiliar meanings.

While narrative structure is consistently written in the same basic structure across the

genre, expository material is organized in several different structures. Nonfiction books are organized with a clear external structure such as headings, a table of contents, chapters, and titles. Nonfiction may use a variety of internal structures including problem-solution, cause-effect, sequence, description, and compare and contrast (Moss, 2003). Signal words alert readers to the presence of these structures.

Teachers need to model for students how to recognize the different text structures. An advantage of text structure knowledge is shown when textbooks are not well-organized, skilled readers are able to impose a structure of their own to organize the information into something that makes sense to them. Thus, organizational patterns can exist both on paper and in mind of the reader (Jones, Palincsar, Ogle, and Carr: 1987).

Expository prose has multiple possible structures instead of the single structure so often found in narrative prose. So, when students are handed informational text, they are expected to make the leap from learning to read through stories written in familiar chronological order to learning to read to obtain information from the expository text that is organized in entirely different ways (Anthony and Raphael, 1989). An expository text is structured to fit its communicative purpose and its structure is derived from its purpose.

These structures describe patterns found in expository text and they cannot serve as a framework for the reader in the same way that narrative structure can. Expository text can rarely be characterized by a single structure, rather a mixture of structures that form expository text.

Even though the specific types of structures in expository texts are likely to be familiar, expository texts lack an important structural ingredient that makes narrative text easier to comprehend. That is, there is no overarching framework that a reader can use to organize and relate the information in the text. Students have no predictable structure with which they can

enter an expository text; expectations about the text can only be based on knowledge of the content topic. Young readers can be taught to anticipate various forms of expository text just like they anticipate events in narrative event.

The purpose of expository text is to communicate new information (Black 1985) and the content topic is likely to be unfamiliar. The student uses the text's organization language and visual features in a unified way to derive meaning (Fountas and Pinnell, 2001). Two influences on comprehension take on increased importance when readers interact with expository text. One is the familiarity of the content or topic. The other is the extent to which the content of a specific text is organized in a logical way. Although informational text is being introduced at earlier points in the primary grades, instruction in working with informational text in many cases still needs to be more focused and intensive (Yopp and Yopp, 2000).

Content Literacy

Informational texts are important to students' development of an important concept called content literacy (Fountas and Pinnell, 2001). Content literacy involves the strategies required to read, comprehend and write informational texts in a variety of subjects. Content literacy involves knowing what to expect and anticipating the kinds of organizational structures the student might encounter. It also involves understanding the kinds of graphic features the student needs to interpret, as well as vocabulary specific to the topic.

Nonfiction is the literature of fact or the product of an author's inquiry, research, and writing. Its primary purposes are to provide information, explain, argue, and/or demonstrate. The form it takes is determined by the nature of the content, the purpose of the author and what best facilitates understanding of the topic. (Bamford and Kristo, 2000, p. 12) Nonfiction literacy is a cognitive and social practice involving the ability and desire to read, comprehend, critique

and write about multiple forms of print. These multiple forms of print include textbooks, novels, magazines, internet materials, and other sign systems conveying information, emotional content, and ideas to be considered from a critical stance. (Swafford and Callus, 2002, pg. 10)

The terms “informational text” or “nonfiction” are types of text that is often used interchangeably. Nonfiction is associated with trade books which are well-written, well-illustrated books on topics related to science, history, math and the fine arts. The term information text encompasses many kinds of expository or non-narrative writing, not only books, but brochures, articles, recipes, newspapers, and selections from web sites.

The term “content area literacy” is a way to think about literacy. Content area literacy has come to mean more than simply reading and writing from textbooks. It refers to all the literacies in students’ lives - whether in school or out of school and all the different forms that today’s texts can take, whether textbook or trade book, e-mail, electronic messaging or Internet sites. These illiteracies are clearly a part of the lives of younger children as well as adolescents. Teachers at both the elementary and secondary levels must recognize their importance (Swafford and Kallus, 2002)

Assumptions of Content Literacy

Students and teachers make the mistake of assuming that skills learned in fiction can be applied to nonfiction. Students need to be taught strategies and skills exclusive to the reading of nonfiction (Benson, 2003).

Another assumption is the textbook is used as the primary resource for students, where it should be one of many resources. Informational picture and chapter books, historical fiction, biography and autobiography, photo essays, magazines, and newspapers can all help bring greater depth and perspective to students. The Internet, videos, parents, other teachers and

community members are also valuable sources of content.

Students learn how to read in the lower grades and some believe (Duke, 2004) they don't need reading instruction in middle school content subjects. However, as readers mature, teachers can help them refine their knowledge and use the in the head strategies. When strategies are taught, teachers can improve students' ability to read and comprehend challenging texts and help them learn more information. Many think reading instruction lies strictly within the reading or language arts teacher's domains and that instructors can focus on content alone and hope that the reading and language arts teachers have done their job (Duke, 2004).

Teaching Reading Strategies with Content Literacy

Real world connections. The literacy demands required to thrive in society have changed over the last decade. These changes are particularly visible in the workplace (Alvermann and Phelps, 1998). According to the NAEP studies (1990), an increasing number of students graduate from high school lacking the basic literacy skills needed to succeed in today's job market.

Nearly 80% - 90% of classroom reading before fourth grade is fictional, after which most classroom reading becomes nonfiction (Benson, 2003). When students reach middle school, high school, and even college, nonfiction is crucial to their understanding and achievement. The importance of nonfiction literacy to elementary and middle school students is evident in the literacy needs of adults.

