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THE COMPARISON OF THE EFFECTS OF THREE PREREADING ADVANCE ORGANIZERS ON THE LITERAL COMPREHENSION OF FIFTH-GRADE SOCIAL STUDIES MATERIALS

A Dissertation

Presented for the

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Degree

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ABSTRACT

The goal of this investigation was to determine if one of three prereading advance organizers: a verbal, a graphic, or a problematic situation organizer affected the comprehension of given fifth-grade social studies reading selections. The study attempted to answer the following research questions.

1. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different from the lesson introduced by the control organizer?

2. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly differently from the other two?

In order to answer these questions, subjects in eight Hamilton County, Tennessee, schools were used. Four 30-minute lesson plans were written for each of four lessons in the McGraw-Hill fifth-grade social studies series (1985), United States. Each plan included one of the prereading organizers, the given reading selection, and a post-reading comprehension test. Eight college education major taught the lessons. The data were collected and analyzed using a t-test or a one-way ANOVA.

The results indicated no significant differences between the test scores following the control organizer and each of the studied organizers, and significantly higher

scores for the graphic organizer over the problematic situation. The conclusions were that the subjects' schemata for the related reading material were already sufficient for its comprehension or that the studied advance organizers did not contribute enough to the building of schemata for them to significantly affect the results.

Other variables appeared to affect the outcomes of the study more than the studied variables. The teacher had an impact on the results, with one teacher's performance appearing to be superior to the others'/ Also, the sequence of lessons affected the results, with the first day's scores, regardless of the use of organizer, being higher than those of the other day's and significantly higher than the last day's. Either the novelty of the student teacher, the alertness of the subjects on the first day, or the difficulty of the material may have caused these results.

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CHAPTER I

INTRODUCTION

Much has been written concerning the problems that many students have with the comprehension of reading materials, especially content texts--science, math, and social studies. Alexander (1988) suggested that these children may be those who have little trouble with their basal readers or trade books, yet are unable to derive meaning from what they read in content area textbooks. This difficulty is a result of a combination of factors, both within the reader and within the printed material (Vacca & Vacca, 1986).

One explanation for the problem that the reader has with content texts is that these materials are written on reading levels beyond the capacity of the intended reader. Textbook writers have attempted to solve this problem by simplifying terminology and shortening sentences. This "dumbing down" of material does not necessarily make it more comprehensible. When long sentences are artificially broken into series of shorter sentences, inferential relationships are often neglected. This may "complicate the reader's ability to comprehend" (Vacca & Vacca, 1986, 18). According to Hittleman "word frequency and sentence length do not stand in simple relationship to reading disability" (1978, 118).

Many other factors affect reading comprehension which readability formulas do not consider. These would include such text variables as concept load, format of material, organization of ideas (Hittleman, 1978), typography, literary form and style, and cohesiveness (Harris & Hodges, 1981).

Also not taken into consideration are factors inherent within the reader, such as "motivation, reading ability, and interest" (Harris & Hodges, 1981, 268). Perhaps the human factor which most influences comprehension is the schemata which the reader brings to the reading selection (Vacca & Vacca, 1986). Text is interpreted as the reader activates the schemata related to that reading material. Comprehension of that material is determined, not by the text itself, but by what the reader brings to the selection (Vacca & Vacca, 1986). The reader interacts with the new information as it enters the cognitive field. One's understanding and comprehension of that information depends on the reader's schemata (Swaby, 1984). The more schemata one has for that topic, the more will be understood of what is read about it (Turner, 1988). Comprehension then "involves taking meaning to text in order to obtain meaning from text" (Turner, 1988, 159).

Since content materials, especially social studies, usually seek to develop many concepts, students often do not

have the related cognitive framework upon which to attach this new knowledge. These concepts must be thoroughly understood if the reader is to comprehend the reading material (Alexander, 1988).

The answer is not to discard the difficult text, but to give stronger emphasis to building background knowledge. "Comprehension can be helped if the teacher pays special attention to building bridges between the reading material and the student's experiences" (Turner, 1988, 164). The teacher can guide comprehension through varied forms of direct instructional activity (Vacca & Vacca, 1986). This instruction can take one of several forms, but it must provide a conceptual framework for the reader upon which to build the new information. It must include activity and discussion before reading in order to prepare the reader to link what is known to the new material (Vacca & Vacca, 1986). This prereading activity is generally known as an advance organizer or structured overview (Alexander, 1988).

Through the use of advance organizers, the reader may be able to build relationships between existing schemata and the text (Spache & Spache, 1986). The depth of one's comprehension will be related to how these advance organizers help to make adequate associations.

These are indications from analysis that advance organizers enhance reading comprehension. Advance organizers

appear to be particularly useful for content area reading because of the heavy conceptual load of most of these textbooks. Social studies materials, in particular, usually include many unfamiliar concepts (Turner, 1988).

Researchers have not addressed the possibility of one organizer being superior when used in the regular classroom. Alvermann (1986), Bean (1986), Hawk (1986), and Reinking (1986) studied only the use of the graphic organizer. Two recent studies made comparisons. Sachs (1983) studied the use of a modified Directed Reading Activity, a modified concept analysis activity, and a worksheet activity, while Ansley and Freebody (1987) studied the effects of a pictorial introduction, content-directed questions, and free associations to passage titles. Several studies related the use of advance organizers to the teaching of the learning disabled student (Darach & Gerstin, 1986; Lenz, Alley, & Shumaker, 1987; Sachs, 1983; & Tudor, 1986). To date, no research was found in the literature that compared a verbal concept organizer, a graphic organizer, and a problematic situation.

The current study examined these three prereading advance organizers: a visual, a graphic, and a problematic situation approach. It attempted to determine whether any one of these organizers might produce significant results as compared with a control lesson using no advance organizer,

or when compared with each other, when used in regular classrooms.

I. STATEMENT OF THE PROBLEM

Reading comprehension appears to be enhanced by the use of advance organizers. Three of these forms are the concept organizer, which organizes the concepts orally for the learner; the graphic overview, which organizes the concepts visually for the learner; and the problematic situation, which demands application of the concepts by the learner. These are discussed under various names in both reading and content area methods literature (Spache & Spache, 1986; Vacca & Vacca, 1986; Alexander, 1988; Burns, Roe, & Ross, 1988; Estes & Vaughan, 1985).

According to the above cited references, the effects of advance organizers on readers' comprehension of related reading material have been examined statistically and have generally been found to be superior to no prereading help. However, no studies were found that compared the effects of three prereading advance organizers: a verbal, a visual, and a graphic organizer approach, on the comprehension of related reading selections.

II. PURPOSE OF THE STUDY

The purpose of this study was to determine if the prereading approach affected the comprehension of a given reading selection. Specifically, an attempt was made to determine if one of three prereading advance organizer approaches was significantly different from a control approach or the other two approaches, in terms of its effect on reading comprehension.

The three approaches were (1) a verbal concept organizer, designed to be presented orally; (2) a graphic organizer, designed as a visual stimulus; and (3) a problematic situation, designed as a study problem leading to the application of the reading material.

The following research questions were formulated:

(1) Were the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different at the .05 level from the lesson introduced by the control organizer?

(2) Were the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different at the .05 level from the other two?

III. IMPORTANCE OF THE STUDY

It was found from the analysis of research that the comprehension of a particular reading selection was affected by one's schema related to that material and content materials included so many concepts unfamiliar to children, strategies to aid in the development of those concepts were most important to reading comprehension. The use of advance organizers assisted the reader in building relationships between his existing schemata and the text (Ausubel, 1969).

The importance of advance organizers has been established, but research was scarce that would indicate if one form was better than another. When reviewing the research that was done comparing prereading strategies to the comprehension of related reading passages, none was found comparing a visual advance organizer, an oral advance organizer, and a problematic situation. Because of the emphasis on learning styles and modalities, this investigation could impact that study as well as indicate whether there is any significant difference among various advance organizers on the comprehension of related reading selections.

The research reported herein should add to the common body of information concerning advance organizers by indicating whether one of the studied strategies affects the comprehension of related context material more than the

others. If one is proven to be more affective, then the teaching of content materials should be modified to include that introductory strategy so as to enhance the comprehension of the reading selection.

IV. ASSUMPTIONS

1. The subjects involved in the study, fifth-grade children in three Hamilton County, Tennessee, schools, were not significantly different from each other in intellect and achievement levels.

2. The intellectual levels, teaching abilities, and teaching strategies of the eight student teachers were not significantly different.

3. The measurements of comprehension used for this study were not significantly different from set to set.

4. The ten experienced, tenured, in-service teachers who were asked to select comprehension questions for the post-tests had the ability and expertise to identify valid and reliable questions for determining the comprehension of that material.

5. There was no conceptual load difference among the four selected lessons in the chapter, "Divided States", in the unit, "The United States Changes", in the fifth-grade textbook, United States, published by McGraw-Hill (1983).

V. LIMITATIONS AND DELIMITATIONS

1. The teaching of the lessons was delimited to eight senior elementary education majors in their last semester of college. These students were chosen by the researcher based upon availability during the allotted time.

2. The experiment was delimited to the fifth-grade population in the Hamilton County, Tennessee, school system, who were using the McGraw-Hill (1983) social studies textbook, United States.

3. The experiment was delimited to the use of one chapter, "The United States Changes", from the McGraw-Hill fifth-grade textbook, United States.

4. The experiment was delimited to the use of only three prereading approaches to reading comprehension.

5. The experiment was delimited to lessons designed by the researcher.

6. The experiment was delimited to the post-tests written by the researcher.

7. The experiment was delimited to the measurement of only literal comprehension.

VI. DEFINITION OF TERMS

Advance organizer. Material used, before a reading selection, which should maximize the learner's cognitive

readiness by providing him with a framework of reference to relate what he already knows to what he needs to know to learn from the reading selection. In some way it should highlight key concepts and ideas to be encountered (Spache & Spache, 1986; Vacca & Vacca, 1986; Vacca, Vacca, & Gove, 1987). To be effective it should be formulated in "terms of the language, concepts, and propositions already familiar to the learner, and use appropriate illustrations and analogies" (Ausubel, 1968, 214).

Background knowledge. The reader's experiential and conceptual background which he brings to the written text (Heilman, Blair, & Rupley, 1986). Some background knowledge, either preexistent or developed before the assignment of the reading material, enhances the comprehension of that material.

Cognitive readiness. The "ability of the learner at a given age to cope adequately with the demands of a cognitive task. It is intrinsic to reading at every instructional level" (Vacca & Vacca, 1986, 101).

Graphic overview. Teacher-designed chart or diagram which uses the content of the reading selection to help students anticipate concepts and their relationships to one another (Earle, 1969; Vacca & Vacca, 1986). The words on the chart should be arranged in a scheme which should visually indicate those interrelationships (Barron, 1969). The

teacher uses the graphic overview as an introduction to a reading passage, explaining the scheme and why terms are arranged as they are and then encourages contributions of information.

Problematic situation. A situation designed and introduced before assigning a reading task. Its purpose is to create a problem and raise questions which can only be solved as the selection is read (Vacca & Vacca, 1986). This should help the reader to organize his thinking as he reads in order to apply what he is reading to a given task and the solution to the problem. This should result in the comprehension of the reading selection.

Reading comprehension. The interaction of textual information and one's existing schemata (Pearson, 1985; Swaby, 1984). It involves what meaning the reader takes to the text in order to obtain meaning from it (Turner, 1988). Comprehension is affected by one's experiential/conceptual background, word recognition capabilities, language ability, and reading purpose (Heilman, et al., 1986).

Schema. All of the ideas one has that are related to a single word or concept (Rumelhart, 1980).

Schema theory. A theory introduced in the mid-1970's which attempts to explain the learning process. The theory assumes that learning is stored hierarchically in the brain in "files." These files are open to growth and modification

as one learns (Swaby, 1984). This theory implies that the reader comprehends written text in relation to his experiential and conceptual background (Heilman, et al., 1986; Vacca & Vacca, 1986).

Schemata. The "clusters of information that one develops related to things, places, or ideas" (Burns, et al., 1988, 8). They are the mental frameworks that allow the brain to interpret, organize, and retrieve information (Kolker, 1988). "Schemata can represent knowledge at all levels--from ideologies and cultural truth . . . to knowledge about what patterns of excitations are associated with what letters of the alphabet" (Rumelhart, 1980).

Verbal concept organizer. Several preparatory paragraphs for a reading selection which the teacher introduces verbally to help the learner relate the new reading material to his schemata (Ausubel, 1968; Vacca & Vacca, 1986). The organizer should be designed in such a way that it reflects the hierarchical structure of the material. Included should be real-life incidents, anecdotes, examples, analogies, or illustrations to which the reader can relate. Finally, the verbal concept organizer should include questions to arouse curiosity and spark interest (Vacca & Vacca, 1986).

VII. HYPOTHESES

1. There is no significant difference at the .05 level between the post-reading comprehension test scores of each of the three experimental advance organizer approaches and the post-reading test scores of the control lesson using no advance organizer approach.

2. There is no significant difference at the .05 level among the three post-reading comprehension test scores of each of the experimental advance organizer approaches.

VIII. OVERVIEW OF METHOD AND PROCEDURES

In order to achieve the purpose of this study, the following procedures were used:

1. Sixteen lesson plans were designed by the researcher, four each for four consecutive lessons from the McGraw-Hill social studies series. Each lesson consisted of one of the three advance organizers or control, the reading of the related social studies selection, and a post-reading comprehension test. Lessons were designed so that every lesson was introduced with every organizer method and no two lessons were taught using the same advance organizer (see Appendix D).

