Content Area Reading Instruction: Issues and Implications for the Elementary Classroom

An Honors Thesis (ID 499)

by

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"Reading is both a process and a product. As a product, it is a learned skill or set of skills. As both process and product, it involves things, ideas, and the mental function we call human learning.

Reading involves specific things such as letters, words, phrases, and sentences; these language characteristics are learned by most children in spoken communication long before they see them represented on a printed page.

Reading also involves ideas based on prior experiences and stored in the memory. Situations depicted in words on a page stimulate memory of those experiences and bring meaning to reading. Thus, prior sensory experiences provide the basis for comprehending what is said.

Above all, reading is a process and product of human learning. As such, foundations for the teaching of reading to children must be built upon modern learning theory, including knowledge and principles of child development and individual differences, buttressed by relevant linguistic principles and a wide acquaintance with the body of literature for children."

The above description by Auckermann is just one way of
describing the complex process we know as reading. The broad purpose of this thesis is to examine the reading process as it is being taught by teachers and experienced by children in the elementary classroom. More specifically, this thesis will discuss the reading process as it is practiced and learned outside the structured reading instructional program.

Fundamentally, this thesis is a call for elementary teachers to give reading in the content areas the attention it deserves.

Many people think of reading as a "subject", usually taught in groups, using a basal reader. But what happens when Greg can’t do his social studies questions because he has such difficulty reading his social studies book? Are teachers spending as much time helping Greg read that social studies book as they do with his basal reader? Sadly, the answer is no.

Thus, a grave injustice is being done to elementary students in that learning to read and reading to learn are being unnecessarily separated. Elementary children need help with reading outside of the reading instructional period and they’re not getting it. Content areas, such as social studies, health, science, and math, each with its own textbook, are subjects in which varying amounts of reading are necessary. But these books, which are often more difficult than "the reading book", are given less instructional time and assistance. Children need the vocabulary development, background, motivation, and follow up activities in the same
way they receive them with the basal selections in order to be able to understand and learn from their content textbook selections. The issues of content area reading and the implications for the elementary teacher will be discussed and evaluated in this thesis study.

To begin a look at content area reading, first the nature of reading and reading instruction must be examined to understand the basic goals and concepts, which underlie reading performance at all levels.

The Nature of Reading

Reading is the key to all learning and understanding. Some would go so far as to say that is the key to life. There is very little one can do in this world without being able to read. Yet, elementary children are relatively unaware of the significance of the journey on which they are about to embark.

To most adults, reading is no more than picking up a piece of print and being able to understand what is written there. It is as natural as walking or breathing, and they are unaware of all the complexities which cause what is happening to actually take place. To teachers and others in the field of education, reading is so much more. By textbook definitions, reading is the process of decoding written symbols and bringing meaning to
those symbols, based on the reader's own background of experiences.

Reading is not simple, nor is it a single skill. It is complex and consists of many different components. Children do not learn to read in one, two, or three years, just as they do not learn to master any other complex activity in a brief period of time. They learn some reading skills and develop some attitudes toward reading as they complete one stage of development and move into another. But it takes them a long time to gain overall proficiency in reading.

So what exactly is reading? The nature of the reading process has been and will continue to be of great concern to scholars and researchers in reading as well as prospective and experienced teachers. To some this may seem to be a tedious and possibly unnecessary concern, but the truth is, how one views reading greatly shapes the way one teaches reading.

In part, reading is a social process. It involves the willingness on the part of readers and authors to communicate with each other. And while the process of reading is a social act, the process of learning to read is even more so, involving interaction with teachers and peers. The relationship between teacher and student is a very complex one. However, research shows again and again that the teacher is the most important variable in how well a child learns to read.

There are basically two ways to view reading: as a skill to be learned, and as a process. "Conceptions of 'reading'
range from extremely narrow to extremely broad. They are confined to the decoding of printed symbols and basic oral responses at one extreme and they move through the graspings of literal meaning and the interpretation of ideas to the inclusion of changes in behavior that result from decoding at the other extreme," states Otto.²

Many historical researchers in reading's varied past held with the idea that reading was in fact a skill. Bloomfield and Barnhart (1938) state: "The letters in a piece of English do not represent things, or even word, but sounds. The task of the reader is to get the sounds from the written or printed page."³

This definition puts the emphasis on decoding. Comprehension, it is implied, is a sort of second step - an activity which occurs after the sounds have been "gotten". But not only writers of the past refer to reading as a skill. In his book Developing Readers In Today's Elementary School, Mark Aulls (1982) contrasts reading as a skill with reading as a process. In the section concerning reading as a skill, he writes, "While the reader's knowledge of language is recognized as an integral part of reading print, reading is viewed as a complex unitary skill which is learned. As an observable unitary skill, reading is usually defined as a level of proficiency in reading text with identifiable subskill. Normally, reading subskills are considered to be best learned and interrelated through sequencing. Sequential learning is
arranged to begin with the simpler subskills and work toward the longer, more complex skills."