Moline (1995) believes "if we spend most of our day reading stories with students and asking them to read or write stories, we are telling our students that most of what they will read in everyday life will be stories" (p.5). Powerful research suggests that 86 % (Vanezky 1982: Duke 1999: Parkes 2000) of the texts read by adults are informational (newspapers, magazines,

directions, recipes, menus, and so on). Adults read mostly informational texts but also standardized tests across our country are now comprised of anywhere from 50% - 85% informational texts. Productive individuals interpret and apply daily information from magazine articles, newspaper editorials travel guides, and a multitude of forms to participate fully in society.

Nonfiction materials can offer many important details and up-to-date information. Students can be inspired to find information of personal interest. In the age of information, it is vital for students to understand and use non-narrative, expository text (Moss, 2003). Students must be prepared to use and understand this information.

Understanding of expository text helps to meet the increasing real-world literacy demands. Recent NAEP (National Assessment of Educational Progress) studies have shown that high school students are graduating at alarming rates without the basic literacy skills required in today's job market (National Reading Panel, 2000). The 1990 U.S. Department of Labor SCANS report recommended that schools help students develop the workplace competencies necessary for today's job demands (National Reading Panel, 2000). These competencies include the ability to use and obtain information from the internet (National Reading Panel, 2000). Approximately 96% of the text on the web is informational (Kamil and Lane, 1998).

January 2002 *Education Week* reported a study comparing American students with students from other countries of the world. The study showed that American nine-year olds scored first in the world in assessments of literacy but American fourteen-year olds scored seventh. The study goes on to suggest that educators need to shift the focus to the complex informational texts of the future, providing more time and more classroom instruction in those texts from kindergarten on up. (Hoyt p. 3)

Students naturally gravitate toward informational texts. They have a need to know, understand, and learn. It doesn't take much prodding to get students of all ages to ask questions about the world around them, and nonfiction often provides the answers. Students love to pour through books with photographs of trucks, dinosaurs, pyramids, and just about anything else under the sun. A student's interest in the world often starts with a nonfiction book. Some research has found that even very young students can read and write nonfiction (Caswell and Duke, 1998) and that those early experiences establish a strong base for reading more sophisticated expository text in later grades. (Newkirk, 1989). Content area literacy instruction is changing. Once associated with middle and high school instruction, educators are directing the attention to their importance of encouraging content area literacy instructions at even the earliest levels.

Today's technology demands a higher level of literacy than ever before. The literacy demands of today's technological society require that students not only be able to read and write in the print world but also in the digital world. The ability to use the Internet to access information quickly, sift through volumes of text, evaluate content, and synthesize information from a variety of sources is central to success at school and the workplace (Schmar-Dober, 2003). All of these skills require that students are able to read text found on the websites which is expository.

Testing effects. The No Child Left Behind Act requires students to take high-stakes, end-of-year tests to determine whether or not they can be promoted. This pressure for improved standardized-test performance has helped to drive emphasis on content area literacy. These tests ask students to read both fiction and nonfiction, compare the two texts, and respond to them in writing. Teaching students to navigate and comprehend nonfiction texts throughout the year will

help them succeed on these critical tests. Students need time to practice and internalize these strategies.

Teachers are becoming more aware of the need to teach to the state standards related to informational texts, and they recognize that students will be tested on their ability to understand such texts. A case in point is the National Assessment of Education Progress (NEAP, Grigg, Daane, Jin and Campbell, 2003) which serves as an audit of each state's annual assessment of student reading achievement in grades 3-8 as part of the No Child Left Behind legislation (2002). Fifty percent of fourth-grade-level test content required students to read narrative text and fifty percent involved reading to gain information. By eighth grade, the bulk of the test involved reading informational text to gain information (43%) or to perform a task (30%). (Moss p.46)

Reading comprehension is being placed at a premium in the No Child Left Behind's compulsory battery of tests. Elementary teachers have used content area work to supplement comprehension skill practice. Many secondary level teachers haven't seen a need to integrate comprehension skills into instruction beyond answering section review questions (Neufeld, 2005). It would appear necessary that secondary teachers blend comprehension strategies with the content. It would appear even more likely that this will soon become a priority across the country.

Reasons. There are several reasons why comprehension instruction needs to become a vital part of content area instruction. First, learning from texts is an important part of the process of learning in all subject areas. Reading informational text increases world knowledge and language that students don't have access to in daily conversations. A student's understanding of the vocabulary in a text is highly correlated to his or her comprehension of that text. In addition, higher levels of background knowledge which was acquired through wide reading and classroom

discussion associated with higher comprehension of texts. Second, some evidence suggests that when hands-on learning is combined with text-based learning, students learn more than they do if reading is not part of the learning process (Neufeld, 2005). Third, there is strong research evidence that students can be taught reading comprehension strategies and that instruction is effective at improving their understanding of the texts they read (Neufeld, 2005).

Unfortunately, there is some evidence that comprehension instruction does not occur in many classrooms. Following a yearlong observational study of 10 fourth and fifth-grade teachers, Pressley and his colleagues concluded, “In general, students were provided with opportunities to practice comprehension strategies, but they were not actually taught the strategies nor the utility value of applying them” (Pressley, 2002c, p. 241).

The Present State of Content Literacy Instruction

Why do students get less opportunity to read nonfiction in their classrooms than fiction? Caswell and Duke (1998) believe the answer to this question relies on research performed in the 1970’s by Button, Burgess, Martin, McLeod and Rosen. This group of researchers suggests that children are unable to learn from and about texts unless they are in the form of stories. While there may be possible explanations for the lack of attention to expository genres in early schooling, perhaps first among them could be the belief that young children are unable to learn from and about texts unless they are stories.