2. For each lesson, a post-reading comprehension test was designed by the researcher. In order to determine the validity of the post-reading comprehension tests, thirty

questions were submitted from each lesson to ten tenured teachers who used the given text (see Appendix B for sets of questions). They were asked to select ten questions for each test that could best determine the comprehension of that material. The ten most chosen questions were then used for each lesson (see Appendix C and D).

3. The sample consisted of children from eight fifth-grade classroomsin Hamilton County, Tennessee.

4. Eight elementary student teachers from Tennessee Temple University volunteered to teach the lessons. These were students under the researcher's supervision who were available during the allotted time for the study. These eight student teachers were instructed by the researcher in the use of each of the three experimental approaches and the procedure for teaching the control lesson. The investigator previously prepared specific, written directions for each approach and for the control lessons (see Appendix D).

5. Each of the eight student teachers was assigned to one of the eight previously determined classrooms.

6. On four consecutive days the student teachers taught their sequence of the four organizers.

7. The data were analyzed using a one-way ANOVA and a t-test. (A) The post-test results of each organizer were compared with those of the control organizer. (B) The post-test scores of each of the experimental organizers were

compared with each other. (C) Because the analysis of the data indicated that other variables than those hypothesized affected the outcome of the project comparisons were made between lessons and post-reading comprehension test scores and between teacher and those same scores.

IX. ORGANIZATION OF THE STUDY

This study is divided into five chapters. Chapter I contained an introduction, a statement of the problem; the statement of the purpose of the study; the importance of the study; the assumptions, limitations and delimitations, definition of terms, and the method and procedures used in the study.

In Chapter II, research studies and other literature directly related to this study are discussed, particularly those related to reading comprehension, schema theory, advance organizers, and content area reading.

Chapter III contains a description of and rationale for the procedures, materials used, and methodology.

The results of the experimental research on the effects of the three organizers are presented and explained in Chapter IV.

A summary of this study on advance organizers, the conclusions drawn from the study, and a discussion of recommendations for further research are included in Chapter V.

CHAPTER II

REVIEW OF RESEARCH AND RELATED MATERIALS

I. INTRODUCTION

This chapter contains a discussion of the research and literature that relate to the relationship of advance organizers to reading comprehension. First is a discussion of the history of the study of reading comprehension, followed by a historical discussion of the advance organizer. Schema theory is then discussed as it relates to the study of advance organizers. The last two sections of the chapter review the literature that supports the use of advance organizers with content area reading, and the current research dealing with advance organizers.

II. READING COMPREHENSION

Reading comprehension, before 1970, was generally viewed as a process solely activated by the text itself, "some degree of 'approximation' to the text read" (Pearson, 1985, 726). If the reader should build some mental model of what was being read, that model should be very similar to the text itself (Pearson, 1985).

Views, however, have changed. As reading comprehension has been researched, text has been determined to be only the framework for meaning. Comprehension has been discovered to

be a complex, multifaceted process which is affected by a variety of factors, many which relate, not to the text, but to the reader and what he brings cognitively to the reading passage (Heilman, 1986). The process is interactive (Vacca & Vacca, 1986) involving "taking meaning to text in order to obtain meaning from text" (Turner, 1988). The reader must construct an "internal conceptual representation of what is being read, how it relates to prior concepts and mental structures" (Dehn, 1984, 86).

III. THE DEVELOPMENT OF THE CONCEPT OF ADVANCE ORGANIZERS

Research dealing with the importance of prior knowledge on comprehension began with Ausubel (1960). That first re search compared the relationship between prereading strategies, called advance organizers, and the comprehension of related reading selections.

The term "advance organizer" was introduced in 1960, when Ausubel (1960) conducted an experiment using forty undergraduate students to test the assumption that the use of an appropriate "advance organizer in the teaching of meaningful verbal material could lead to more effective retention" (p. 271). The research indicated that the advance organizer, when used as a prereading strategy, did facilitate retention by activating relevant concepts which

were already present in the learner's cognitive structure (Ausubel, 1960).

In an attempt to further define the advance organizer, Ausubel and Fitzgerald (1961) suggested that the advance organizer was the means for providing "ideational anchorage and scaffolding" (Ausubel and Fitzgerald, 1961, 266) of previous learned material for the optimal understanding and retention of new information. The advance organizer was the deliberate introduction of relevant, appropriate, and inclusive subsuming concepts upon which the learner could attach new, unfamiliar material.

Finally, Ausubel (1968) concluded that the advance organizer should enhance the discernibility of new material by providing the scaffolding of previously learned related ideas. The advance organizer should "effect integrative reconciliation at a level of abstraction, generality, and inclusiveness which is much higher than the learning material itself" (Ausubel, 1968, 214).

The effectiveness of the advance organizer is based upon its ability to scaffold new ideas with the preexisting ideas or schemata of the learner. Before discussing studies involving advance organizers, it is important to discuss schema theory which seeks to explain this relationship.

IV. SCHEMA THEORY

Schema (the plural is schemata) theory forms "the basis for a reasonable theory of human information processing" (Rumelhart, 1981, 4). The term, in its present sense, was introduced by Sir Frederic Bartlett (1932). He defined schema as "an active organization of past reactions, or past experiences" (Bartlett, 1932, 201). His study of the importance of schema in memory, using The War of the Ghosts indicated that after a long time lapse subjects' recall of the passage became simplified and stereotyped. He concluded that what was remembered "fit in with a subject's performed interests and tendencies" (Bartlett, 1932, 93).

According to schema theory, schemata are abstract knowledge structures (Anderson & Pearson, 1984), the building blocks of cognition, all the ideas (words) related to a single word or concept (Rumelhart, 1980), the "internal, informal explanations about the nature of events, objects, or situations" (Turner, 1988, 164), the "data structure for representing general concepts stored in memory" (Spache & Spache, 1986, 550), "concepts, beliefs, expectations, processes--virtually everything from past experiences--that are used in making sense of things and actions" (McNeil, 1984, 5), a "set of associations or experiences brought to consciousness when we see or hear a word, phrase, sentence, or picture or experience an event" (Swaby, 1984, 71), those

"functions in the brain that interpret, organize, and retrieve information" (Kolker, 1988, 9), or a "hierarchical network of related concepts" (Holmes, 1983, 1). The framework is designed in a hierarchical structure, beginning at the top with superordinate concepts branching into subordinate concepts. This structure provides for the assimilation of new ideas.

> Schemata are employed in the process of interpreting sensory data (both linguistic and nonlinguisitic), in retrieving information from memory, in organizing actions, in determining goals and subgoals, in allocating resources and generally in guiding the flow of processing in the system (Rumelhart, 1981, p. 4).

Computer scientists, simulating human cognition, more fully developed schema theory as a model for understanding the storage of knowledge in human memory (Minsky, 1975; Winograd, 1975). Thus, schema theory began to be applied to the comprehension of stories (Mandler & Johnson, 1977; Rumelhart, 1975; Stein & Glenn, 1979) and to the reading process (Adams & Collins, 1979).

Schema theory relates to reading comprehension by suggesting that the reader builds meaning of a reading selection by connecting the new knowledge to knowledge already stored in memory (Vacca & Vacca, 1986). Comprehension results when the new information enters the cognitive field and interacts with the reader's existing schemata (Swaby, 1984). The reader builds relationships, between the

text and the schemata, and among the parts of the text (Spache & Spache, 1986). The comprehension of the reading selection then does not reside in the text alone, but in the interaction and transactions that take place between the reader and the text (Vacca & Vacca, 1986).

The logic of this relationship is that the more one knows about a particular reading topic, the better will be the understanding of that material (Turner, 1988). One's ability to comprehend what is to be read then basically depends on what one knows about the subject (Pearson & Dole, 1987). Comprehension then is always to some degree idiosyncratic (Langer, 1978), related to the reader's interpretation of a particular reading selection, based upon the schemata for that material (Bransford & Johnson, 1972; Anderson, Spiro, & Anderson, 1977; Anderson & Pickert, 1978; Anderson, Reynolds, Schallert, & Goetz, 1977; Snyder & Uranowitz, 1978).

Because meaningful information is more easily processed than non-meaningful information (Kolker, 1988), and because students do not always have existing schemata for that new information, teachers should plan experiences which should give children the necessary background framework to aid in their understanding of the written material (Burns, et al., 1988). "If teachers focus on helping students understand

the content, comprehension skill acquisition will occur almost incidentally" (Pearson & Dole, 1987, 162).

If students are going to be prepared to read and comprehend particular selections, much more is needed than typical readiness activities (Vacca, 1972). Prereading activities need to be purposely constructed to build schema (Jenkins & Pany, 1981). These activities may include concrete, extended discussions focused on the key ideas of the selection (Vacca, et al., 1987); may use prereading questions (Spache & Spache, 1986), predictions, inferences, elaborations; may search for relationships among the pieces of information (Vacca and Vacca, 1986); may focus on learning objectives (Rothkopf & Billington, 1979); and may make analogies, comparisons, associations, and categorizations (Spache & Spache, 1986) according to which ones are needed to activate the schemata.

V. THE ADVANCE ORGANIZER AND CONTENT AREA READING MATERIAL

Content area reading materials, particularly social studies, contain a heavier concept load than other materials (Jones, 1982). Most students do not have the cognitive framework upon which to attach this new knowledge. If these readers are to comprehend this material, teachers must help them build the scaffolding necessary to integrate this new information with their prior knowledge (Roney, 1984). This

scaffolding is achieved through the use of advance organizers.

A good advance organizer should "highlight key concepts and ideas to be encountered", should be devised so that the superordinate structure is "easily identifiable and prominent", and should provide "explicit links between background knowledge and experience and ideas in the reading selection" (Vacca, et al., 1987, 152). Effective advance organizers use real-life incidents, anecdotes, examples, or illustrations to which readers can relate; questions which will arouse curiosity and pique interest (Vacca & Vacca, 1986); or analogies and comparisons which connect the reading material to the experiences of the child (Turner, 1988). "To be maximally effective they (advance organizers) must be formulated in terms of the language, concepts, and propositions already familiar to the learner, and use appropriate illustrations and analogies" (Ausubel, Novak, & Hanesian, 1968, 214).

Advance organizers can take many forms. They must, however, link what readers know to what they will learn. Their effectiveness depends on their construction and how actively students are engaged in discussing them before reading (Vacca & Vacca, 1986). The materials will need to be prepared by the teacher because quality commercial materials do not appear to be available (Eeds, 1981).

One form of organizer that the teacher may use to build schemata is the verbal organizer. This organizer is usually constructed as a series of short statements or a few paragraphs to provide interest and a link between the familiar topic and the topic of the selection. It may provide a synopsis of the selection. It should lead to discussion of the key terms within the context of the passage to be read (Vacca & Vacca, 1986). These terms may be introduced through the use of analogies (Burns, et al. 1988).

Another advance organizer is the anticipation guide. It is a series of declarative statements, both true and false, which are related to the material about to be read. The student answers the questions, based upon his prior knowledge; reads the selection; then corrects the questions he answered incorrectly before he read (Burns, et al., 1988).

The graphic overview is one advance organizer which has been discussed extensively in related literature. The teacher selects the important words from the reading selection, arranges them in a hierarchical diagram which shows the relationships existing among the ideas, and displays the diagram with oral explanations of the relationships (Barron, 1969; Earle, 1969; Herber & Sanders, 1969; Vacca, 1977; Vacca & Vacca, 1986).

Vacca and Vacca (1986) discussed another type of advance organizer which uses a different type framework. The

teacher poses a problem, raises questions, and encourages students to seek possible solutions as they read the given selection. This should lead to the resolution of the problem and to conceptual development.

VI. RECENT EMPIRICAL STUDIES ON THE USE OF THE ADVANCE ORGANIZER

In the past twenty years many studies have been conducted to determine the relationship between advance organizers and the comprehension of given reading material, particularly content area material. Many of the early studies, however, resulted in little empirical support for their use. A major reason for this lack of support was the absence of objective descriptions and definitions of the organizers and the poor control over their construction (Clark & Thomas, 1980). In more recent studies, researchers have been able to correct these problems and have observed significant differences in their studies.

In three different studies done during 1982-1983 (Beck, Omanson, & McKeown, 1982; Singer & Donlan, 1982; Gordon & Pearson, 1983), the authors reported that when prereading questions focused attention on salient story elements, students had better comprehension of that story as well as better recall of new stories for which no questions were asked. These authors concluded that the application of a

comprehension framework serves as a strategic device for comprehension and recall.

In three similar studies (Darach & Gerstin, 1986; Lenz, et al., 1987; Tudor, 1986), advance organizers were found to positively affect the comprehension of reading done by learning disabled students. Lenz, Roe, and Ross (1987) found that this was true, however, only after the students were taught how to use the advance organizer.

Several studies have examined the use of graphic organizers. Alvermann (1984) reporting the results of an early study, concluded that both skilled and unskilled fourth-grade readers benefited from the use of a graphic organizer and that there was no discernible difference between the comprehension level of those same students who had used a descriptive top-level structure. In a second study, Alvermann (1986) concluded that graphic organizer instruction improved students' ability to read and retain social studies information.

Armstrong (1988) compared a group of students who used forms of the graphic organizer, hierarchical and non-hierarchical guides, with a group who used no such guide. The study indicated that hierarchical guides improve comprehension, provide transferable skills, and create positive feelings about learning.

Ansley and Freebody (1987) investigated four different prereading activities: irrelevant task (control), a pictorial introduction, content-directed questions, and free association to the passage's title. Their conclusions were that the group using the pictorial introduction performed best, that any relevant introduction facilitates inferences, and that literal comprehension is best aided by direct questions.

The effects of verbal and pictorial advance organizers on science text comprehension was investigated by Townsend and Clarihew (1989). They found that the verbal advance organizer assisted text comprehension of children with strong prior knowledge, while the addition of a pictorial component aided the comprehension of children with weak prior knowledge.