However, reading as a process allows one to ask, and answer, many important questions which cannot be addressed simply by viewing reading as skills learning. Almost all humans learn to speak without direct instruction. Children learn to produce and process spoken language so naturally that it is curious how most educators assume they cannot learn to read in the same natural way.

For all children, reading acquisition is closely tied to language acquisition. The concept of reading as primarily a receptive language process and only incidentally as skills learning makes it possible to discover how word identification skills are applied and integrated during the activity of reading print.

The skills dimension of reading does not provide much insight into how readers go about applying their word identification and comprehension skills during reading. The process dimension offers insight into what happens during sentence-by-sentence construction of a printed message. This insight reveals how readers may apply, supplement, or integrate their skills knowledge through the development of strategies for predicting, confirming, and integrating words, word groups, and sentences. Thus, the reader needs not only skills knowledge but also efficient reading strategies for using and integrating this knowledge when reading all forms of printed
Regardless which view of reading one prefers, all agree that the outcome of reading is meaning. And all views clearly indicate that readers must actively employ a variety of knowledge sources to acquire meaning through reading.

All views of the nature of reading recognize that a distinction must be made between the concepts of reading as learning and learning through reading. Children do not learn all they need to know about the reading process in a month or a year. However, through repeated opportunities to interact with printed language, they learn to integrate knowledge, skills, and strategies in order to make sense of print.

The overriding principle to be acknowledged is that, although most learners profit from decontextualized interactions with print to some extent (skill learning and practice), reading growth is largely a matter of interacting with complete texts which are highly redundant and cohesive. Decontextualized instruction must always be followed by contextualized instruction or by opportunities for the child to independently apply what was learned in the decontextualized setting by actually reading.

Finally, all views of reading agree that language learning is closely tied to reading. Reading takes place in certain contexts or situations. It must have the same explicit or implicit meaning-ordered functions that language has. Thus, knowing a good deal about the nature of language is not
not be recognized, then meaning can not enter into the process
and bringing meaning to them is, however, the words can
The act of reading has already been defined as recognizing
comprehension skills and study skills.
Instruction on three skills areas word recognition skills,
strong emphasis on reading as skill development and most focus
most teachers and instructional texts place a relatively

The nature of reading instruction
act and is reflected differently in each classroom,
the teaching of reading, as with all teaching, is a highly personal
children pass through a series of stages. However, the
not easily defined. It is a developmental process in which the
of reading, reading instruction in the elementary classroom is
many children and responsibilities involved with being a teacher
products? Language comprehension and comprehension all of these? Where are so
ourselves? Teach children to read? Do we focus on decoding?
go how do we? As teachers of reading and readers
the nature of reading
many theories of instruction as there are theories concerning
reading instruction is being discussed, there are almost as
placed on beginning reading. Regardless of which level of
for all stages of reading, but the majority of experts is
the reading process, there are many approaches and strategies
children's struggle. Children can have problems with any level of
Although complex, reading is an adult delight, it can be a
irrelevant to being a successful teacher of reading.
In addition, there are other components of reading to read, they must practice reading anything and everything. In order for children to learn to read, they are meaninglessly. Above items are a means to an end, but without actual materials which reading instruction is centered, but not restricted. The recognition, comprehension, and study skills - are areas in as mentioned before, these three skills areas - word reading skills.
classes. For example, reading is generally leveled, being divided into graded units. It is usually taught in groups of ten children or less. It has a set organization and plan to it and is accompanied by very specific materials. All of these things make up the current mode of reading instruction in elementary schools today.

Everything a child reads, whether it is written for her or not, is written at a certain level. Readability is the objective measure of the difficulty of a piece of written material. It is usually based on the number of syllables per word and the number of sentences in the passage, and is calculated by the use of a readability formula. Readability levels are usually reported in terms of grade level. Later, it will be discussed how the readability concepts can help us understand some of the difficulty encountered when children read content area textbooks in the elementary classrooms. There are two basic uses for readability formulas in the classroom - one is to estimate the reading difficulty of printed materials. The other is to guide the teacher in preparing or altering reading levels of materials for her students.10

The primary reading material used for reading instruction in the grade school years is a series of basal textbooks. "At least four out of five teachers in the elementary grades use basal readers .... as their primary medium of reading instruction."11 A basal series consists of an integrated
reading and skill program. Along with the series of leveled reading books is a complete skill program worked into the readers and the teachers manual.

There are advantages and disadvantages to using basal series in the classroom. The advantages are fairly clear: Basal reader programs have a logical organization. They're broken down into manageable units. The sequence of the skill development program is written down in an organized fashion. (It is interesting to note that not one of sixteen publishers agrees with another on the proper sequence of a program.) They also provide a wealth of supplementary materials. They are beautifully illustrated. And the story selections are from the best in children's literature. All of this leads to a great deal of security for the teachers and school systems who use them.