Caswell and Duke (1998) think greater attention to non-narrative texts in the early grades would help mitigate the difficulty many students encounter with these texts later in schooling. Chall, Jacobs, and Baldwin (1990) proposed that late in elementary school, an important shift occurs in many public school classrooms. A shift occurs from learning to read to reading to learn. This shift includes going from reading mostly narrative texts, to reading increasing

numbers of informational texts whose function is to communicate information. This can pose difficult challenges for developing readers and writers whose main exposure has been to narrative texts. This difficulty may be the result of their lack of experience with these texts in early years.

Students' exposure to expository text comes from a narrow range of materials, content area textbooks or basal readers. Basal readers used in 85% (Moss, 2005) of elementary classrooms have limited informational text. A study of basal readers found that only twenty percent of the pages in second, fourth and sixth grades were devoted to informational literature (Moss, 2005). Duke (2000) found that very little informational text was available in the first-grade classrooms she studied, whether displayed on walls or in classroom libraries. Most importantly, the findings that students in these classrooms spent on average only 3.6 minutes with informational text per day.

Content area instruction usually follows the format of the instructor lecturing from a textbook too difficult for many students to comprehend, asking questions or assigning seat work, and finally, testing on the material. Many students in elementary students through high school struggle to learn from content area textbooks that don't match their reading levels. The syntax of texts becomes more complex and demanding. Reasoning about information in texts shifts with greater emphasis on inferential thinking and prior knowledge. Textbooks are written two or more years above the average grade level of students; even students on grade level have trouble learning from their textbooks. Teachers need to provide different kinds of materials and reading strategies that support building comprehension and interest.

Content area textbooks provide students with exposure to exposition, but the extent to which students are actually getting practice in reading those texts is a matter of debate. Some

studies consistently indicate that students do little textbook reading. (Wade and Moje, 2000). In an effort to make these often poorly organized and user-unfriendly texts accessible, teachers often read aloud to students rather than show them how to read the material themselves.

Besides limited exposure to exposition, students apparently get little instruction in how to comprehend informational texts. In one study involving over one hundred hours of observations in primary literacy classroom, Fisher and Hieber (1990) found no instances of teachers modeling strategies for reading expository text. Taylor, Pearson, Clark, and Walpole (2000) found that even in fourteen high performing urban schools, comprehension instruction was seldom observed in grades one through third. In fact, only 16% of teachers in the sample emphasized comprehension of any kind (Taylor, Pearson, Clark, and Walpole, 2000). The situation at the upper elementary level was equally dismal. Taylor, Pearson, Clark and Walpole (2000) observations of 192 fourth grade science and social studies lessons found no example of explicit instruction in how to read and learn with text. Students learn to use organization and structure of informational texts are better able to comprehend and retain the information found in them.

Despite all the debate about the initial teaching and learning of reading, little attention seems to be paid to how students are to be assisted to become competent independent readers of a variety of texts. There are assumptions that as students progress through primary school and middle school that they transfer their ability to read narrative into competent reading of non-narrative. (Moss, 2005)

Making the Case for Content Area Literacy

Early experience to exposition can begin to lay the foundation for student's understanding of the expository text that dominates in later grades. For many years educators assumed young children were incapable of understanding information-type text. Pappa's (1993)

seminal study comparing 20 kindergartners' ability to retell a children's informational trade book with their ability to retell a fictional one was the first study to call that assumption into question. She found that the children she studied were just as capable of retelling informational text as narrative. Early exposure to exposition may also contribute to improved writing abilities.

Students' exposure to expository text comes from a narrow range of materials, content area textbooks or basal readers. Basal readers used in 85% (Moss, 2005) of elementary classrooms have limited informational text. A study of basal readers found that only twenty percent of the pages in second, fourth and sixth grades were devoted to informational literature (Moss, 2005). Duke (2000) found that very little informational text was available in the first-grade classrooms she studied, whether displayed on walls or in classroom libraries. Most importantly, the findings that students in these classrooms spent on average only 3.6 minutes with informational text per day.

The knowledge that students seek through expository text may be just as motivating as the "lived through" story experience. This increased interest in and engagement with text can influence learning and development. The opportunity for students to have access to expository literature will provide new ways into literacy and a greater motivation for reading. Klitzing (1998) found that elementary school children chose to read informational texts almost half the time. Students that have the option to select nonfiction trade books improved their motivation for reading.

The ability to gain knowledge from text is a critical one in this informational age. Students need to develop the ability to understand the languages of disciplines like mathematics, history, and science. Students need to develop critical reading abilities associated with thinking like a mathematician, historian, or scientist. They need to not only understand

information but also evaluate it becomes a necessity in today's world.

According to Susan B. Neuman (2001), former U.S. Assistant Secretary of Education, "To write, think, or solve problems, young learners must have something to write about, something to think about, or some problems to solve. In short, important learning processes require content knowledge." (p. 473). The content knowledge of a variety of subjects can contribute to schema development that can be invaluable to children as they progress through school.

Trying to reach the wide range of readers in a class can also be frustrating for teachers, especially when districts require that every student read, comprehend, and absorb the same material, and take state tests written for students reading at or slightly above grade level. When alternate materials are not available for teachers to use with struggling readers, teaching can feel like navigating an impossible obstacle. Students avoid reading the textbooks. They find the textbook too boring and hard to understand. They can gather the information for the text from listening to the teacher lecture about the text and copying notes. Many students can learn the required information to pass and even do well on quizzes and tests.