VII. SUMMARY

The purpose of this chapter was to review the literature and research that relate to this study. Included were references to the historical background of advance organizers, their relationship to schema theory, the need for advance organizers for content area reading materials, and specific studies comparing the effects of advance organizers on reading comprehension.

CHAPTER III

RESEARCH METHODS AND MATERIALS

I. INTRODUCTION

This chapter contains a discussion of the methods and materials used in the study. Within the discussion are (1) a restatement of the problem and purpose; (2) a description of the materials used; and (3) the methodology and procedures.

II. THE PROBLEM

The positive relationship has been established between the use of well-designed advance organizers and the comprehension of related reading material (Beck, Omanson, & McKeown, 1982; Darach & Gerstin, 1986). However, no study was found that compared the differences among the effects of three prereading advance organizers: an verbal, a graphic, and a problematic situation, on the comprehension of related social studies reading selections.

III. THE PURPOSE

The purpose of this study was to determine if the prereading approach affected the comprehension of a given reading selection. Specifically, the study attempted to determine if one of three prereading advance organizer

approaches was significantly different from the other two, in terms of its effect on reading comprehension.

The three approaches were (1) a verbal concept organizer, designed to be presented orally; (2) a graphic organizer, designed as a visual stimulus; and (3) a problematic situation, designed as a study problem leading to the application of the reading material.

The study attempted to answer the following research questions:

1. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different at the .05 level from the lesson introduced by the control organizer?

2. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different at the .05 level from the other two?

IV. MATERIALS USED IN THE STUDY

The instruments used for comparison in this study were comprehension tests for each of the four reading passages taken from the McGraw-Hill fifth-grade social studies series, United States, unit 4, "The United States Changes", chapter 1, "Divided States", pp. 200-225. Because there were no standardized comprehension tests for this material,

the researcher had to create instruments to evaluate the comprehension of each of the lessons.

The McGraw-Hill textbook was selected because it was the text currently used in the Hamilton County schools. The unit and chapter were chosen for the study because of their place within the sequence of the text. The teaching of that material was assumed to be taught in the early to middle part of the second semester. This material then would not have already been taught before the time of the study.

Writing and Validating the Testing Instruments

The procedure for writing and validating the comprehension tests was as follows:

1. The researcher wrote a series of thirty literal comprehension questions for each of the four lessons: (a) "Black Slavery in the United States", (b) "Blacks Who Fought Slavery", (c) "Slave or Free", and (d) "The American Civil War".

2. To assure the validity of the instruments, the researcher used expert rater validation. Expert rater validation is a standard tool for determining validity. The procedure that was used was to submit four sets of comprehension questions, one for each lesson to each of ten tenured fifth-grade teachers from four Hamilton County, Tennessee, schools. These teachers were asked to participate

because they were currently using the McGraw-Hill series, their classes would be involved in the experiment, and they were experienced teachers. Table 3.1 records the data relating to the participating teachers' years of experience. Their years of experience ranged from five to thirty years, with an average of 17.2 years.

3. The participating teachers were instructed to choose ten questions from each set of thirty. A set of thirty had been written by the researcher for each chapter. Teachers were asked to choose those that best evaluated the comprehension of each lesson.

4. The teachers' responses were tallied, and for each lesson the ten questions with the most responses were used for the final comprehension test.

Designing of the Lessons

Sixteen 30-minute lesson plans were designed by the researcher.

1. The verbal concept organizers consisted of several preparatory paragraphs for each of the lessons, which were intended to help the students relate the new reading material to their schemata. They were designed to reflect the hierarchical structure of the material. Included were real-life incidents, anecdotes, examples, analogies, or illustra-

Table 3.1

Years of Teaching Experience for
Teachers Used for Expert Rater Validation

Teacher	Years of Experience
Teacher #1	5 years
Teacher #2	32 years
Teacher #3	6 years
Teacher #4	25 years
Teacher #5	12 years
Teacher #6	22 years
Teacher #7	30 years
Teacher #8	20 years
Teacher #9	15 years
Teacher #10	5 years

tions. Finally, the verbal concept organizers included questions to arouse curiosity and spark interest.

2. The graphic organizers were designed as diagrams on transparencies. They used the content of the reading selections to help students anticipate concepts and their relationships to one another (Earle, 1969; Vacca & Vacca, 1986). The terms on the charts were arranged in a scheme intended to visually indicate their hierarchical relationships (Barron, 1969).

3. The problematic situations were designed to create problems and raise questions which could only be solved by the reading of the related material (Vacca & Vacca, 1986). These were intended to help readers organize their thinking as they read, in order to apply what was being read to the given task and the solution to the problem.

4. The control lessons used no advance organizers. The instructions at the beginning of these lessons were only to give the name of the lessons and children were told to read the selections.

Each lesson was comprised of one of the prereading strategies, instructions to read one of the given textual passages, and a post-reading comprehension test. Sixteen lessons were required in order for each of the four lessons to be introduced by each of the three experimental strategies and a control strategy. Along with each of the lessons,

the researcher designed instructional materials for the teachers who would be teaching the lessons (see Appendix D).

V. METHODOLOGY

In order to achieve the purposes of this study, the following procedures were used:

1. The subjects for this study were one hundred twenty-seven students from eight fifth-grade classrooms from three Hamilton, County, Tennessee, schools. One group of children was made up of eighteen fifth graders from a combined fourth-fifth grade class and a combined fifth-sixth grade class at Falling Water Elementary School. Three classes used were at the Ganns-Middle Valley School. The other four classes were at the McConnell Elementary School.

2. Permission for schools to participate was sought and received from the Hamilton County Board of Education. Permission for children to participate was obtained from them and their parents (see Appendix E for copies of the forms).

3. Eight senior elementary education students from Tennessee Temple University volunteered to participate in the study. These were students, in their last semester of college, having only to complete student teaching before graduation, who were under the researcher's supervision.

4. Each of the student teachers was randomly assigned to one of the predetermined classrooms.

5. Each student teacher was given instructions for the procedures for the teaching of the lessons and copies of the lessons and all related materials. Two teachers were assigned to each sequence of lessons. No two student teachers, assigned to the same school, were assigned to the same sequence of lessons.

6. In a one and one-half hour session, the researcher demonstrated for the student teachers the procedures for the lessons. The importance of strictly following the procedures was stressed.

7. The experiment was conducted over a two week period. On four consecutive days, Monday through Thursday, January 22-25, 1990, 12:40-1:10 p.m., the lessons were taught by student teachers #1, #3, #5, and #8, in McConnell Elementary School. On Tuesday through Friday, January 23-26, 1990, 11:00-11:30 a.m., the lessons were taught by student teacher #8, in Falling Water Elementary School. The lessons were taught at Ganns-Middle Valley Elementary by student teachers #2, #4, and #6 the next week Monday through Thursday, January 29-February 1, 1990, 12:15-12:45 p.m.

8. The comprehension tests were given following each lesson. These were then collected and scored.

9. The researcher provided the transportation to the schools. This gave the student teachers an opportunity to ask questions before beginning the lessons each day. It also gave the researcher an opportunity for feedback after each lesson.

10. The researcher was not present in the classrooms during the teaching of the lessons but remained in the halls outside. There were no observed or reported variations from the instructions for each of the lessons as given by the researcher.

11. The statistical data were organized and analyzed, using the Statpac computer program. The data were organized by five variables: class, student, lesson, method, and comprehension test score.

12. The data were analyzed in several ways, using the t-test and a one-way ANOVA. The t-test is used to compare the means of two groups. If the sample means are far enough apart, the t-test will yield a significant difference, indicating that the two samples probably do not have the same mean. A one-way ANOVA is an inferential statistical procedure which has the same general purpose as the t-test: to compare groups in terms of the mean scores. The difference between the two procedures is that the t-test is used for the comparison of two groups and the one-way ANOVA is used to compare two or more groups.

13. The following statistical procedures were followed:

a. Post-reading comprehension test scores of the lessons taught by the control organizer method were compared with those of each of the experimental methods, using a t-test.

b. Post-reading comprehension test scores of the lessons using the experimental advance organizers: a verbal, a graphic, and a problematic situation, were compared with each other; using a t-test.

c. The test data, grouped by lesson, were compared, using a one-way ANOVA.

d. The test data, grouped by organizer and teacher, were compared, using a one-way ANOVA.

e. The test data, grouped only by teacher, were compared, using a one-way ANOVA.

CHAPTER IV

ANALYSIS AND DISCUSSION OF THE DATA

I. INTRODUCTION

It was the purpose of this study to attempt to determine if one of three prereading approaches, a verbal, a graphic, or a problematic situation approach, was significantly different from the other two, in terms of its effect on reading comprehension. The research reported herein attempted to answer the following research questions: (1) Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different from the lesson introduced by the control organizer? (2) Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different from the other two?

One hundred twenty-seven subjects in eight fifth-grade classrooms in three Hamilton County, Tennessee, elementary schools were used for the study. During a two week period, on four consecutive days each, four thirty-minute lessons from the McGraw-Hill fifth-grade social studies series, The United States, unit 4, "The United States Changes", chapter 1, "Divided States", were taught by eight college senior

student teachers who were under the supervision of the researcher. Although the sequence of lessons was the same, each two groups of subjects were taught with a different sequence of advance organizers to introduce those lessons. Each group of subjects was taught by a different student teacher. All subjects and all lessons were taught by all organizer methods. Table 4.1 records the sequence of lessons, the sequence of organizers used, and the order each teacher taught the lessons.

Each lesson was comprised of one of the advance organizers, the reading of the related reading selection from the textbook, and a post-reading comprehension test. Each test was made up of ten multiple choice items.

The data obtained by administering the post-reading comprehension tests to each of the groups of subjects after each of the four lessons were used to test the two hypotheses. Data were compared in several ways. Either a t-test or an ANOVA were used for those comparisons.

II. HYPOTHESIS #1

Table 4.2 presents a comparison between the post-reading comprehension test scores of the lessons taught by the control method with those of each of the experimental methods: a verbal, a graphic, and an application method. No significant differences at the .05 level were indicated.

TABLE 4.1

THE FORMAT OF ORGANIZERS, LESSONS, AND TEACHERS USED IN THE STUDY

	LESSONS			
	I	II	III	IV
Teacher #1	A	B	C	D
Teacher #2	A	B	C	D
Teacher #3	B	C	D	A
Teacher #4	B	C	D	A
Teacher #5	C	D	A	B
Teacher #6	C	D	A	B
Teacher #7	D	A	B	C
Teacher #8	D	A	B	C

ORGANIZER A = CONTROL
ORGANIZER B = VERBAL ORGANIZER
ORGANIZER C = GRAPHIC ORGANIZER
ORGANIZER D = PROBLEMATIC SITUATION

TABLE 4.2

THE COMPARISON OF THE POST-COMPREHENSION TEST SCORE MEANS OF THE CONTROL ORGANIZER WITH THE THREE EXPERIMENTAL ORGANIZERS, A VERBAL, A GRAPHIC, AND AN APPLICATION, USING A T-TEST FOR ANALYSIS

(N=127) (df=252)

	Mean	S.D.	t	p
Control	7.59	1.99		
Verbal Organizer	7.71	1.91	.480	.319
Graphic Organizer	7.87	1.69	1.218	.111
Problematic Situation	7.41	1.77	.763	.274

The null hypothesis that there is no significant difference between each of the post-reading comprehension test score means of the three experimental advance organizer approaches and the post-reading test scores following the control lesson using no advance organizer cannot be rejected.

III. HYPOTHESIS #2

Displayed in Table 4.3 are the results of the comparison of the post-reading test scores of the lessons using the experimental advance organizers: a verbal, a graphic, and an application organizer. The post-reading comprehension test scores of method C (7.87), using the graphic organizer, and method D (7.41), using the application organizer, indicated significant difference at the .05 level. The null hypothesis that there is no significant differences among the three post-reading comprehension test scores of each of the experimental advance organizer approaches can be rejected.

An examination of Table 4.2 and Table 4.3 indicates that the only organizers which were significantly different were the graphic organizer and the application organizer. The scores on the post-reading comprehension tests for the graphic organizer were significantly higher than those for the problematic situation. There was no significant difference between the control organizer and any of the experimental organizers, and yet there was a significant difference

TABLE 4.3

THE COMPARISON OF THE POST-COMPREHENSION TEST SCORE MEANS OF THREE ADVANCE ORGANIZERS, A VERBAL, A GRAPHIC, AND AN APPLICATION WITH EACH OTHER USING A T-TEST FOR ANALYSIS

(N=127) (d.f.=252)

	Mean	S.D.	t	p
Verbal Organizer	7.71	1.91		
Graphic Organizer	7.87	1.69	.728	.263
Verbal Organizer	7.71	1.90		
Problematic Situation	7.41	1.77	1.290	.098
Graphic Organizer	7.87	1.69		
Problematic Situation	7.41	1.77	2.134	.016*

*Significant at the alpha level .05

between two experimental organizers, the graphic and the application. Because the mean test scores of the application approach (7.41) were significantly lower than those of the graphic organizer (7.87) and were lower than those test scores of the control organizer (7.59), perhaps the deduction may be made that the application advance organizer may not aid in the comprehension of a given social studies reading selection and may even be detrimental to its understanding.