The disadvantages, unfortunately, are not so clear, at least not to those who make decisions concerning reading programs. Kenneth Goodman reports that the best research knowledge in reading instruction is not influencing the development of basal programs. He says, "The current basals require more time for reading instruction while they provide less time for students actually reading." 

Goodman also lists what he considers the problems with basal readers. Here are a few of them: "1. They put undue emphasis on isolated aspects of language: letters, letter-sound relationships, words, sentence fragments, or
sentences. 2. Basals discourage risk taking by requiring right answers on trivial details. 3. They isolate reading from its use and from other language processes. 4. They minimize time spent on reading while monopolizing school time for skill exercises. 5. Even the use of real children's literature is marred by relating it to skill development, rewriting it, or using excerpts instead of whole books."

Unfortunately, these basal reading programs, with all their problems, are usually the only textbooks in the classroom written on the children's level. The content area textbooks are written with specialized vocabulary, intricate drawings and diagrams, and complex concepts with less available help for the children than the basal program.
Reading In the Content Areas

Content area reading instruction came about in recognition of the fact that readers require various strategies when they study particular subjects and read many kinds of materials for different purposes. Content area reading instruction is designed to deliver those strategies. The majority of research in content area reading instruction is geared to assisting students at the secondary level. However, many strategies are proposed for the elementary student and, often, strategies for older children can be "toned down" for younger students.

In order to understand content area reading instruction, one needs to understand the larger context from which it emerged. In the early 1900's, education placed a great emphasis on mental discipline. Children did not read for comprehension, they simply read to decode. Says Moore, "...early U.S. reading instruction consisted mainly of elocution and memorization. Students at all grade levels were drilled so that they could declaim a text with correct articulation, inflection, accent, emphasis, and gesture."  

At the turn of the century, mental discipline declined as the primary focus of American schools. Modern American education in general, and content area reading instruction specifically, emerged largely as the result of three forces: humanists, developmentalists, and scientific determinists.

Among other things, humanist educators argued that the central functions of the schools were to develop students'
abilities to learn information meaningfully and to think independently. Humanist thought set the stage for current beliefs. The history of humanist concerns can be traced back to the Greeks but names known in American educational history did not begin to appear until the late 1800's. John Dewey, specifically, was a compelling force as he nudged American education toward the goal of meaningful reading. Dewey placed children at the center of the curriculum.

Another humanist concern was that of helping students to think and make inferences on their own. This concern surfaced periodically throughout the history of education but reached a high point during the 18th century French Enlightenment, and again in John Dewey's 1910 text How We Think.

Developmentalism became an influential force in education at the turn of the century. Psychologists such as G. Stanley Hall and Arnold Gesell were in the forefront of this field as they studied patterns of growth among children. Child study added to the growth of content area reading instruction mostly by pointing out that children at various stages of development require different strategies for dealing with the world of print.

Besides emphasizing the developmental stages of a child's learning, the developmental influence focused instructional attention on children as individuals in their own right. This helped to stimulate content area reading instruction by focusing attention to what each student needed in order to cope
sociocultural and educational frameworks that have been developed to address these issues. 

In education, as in other fields, the role of the teacher is crucial. In the 19th century, educational researchers such as John Dewey emphasized the importance of the teacher's role in facilitating learning. 

The development of Dewey's ideas proceeded through various interpretations, and the creation of educational programs and curricula that reflect these ideas continues to be an ongoing process. 

There are several key figures who have helped to set apart reading and writing as distinct areas of study, and their work has influenced educational research and practice. 

From a sociocultural perspective, it is revealed that several influential educational theorists contributed to the development of the modern concept of the teacher as a facilitator of learning. 

Attention to the teacher's role in facilitating learning has been a central theme in educational research, and the need for culturally relevant curricula has been highlighted in recent decades. 

The use of scientific principles in education has also advanced educationally with the use of her subject-matter reading assessments.
Teaching reading in the content areas is a highly specialized subject. Numerous books and articles have been published in this field. It is interesting to note that, although many elementary teachers do not regularly assist students in reading content textbooks and most secondary teachers do not consider themselves teachers of reading, there are scores of college-level textbooks written to teach the teacher how to teach reading.

In a research article by Readance and Moore (1984), overall conclusions were drawn concerning the suitability and practicality of these textbooks. "There is a limited body of historical literature underlying contemporary writings about content area reading instruction. Indeed, the results of this investigation indicate that the writers of the last few years mainly attend to only two pre-1950 publications. Other early references were noted by contemporary educators and researchers, but that notice is extremely meager and irregular." 17

These two authors suggest that progress cannot be made unless the historical background is considered, "...historical perspectives are essential tools which enable educators and researchers to extend and refine old ideas and create new ones. History helps us to move in a linear or spiral fashion rather than in circles." 20

This would lead one to the conclusion that by not noting previous efforts made by educators and researchers, today's
teacher educators are not maintaining a continuity of ideas within the field. These textbooks aim to provide a knowledge of the reading process, an understanding of how specific teaching strategies can enhance students' comprehension, and a rationale for accepting responsibility for developing students' reading abilities.