Unfortunately, by sixth grade many teachers feel that students should have enough reading skills to learn from a grade-level textbook (Robb, 2003). In order to improve students reading and thinking, teachers should help students construct meaning by modeling and teaching strategies and techniques that support learning to read while reading to learn.

Readers learn information by taking what they know and linking it to new ideas in order to construct new understandings. When reading, the students apply strategies that help them solve the problems that print presents, problems such as figuring out the meaning of unfamiliar words and making sense of confusing passages packed with new ideas and concepts.

There are many reasons for using trade books and other real world nonfiction in content area instruction. Nonfiction provides an alternative to the single textbook. With increases in the number and quality of nonfiction books and entrance of teaching models that rely on nonfiction, content area teachers have a chance to move from the textbook approach. This move is important because the use of one text restricts independent learning, rich discussion and critical thinking. By using a variety of nonfiction books, students can explore in depth while synthesizing information and applying critical reading or thinking skills (Holmes and Ammon, 1985; Stewart, 1994). The discussions and learning in the content area classrooms is significantly enhanced.

The reason for the use of nonfiction in content area classrooms is to expose students to a variety of expository texts and provide practice with this genre. Because of the dominance of textbooks, most students read little informational text in school except content area textbooks. Armbruster states that “children need extensive practice reading nonfiction in order to become proficient at reading to learn” (Armbruster, 1993, 324). A variety of nonfiction books effectively incorporated into the content areas provides practice.

Improving Students' Comprehension of Informational Text

The school system should not wait to address the need for understanding of informational text until the students reach late elementary, middle, and high school. Young students need to learn about the range of purposes that text can serve (Duke 2000). By filling the classroom with books on insects, stars, oceans, animals, and other topics that fascinate young students, teachers can demonstrate to their students that reading can help them obtain important information.

When teachers include informational text in the classroom, they also expand opportunities for home-school connections that support literacy (Duke and Purcell-Gates, 2003).

Some research and experience suggest that even parents who rarely read fiction for pleasure can become inspired when teachers invite them to interact with their children around nonfiction texts, newspapers, magazines, and reference books (Duke 2000).

Increased access to informational text can motivate students who prefer this kind of text or have strong interests in the topics addressed in the text. Duke (2000) shares that one student that she worked with was uninterested in the storybooks that his teachers had been providing, but he enjoyed the informational books that were introduced to him. When reading informational books, the student was more willing to persist in decoding difficult words and he applied background knowledge more readily. He experienced success with informational books and both his overall reading ability and self-confidence grew to the point where his narrative reading also seemed to benefit (Duke 2000).

It is helpful for teachers to include informational text in instructional activities. One method of using informational text in the classroom is to read aloud various types of informational texts to the students. As teachers read aloud from nonfiction material, the students will become familiar with its characteristics and conventions. Listening to informational text is a tool for knowledge building, especially when combined with other ways of learning about the world, such as hands-on-investigations. Some evidence suggests that students are more likely to select informational text for independent reading if their teacher has read it aloud to them (Dreher and Dromsky, 2000).

Teachers can use the informational text in guided and independent reading, in writing, and in content-area instruction. Some teachers worry that nonfiction text may be too difficult for their students, or that spending too much time with this type of text may distract students from learning basic reading skills. In one study, 1st grade students whose teachers included more

informational text in their classroom libraries, on classroom wall displays, and in classroom activities showed growth on standardized test of decoding and word identification equal to those of students whose teachers focused less heavily on informational text (Duke, Bennett-Armistead and Roberts, 2002, 2003).

In addition to exposing the students to informational text, teachers need to teach them how to read it. Strategies that work to improve comprehension include monitoring students' understanding and making adjustments as needed: activating and applying prior knowledge, generating questions, thinking aloud, uncovering text structure, drawing inferences, construction of visual representations, and summarizing. When teaching each strategy, the teaching should be explicit. The explicit teaching should include information about what the strategy is, when it is used, how it's used and why it is used.

Comprehension Strategies

The first step in teaching informational texts is to help students become familiar and comfortable with nonfiction text features. Teachers can use the think-aloud technique to help familiarize students with the unique features of nonfiction text. This technique demonstrates the thought processes a good reader uses to construct meaning from text.

Just as with narrative texts, a teacher needs to keep in mind the level of a student's reading ability when using expository text. The experience of reading informational text should challenge students to grow, but the challenge must lead the students to feel successful. The use of carefully leveled content area readers can enable students to experience success (McGee and Richgels, 1985).

Fountas and Pinnell (2001) shared that the act of comprehending a written text is a complex one that depends upon a number of different thinking processes within the reader.

Comprehension strategies are important for students to master when working with the understanding of nonfiction text. Such strategies can be described as special knowledge of how readers comprehend what they read. The student's general knowledge of the world and specific knowledge of the topic about which they are reading play a critical role in the comprehension process.

Comprehension strategy instruction is most effective if it is delivered within a context where students use the strategies to read and learn from the actual texts they are expected to read. As Gambrell, Kapinus, and Wilson (1987) pointed out, "Students will stand the best chance of achieving independence in a strategy's use if they have learned it in a meaningful context" (p.641). They went on to say that students need to be shown that the strategy they are learning has direct application in the course material they are assigned to read. This is accomplished by using actual content area materials during each phase of the explicit instruction process.