IV. UNHYPOTHESIZED STATISTICAL DATA

Data Grouped by Lesson

Because variables which were assumed to be controlled appeared to affect the results of the study, the data were analyzed further to investigate if other variables demonstrated any systematic interaction. The data were grouped and compared in several ways. Table 4.4 presents a comparison of the data, grouped by lesson. The results indicate that the post-reading comprehension test scores for the control organizer for lesson I (8.533) and lesson II (7.118), and for lesson I (8.533) and lesson IV (7.250) were both significantly different. A significant difference was also found between the scores for lesson I (8.667) and lesson III (7.176), and between those for lesson I (8.667) and lesson IV (6.926), when using the verbal organizer. The

TABLE 4.4

THE COMPARISON OF THE POST-READING COMPREHENSION TEST SCORES OF THE FOUR ADVANCE ORGANIZERS: CONTROL, VERBAL, GRAPHIC, AND APPLICATION, GROUPED BY LESSON, USING A ONE-WAY ANOVA FOR ANALYSIS

	LESSON			
	I	II	III	IV
Control	(n=30)	(n=34)	(n=27)	(n=36)
Mean	8.533	7.118	7.593	7.250
S.D.	1.323	2.240	1.551	2.310
	Significant differences found between			
		Lesson 1 & 2		p=.005
		Lesson 1 & 4		p=.009
Verbal	(n=36)	(n=30)	(n=34)	(n=27)
Mean	8.667	7.867	7.176	6.926
S.D.	1.352	1.592	1.914	2.368
	Significant differences found between			
		Lesson 1 & 3		p=.001
		Lesson 1 & 3		p=.001
Graphic	(n=27)	(n=36)	(n=30)	(n=34)
Mean	8.111	8.333	7.967	7.118
S.D.	1.281	1.531	1.542	2.056
	Significant differences found between			
		Lesson 1 & 4		p=.021
		Lesson 2 & 4		p=.003
		Lesson 3 & 4		p=.041
Prob. Sit.	(n=34)	(n=27)	(n=36)	(n=30)
Mean	8.029	7.259	7.528	6.700
S.D.	1.446	2.105	1.748	1.622
	Significant differences found between			
		Lesson 1 & 4		p=.003

means of the post-reading comprehension test scores for lessons I (8.111) and IV (7.118), II (8.333) and IV (7.118), and III (7.967) and IV (7.118) all were significantly different for the graphic organizer. The application organizer indicated a significant difference between the scores for lessons I (8.029) and IV (6.700).

Table 4.5 displays the comparison of the post-comprehension test score means of the lessons as they are grouped by organizer methods. There were no significant differences among the means of lessons I and IV, regardless of the methods used. Data pertinent to lesson II indicate a significant difference between the test means of method C (8.333) and both A (7.118) and D (7.259). The data for lesson III indicate a significant difference between the test means of method C (7.967) and method D (7.528).

The lessons were taught during a two-week period, in four-day sequences. The above statistical data indicated that, without exception, regardless of the use of introductory advance organizer, the lessons which were taught on the first day of the sequence were not significantly different from each other and they produced higher test score means than lessons taught on any other day, except for the graphic organizer on the second day. There were also no significant differences among the means of the test scores for the lessons taught on the last day of the sequence, regardless

TABLE 4.5

THE COMPARISON OF THE POST-READING COMPREHENSION TEST SCORES OF THE FOUR LESSONS GROUPED BY ADVANCE ORGANIZER: CONTROL, VERBAL, GRAPHIC, AND APPLICATION USING A ONE-WAY ANOVA FOR ANALYSIS

	Advance Organizer Method			
	A (Control)	B (Verbal)	C (Graphic)	D (Prob. Sit.)
Lesson I	(n=30)	(n=36)	(n=27)	(n=34)
Mean	8.533	8.667	8.111	8.029
S.D.	1.332	1.352	1.281	1.446
Lesson II	(n=34)	(n=30)	(n=36)	(n=27)
Mean	7.118	7.867	8.333	7.259
S.D.	2.240	1.592	1.531	2.105
	Significant differences found between			
		Methods A & C		p=.009
		Methods C & D		p=.027
Lesson III	(n=27)	(n=34)	(n=30)	(n=36)
Mean	7.593	7.176	7.967	7.528
S.D.	1.551	1.914	1.542	1.748
	Significant differences found between			
		Methods C & D		p=.010
Lesson IV	(n=36)	(n=27)	(n=34)	(n=30)
Mean	7.250	6.926	7.118	6.700
S.D.	2.310	2.368	2.056	1.622

of the organizer used. Also, without exception, the mean test scores of the first day's lessons were significantly higher than the mean test scores of the last day's lessons. These statistics indicate that perhaps the lessons became progressively more difficult, that subjects were generally more alert on the first day of the study than they were at the end of the week, the time frame was too compressed, or the novelty of having a new teacher declined from day-to-day.

Data Grouped by Teacher

Another alternative answer to the skewed results toward the first day's lessons is that lessons were taught by student teachers who had never been in the subjects' classrooms before. The newness of these teachers, the novelty of the procedures, and the insinuation that children are usually more alert on Monday, might help to explain these results.

Because of the indicated impact of teacher on method and lesson, the data were grouped by teacher. Table 4.6 presents the comparison of the means of the post-reading comprehension test scores for each organizer, grouped by teacher. For teachers #3, #5, #6, #7, and #8, no significant differences in comprehension were indicated by their use of any of the advance organizers. The mean test scores for teacher #1 indicated significant differences between the

TABLE 4.6

THE COMPARISON OF THE POST-READING COMPREHENSION TEST MEAN SCORES OF EACH TEACHER GROUPED BY ADVANCE ORGANIZER METHOD: CONTROL, VERBAL, GRAPHIC, AND APPLICATION, USING A ONE-WAY ANOVA FOR ANALYSIS

	Advance Organizer Method			
	A (Control)	B (Verbal)	C (Graphic)	D (Prob. Sit.)
Teacher #1 (n=18)				
Mean	8.444	7.778	7.667	6.667
S.D.	1.097	1.592	1.680	1.910
	Significant differences found between			
		Methods A & D		p=.002
		Methods B & D		p=.042
Teacher #2 (n=12)				
Mean	8.667	8.000	8.417	6.750
S.D.	1.670	1.651	1.240	1.138
	Significant differences found between			
		Methods A & D		p=.004
		Methods B & D		p=.043
		Methods C & D		p=.010
Teacher #3 (n=20)				
Mean	8.250	8.900	8.500	8.300
S.D.	2.071	1.119	1.504	1.261
Teacher #4 (n=16)				
Mean	6.000	8.375	8.125	6.563
S.D.	2.000	1.586	1.586	1.825
	Significant differences found between			
		Methods A & B		p=.001
		Methods A & D		p=.002
		Methods B & D		p=.007
		Methods C & D		p=.017

TABLE 4.6 (Continued)

	Advance Organizer Method			
	A (Control)	B (Verbal)	C (Graphic)	D (Prob. Sit.)
Teacher #5 (n=15)				
Mean	7.467	7.200	8.133	7.467
S.D.	1.685	2.455	1.246	2.295
Teacher #6 (n=12)				
Mean	7.750	6.853	8.083	7.000
S.D.	1.422	2.314	1.378	1.907
Teacher #7 (n=18)				
Mean	7.167	7.333	7.278	7.889
S.D.	2.407	1.815	2.109	1.676
Teacher #8 (n=16)				
Mean	7.063	7.000	6.938	8.188
S.D.	2.112	2.066	2.048	1.167

test scores for organizer A (8.44) and organizer D (6.667), and between organizer B (7.778) and organizer D (6.667). The data pertinent to teacher #2 evidenced significant differences in the mean scores for the post-comprehension tests for organizer D (6.750) and each of the other organizers, A (8.667), B (8.000), and C (8.417). For teacher #4, significant differences were indicated between the post-reading comprehension test scores for organizer A (6.000) and both organizers B (8.375) and C (8.125), and between organizer D (6.563) and both organizers B (8.375) and C (8.125).

Table 4.7 presents the data organized by teacher, but compares it by lesson. For lesson I, the significant difference was between the post-reading comprehension test score means of subjects taught by teacher #3 (8.900) and teacher #7 (7.889). The mean score for teacher #3 (8.00) on lesson II significantly differed from three other teachers, #6 (7.000), #7 (7.167), and #8 (7.063). For lesson III, the mean of the test scores for teacher #2 (8.417) significantly differed from those of teacher #4 (6.563) and teacher #8 (7.000). Again on this lesson, the post-reading comprehension test score mean of teacher #3 differed from teacher #4 (6.563) and teacher #8 (7.000). The mean of the scores of teacher #3 (8.250) on lesson IV differ significantly from those of teacher #1 (6.667), #4 (6.000), and #6 (6.583).

TABLE 4.7

THE COMPARISON OF POST-READING COMPREHENSION TEST SCORES OF EACH LESSON GROUPED BY TEACHER, USING A ONE-WAY ANOVA

	#1 (n=18)	#2 (n=12)	#3 (n=20)	#4 (n=16)	#5 (n=15)	#6 (n=12)	#7 (n=18)	#8 (n=16)
Lesson I								
Mean	8.444	8.667	8.900	8.375	8.133	8.083	7.889	8.188
S.D.	1.097	1.670	1.119	1.586	1.246	1.379	1.676	1.167
		Significant differences found between						
				Teachers #3 & #7 p=.028				
Lesson II								
Mean	7.778	8.000	8.500	8.125	7.467	7.000	7.167	7.063
S.D.	1.592	1.651	1.504	1.586	2.295	1.907	2.407	2.112
		Significant differences found between						
				Teachers #3 & #6 p=.037				
				Teachers #3 & #7 p=.036				
				Teachers #3 & #8 p=.029				
Lesson III								
Mean	7.667	8.417	8.300	6.563	7.467	7.750	7.333	7.000
S.D.	1.680	1.240	1.261	1.825	1.685	1.422	1.815	2.066
		Significant differences found between						
				Teachers #2 & #4 p=.007				
				Teachers #2 & #8 p=.032				
				Teachers #3 & #4 p=.004				
				Teachers #3 & #8 p=.024				
Lesson IV								
Mean	6.667	6.750	8.250	6.000	7.200	6.853	7.278	6.938
S.D.	1.910	1.138	2.074	2.000	2.455	2.314	2.109	2.048
		Significant differences found between						
				Teachers #1 & #3 p=.022				
				Teachers #3 & #4 p=.003				
				Teachers #3 & #6 p=.032				

To more clearly understand the effect of the teacher on the outcome, the data, grouped by teacher, were compared. Table 4.8 presents the data grouped by teacher only. It was found that the post-comprehension test scores of the subjects in teacher #3's group were significantly higher than those of all the other teachers.

The above three tables indicate that the teacher effect was a stronger influence on the subjects' performance on the post-reading comprehension tests than the method. Although the student teachers had been given specific and identical instructions as to the teaching of the lessons and the use of the organizers, the human element seems to prevail. The scores for the group taught by teacher #3 were consistently significantly higher than all of the other groups and were consistent from one day to the next. One explanation of this uniformity is the continued positive response and desire to please of elementary children to a new teacher. Another possibility is that these children's reading comprehension levels were such that the use of the advance organizers did not affect their comprehension of the related reading selections either positively or negatively.

TABLE 4.8

THE COMPARISON OF THE POST-READING COMPREHENSION TEST SCORES, GROUPED BY TEACHER USING A ONE-WAY ANOVA FOR ANALYSIS

	N	Mean	S.D.
Teacher #1	72	7.639	1.689
Teacher #2	48	7.958	1.584
Teacher #3	80	8.488	1.526
Teacher #4	64	7.266	1.994
Teacher #5	60	7.567	1.960
Teacher #6	48	7.354	1.839
Teacher #7	72	7.417	1.998
Teacher #8	64	7.297	1.916

Significant differences found between

Teachers #1 & #3	p=.005
Teachers #2 & #4	p=.046
Teachers #3 & #4	p=.000
Teachers #3 & #5	p=.004
Teachers #3 & #6	p=.001
Teachers #3 & #6	p=.001
Teachers #3 & #8	p=.000

V. SUMMARY

It was found that the use of one of these advance organizers does not always enhance the comprehension of the related reading selection. In fact, the use of an application advance organizer may inhibit the comprehension of that selection. It could be argued that there is a significant difference between the use of the graphic organizer and the application organizer. The use of the visual organizer throughout the study tended to have a positive impact.

Unexpected, however, was the impact of lesson and teacher on the results. Lessons taught on the first day of the study, regardless of method, had higher post-reading comprehension test scores than did any other days. There were significant differences between lessons taught on the first day and those taught on the last day.

The teacher was another variable that impacted the results more than the organizer methods used. The subjects in one of the classrooms had consistent significantly high scores throughout the study, regardless of method used. This may be explained by the human element involved or that these children were perhaps better readers and were not particularly influenced by the methods used.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. INTRODUCTION

This chapter presents the summary, conclusions, and recommendations made concerning the study of the effects of three prereading advance organizer approaches: a verbal, a graphic, and a problematic situation approach, on the comprehension of related social studies material.

II. SUMMARY

The goal of the current investigation was to determine if one of three prereading advance organizers, a verbal, a graphic, or an application organizer, affected the comprehension of given fifth-grade social studies reading selections. The study attempted to answer the following research questions:

1. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different from the lesson introduced by the control organizer?

2. Are the post-reading comprehension test scores following a lesson using any one of the given prereading approaches significantly different from the other two?

Procedures

In order to answer these questions, the following procedures were used:

1. Eight fifth-grade classrooms from three Hamilton County schools were chosen for the study.

2. A fifth-grade social studies textbook, the McGraw-Hill United States was selected as the reading material used in the study, as it was the one currently in use in the Hamilton County, Tennessee, schools. The first four lessons from chapter one of unit four, "The United States Changes", were chosen because of their place in the sequence of the material in the text, assumed to fall during the middle or end of the second semester.

3. Because no standardized instrument existed to use in the study, the researcher wrote and validated, by the use of expert rater validation, comprehension tests to follow each lesson.