Ratekin, et al, believes that complicated reading instructional methods are possibly invalid for the current instructional time. Their study, conducted in 1983, concludes that some secondary teachers, although instructed as to what is "best" for comprehension and understanding, are not using the methods made available to them.

"....rather than use a variety of instructional resources, teachers used a single textbook with the single assignment for all students. Adjunct aids were rare. In contrast, textbook authors recommend using a variety of instructional resources. Clearly, recommendations made by textbook authors about teaching reading in content areas were rarely implemented in the classrooms we observed. ......we are becoming increasingly convinced that as teacher educators we must account for the realities of individual classrooms and design professional development programs with those realities in mind." 21

It is fairly clear that the textbooks and articles designed to help teachers in the classroom are less than perfect. But they are specific guidelines and worthy of
Most of the resources available today on research and strategies for content areas organize themselves in one of two ways: by subject area or by skill area (such as vocabulary or study skills). There are few authors who recommend strategies for one or two specific subject areas, mainly because most can be adapted to work with all subject areas. In the next section, specific subject area recommendations will be examined. Following that, skill area strategies will be discussed.

**Subject Area Strategies - Mathematics**

Just as reading is more than pronouncing symbols and attaching meaning and understanding to the symbols, mathematics entails more than a mechanical or manipulative approach to numbers. Mathematical competence requires an understanding of symbols in order to master two basic processes - classification and the study of relationships. Therefore any approach to improving reading skills in mathematics must focus primarily on comprehension, on understanding abstract ideas in order to improve the study of sets and functions.

Herber gives a definition of reading that is appropriate for reading mathematics. He states that "...reading is a thinking process which includes decoding symbols, interpreting the meaning of symbols, and applying the ideas derived from the symbols." In the area of mathematics, the focus must be on vocabulary and on interpreting symbols. Straight lecture is discouraged. Students at all levels in mathematics face
similar problems when reading mathematical language. The main problems that students face in reading a mathematics textbook is the complex vocabulary. It is almost like learning to read a foreign language.

One strategy recommended by Horber (1978), related by Smith and Kepner (1981), is the instructional framework. It is dependent upon the teacher's analysis of the reading assignment in terms of both content and process. Content analysis is the selection and organization of information the teacher wishes to convey to the students. Process analysis is the development of an instructional sequence and the inclusion of appropriate learning activities that provide students access to the content. The combination of the content and process analyses forms the instructional framework.

Basically, the mechanics of the instructional framework are very simple. In the first stage of content analysis, the teacher writes one to four basic sentences describing the content she would like the students to know by the end of a given time period. She orders these statements in terms of difficulty and identifies the specialized vocabulary needed for each specific concept or idea. Content analysis allows the teacher the necessary flexibility and efficiency to plan an instructional unit.

Once the major understandings are identified and prioritized and the essential vocabulary listed, the teacher begins to formulate an instructional sequence for the lesson.
Harber lists some items which he feels should be included in this decision-making process, such as: selecting motivational activities, reviewing background information, setting purposes, giving directions for reading, providing sufficient guidance, and anticipating appropriate concluding activities. The result is an instructional outline which provides the necessary assistance for a particular unit.

Another strategy recommended for improving students' reading ability within the mathematics area is the structured overview. Two forms of the overview are suggested: the tree diagram or the pictorial format. A complete and in-depth description of this strategy can be found in Reading In The Mathematics Classroom (Smith, 1981).

The biggest problem most elementary students face involving reading in mathematics is the ever troublesome story problem. By helping the students with their reasoning skills and by keeping the vocabulary at a definable level, children can learn to decode math problems as they would any other unknown or confusing passages. The key to this subject area, and to all others, is that children receive the help they need.

Subject Area Strategies - Social Studies

Reading in the social studies classroom presents a slightly different problem for an elementary student. Again, there is the difficulty with vocabulary and concepts. In addition, pictorial and map skills are needed. But there is also more actual text to understand and remember. Often, the
reader will be expected to remember what he has read as background information for ideas to be presented later. With the social studies textbook, surprisingly enough, students usually get even less help than with the mathematics textbook. Most teachers interpret the social studies book to be "easier" because there are less "problems".

There a re several ways that a teacher can aid students in reading a social studies text. First, of course, is to develop the specialized vocabulary. There are many creative vocabulary strategies available to an elementary teacher, such as List-Group-Label, Possible Sentences, or Contextual Redefinition. Another is to teach students how to organize and interpret ideas. The highly factual nature of much social studies material makes it imperative that the reader organize what has been read in a meaningful manner. This can be facilitated in many ways, the most obvious of which is outlining. Interpreting material involves making inferences, noting cause and effect, and evaluating ideas.