The teacher introduces students to the strategy by telling them what it is and why it is useful. The teacher provides students with a rationale for learning the strategy by sharing with them the reasons why and evidence of how the strategy can improve their reading comprehension. Modeling the strategy begins the process of teaching the students how to use the strategy. As the teacher models the strategy the students are shown how the strategy works. Through the demonstration and thinking aloud teachers guide the students through the strategy. The next step is guided practice which provides the students with opportunities to practice the strategy they are learning in an environment where support and feedback are readily available. Teachers and students implement the strategy together, sharing responsibility for its execution. Students will eventually begin to use the strategy on their own with teacher monitoring and feedback to ensure the strategy is used correctly and to help build students' confidence.

The goal of teaching comprehension strategies is to help students reach a point where they independently approach and read texts in a strategic fashion - first choosing and then using the appropriate strategy or strategies given the purpose for reading. Optimal reading comprehension depends not only on readers' knowledge of many specific strategies, but also on their knowledge of when to use each strategy in their repertoire (Malone and Mastropieri, 1992, p. 278). The instruction moves toward helping students learn to use their growing list of strategies with the appropriate reading materials. The teacher applies comprehension strategies before, during, and after reading nonfiction: making predictions and connections, questioning, visualizing, inferring, determining importance, analyzing, synthesizing, and summarizing what they read.

Before reading. The before reading strategies help students think what they are going to read before they start reading. One strategy is for the teacher as well as the students to clarify a purpose for reading. Teaching students to think consciously about why they are about to read a particular text has been shown to improve comprehension (Pressley, 2000). A question that students need to ask and answer is, "Why am I reading this text?"

Students should take a few minutes before reading the text to examine the text to discover more clues what the text is about. Fountas and Pinnell (2001) state that implementing this strategy involves reading and thinking about the title of the text and major headings, reading the introduction and conclusion, examining text support features, such as tables and graphs, with the purpose of answering questions such as the following: What does this text appear to be about? What are some of the major topics covered in the text? How is the text organized?

Having developed a general sense of what the text is about during the overviewing process, readers can call up relevant knowledge they already possess (Levin and Pressley, 1981).

Activation of one's prior knowledge of a topic before reading provides a mental hook linking knowledge the reader already possesses with ideas in the text. The practice has been shown to improve both understanding and recall of text content (R. Anderson and Pearson, 1984). At this point, possible questions to ask and answer could include the following: What do I know about this topic already? How might what I know relate to this particular text?

Students use the answers to the questions posed during the overview process in combination with their prior knowledge of a topic in assisting the students in learning to make predictions about the text. Such predictions can be used as the student reads to test whether or not the text is making sense. The predictions become hypotheses to test as the student is reading.

The teacher should establish a clear and meaningful purpose for reading. Some research suggests that having a clear purpose for reading improves comprehension especially when reading expository text. (Armbruster, 1991). When a teacher sets a purpose it directs students as they read by helping establish guidelines for how to approach the reading and what information is essential. At first the teacher can set the purposes, and then later move into collaborations with students on purpose-setting. Finally, once the students had enough experience with this approach, then the teacher can turn setting purpose over to the students (Armbruster, 1991).

During reading. Some evidence tends to show that students' comprehension of nonfiction texts can be improved by teaching them a number of strategies to use while they are reading and after they finish reading a given text (Pressley and Wharton-McDonald, 1997). Strategies applied during this phase of the reading process are to help students understand and remember when they read as well as to help students monitor comprehension. They continually monitor what they read by making decisions about what parts to skim and scan and which sections to examine carefully. Students speed through an assignment without pausing to

evaluate, observe, or check their work. Students need to be taught to self check and this could be done with a process check list. Students are also building connections with their existing knowledge to help clarify their predictions of the material.

Good readers literally talk to themselves. This internal speech is a dialogue the reader experiences as a way to question, modify, and formulate new understandings, as well as to confirm or make changes about prior knowledge.

Teachers will need to teach students how to recognize the different types of text structures that are found within expository text. Each text structure is associated with a set of keywords that readers can use to assist them in identifying the particular structure or structures used which helps students identify the organizational structure of a text facilitates the comprehension process (Duke & Pearson, 2002). A student that recognizes that a particular text is comparing and contrasting the habitats of a polar bear and a grizzly bear has established an understanding of the information presented in the text. It is not surprising that once students learn how to identify the organizational structure of texts they can apply this strategy when over-viewing texts prior to reading.

Teaching text structure is effective at various grade levels. Barlett (1978) taught ninth grade students to recognize text structures and use them to organize a written retelling. These students remembered almost twice as much as students who did not learn to recognize structure. Taylor and Beach (1982) studied teaching middle school students about text structure using headings and subheadings in social studies chapters. Their research found that trained students were better at remembering new concepts social studies than were untrained students.

A teachers' first objective is to show students that the contents of a passage consists of its ideas, facts, and information, while the structure is the scheme by which that content is

organized. Students need concrete experiences to help them differentiate content and structure.

The students learn how to use prior knowledge, making conscious and unconscious inferences about the content. An example of this strategy is seen when a student compares and contrasts an event in history that repeats itself, looking for cause and effects.

After reading. The after reading experiences need to invite students to return to the text to gather information and review important details. Writing summaries, taking notes, or placing details in a graphic organizer also helps students retain information. When students cannot write about what they know and have learned from a text, an experiment, or construction, such as a building a kite or polygons, they have not yet made that new information their own (Robb, 470).

Reflection invites learners to contemplate new information and experiences, clarify and use concepts, connect them together as ideas, and claim the new information as theirs. All students need rich after-reading learning experiences to cement their understandings. Practices that encourage reflection, comprehension, recall, and analytical thought will increase students' comprehension of the material and provide new connections for learning.