4. Sixteen 30-minute lesson plans were designed by the researcher. Each plan was comprised of one of the pre-reading strategies, instructions to read one of the given textual passages, and a post-reading comprehension test. Four lesson plans were written for each of the four lessons, so that each of the four advance organizer strategies could be utilized with each lesson.

5. Eight college education majors, who had only to finish student teaching volunteered to participate in the study. These students were given a one and one-half hour training session and were randomly assigned to the eight classrooms.

6. During a two-week period, each student teacher taught a sequence of four lessons, one per day, in one of the given classrooms.

7. The data were collected and analyzed using a t test and a one-way ANOVA.

Findings

The following research questions were examined in the study:

Question 1. Are the post-reading comprehension test scores following a lesson using any one of the given pre-reading approaches significantly different from the lesson introduced by the control organizer?

No significant differences were indicated. The null hypothesis that there is no significant difference between each of the post-reading comprehension test score means of the three experimental advance organizer approaches and the post-reading test scores following the control lesson using no advance organizer cannot be rejected.

Question 2. Are the post-reading comprehension test scores following a lesson using any one of the given pre-

reading approaches significantly different from the other two?

The post-reading comprehension test scores of the graphic organizer and the problematic situation method indicated significant difference. The scores of the post-reading comprehension tests following the graphic organizer were significantly higher than the problematic situation. The null hypothesis that there is no significant differences among the three post-reading comprehension test scores of each of the experimental advance organizer approaches can be rejected.

Discussion

Because variables which were assumed to be controlled appeared to affect the results of the study, the data were analyzed further to discover if lesson or teacher variables had significant influence on the outcomes. When grouped by lesson, the statistical data indicated that, without exception, regardless of the use of introductory advance organizer, the lessons which were taught on the first day of the sequence were higher and not significantly different from each other. There were no significant differences among the means of the test scores for the lessons taught on the last day of the sequence, regardless of the organizer used. Also, without exception, the mean test scores of the first

day's lessons were significantly higher than the mean test scores of the last day's lessons. These statistics indicate that the sequence of lessons had a greater influence on the results than did the organizer method used.

These statistics indicate that perhaps the lessons became progressively more difficult or that subjects were generally more alert on the first day of the study than they were towards the end of the week. Another possibility is that the lessons were compressed too closely together, being taught in just a four-day time frame. One other explanation for the skewed test scores toward the first day of the study is that the student teachers who participated in the study had never been in these classrooms before and subjects may have been more eager to do their best for them on the first day. Another conclusion might be that after the first day, subjects became aware that the scores on the tests would not be part of their social studies grades. They then perhaps were not as motivated to do their best.

The teacher variable also indicated influence on the outcomes. When teachers were compared lesson by lesson, the post-reading comprehension test score means for teacher #3 were significantly higher from day to day than the other teachers and remained consistent from one lesson to the next.

These data suggest that the teacher variable also was a stronger influence on the subjects' performance on the post-reading comprehension tests than the method. Although the student teachers had been given specific and identical instructions as to the teaching of the lessons and the used of the organizers, the human element seemed to prevail.

From the analysis of the findings of the current study it was indicated that post-comprehension test score means of lessons introduced by no advance organizer were not significantly different from lessons taught using one of the studied organizers: a verbal, a graphic, or a problematic situation organizer. One conclusion for these results might be that the organizer strategies were different but variables which were assumed to be controlled had a greater influence on the results than the advance organizer variable under study.

When comparing the post-reading comprehension test score means of the three advance organizers among themselves, the means of the graphic organizer were significantly higher than those of the application organizer. The graphic organizer is a visual diagram of the related concepts to be learned. The application organizer is an abstract problem-solving strategy. The conclusion may be drawn that the more graphic, visual strategy leads to better comprehension than does an abstract, verbal strategy.

Other possible explanations may be inferred by the consistent test scores of teacher #3. One possibility is that the reading comprehension test scores of the children in teacher #3's class were higher than those of children in the other classes and the use of the advance organizers did not affect their comprehension of the related reading selections either positively or negatively. Another possibility is that the management style of teacher #3 and the classroom teacher were very similar and children were not affected by the new teacher's presence in the classroom. These children may have also been more motivated to do their best every day.

III. CONCLUSIONS

The following conclusions are supported by this study:

1. Differences in the method of presenting content material previous to its reading did not substantially affect reading comprehension, at least in the short run, for the fifth-graders in this study.

The results of this study indicated that either the subjects' schemata for the related reading material were already sufficient for its comprehension or that the advance organizers did not contribute enough to the building of schemata for them to significantly affect the results.

2. Graphic, or visual, organizers appeared to have an advantage over non-visual organizers. When subjects not only heard, but saw the relationships among the related concepts in content material they were about to read, they were better able to conceptually organize it for comprehension. This visual method, however, was not significantly better than a verbal organizer or even no organizer at all. Teachers could use these methods interchangeably since one brought much the same results as the others. However, if the objective is the comprehension of the related material, a problematic situation should not be used, as it tended to cloud the comprehension of that material.

3. As in previous studies (Challs, 1963), the teacher variable may be a major factor in learning. In this study, the scores in one teacher's group remained consistently high from day to day, and significantly higher than the other groups' scores. The teacher, more than methods, affected the learning outcome.

4. Scores for fifth-graders, in this study, appeared to be higher at the beginning of the week and tended to decline towards the end of the week. The day of the week that material was presented, in this study, appeared to affect the learning of that material. Children appeared to be more alert on Monday than any other day of the week.

Teachers need to be aware of this phenomenon because of

its overall affect on the learning process. New concepts should be introduced at the beginning of the week when children are more alert. Testing should also take place at the beginning of the week rather than on Friday when children tend to be more distracted.

5. When children were told that they were part of a study and that their responses would not affect their classroom grades, they had a tendency not to perform as well as if they were not told. Their scores declined.

Teachers need to be aware that children may respond more to "grade" motivation than to other factors in the learning processes. We seem to have lost the motivation of learning for the joy of learning.

IV. RECOMMENDATIONS

Based on the findings of the current study, the following recommendations are made for further research:

1. The replication of this study should include a larger group of subjects with true random placement.

2. The replication of this study should include field testing of lesson materials to be used: the lesson plans, advance organizers, and comprehension tests.

3. Because, in this study, test scores could only range from one to ten, due to the small number of questions on each comprehension test, the instruments used for com-

parison in a replicated study should consist of more than ten questions. This would allow for a better evaluation of the data.

4. Since the teacher variable so drastically affected the outcome of this study, this variable should be more controlled. Participants should be given specific instructions as to the use of each of the advance organizers and should be monitored as to their compliance with those directions. The teachers should also not be new to the subjects on the first day of the study.

5. Because the reading comprehension levels of the children involved may have affected the outcome of this study, further research should include comprehension levels of subjects within the study.

6. Another variable which needs to be more stringently controlled in a follow-up study is the day of the week. In order to avoid the skewing of data toward the first day of the study, lessons could be taught at one-week intervals. For instance, lessons could be taught on consecutive Mondays or consecutive Tuesdays.

7. In order to have more accurate reliability data concerning how the lessons were taught, audio or video tapes would be appropriate in a replicated study.

8. If further research used teachers not regularly in the classrooms, it should include the study of the relation-

ship of the management styles of the classroom teachers to those teachers participating in the study, since a possibility for the skewing of the data toward teacher #3 was that her teaching and management style was close to that of the classroom teacher.

9. Further research might also include a comparison of the organizers used in this study to the learning styles of children. These organizers could easily be used for comparisons of children who are either visual or auditory learners, or of those who are either concrete or abstract learners.

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APPENDIXES

APPENDIX A

COVER LETTER TO TEACHERS PARTICIPATING IN THE SELECTION OF COMPREHENSION QUESTIONS USED IN THE STUDY

Tennessee Temple University
Chattanooga, TN 37404
November 14, 1989

Dear Fifth-Grade Teacher:

In order to complete an Ed.D. from the University of Tennessee at Knoxville, I have chosen to do an experimental study for my dissertation. Hopefully, in some small way, the results will impact the teaching of reading, especially in the content areas. The purpose of my study is to determine if one of three advance organizers, (1) a verbal concept organizer, (2) a graphic overview, or (3) a problematic situation, affects the comprehension of related materials from a social studies textbook. The study consists of four 30-45 minute lessons, each being introduced with one of the experimental advance organizers or a control method, then the children read the related material, and finally are given a comprehension test over the material. The scores on these comprehension tests will be compared for significant differences.

After consulting with Dr. Wallace Smith several months ago and obtaining permission to use fifth-grade classrooms in the Hamilton County Schools, I have developed lessons from Chapter 1, "Divided States", of Unit 4, "The United States Changes", in McGraw Hill's United States. I understand that this is the textbook which you are using.

I am writing to you because I need your help. First, I would like to ask if I might use your class as part of my study, if you have not already taught this chapter. It will not be necessary for you to teach the lessons; because, in order to control as many variables as possible, I am going to use senior elementary education students from Tennessee Temple University to do the teaching. The only thing you would need to do is to allow one of these student teachers to teach the first four lessons of this chapter for you.

Then, if at all possible, could these lessons be taught sometime during the first two or three weeks after the Christmas holidays? I know that things are very hectic so close to Christmas, so it would probably be better after the holidays.

Last, I have included a set of questions for each of the lessons. I need to use your expertise to validate their use as viable comprehension questions. In order to do so, I am asking that you read through each set and choose 10 from

that set which you believe best evaluate the comprehension of the related reading selection.

Your assistance will be appreciated so very much, if you can help with this project. If you have any further questions about the research, either now or later, please call at TTU, 493-4331, or at home, 624-7172.

Sincerely,

Constance L. Pearson
Department of Education

APPENDIX B

SETS OF COMPREHENSION QUESTIONS SUBMITTED TO TENURED TEACHERS FOR SELECTIONS OF FINAL SETS OF COMPREHENSION QUESTIONS

LESSON 1 - "Black Slavery in the United States"

___1. The first Blacks were brought to America _____.
a. before 1400
b. about 1500
c. after 1600

___2. The first Blacks were first brought to the _____.
a. New England colonies
b. Middle colonies
c. Southern colonies

___3. Blacks had to work as indentured servants for _____ years before they could earn their freedom?
a. 5
b. 7
c. 9

___4. _____ could not earn their freedom by their work.
a. Slaves
b. Masters
c. Indentured servants

___5. The person who owned slaves was called their _____.
a. father
b. brother
c. master

___6. Slaves usually had to work _____ without any pay.
a. for two years
b. for seven years
c. all their lives

___7. Slaves earned money by working for _____.
a. people for whom their masters let them work
b. their masters
c. the government

___8. Most of the Blacks who were sold in the colonies were from captured in _____.
a. Europe
b. Africa
c. Australia

__9. When Blacks were captured, they were brought to American in _____.
a. ships
b. airplanes
c. buses

__10. The part of a ship where goods are stored is called the _____.
a. bow
b. deck
c. hold

__11. During their voyage to America, many slaves _____.
a. enjoyed the trip
b. died
c. worked

__12. Slaves were kept from escaping from ships by _____.
a. chaining them down
b. promising them new homes when they got to America
c. locking them in their rooms

__13. During the early _____, Blacks had no rights at all.
a. 1400s
b. 1600s
c. 1800s

__14. During the early _____, Blacks could not go to school with Whites.
a. 1400s
b. 1600s
c. 1800s

__15. During the early 1800s, Blacks were not allowed to _____.
a. learn to read and write
b. sing
c. eat

__16. During the early 1800s, Blacks needed a _____ in order to leave their master's land.
a. court order
b. pass
c. license

__17. When slaves were sold, they were often _____ .
a. treated very well
b. separated from thier families
c. given special privileges

__18. When slaves did not do what they were told to do, they could be _____.
a. whipped
b. sent to jail
c. asked to stay with their masters for seven more years

__19. If slaves escaped and then were caught by their masters, they were often _____.
a. freed
b. punished harshly or killed
c. given permission to move to another plantation

__20. Until about 1800, there were slaves in ____ states in the United States.
a. many
b. few
c. no

__21. Northern factories used _____.
a. indentured servants
b. slaves
c. hired workers

__22. These workers were paid _____.
a. high wages
b. in gold
c. low wages

__23. In the Northern factories _____ worked long hours.
a. slaves
b. indentured servants
c. young children

__24. All Northern states had made slavery illegal by _____.
a. 1800
b. 1850
c. 1900

__25. On the Southern plantations, most of the field workers were _____.
a. children
b. slaves
c. women

__26. One out of every _____ families in the South owned slaves.
a. 4
b. 10
c. 100

__27. Only about _____ families owned most of the slaves in the South.
a. 1,000
b. 10,000
c. 100,000

__28. The blacks only power came from their strength as _____.
a. indentured servants
b. families
c. individual workers

__29. Sometimes Blacks had to be smart by playing _____.
a. instruments
b. white
c. dumb

__30. The _____ opposed slavery.
a. abolitionists
b. masters
c. plantation owners

LESSON 2 - "Blacks Who Fought Slavery"

__1. Many Blacks in the United States were
a. slave owners
b. slaves
c. masters

__2. There were free Blacks in the _____.
a. North only
b. South only
c. North and South

___3. All Black people had to fight _____.
a. freedom
b. communism
c. racism

___4. _____ is the belief that Whites are superior to Blacks.
a. Abolitionism
b. Racism
c. Slavery

___5. _____, in the North, proved that this idea was false.
a. Whites
b. Indentures
c. Free Blacks

___6. Many _____ were explorers, preachers, writers, artists, scientists, and inventors.
a. slaves
b. indentures
c. Blacks

___7. Slaves proved their strength of mind and spirit by their endurance of _____.
a. famine
b. slavery
c. communism

___8. _____ was a Black who owned a fleet of ships and much land in New England.
a. Paul Cuffe
b. James Forten
c. John Jones