A third possible way that a teacher might help her students to better comprehend the material being read is to teach locating and utilizing reference materials. "Social studies units must necessarily make use of a wide variety of reference material. The value of such references depends not only on their availability but also on the ability of the children to make wise use of them." There are many ways to teach children to use reference books but the most practical is
is to read. Children need to be encouraged to read for
reading program and children begin to think that 3. All three
as mentioned earlier, teachers become dependent upon the basic
"taught" or "learned" they must be experienced. So often,
"literary" works, whether classics or trade books, can not be
reading books other than the textbooks.
"subject" of "literature." But, hopefully, one day, children
In the elementary classrooms, one rarely finds the
phrasing, and varied writing styles, to name a few.
Now a student must work with figurative language, outdated,
still there, but the complexities of the concepts have changed.
the comprehensive area of literature. The vocabulary situation is
one comes across another kind of problem when dealing with
Subject Area: "Literature" - "Literature"

To her students.

dependence on the text. The manual, which truly teaches something
creativity and consistent teacher, able to break away from
social studies more alive and stimulating to them. It is the
audio-visual aids, trade books, and guest speakers to make
shows, role playing, learning centers, field trips, possible to her students. Students need dramatic presentations, puppet
counters, distant wars, and past civilizations as real as
classroom teacher's responsibility to try to make foreign
availability of outside resources to the teacher. It is the
field. In with the idea of using reference books is the

to make them a part of everyday classroom use.
enjoyment, but teachers must help them to be successful. This could mean stimulating, creative writing assignments (not just "How I Spent My Summer Vacation"), introducing them to the world of poetry, or simply allowing them to read a newspaper or magazine during their free time.

One time consuming but highly successful supplementary program is the program of individualized reading. What this involves is a one-on-one instructional setting where the teacher allows the student to choose a book to read. At least once a week, more often if possible, the teacher and the student meet to discuss the book. This aspect keeps the teacher fairly busy trying to have a working knowledge of the books being read, but the work is worth the benefits which can be reaped.

Authors Holmes and Ammon (1983) actually outline a strategy for teaching content with trade books, similar to the individualized reading program. "Trade books have the potential for developing the thinking skills of students. In particular, they offer the opportunity for comparing and contrasting information, and judging authenticity of the writing as well as the credibility of the authors. At the same time, self-selecting of trade books allows for individual differences in students' reading ability, interests, and motivation."28

Another possible strategy for enhancing children's reading of literature is the directed reading lesson. It generally
Individual subject areas.

Enhance students' comprehension and understanding within
as it has been noted, there are a multitude of ways to
personalize the act of reading within the field of literature.

of the child's background of experience and his interests.

childhood, preparation and follow-up are planned on the basis
is chosen specifically for one child or a small group of

difference lies in the individuality of the DRL, a selection
to the format employed by the basal series' publishers. The

The directed reading lesson appears to be quite similar

game. 24

plus an enriching activity, such as a filmstrip, record or

follow-up generally consists of a discussion of the material.

case. This step is followed by silent reading and follow-up.

All these things comprise the usual parts of the preparation

determines for what purpose he thinks his students should read.

are provided with additional background information. He also

within the selection will be unclear to students unless they

unfamiliar and determinable if any of the concepts contained

students to read, isolates vocabulary words he thinks might be

follow-up. A teacher examines the selection he wants the

consists of three stages: preparation, directed reading, and
Mathematics, social studies, and literature are only three areas of the varied content areas presented to elementary children and the strategies mentioned are but a sampling of what is available to the teacher.

Within every subject area there are three areas which need to be enhanced to increase the child's chances of understanding and enjoying the assignments given him. These are the areas of vocabulary, comprehension, and study skills. A look will now be taken at some strategies which can aid in these specific areas within any subject.

Skill Strategies - Vocabulary

"A vocabulary is a corpus of many thousands of words and their associated meanings.\textsuperscript{30} The development of one's vocabulary is absolutely essential if adequate reading growth is to take place in such important areas as silent reading comprehension and oral and written communication skills. Vocabulary enlargement is a lifetime process, and every teacher in each content area has a significant responsibility for helping students realize maximum growth in each of the different types of vocabulary.

There are five general types of vocabulary: listening, speaking, reading, writing, and potential.\textsuperscript{31} This paper is specifically concerned with increasing comprehension within the area of a child's reading and writing vocabulary, although it is hoped that increased development will occur in all five areas.
Vocabulary in content area selections generally fall into three categories: technical vocabulary, specialized vocabulary, and general vocabulary. The technical vocabulary consists of those words that belong specifically to one area and often have been coined for specific fields. For example, "tyrannosaurus" and "brontosaurus" would be technical words for a selection on dinosaurs. These words must be taught if most students are going to be able to read them.

The specialized words are terms that change meanings for different fields. For example, a student may have no difficulty with the word "fault" in a tennis lesson, but would become baffled if he tried to apply that meaning to a geology unit in science. Finally, the general vocabulary includes all the other sophisticated, complex terms that are used.

Several strategies are suggested by the recent literature. One is the relatively common idea of using context clues. The context of an unknown word is the material surrounding it. This context may be a phrase, a sentence, a paragraph, or an entire chapter. Context clues are words, phrases, or more which help the reader identify - give him/her clues to the meaning of - the unfamiliar word.