An example of an after-reading experience is organizing discussion so students clarify new information and deepen understandings of the material. Teachers can show students how oral presentations work. The after-reading strategies will allow students to examine, evaluate, and judge the material that was read which will help the students begin to think critically and draw conclusions. Effective nonfiction readers reflect on what they've read and make a plan for what to do next.

Students need to be taught how to create summaries over what they have read. This strategy has been shown to improve their overall comprehension (Armbruster, 1987).

Summaries can be described as oral, written, or visual statements; texts; or diagrams that capture

the important ideas from a text in abbreviated form.

Brown and Day (1983) have shown that students in the middle school have difficulty producing written summaries of expository text. These students have difficulty because they have trouble identifying important information or finding the main idea in expository text.

Responding to Text

There are a number of comprehension strategies that are both teachable and useful for students to learn. One strategy is crucial to the effective use of all the other strategies - question and answering. Questioning refers to students asking or writing self-initiated questions about the content of the text before or during reading to help them understand the text and topic.

Questioning instruction has focused on teaching students strategies for answering questions or generating questions of their own before, during, or after reading. Questions help students actively engage with a text, check their comprehension and construct memory representations (Rosenshine, 1996).

A powerful strategy is for students to ask themselves why questions as they read informational text. The value of teaching students to use question asking and answering to support their efforts to comprehend has been well established. Question asking and answering can be viewed as the strategy that drives all of the other strategies. It is the process of asking and then answering questions of oneself and the text that brings the other strategies to life. What differs from strategy to strategy is the type of questions one asks of oneself or the text. An important part of the process of becoming a strategic reader happens when teachers help students develop the ability to ask and answer questions of themselves and the text before, during, and after reading (Rosenshine, 1996).

Taboada and Guthrie (2006) suggest that an active learner has been described as

inquisitive and curious, someone who asks a substantial number of questions. Students who compose and answer their own questions are perceived as playing an active role in the learning process. They seek information that is related to an existing knowledge structure. Student questioning relies on assessing what is known about a topic and attempts to expand existing knowledge of the topic.

Curiosity spawns questions. Questions are the master key to understanding. Questions clarify confusions and stimulate research efforts. Adult readers question all the time, often without even thinking about it. When readers first begin to pay attention to their thinking as they read, they can be amazed at the number of questions they have, many of which are inspired by relatively small amounts of text (Rosenshine, 1996).

Students don't grow up knowing that good readers ask questions. Schools often appear more interested in answers than in questions. Teachers now teach students to think about their questions before, during, and after reading. Teachers encourage students to stop, think, and record their questions throughout the reading process. Students need to know that their questions matter (Billmeyer and McKeown, 1998). They need to see adults asking questions as well as answering them. Asking questions engages all to keep reading. A reader with no questions might just as well abandon the book. When students ask questions and search for answers, they are monitoring comprehension and interacting with the text to construct meaning, which is exactly what is hoped for in developing readers.

The association between questions and reading comprehension is the influence of prior knowledge on students' questions. Prior knowledge plays a role in the types of questions a student asks. Students that have little prior knowledge in a subject area do not ask many questions on the material that is too difficult or that may exceed the extent of their knowledge

base in the subject area. Questions activate prior knowledge which aids in reading comprehension (Neufeld, 2005).

A factor that could explain a contribution of reading comprehension is the conceptual levels of questions that enable students to build knowledge structures from text. When the text is expository or informational, reading comprehension can be characterized by the conceptual knowledge constructed from text (Armbruster, Anderson, and Ostertag, 1987). Conceptual knowledge consists of content information that can be structurally organized within a knowledge domain or a particular topic in that domain. Student questions may support expository text comprehension to the extent that they support building a conceptual knowledge structure that includes the main concepts and essential relationships among the concepts in the text (Armbruster, Anderson, and Ostertag, 1987).

Strategic questioning. Another category, strategic questioning, is when the questioning focus on ways to make meaning. The term strategic refers to thinking about reading in ways that enhance learning and understanding. This type of questioning will help students through unfamiliar material by prompting students to think beyond the literal level. Strategic questions are useful in fostering reading comprehension. The students can be asked about any topic or process, strategic questions are useful in fostering reading comprehension. When the context of content reading is applied the students will focus on how to comprehend challenging material than on what has been comprehended. Duke (2000) suggests that the focus of instruction should not be on the print, but on how readers interact with the print, which is where good instruction comes in.

Much of the responsibility of teaching reading in nonfiction text is to make what is implicit, explicit. Explicit instruction means the teachers show students how they think when

they read. Teachers explicitly teach reading comprehension strategies so that readers can use them to construct means. The instruction of a reading content strategy is modeled for whole class, guided students in practice in large groups, small groups, and pairs, and provide large block of time for the students to read independently and practice using and applying the strategy or strategies in their reading comprehension.

Moss's (2005) study of 12 fourth grade science and social studies lessons in which a textbook was used as a focus of instruction. The purpose was to determine how the text book was used by teachers and students and what kinds of questions the teachers asked during the textbook based lessons. The data base for the study consisted of 12 lessons selected from a large group of lessons recorded as part of the longitudinal study during 1987-1988 academic years. There were six social studies and six science lessons taught by nine teachers. The science and social studies texts were used during the lessons.