___9. _____ was a sail manufacturer.
a. Paul Cuffe
b. John Jones
c. James Forten

__10. _____ invented a new way of making sugar.
a. James Forten
b. Lewis Temple
c. Norbert Rillieux

__11. _____ was a rich Chicago businessperson.
a. John Jones
b. Lewis Temple
c. Norbert Rillieux

__12. _____ invented a new harpoon for whaling.
a. Paul Cuffe
b. Lewis Temple
c. John Jones

____ 13The _____ is a spear used for whaling.
a. sword
b. rod and reel
c. harpoon

__14. _____ was a well known Black doctor.
a. John Jones
b. James McCune Smith
c. Benjamin Banneker

__15. Free Blacks became wealthy businesspeople during the _____.
a. 1500s and 1600s
b. 1600s and 1700s
c. 1700s and 1800s

__16. One important invention by a Black was that of a new way of making _____.
a. butter
b. brooms
c. sugar

__17. Some Blacks returned from _____ to the North with medical degrees.
a. Europe
b. North Carolina
c. Africa

__18. The first Black newspaper was called the _____.
a. Underground Railroad
b. Born Free
c. Freedom's Journal

__19. Frederick Douglass, Harriet Tubman, and Sojourner Truth were _____.
a. slave owners
b. escaped slaves
c. inventors

____ 20.____ was one of the most powerful abolitionists of his time.
a. Samuel E. Cornish
b. John Jones
c. Frederick Douglass

__21. _____ made 19 trips to the South to help free 300 slaves.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

__22. Slaves escaped to the North on the _____.
a. Freedom Train
b. Trail of Tears
c. Underground Railroad

__23. _____ were places for escaped slaves to hide during the day.
a. Caves
b. Stations
c. Abandoned buildings

__24. _____ served as a spy for the Union Army during the Civil War.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

__25. _____ spoke against slavery and for women's rights.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

__26. Sojourner Truth had _____ children.
a. 12
b. 13
c. 14

__27. All Black people had to fight against the idea of _____.
a. abolitionism
b. racism
c. communism

__28. Harriet Tubman`s most important work was to _____.
a. speak for women's rights
b. become a doctor
c. work to free slaves

__29. On of the causes that Sojourner Truth fought for was _____.
a. women's rights
b. labor unions
c. children's rights

__30. "Stations" on the Underground Railroad were places for escaped slaves to _____.
a. buy tickets
b. meet their masters
c. hide

LESSON 3 - "Slave or Free"

__1. During the early 1800s, the North had cities with much _____.
a. agriculture
b. manufacturing
c. slavery

__2. The North had many workers with _____ skills.
a. many
b. few
c. no

__3. The North's wealth was in its _____.
a. manufacturing
b. farms
c. plantations

__4. Most of the people of the South were _____.
a. factory workers
b. plantation owners
c. farmers

__5. The wealth of the South came largely from _____.
a. manufactured goods
b. plantation crops
c. gold mining

__6. _____ did much of the work on Southern farms.
a. Slaves
b. Indentured servants
c. Hired hands

___7. Chicago and Cincinnati were considered to be two _____ cities during the 1800s.
a. Northern
b. Southern
c. Western

___8. Chicago and Cincinnati were important because_____ were shipped from them to the East.
a. gold
b. Western products
c. plantation crops

___9. As changes took place, people of the North and South became more concerned about the control of the _____.
a. federal government
b. state governments
c. railroads

__10. One of the big problems that divided the North and the South was the _____.
a. tariff placed on European imports
b. language that should be spoken
c. decision of whether or not to raise cotton

__11. The _____ wanted a high tariff on European goods.
a. South
b. West
c. North

__12. The main source of wealth in the South was trade with _____.
a. Western territories
b. Northern cities
c. Europe

__13. The main thing which divided the North and the South was _____.
a. taxation
b. slavery
c. manufacturing

__14. _____ invented the cotton gin.
a. Harriet Beecher Stowe
b. Abraham Lincoln
c. Eli Whitney

__15. The cotton gin _____.
a. cleaned seeds from cotton fibers
b. made cotton fibers into strands of cotton thread
c. made cotton threads into material

__16. By 1850, there were _____ slaves.
a. 3,000,000
b. 4,000,000
c. 5,000,000

__17. Slowly in the North and elsewhere in the world, slavery was looked upon as _____.
a. right
b. determined by the individual
c. wrong

__18. Southern Whites _____ with Northerners about slavery.
a. disagreed
b. agreed
c. voted

__19. In his newspaper, @ux(The Liberator), William Lloyd Garrison _____.
a. encouraged slavery
b. attacked Congress because of its slow action against slavery
c. attacked many Northern manufacturers for not hiring Blacks

__20. Harriet Beecher Stowe informed Northerners about the terrible things that happened to slaves in her book _____.
a. Freedom's Journal
b. The Liberator
c. Uncle Tom's Cabin

__21. In 1860, _____ became President of the United States.
a. Ulysses S. Grant
b. Abraham Lincoln
c. Robert E. Lee

__22. Abraham Lincoln was a _____.
a. Republican
b. Democrat
c. Independent

__23. _____ were against slavery.
a. Republicans
b. Democrats
c. Independents

__24. The _____ cleaned the seeds from cotton faster than workers could.
a. washing machine
b. cotton gin
c. cotton reaper

__25. Many Southerners wanted to _____ from the United States.
a. steal
b. collect taxes
c. secede

__26. Secede means to _____.
a. join
b. withdraw from
c. divide

__27. The first state to secede from the United States was _____.
a. South Carolina
b. Virginia
c. Tennessee

__28. Seven Southern states seceded and became the _____.
a. Continental Congress
b. Rebel States of American
c. Confederate States of America

__29. Lincoln wanted to keep control of all federal property in the South, especially _____.
a. national forests
b. national parks
c. forts

__30. The first battle of the Civil War was at _____, when federal troops refused to leaved and Confederates fired their cannons at them.
a. Washington, D. C.
b. Fort Sumter
c. Appomattox, Virginia

LESSON 4 - "The American Civil War"

___1. The dates of the Civil War were _____.
a. 1856-1861
b. 1861-1865
c. 1865-1871

___2. Another name for the South was the _____.
a. Union
b. Confederacy
c. Federal Army

___3. The South fought for _____.
a. Southern independency
b. abolitionism
c. tariffs

___4. Another name for the North was the _____.
a. Union
b. Confederacy
c. Rebels

___5. The North fought to _____.
a. protect states' rights
b. protect their way of life
c. preserve the federal union

___6. _____ of the nation's wealth was produced in the North.
a. One-half
b. Two-thirds
c. Three-fourths

___7. The North had _____ people, compared to the South's eight million.
a. 20 million
b. 22 million
c. 24 million

___8. The Confederate Army had better _____.
a. uniforms
b. horses
c. generals

___9. _____ trade was most important to the South.
a. European
b. Indian
c. Northern

__10. To _____ a port is to keep ships from entering or leaving it.
a. volunteer
b. emancipate
c. blockade

__11. The first major battle of the Civil War took place in _____.
a. 1851
b. 1861
c. 1871

__12. The first major battle of the Civil War took place at _____.
a. Bunker Hill
b. Richmond
c. Bull Run

__13. For _____ years, things went badly for the Union Army.
a. 2
b. 3
c. 4

__14. The Union forces were lead by _____.
a. Abraham Lincoln
b. General George McClellan
c. General Robert E. Lee

__15. A _____ army is made up of soldiers who joined of their own free choice.
a. volunteer
b. draft
c. civilian

__16. The _____ is a law that requires people to join the armed forces.
a. volunteer
b. draft
c. civilian

__17. The opposite of a draft army is a _____ army.
a. volunteer
b. forced
c. civilian

__18. In the North, anyone who did not want to fight could avoid the draft by paying _____ to the government.
a. $100
b. $200
c. $300

__19. The Northern draft law was unfair to _____ because they could not afford to pay so much money.
a. governors
b. rich people
c. poor people

__20. _____ people in the North proved to be very good soldiers.
a. Black
b. Rich
c. Poor

__21. The _____ freed slaves living in the parts of the South under Confederate rule.
a. Declaration of Independence
b. Emancipation Proclamation
c. Thirteenth Amendment

__22. The _____ freed all slaves in the United States.
a. Declaration of Independence
b. Emancipation Proclamation
c. Thirteenth Amendment

__23. After the North's victory in the battle at Gettysburg, the tide had turned ____ the South.
a. for
b. against

__24. On April 9, 1865, _____ surrendered to Grant at Appomattox, Virginia.
a. McClellan
b. Jackson
c. Lee

__25. Lincoln made a famous speech in November 1863, called the _____.
a. Gettysburg Address
b. Emancipation Proclamation
c. Thirteenth Amendment

__26.__ In 1864, Lincoln made _____ head of all the Union forces.
a. McClellan
b. Lee
c. Grant

__27.__ The war was over in _____.
a. 1855
b. 1865
c. 1875

__28.__ The American Civil War was the first _____ war.
a. world
b. interesting
c. modern

__29.__ _____ are people not in the armed forces.
a. Volunteers
b. Civilians
c. Draftees

__30.__ More than ever before, _____ suffered because of war.
a. volunteers
b. civilians
c. draftees

APPENDIX C

SETS OF COMPREHENSION QUESTIONS

USED IN THE STUDY

Name_____
Teacher_____

LESSON 1 - "Black Slavery in the United States"

_____1. The first Blacks were brought to America _____.
a. before 1400
b. about 1500
c. after 1600

___2. _____ could not earn their freedom by their work.
a. Slaves
b. Masters
c. Indentured servants

___3. The person who owned slaves was called their _____.
a. father
b. brother
c. master

___4. Most of the Blacks who were sold in the colonies were from _____.
a. Europe
b. Africa
c. Australia

___5. When slaves were sold, they were often _____ .
a. treated very well
b. separated from thier families
c. given special privileges

___6. If slaves escaped and then were caught by their masters, they were often _____.
a. freed
b. punished harshly or killed
c. given permission to move to another plantation

___7. Northern factories used _____.
a. indentured servants
b. slaves
c. hired workers

___8. In the Northern factories _____ worked long hours.
a. slaves
b. indentured servants
c. young children

__9__. One out of every _____ families in the South owned slaves.
a. 4
b. 10
c. 100

__10__. The _____ opposed slavery.
a. abolitionists
b. masters
c. plantation owners

Name_____
Teacher_____
LESSON 2 - "Blacks Who Fought Slavery"

___1. _____ is the belief that Whites are superior to Blacks.
a. Abolitionism
b. Racism
c. Slavery

___2. Many _____ were explorers, preachers, writers, artists, scientists, and inventors.
a. slaves
b. indentures
c. Blacks

___3. The first Black newspaper was called the _____.
a. Underground Railroad
b. Born Free
c. Freedom's Journal

___4. Frederick Douglass, Harriet Tubman, and Sojourner Truth were _____.
a. slave owners
b. escaped slaves
c. inventors

___5. _____ was one of the most powerful abolitionists of his time.
a. Samuel E. Cornish
b. John Jones
c. Frederick Douglass

___6. _____ made 19 trips to the South to help free 300 slaves.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

___7. Slaves escaped to the North on the _____.
a. Freedom Train
b. Trail of Tears
c. Underground Railroad

___8. _____ were places for escaped slaves to hide during the day.
a. Caves
b. Stations
c. Abandoned buildings

___9. _____ served as a spy for the Union Army during the Civil War.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

___10. _____ spoke against slavery and for women's rights.
a. Frederick Douglass
b. Harriet Tubman
c. Sojourner Truth

Name_____
Teacher_____
LESSON 3 - "Slave or Free"

___1. During the early 1800s, the North had cities with much _____.
a. agriculture
b. manufacturing
c. slavery

___2. Most of the people of the South were _____.
a. factory workers
b. plantation owners
c. farmers

___3. One of the big problems that divided the North and the South was the _____.
a. tariff placed on European imports
b. language that should be spoken
c. decision of whether or not to raise cotton

___4. _____ invented the cotton gin.
a. Harriet Beecher Stowe
b. Abraham Lincoln
c. Eli Whitney

___5. Harriet Beecher Stowe informed Northerners about the terrible things that happened to slaves in her book _____.
a. Freedom's Journal
b. The Liberator
c. Uncle Tom's Cabin

___6. In 1860, _____ became President of the United States.
a. Ulysses S. Grant
b. Abraham Lincoln
c. Robert E. Lee

___7. Secede means to _____.
a. join
b. withdraw from
c. divide

___8. The first state to secede from the United States was _____.
a. South Carolina
b. Virginia
c. Tennessee

___9. Seven Southern states seceded and became the _____.
a. Union States of America
b. Rebel States of America
c. Confederate States of America

___10. The first battle of the Civil War was at _____, when federal troops refused to leave and Confederates fired their cannons at them.
a. Washington, D. C.
b. Fort Sumter, S. C.
c. Appomattox, Virginia

Name_____
Teacher_____

LESSON 4 - "The American Civil War"

___1. The dates of the Civil War were _____.
a. 1856-1861
b. 1861-1865
c. 1865-1871

___2. Another name for the South was the _____.
a. Union
b. Confederacy
c. Federal Army

___3. The South fought for _____.
a. Southern independency
b. abolitionism
c. tariffs

___4. Another name for the North was the _____.
a. Union
b. Confederacy
c. Rebels

___5. The first major battle of the Civil War took place a _____.
a. Bunker Hill
b. Richmond
c. Bull Run

___6. The Union forces were lead by _____.
a. Abraham Lincoln
b. General George McClellan
c. General Robert E. Lee

___7. The _____ freed slaves living in the parts of the South under Confederate rule.
a. Declaration of Independence
b. Emancipation Proclamation
c. Thirteenth Amendment

___8. The _____ freed all slaves in the United States.
a. Declaration of Independence
b. Emancipation Proclamation
c. Thirteenth Amendment

___9. On April 9, 1865, _____ surrendered to Grant at Appomattox, Virginia.
a. McClellan
b. Jackson
c. Lee

__10. Lincoln made a famous speech in November 1863, called the _____.
a. Gettysburg Address
b. Emancipation Proclamation
c. Thirteenth Amendment

APPENDIX D

FORMATS OF LESSON PLANS USED IN THE STUDY

FORMATS FOR RESEARCH LESSONS

Chapter 1 - "Divided States"

Unit 4 - "The United States Changes"

United States

McGraw-Hill Fifth Grade Social Studies Series, 1983

LESSON I - "BLACK SLAVERY IN THE UNITED STATES"
Approach A

Instructions to the teacher:

(1) Tell the children: "Today we are beginning a new chapter on the Civil War, called Divided States. Without any further word, I would like for you to read Lesson I--'Black Slavery in the United States'."