Teachers can help students to use context effectively and efficiently by providing practice in identifying and using context clues in reading. One way to help students practice in identifying and using context clues is to provide modified versions of the cloze procedure. The term cloze relates to the
The graphic organizer may be used in a variety of ways.

Another innovative strategy is a

In single sentences to tell paragraphs. Then words, practice in using context clues can range from filling

Given students sufficient context to identify the meaning one word in ten on the average, should be deleted. This ratio of those in preparing such close exercises is that no more than of clues in the passage which give meaning to the blank. A rule

necessary to fill in the blanks and he needs only recognize the then any fifth word. The student has a list of the words

to delete vocabulary words from a passage as they occur; rather
close procedure when it is used for practice allows the teacher

regularly spaced intervals are omitted. The format of the concept of closure. With the close procedure, words at
There are four steps to generating a graphic organizer. Step one—concept identification—is when the teacher identifies all new terms and concepts which will be introduced in the reading assignment. Concept selection is the next step. In order to prevent the organizer from becoming overly complex, it is necessary to cut the initial lists until it consists of only the concepts which are most essential to the reading selection. The organizer is supposed to supplement the reading assignment, not replace it. Once the list has been reduced, sub-classify the remaining terms in an informal outline.

The third step is the construction of a diagram. The terms are arranged in a tree structure which reflects the outline. This is the key to the graphic organizer but the tree may not quite as organized as it could be. Does it accurately convey the concepts you wish to teach? If not, the diagram should be re-organized and re-defined until it is. One of the advantages of the graphic organizer is that it helps teachers to organize and clarify their own purposes. Also the complexity of the diagram should be evaluated. Students can be overwhelmed if the visual display is too complex.

The final step is the presentation of the organizer. How it is physically presented is unimportant; dittoes, a poster, transparencies, or the chalkboard may be used as the teacher's resources dictate. The time required for the presentation will vary depending upon the complexity of the organizer and the extent to which the concepts in question are unfamiliar to
Cuthbertson (1965) suggested the following prerequisites when

content areas.

for helping children develop their reading skills within the
subject. Therefore, every teacher has a serious responsibility
area. Reading must always be thought of as a process and not a
needs to remember as she prepares a lesson within a content

there are a number of significant factors which the teacher

Since comprehension is the end result of the reading act,

**Skill Strategies - Comprehension**

material read.

Specifically for increasing overall comprehension of the
strategies presented in current literature described
extra attention to content reading. However, there are
increase comprehension to some degree simplified by giving needed

Almost all the strategies presented in this thesis will
enhance vocabulary, improved comprehension is also a result.

While the major focus of the graphic organizer is to
will make the subject matter more meaningful to the students,

as improving reading comprehension, and enhanced material which
terms. The end result will be vocabulary development as well
questions and discussion, and establishing relationships between
the organizer, explaining each term, encouraging student

three diagram works, the students should be "taught through"

of the purpose of the organizer and an explanation of how a

The presentation should begin with a general explanation

students.
building a program to increase comprehension,

1. Since comprehension is a holistic concept, it should not be thought of as a single skill ability.

2. Instruction in the various comprehension skills must be developed through the use of direct lessons which emphasize a major skill.

3. If comprehension is to be developed effectively, students must always be given a purpose for reading.

4. All material used for comprehension exercises should be at the instructional reading level of the readers.

One strategy used in improving comprehension among elementary students is a study guide. Study guides are used to "guide" the students' reading so that they read purposefully. Vocabulary and new concepts should be presented beforehand so that they do not interfere with the students' using the guide effectively. Discussion should occur following the completion of a study guide. The teacher may lead the discussion or, in the upper grades, students may hold a group discussion. Discussion should focus on higher levels of comprehension not covered by the guide.

It is important that study guides be discussed in order to clear up any questions students could not answer, and to provide a follow-up for their hard work. If students perceive a guide as "busy work", then the guide will immediately lose a lot of its effectiveness. It is also recommended that a
variety of questions be included in any particular study guide. If the majority of questions require literal, factual answers, then the child will no longer be reading for understanding but reading to "find the answers."

Finally, study guide questions and test questions over the material studied should emphasize the same type of thinking. If the student guide and subsequent discussion and activities emphasize only literal comprehension, it is inappropriate for the teacher to ask inferential, evaluative, and appreciation level questions on an examination. Conversely, if all levels of comprehension are stressed in class, it seems unfair to administer a strictly multiple-choice test of literal comprehension, unless students are told in advance. Ideally, a test should have approximately the same proportion of questions at each level as the instruction over the material.

There are many different kinds of study guides, each best suited for a specific purpose. There are concept guides, which are especially useful in studying literature, although they could be used with any subject matter where the intent is to present concepts, ideas, and generalizations. Problem-solving guides work best with subjects which lend themselves to step-by-step reading of material, such as mathematics or science. Similar to a problem-solving guide is a pattern guide where the student is guided step by step through a recipe, science experiment, and so forth. Key words are highlighted and each step emphasized so that students carefully follow a
understanding of what they are reading.