The average number of words read per lesson was 782 in the 12 lessons. There were differences between the two content areas in amount of text read and fewer words were read in science than in social studies. In the 387 minutes of lessons analyzed in this study, Moss (2005) found no instances of explicit instruction in how to read and learn from the text. The text was read silently or aloud. The majority of the reading events (87%) were read aloud. The students usually did the oral reading (91%). Teachers read aloud (6%) and both teachers and students read simultaneously (3%) (Moss, 2005).

Moss (2005) examined how many questions teachers asked and the type of questions teachers asked of the students. The teachers did not ask questions evenly throughout the text but they clustered them at the ends of the reading events. Most of the questions were made up by the teachers themselves. Slightly more than half of the questions (53%) were based on the target

text segment, another 28% came from some other part of the textbook. Teachers generated 9% of their questions from another source that did not seem to be related textbook content.

Moss's (2005) study did not rely on the publishers' questions but preferred to develop her own questions. Most the questions were related to textbook content, especially the target text segment. About 1 out of 10 questions appeared to be unrelated to the information in the text. Moss (2005) classified questions according to five possible information sources for the answers: text explicit, text implicit, scriptable implicit, graphics, or activities. The scriptally implicit or prior knowledge category accounted for half of the answers sources and recall that the scriptally implicit category includes not only background knowledge but also information in the textbook that had been read in the previous lessons.

The text currently being read accounted for only a little over one fourth of the questions asked of the text. Of the text based answers, text explicit outnumbered text implicit. Less than 1 out of 10 questions teachers asked required students to make an inference from the text they had read. Moss (2005) found that 15% of the total questions asked that elicited substantial analysis of the text, predictions, or applications of information from the lesson. In Moss's study (2005) the teachers seemed more intent on having students learn the content than on learning how to learn from reading.

Teachers use the text material to assist the students in understanding content. It would make sense then to take that understanding of content and to ask questions that promote a higher level of thinking and connect prior knowledge as well as current content together to form an analysis of the content. Moss's (2005) study found that most teachers ask questions at the end of the reading instead of throughout the materials. The teacher seems more intent on students saying the particular sentence he/she has in mind than in having them understand the concept

involved. Students did not get much practice reading informational text and instruction often failed on promoting conceptual understanding and learning from reading informational text.

Reciprocal questioning. One reading strategy that teaches students about reading comprehension is reciprocal teaching. Palincsar and Brown (1986) found that when reciprocal teaching was used with a group of students for 15-20 days, the students' reading on a comprehension assessment increased from 30% to 80%. According to a study by Palincsar and Klink (1991), students not only improved their comprehension skills, but they also maintained the improved comprehension skills when tested a year later.

This strategy was first incorporated as an intervention for struggling readers in small-group instruction. Reciprocal teaching has proved to yield positive and consistent results with primary and upper grade elementary students taught in large group instruction. Rosenshine and Meister (1994) reviewed 16 studies of reciprocal teaching and concluded that reciprocal teaching is a technique that improves reading comprehension.

Even though reciprocal teaching is a powerful research-based teaching technique, it is not comprehensive enough to stand alone as a method for teaching reading comprehension. Reciprocal teaching has four main strategies that teachers and students employ together to comprehend text: predicting, questioning, clarifying, and summarizing. Each reciprocal teaching strategy has an important role in the reading comprehension process. The four strategies are part of the comprehensive reading comprehension program based on all the strategies that good readers use, such as previewing, self-questioning, visualizing, making connections, monitoring, knowing how words work, summarizing, and evaluating.

Wolf (1978) attempted to demonstrate that systematically teaching a wide variety of reading and study skills in both social studies and English classes raises achievement scores.

Control subjects, using the same textbooks were not given direct instruction in reading, although they were taught vocabulary by means of word lists and the dictionary. At the end of the 8 month study, students in the experimental group who received direct instruction of multidimensional reading approaches achieved significantly higher scores on a comprehensive standardized test than did those in the control group.

Another study, Reeke (1971) took a different approach to investigating functional reading instruction by comparing the effectiveness of three methods of teaching social studies to sixth graders; a reading skills, an activities, and a traditional approach. The reading skills approach, which involved teacher-led discussions, worksheets, reading, and both creative and report writing, emphasized such areas as vocabulary development, setting purpose for reading, answering questions at different levels, note taking, and outlining. The activities approach relied on visual aid material and occasional speakers, and emphasized independent research projects that were accompanied by illustrations, maps, legends, and folk dances and songs. Students also engaged in activities similar to the reading skills approach, such as, worksheets, directed silent readings, quizzes, and discussions. The control group was the traditional approach of teacher-led discussions, reading the newspaper, worksheets, answering written questions and giving oral reports. Lesson plans required that the control groups' teacher introduce new vocabulary, provide instruction in picture interpretation and map skills, and give frequent quizzes.

After 5 months of instruction, results of a standardized achievement test favored the reading skills group, which did significantly better than the control group, although the activities group was not far behind. This research study supports that students learn better when the instruction is more diverse than read the material and answer the questions.

Visual organizers. There is considerable research support for the teaching of students to

construct visual summaries of texts (Duke and Pearson, 2002). Visual organizers also known as graphic organizers are representations that capture both the important information from the text and the structure of the knowledge contained in the text (Vacca and Vacca, 1999).

A graphic organizer is a form of outline that specially represents its organization and helps students visualize text structure. Most students today are visual learners and utilizing graphic organizer techniques can be effective methods for helping students improve learning from informational texts. Graphic organizers have proven to be useful in helping students visualize relationships among structural elements in a text.