(2) Have children read Lesson I--"Black Slavery in the United States."

(3) Administer and collect the post-reading comprehension test for Lesson I--"Black Slavery in the United States."

LESSON I - "BLACK SLAVERY IN THE UNITED STATES"
Approach B

Instructions to the Teacher:

(1) Read the following paragraphs to the class:
Early settlers had tried to use American Indians as field workers. But they fell victim to many diseases brought by the settlers and they did not adapt well to farm work.

After 1619, the first Blacks were brought to the Southern colonies as indentured servants. Indentured servants worked for their freedom. They usually were not paid while they were working but after about seven years they could earn their freedom. Very soon, however, laws were passed and

Blacks were brought to the colonies as slaves. Slaves were different from indentured servants in that slaves were not usually allowed to earn their freedom. Most slaves were slaves for life.

Slaves were captured in Africa and were brought to the United States on ships. They were crowded together in the holds of the ships. The hold of a ship is the place below the deck where goods are stored. The living conditions on most of these ships were terrible. Usually the slaves were chained down and could hardly move for many days. Many became sick and died. Some who could free themselves from the chains even jumped overboard and drowned rather than be slaves.

In the early 1800s, Blacks had no rights at all. They even had to have a pass to leave their master's property. Just like you must have a pass to leave your classroom, they had to have written permission to leave.

During this time, there were people called abolitionists who wanted to have slavery abolished. Abolitionists felt that slavery was wrong and should be stopped.

(2) Ask and let children discuss the following questions, but do not answer them for them. Finding the answers to these questions becomes the focus for their reading.

> Why did slavery become established in the South rather than elsewhere in the United States? (Plantations needed slave labor.)

How would you describe a day in the life of a slave? (Hard labor from daybreak to late at night, little food, very poor housing, insults and injuries.)

(3) Have children read Lesson I--"Black Slavery in the United States."

(4) Administer and collect the post-reading comprehension test for Lesson I--"Black Slavery in the United States."

(5) Discuss the questions from the lesson introduction.

LESSON I - "BLACK SLAVERY IN THE UNITED STATES"
Approach C

Instructions to the Teacher:

(1) Put the transparency on the overhead projector and introduce each part of it, emphasizing the relationships.

(2) Have the students read Lesson I - "Black Slavery in the United States."

(3) Administer and collect the post-reading comprehension test for Lesson I - "Black Slavery in the United States."

BLACK SLAVERY IN THE UNITED STATES

1619

INDENTURED SERVANTS
(worked for 7 years for freedom)

1660

SLAVES
(owned by master without rights)

SLAVES
Captured in Africa
Brought to U.S. on holds in ships
Could not earn freedom
Had no rights
Could not vote
Not allowed to learn to read or write
Had to have pass to leave master's property
Often separated from families when sold
Usually lived on Southern plantations or farms
Strength lay in individual men and women

EARLY 1800's

ABOLITIONISTS
(wanted to abolish, do away with, slavery)

LESSON I - "BLACK SLAVERY IN THE UNITED STATES"
Approach D

Instructions to the Teacher:
(1) Tell the students, "We are going to read the first lesson in the chapter, 'Divided States.' This lesson discusses slavery in the United States. When you have finished reading, I want you to write a one-page story called, 'My life as a slave in the 1700s.' In it you will include how you got to the United States, where you live, what you do for a living, what you are allowed and are not allowed to do, and how you feel being a slave."
(2) Have students read Lesson I - "Black Slavery in the United States."

(3) Administer and collect the post-reading comprehension test for Lesson I - "Black Slavery in the United States."

(4) Discuss with the students again what should be in their papers, and have them write them.

LESSON II - "BLACKS WHO FOUGHT SLAVERY"
Approach B

Instructions to the Teacher:

(1) Tell the children: "Today I want you to read Lesson II "Blacks Who Fought Slavery."

(2) Have children read Lesson II - "Blacks Who Fought Slavery".

(3) Administer and collect the post-reading comprehension test for Lesson II - "Blacks Who Fought Slavery."

LESSON II - "BLACKS WHO FOUGHT SLAVERY"
Approach B

Instructions to the teacher:

(1) Read the following paragraphs to the children:

As a rule, Black slaves were not permitted to learn how to read and write. But many were able to learn skills such as masonry (laying stones and bricks), carpentry (building with wood), shoemaking (making shoes), and mechanics (putting things together). These skills made the slaves more valuable to their masters, who could then sell the slaves for a higher price. Black slaves who escaped to Northern cities were often skilled workers, but that did not necessarily help them to get jobs. White skilled workers objected to the competition from Blacks and excluded them from labor associations such as guilds and unions. White employers who hired skilled Blacks usually paid them considerably less than they did their White skilled laborers.

Whites acted this way because many believed that they were superior to Blacks. They felt that because of the color of their skins they were better than Blacks were. This attitude is called racism.

To illustrate racism, let's pretend that everyone in the room who has brown eyes decides that they are more important than people with blue, green, or hazel eyes. They go first to the restroom, lunch, and to recess. They get to sit in the best seats. They play with all of the playground equipment. There is no foundation for their better treatment other than the color of their eyes. Racism is an attitude that one's color determine's worth.

Runaway slaves from the South faced great danger while trying to reach the North. Some tried to escape by way of the Underground Railroad. The Underground Railroad was the secret, illegal means for slaves to escape from the South. Sometimes they hid in the hay of wagons. Sometimes they went by foot through forests and other hidden paths. If captured, slaves were usually tortured, in an attempt to force them to reveal its secret route. Even so, some 75,000 slaves escaped in this way, aided by 3,000 White sympathizers.

(2) Ask and let children discuss the following questions, but do not answer them for them. Finding the answers to these questions becomes the focus for their reading.

> What is racism? (Racism is a false idea that one race is superior to other races.)
>
> What makes us know that there is no superior race? (People of every race excel in many different areas.)
>
> What do you know about black people in the North and in the South <u>before</u> the Civil War? (There were many Blacks important to the development of the United States.)
>
> During the Civil War, free Blacks in the North and slaves in the South opposed slavery. Who were some of these people? (Benjamin Banneker, Samuel E. Cornish, John Russwurm, Frederick Douglass, Harriet Tubman, and Sojourner Truth.)
>
> What was the Underground Railroad? (The Underground Railroad was the secret, illegal means for slaves to escape from the South.)

(3) Say to the children: "As you read, see if you can find better answers to our questions."

(4) Have the children read Lesson II - "Blacks Who Fought Slavery."

(5) Administer and collect the post-reading comprehension test for Lesson II - "Blacks Who Fought Slavery."

(6) Discuss the questions from the lesson introduction.

LESSON II - "BLACKS WHO FOUGHT SLAVERY"
Approach C

Instructions to the teacher:

(1) Put the transparency on the overhead projector and introduce each part of it, emphasizing the relationships.

(2) Have children read Lesson II - "Blacks Who Fought Slavery."

(3) Administer and collect the post-reading comprehension test for Lesson II - "Blacks Who Fought Slavery."

BLACKS WHO FOUGHT SLAVERY

WAR AGAINST RACISM

WEALTHY BUSINESSPEOPLE

Paul Cuffe - ship owner
James Forten - sail manufacturer
John Jones - Chicago businessman

BLACK INVENTORS

Norbert Rillieux - new way of making sugar
Lewis Templeton - new harpoon

MEDICAL DOCTOR

James McCune Smith

OTHER FREE BLACKS

Benjamin Banneker - received a Presidential appointment
Samuel E. Cornish and John Russwurm - set up first Black newspaper, *Freedom's Journal*

ESCAPED SLAVES

Frederick Douglas - set up newspaper, *The North Star*
Harriet Tubman - guided slaves to freedom on the Underground Railroad
Sojourner Truth - speaker against slavery and for women's rights

LESSON II - "Blacks Who Fought Slavery"
Approach D

Instructions to the teacher:

(1) Read the following instructions to the class verbatim: As you read this lesson, "Blacks Who Fought Slavery," look for all the ways that Black people proved that they were very intelligent. When we are finished with the lesson, we will have a television interview show and you will be one of the people we are reading about. You will tell me about your accomplishments and what obstacles you had to overcome in order to be successful.

(2) Have children read Lesson II - "Blacks Who Fought Slavery."

(3) Administer and collect the pre-reading comprehension test for Lesson II - "Blacks Who Fought Slavery."

(4) Do the role-play in the introduction.
People to interview: Paul Cuffe; James Forten; John Jones; Norbert Rillieux; Lewis Templeton; James McCune Smith; Benjamin Banneker; Samuel E. Cornish; John Russworm; Frederick Douglas; Harriet Tubman; and Sojourner Truth.

LESSON III - "Slave or Free"
Approach A

Instructions to the Teacher:

(1) Say to the class: "Today I want you to read Lesson III -"Slave or Free."

(2) Have class read Lesson III - "Slave or Free."

(3) Administer and collect the post-reading comprehension test for Lesson III - "Slave or Free."

LESSON III - "Slave or Free"
Approach B

Instructions to the teacher:

(1) Read the following paragraphs to the class:

During the early 1800s, divisions between the North and the South became more evident. The North had factories; the South had farms and plantations. They disagreed over who should control the federal government. As new states were added, they took sides.

Another dividing issue was a tariff placed on European goods shipped to the United States.

To explain the tariff, let's pretend that we are southerner farmers. We have been trading with Europe rather than the North because Europeans pay more for our raw materials and charge less for their manufactured goods. Northerners do not like our trading with Europe and so they place a large tax on all European goods so that they will cost more than Northern goods. That tax what a tariff is.

Southerners did not like the tariff.

Slavery, however, was the main dividing issue. After Eli Whitney's invention of the cotton gin, slavery became much more important in the South. The cotton gin was a machine that could clean the seeds out of cotton very quickly. Many slaves were needed to pick the cotton to be cleaned in the cotton gins and sold. Cotton became the major source of Southern wealth.

Many Northerners spoke out against slavery. Newspapers and books criticized it. A Northerner who opposed slavery, Abraham Lincoln, was elected President of the United States in 1860. After his election, several southern states seceeded from the Union.

Secession meant that these states withdrew and no longer wanted to be part of the United States. Eleven southern states seceeded and formed the Confederate States of America. President Lincoln disagreed with secession and kept control of all federal property in the South, especially the forts. Because Union soldiers would not leave Fort Sumter, South Carolina, Confederates fired cannons on the fort. This was the beginning of the Civil War - on April 12, 1861.

(2) Ask and let children discuss the following questions, but do not answer them for them. Finding the answers to these questions becomes the focus for their reading.

> How did tariffs on goods from Europe divide the North and the South? (the North wanted higher tariffs placed on European goods because they were cheaper than theirs; the South did not want the tariffs because they wanted to buy Europe's goods and sell their own to them).
>
> How was slavery made more important to the South by the invention of the cotton gin? (Cotton became the major crop, made slave labor very important.)
>
> What was the beginning of the Civil War? What caused it?

(3) Say to the children: "As you read, see if you can find better answers to our questions."

(4) Have children read Lesson III - "Slave or Free."

(5) Administer and collect the post-reading comprehension test for Lesson III - "Slave or Free."

(6) Discuss the questions from the introduction.

LESSON III - "Slave or Free"
Approach C

Instructions to the teacher:

(1) Put the transparency on the overhead projector and introduce each part of it, emphasizing the relationships.