"Self-monitoring" which helps the students to monitor their
students use to help themselves. The process is known as
which the teacher uses to help the students but one the
A second strategy for improving comprehension is not one
source materials.

the comprehensiveness that might be lacking with the use of diverse
important in this reading materials and give the unit of study
material. This guide will help the students know what is
students grasp the important ideas from any of the reading
different reading levels. The general study guide can help
use different textbooks and references for students of
Finally, a general study guide can be used when a teacher
material is much too difficult. It
frustration while reading content textbooks because the
option works especially well for students who often experience
paragraph and one or two questions to answer. This second
a guide which gives a specific purpose for reading each
incorporating questions after every section. Or she can create
guide. She can rewrite the instructional material;
the teacher has two options in using this type of
guide. The teacher has two options in using this type of
considerable amount of guidance is the paragraph-by-paragraph
the type of study guide used for readers who need a
provides the organization of a paragraph or selection.
sequential comprehension skills whenever chronological order
set of directions. A pattern guide can be used to teach
"Metacognitive theory suggests that self-monitoring should be taught to help students regulate their comprehension independently while they are reading and studying."

The strategy was designed to help students monitor their comprehension while reading content area materials. To do this, students use a code to record their responses to assigned material. The specifics of the code are determined by the teacher based on the responses he or she wants to elicit from students, the characteristics of the assigned material, and the teacher's curriculum objectives.

For example, the code for a social studies textbook might be "A"=Agree, "B"=Bored, "C"=Confuses, "D"=Disagree, "M"=Main Idea. For a science textbook, the code might be "C"=Clear, "D"=Difficult, "I"=Important, "S"=Surprising. Students are given the code before reading, monitor the responses as they read, and record their responses on strips of paper they affix to the margins of the pages they are reading. Students can note specific lines, paragraphs, or pages with the descriptive codes.

Postreading discussion using the students' responses is important to the development of their comprehension skills. When students discuss some confusion or problems in understanding the content, teachers can determine what should be clarified and teach meaning-getting strategies that might facilitate comprehension, such as cause and effect skills. Students also enjoy expressing boredom with a selection that is
It is important that students learn how to locate
and follow directions.

If students read at a pace of reading to the learning situation
summarizing, and evaluating information comprehension what is
understanding, gathering, organizing,
and effectively study includes "locating," gathering, organizing,
and can acquire while in school. Reading ability is important for
Study skills are among the most important skills a student

**Skill Area Strategies - Study Skills**

Comprehension and the understanding of the vocabulary

who improves his study skills can only naturally improve his
example of strategies which enhance all three areas. A student
the others. The third area, study skills, is probably the best
each particular strategy is designed to highlight one area over
materials - vocabulary, comprehension, and study skills, but
increase comprehension in all three areas of reading content
as has already been noted, all of the strategies presented

it's appeal and effectiveness.

This strategy should be used sparingly otherwise it will lose
what is important in the selection and what is not. However,
redundant (I already knew that) or giving their opinion of
students how a chapter is set up and how to use that information in reading. The information presented in this initial lesson should be repeated throughout the year to refresh the students' memories.

Many authors also suggest the constant teaching and re-teaching of library skills as a teaching strategy. Library skills are usually taught within the sequence of skills of a basal series. This is not a suggestion that those skills be re-taught in the content areas. This strategy suggests that the teacher teach the students to use the various resources of the library and then have them use them in relationship to activities and assignments within content area instruction. One of the problems of basal series skill instruction is that skills are taught out of context. Children need to learn, for example, how to find and read a world map and then use that map to understand a particular concept or problem.

Also, library instruction should not be left to the librarian. The teacher's presence and participation in the library lesson will relay to the students the notion that using, and learning to use, the library must be taken seriously. The more practice children get in using the references of the library for a purpose, the more confident they will be in their ability to solve a problem using outside sources.

Finally, almost every source referenced in this thesis recommends the strategy of SQ3R as a skill strategy. SQ3R was
developed by Robinson in 1946 to provide students with a systematic approach to study-type reading and to promote more efficient learning of assigned reading materials. There are many variations of SQ3R such as FORST, SQ3RCCQ, PQ4R and TQLR, but all of them follow the same basic format.

"SQ3R was designed to take advantage of the consistant format of most traditional content textbooks. Each chapter generally contains a title, an introduction, a number of headings and subheadings, a concluding or summary statement, and some questions or problems by the textbook author at the end of the chapter. This format naturally leads up to the five steps that make up the SQ3R procedure: survey, question, read, recite, and review."42

Some problems with SQ3R are that some students find it tedious, and that it can not be used with primary students. However, most sources suggest that primary-age students be taught to use step one, survey, as a prelude to learning the entire strategy later on. SQ3R, and other strategies like it, can be a successful study strategy for those students diligent enough to learn to apply it, but unfortunately, those are usually the students who don’t need the help.