The graphic organizer includes the main ideas presented in a text and shows how the ideas relate to one another. The type of visual organizer used to summarize a text must correspond with the organizational structure of the text. A Venn diagram can be used to summarize texts written using a compare and contrast text structure. A cause and effect or problem/solution organizational structure would not be best suited for a Venn diagram organizer. The real power of visual organizers is realized when students learn to construct visual summaries that accurately represent the actual texts they are reading.

While most of the studies reviewed by the National Reading Panel (2000) involved students in the upper elementary and middle grades, evidence also indicates that use of graphic organizers as a component of a comprehension program is helpful for those with learning disabilities and at risk for reading difficulties (Williams, 2005). Much of the research on graphic organizers has focused on their use as tools for helping students understand text structure. The use of graphic organizers has focused on their use as a tool for helping students understand text structure. The use of graphic organizers is often accompanied by instruction on using “signal words” or transitional expressions to identify, for instance, a compare/contrast or cause/effect

framework (Williams, 2005).

The consensus among the findings of research studies in this area is that the strength of graphic organizers is that they can help to improve the memory and recall of text that has been read. The National Reading Panel (2000) concluded that better memory for what is read may transfer to improved comprehension ability of content area text. Another factor accounted for the effectiveness of the graphic organizer is that it requires students to slow down and think through each problem.

Benefits of Using Content Teaching Strategies

The ability to understand nonfiction is essential for student achievement. Students will encounter a larger number of nonfiction texts as they progress through school. Like narrative texts, properly leveled content area readers can support literacy development in a variety of ways. Students will develop oral language skills and practice word attack skills. They also will increase vocabulary. Students will increase and develop fluency. They will learn comprehension strategies and they will develop enthusiasm for reading.

The teaching of nonfiction will open doors to classroom research and inquiry. Students will learn how to read and write nonfiction will increase inquiry process. One of the strongest arguments for exposing students to informational texts is that it increases their ability to read and write effectively in the later grades.

The students will become familiar with the unique features of informational text. Some evidence shows that students need and benefit from explicit instruction in the special features of content area readers that are so different from features of fictional works (Yopp and Yopp, 2000). Systematic practice in using content area readers provides students with opportunities to grow knowledgeable and comfortable with these support features, which include the table of

contents, captions, glossary, and index.

Teachers can provide children the opportunity for systematic learning of national standards-based content that covers the core concepts and vocabulary in such essential areas as science, social studies, health and math.

Students who appear to have progressed well in the primary grades experience difficulties in learning when they reach the older grades. The fourth-grade slump may well reflect the shift in instructional focus from fiction to nonfiction—from storybooks to textbooks (Chall, 1990). The fourth-grade slump may result from one or more of the following deficiencies: lack of basic skills, lack of familiarity and comfort with structures, text-support features, and writing styles of textbooks, lack of background knowledge upon which to build and the lack of self-confidence as a reader (Chall, 1990).

Informational books can acquaint students with the expository text patterns most commonly found in their readings. Teachers can capitalize on students' enthusiasm for nonfiction literature while providing rich experiences from engagement with nonnarrative texts. Duke (2000) said children must see, hear, read and write information texts before they have any hope of reading and writing them well.

Discussion and Conclusions

If teachers are to help students meet the literacy demands of the 21st century, it is essential that the elementary curriculum reinvent itself in ways that give content area literacy a place of greater importance. By using an array of text types to link content learning with literacy, teachers will achieve goals far greater than simply helping students read their content area textbooks. They will help students learn to read the world by providing them with literacy learning tools that will last a lifetime and by developing the abilities that will allow students to

not only survive but also thrive in the technological age to come.

Students need the right material available on a variety of reading levels. They need to be taught how to choose nonfiction appropriate to their ability level, research topic, and goals. They must also receive practice and guidance in extracting information in order to become competent at reading to learn. Teachers will need to provide instruction, modeling and authentic practice for students to achieve these competencies. Students' must have practice in how to choose and refine a topic, locate books at appropriate levels, read critically, take notes, and summarize, synthesize, and organize information that is necessary to use nonfiction to its full potential.

As students learn how to process the assigned text, they will increase both their reading skills and their understanding of the subject area. The better students can process and understand printed text, the better they will understand the content of what the teacher is teaching. Students will be more willing to read when they have mastered the skills they need to understand the assigned reading. By helping students practice effective reading strategies and providing tools they can use to process content-area text, they will realize the ultimate goal: becoming independent, strategic readers.

Students who are successful in reading and understanding content are able to connect what they already know about a subject to what they are reading. They make predictions about what they will learn from the reading. The students ask questions about what they don't understand and identify important ideas from the reading and summarize those ideas. Students use strategies when encountering text they don't understand and process the information they read in an organized fashion.

Students learn to make a distinction between what they think is most important and what the author most wants them to take away from the reading. Students use text evidence to form

opinions and to understand big ideas and issues.

Students must have access to materials of interest, must be instructed in nonfiction literacy skills and must interact in nonfiction-centered activities. It is evident that students are interested and will engage in nonfiction when provided this simple sequence of steps. The ability to read nonfiction becomes increasingly important to a student's academic success as the student progresses through school. It is essential that all students be presented with opportunities to learn from this often underused, yet undeniably important resource.

The importance of nonfiction to elementary, middle school and high school students is evident in the literacy needs of adults. Students from lower elementary to adulthood require many important literacy skills on a daily basis. Nonfiction materials can offer many interesting details with up-to-date information. Students can be inspired to find information of personal interest. In the age of information, it is vital that students understand and use non-narrative, expository text (Moss, 2003). The world of information is now at the students' hands. Students must be prepared to use and understand the information.

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