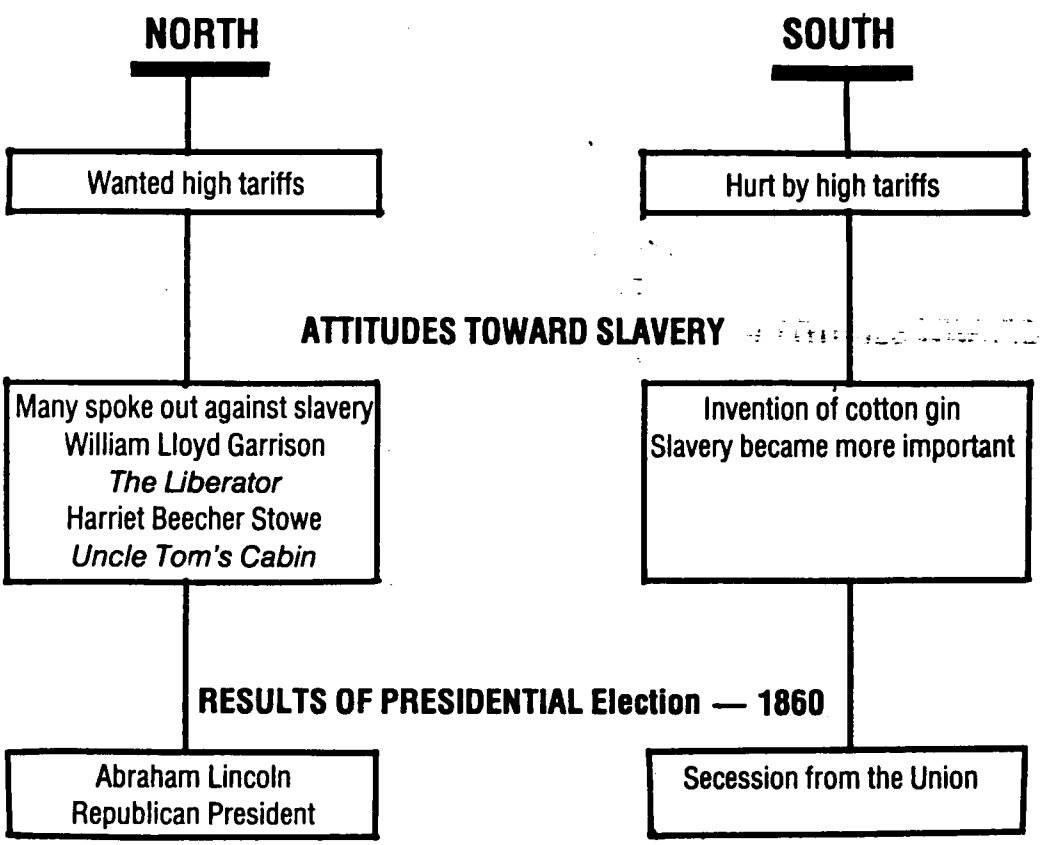
(2) Have children read Lesson III - "Slave or Free."

(3) Administer and collect the post-reading comprehension test for Lesson III - "Slave or Free."

SLAVE OR FREE

WHO WOULD CONTROL THE FEDERAL GOVERNMENT?

NEW WESTERN STATES



BEGINNING OF CIVIL WAR — FORT SUMTER, S.C.
April 12, 1861

LESSON III - "Slave or Free"
Approach D

Instructions to the teacher:

(1)Read the following instructions to the class:
I am going to divide the class into two groups. One half of the class will represent the Northern states and the other half will represent the Southern states. After you have read the lesson, "Slave or Free," we will have a contest called a debate. We will debate two statements: (1) European goods shipped to the United States should have high tariffs; and (2) Slavery must be abolished. If your group represents the Northern states, you will argue for the Northern position. If your group represents the Southern states, you will argue for the Southern position.
(2) Have children read Lesson III - "Slave or Free"

(3) Administer and collect the post-reading comprehension test for Lesson III - "Slave or Free."

(4) Do the role-play from the introduction.

LESSON IV - "The American Civil War"
Approach A

Instructions to the Teacher:

(1) Say to the class: "Today I want you to read Lesson IV -"The American Civil War."

(2) Have the class read Lesson IV - "The American Civil War."

(3) Administer and collect the post-reading comprehension test on Lesson IV - "The American Civil War."

LESSON IV - "The American Civil War"
Approach B

Instructions to the teacher:

(1) Read the following paragraphs to the class:

The fact that the Civil War was fought on home ground was considered a Southern advantage, but it was not an advantage in all respects. General William T. Sherman's historic march to the sea, from Atlanta to Savannah, Georgia, in 1864, left in its wake a path of destruction unlike any other the country had ever experienced. Soldiers on both sides lost their lives during the Civil War, but the South's casualties also included many civilians, killed, wounded, or driven from their homes. Cities and towns of the South were burned and looted. The railroads were destroyed. An entire way of life was destroyed.

The North, on the other hand, profited handsomely from the South's ruin. Manufacturers of arms and munitions, producers of iron and steel, bankers, and wheat farmers especially benefited from the long and arduous war.

One of the North's first actions was to blockade Southern ports so that ships could not enter or leave. The South depended on European trade and this made it difficult to get needed supplies and to export raw goods to them.

In chapter 2 you learned what a stockade was. Does anyone remember? A stockade was a wooden fence that surrounded a village for its protection, to keep enemies out.

How is a blockade different from a stockade? (A blockade is used to block people or goods from going through from either direction. A stockade is a barrier to protect those within.)

Two ways that soldiers joined the armies of the North and the South were by volunteering or by being drafted. Volunteers were those men who joined because they wanted to. Draftees were those who were required by law to join. The North and the South both draftfed soldiers, but the North let anyone who could pay $300 avoid the draft. That made poor people very angry.

(2) Ask and let children discuss the following questions, but do not answer them for them. Finding the answers to these questions becomes the focus for their reading.

> How does a civil war differ from other wars? (It is a war between parts of a single country, not between two or more countries.)
>
> What advantages did the North have in the Civil War? (more people, wealth, factories)
>
> What advantages did the South have? (home soil, outstanding officers, trade resource - cotton)
>
> What was the Emancipation Proclamation? (Document that freed slaves in the part of the South under Confederate control)

(3) Say to the children: "As you read, see if you can find better answers to our questions. "

(4) Have children read Lesson IV - "The American Civil War."

(5) Administer and collect the post-reading comprehension test for Lesson IV - "The American Civil War."

(6) Discuss the questions from the lesson introduction.

LESSON IV - "The American Civil War"
Approach C

Instructions to the teacher:

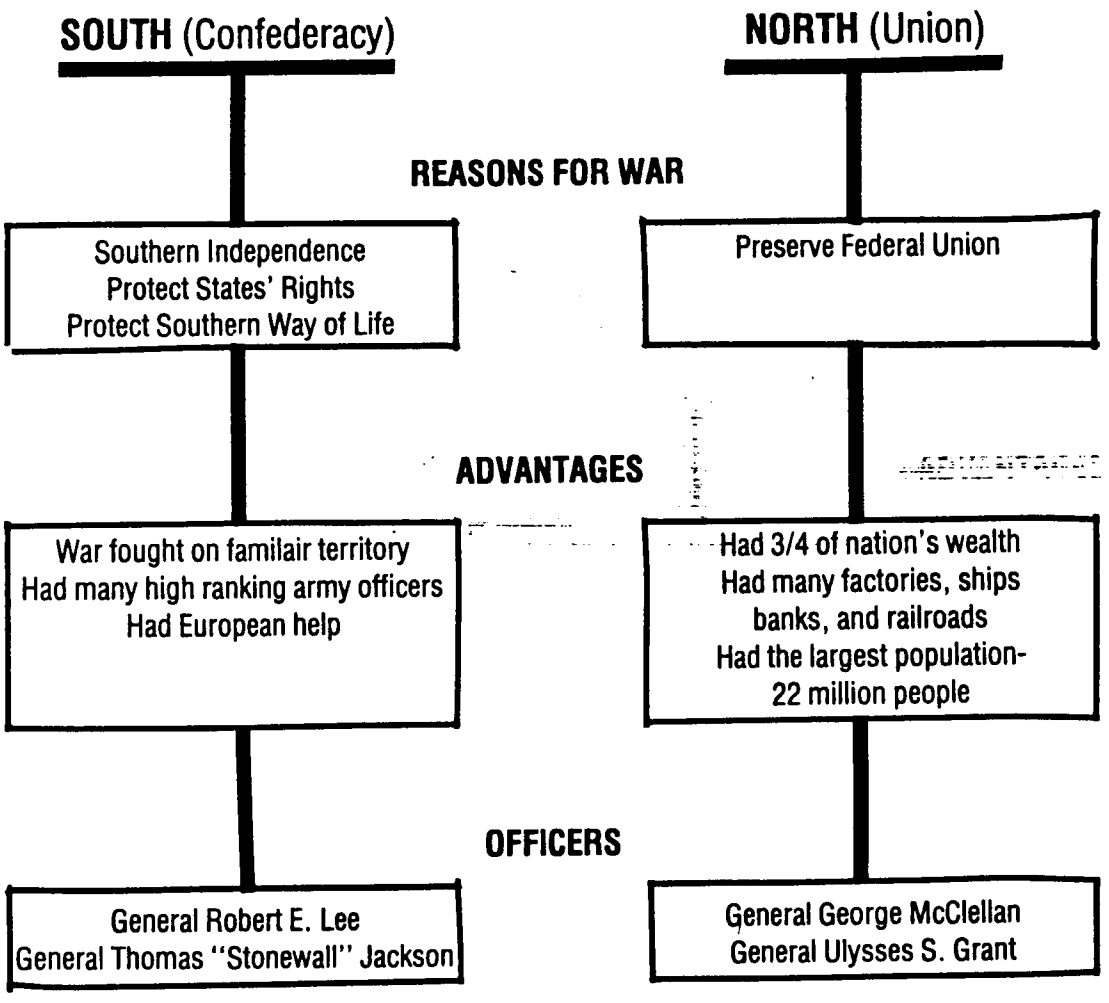
(1) Put the transparency on the overhead projector and introduce each part of it, emphasizing the relationships.

(2) Have children read Lesson IV - "The American Civil War"

(3) Administer and collect the post-reading comprehension test for Lesson IV - "The American Civil War."

THE AMERICAN CIVIL WAR

CONTRASTS BETWEEN THE NORTH AND THE SOUTH



OUTCOMES OF THE MAJOR BATTLES

BULL RUN (RICHMOND, VIRGINIA)
July 21, 1861
First Major Federal Defeat

GETTYSBURG, PENNSYLVINIA
July 1, 1863
Turning point, in favor of the North

PETERSBURG, VIRGINIA
End of 1864 — early 1865
Battles leading to the end of the War

SOLDIERS OF THE CIVIL WAR

Volunteers
Draftees

EVENTS WHICH FREED SLAVES

Emancipation Proclamation
January 1, 1863
Thirteenth Amendment — 1865

LESSON IV - "The American Civil War"
Approach D

Instructions to the Teacher:

(1) Read the following instructions to the class verbatim: When you are finished reading the lesson, I am going to divide you into two groups, one group will represent the North and the other will represent the South. I will then give each of you a card, upon which will be written some advantage or disadvantage of the Civil War to your side. You must explain why this was an advantage or disadvantage.
(2) Have the children read Lesson IV - "The American Civil War."

(3) Administer and collect the post-reading comprehension test for Lesson IV - "The American Civil War."

(4) Do the role-play from the lesson introduction.
Information for cards:

North - Advantagaes
1. Three-fourths of the nation's wealth was produced in Northern factories.
2. Northern factories made everything the Union Army needed.
3. There were 22 million people in the North.
4. The North had most of the nation's ships.
5. The North had most of the nation's banks.
6. The North had most of the nation's factories.
7. The North had most of the nation's railroads.

North - Disadvantages
1. The North had to fight in unfriendly and unfamiliar terrritory.
2. The North did not have good army officers.
3. The North had a draft law which was unfair to poor people.

South - Advantages
1. Most of the war was fought on Southern territory.
2. Many high ranking army officers were from the South.
3. The Confederate Army had better generals.
4. The South had cotton.

South - Disadvantages
1. The South only had 8 million people.
2. The South had few factories.
3. The South had few banks.
4. The South had few ships.
5. The South had few railroads.

APPENDIX E

LETTERS SENT HOME TO PARENTS FOR PERMISSION FOR CHILDREN TO PARTICIPATE

CONSENT TO PARTICIPATE IN READING
COMPREHENSION RESEARCH

This is an experimental research study to determine if one of three advance organizers affects the comprehension of related reading selections. An advance organizer is material used before a reading selection which provides for the learner a frame of reference to relate what he already knows to what he need to know to learn from that reading selection.

You will be asked to participate with other members of your class and children in seven other classrooms in Hamilton County schools in four consecutive lessons from your social studies textbook, on four consecutive days, of about 45 minutes each, taught by a college senior education student from Tennessee Temple University. Each lessons will be introduced with one of the experimental organizers or a control method and followed with a comprehension test.

This study will help us determine whether one of these three advanced organizers helps students to comprehend what they read. Although the study may have no direct benefit to you a this time, it may improve the way reading is taught in the future. There should be no risks to this testing procedure since the only difference from the way your teacher is teaching you now is how individual lessons are introduced, so your participation should not be detrimental to you in any way.

Your identity will be kept confidential. Only the investigator will have access to your score sheets, which will be stored in locked cabinet in her office. Only aggregate results will be reported, and your individual test sheets will be destroyed as soon as the results are statistically compiled. Any reference to individual performance in the test will be disguised to protect your identity.

If you have any questions about the research, either now or later, please contact Mrs. Connie Pearson, Education Department, Tennessee Temple University, Chattanooga, Tennessee 37404, or call 493-4331. Your participation in this study is voluntary, and you may refuse to participate. You may withdraw at any time during the testing without penalty.

I have read and understood the explanation of this study and agree to participate.

_____ _____

Your Name Date

_____ _____

Your Signature Parent's Signature

VITA

Constance Pearson was born in Portsmouth, Ohio, on September 9, 1944. She moved to Chattanooga, Tennessee, in September , 1954. During her freshman year of high school she moved again to Festus, Missouri. She graduated from Festus High School in May, 1962.

In May, 1967, she graduated with an A.B. degree in English from Tennessee Temple University in Chattanooga, Tennessee. After teaching two years at Webster Elementary School in Peoria, Illinois, she completed a M.S. degree in elementary education at Illinois State University, Normal Illinois.

She moved to Chicago, Illinois in August 1970, where she taught English at Palos Heights Jr. High School for one semester.

In January, 1971, she returned to Tennessee Temple University where she has taught for almost twenty years in the education department. She assumed the role of Director of Academic Advising for Tennessee Temple University in January, 1989.

She began the pursuit of the Doctor of Education degree with a major in curriculum and instruction in the fall of 1984. The degree was conferred in August 1990.

She is married to Mr. W. Ted Pearson of Tuscaloosa, Alabama. They have two children, Mark and Jay.