In conclusion, this section of the thesis has examined some of the subject areas, and the specific skill areas in which students may need help in the elementary classroom. It may not be critically important how the teacher helps his students, but it is important that he does make the effort to
help them. As this section on strategies should make clear, there are strategies available for every subject area and situation. There is no excuse for not giving students the assistance they need with content area textbooks.
in the total reading program is never completely gone.

Content reading is also present throughout the school cycle. Students begin reading materials in math, science, social studies, and literature in the earliest grades. Not as much emphasis is placed there as it is later on in junior high and high school, but the base is there. This base is built upon in junior and senior high school by applying developmental reading to the situations in which adults use reading - to gain information, to learn about people, and for pleasure.

The need for an effective remedial component is present throughout the school reading program. This represents a philosophical position that the school, and indirectly the society supporting the school, owes its young people a continuing opportunity to master this most basic of skills, reading. As a profession, teachers have accepted the proposition that literacy is important, in fact, fundamental, to today's society. Therefore, the schools need to provide support for those students who do not maintain the increasing reading levels of their peers and are classified as needing remedial help.

Where does the elementary teacher fit in? Into all three components, of course. The major component is the developmental process because in the elementary classroom children are just beginning to learn and apply their reading skills. Remediation is very important in the early stages of reading development so that a child might catch up and continue
Conclusion

Reading in the content areas is but one part of an entire program of reading and learning for the elementary child. How do the content area reading strategies fit into the total reading program? A complete school program has three major components: the developmental reading program, the content reading program, and the remedial reading program. Those three components should be present at all levels of schooling, from K through 12, but their relative emphasis will differ as grade levels increase.

Developmental reading is a continuing need from kindergarten through senior high school. Developmental reading is the primary source of reading instruction. This involves teaching students how to read - the basic processes of reading and their use in students' developing lifestyles. Developmental reading in primary grades is easy to identify - the process of beginning reading and the need for students to be taught and to practice reading in order to become fluent readers. By intermediate grades, developmental concerns shift to advancing students' word attack skills and their use of higher levels of comprehension. This development continues on through the education process, concluding with higher-level study skills for college-bound students. The emphasis on developing new reading skills gradually diminishes as instructional and independent level readers move to higher skill levels. However, the need for a developmental component
experts his students to be able to do after instruction. These objectives state the behaviors to be expected at the end of the teaching activity. What the teachers expect at the end of the teaching activity, the objectives, should focus on the terminal, behavioral, or performance evaluations and organize for instruction. In planning the content area texts, evaluation is logistically related to evaluating the effectiveness of the strategies used to improve learning. It is important, too, for teachers to be continuously interested in content area textbooks and materials.

Nature and students will become more confident and more time. Graduallyly, a variety of strategies will become second nature and students will become more confident and more time. Graduallyly, a variety of strategies will become second nature and students will become more confident and more time. Graduallyly, a variety of strategies will become second nature and students will become more confident and more time. Graduallyly, a variety of strategies will become second nature and students will become more confident and more.
behaviors serve as indicators which let the teacher know whether or not learning has taken place, and the degree and direction of that learning.

Educators need to be aware of the wide variety of resources available to them, both for their own professional growth and for use with students. One of the purposes of this thesis was to point out that teachers are not tied to a textbook, that there are options available. Content area textbooks are difficult reading for elementary students and they need assistance. Teachers, with a little advance planning and organization, can provide this assistance and, as a result, enhance confidence and understanding. It is the responsibility of every elementary teacher to do his/her best to help children to learn to read and read to learn in every area of the curriculum. It can be done, and if only for the sake of the students, it must be done.
Endnotes

1. Auckerman. *How Do I Teach Reading?*, Pg. 1
3. Hall, Ribovich, and Ramig. Pg. 6
5. Aulls. Pg. 36.
6. Aulls. Pg. 73.
7. Auckerman. Pg. 60.
12. May. Pg. 287.
15. Moore, Readance, and Rickelman. "An Historical Exploration of Content Area Reading Instruction." Pg. 421.
16. Moore, Readance, and Rickelman. Pg. 422.
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20 Readance and Moore. Pg. 303.
21 Ratekin, Simpson, Alvermann and Dishner. "Why Teachers Resist Content Area Reading Instruction." Pg. 435.
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31 Cushenbery. Improving Reading In The Content Areas. Pg. 45.
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33 Criscoe and Gee. Content Area Reading: An Individualized Approach. Pg. 163.
34 Criscoe and Gee. Pgs. 164-165.
35 Readance, Bean, and Baldwin. Pg. 111.
37 Hennings. Teaching Communication and Reading Skills in the Content Areas. Pgs. 192-193.
32  Criscoe and Gee. Pg. 207.


40  Dauer and Smith. Pg. 145.

41  Granard and Ashby-Davis. Pg. 236.

42  Tierney, Readance, and Dishner. Pg. 212.

43  Criscoe and Gee. Pg. 308.

44  Criscoe and Gee. Pg. 307.
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