To determine how differences in isolating and elaborating on important text information influence learning and attitudes toward learning, two groups of fifth grade students were trained to apply the mechanics of precis writing and outlining to their social studies readings. After a pretest for content knowledge and an evaluation of their attitudes toward learning strategies, 24 students received four weeks of training in precis writing, while 26 students were trained in outlining. Following a multiple choice test, an essay test, and an attitude measure, the treatment was reversed. Analysis of variance between test scores failed to reveal significant differences in students' social studies knowledge as measured by detail, main ideas, or essay questions. Additionally, there were no significant differences on attitude measures administered during the study, indicating that regardless of the activity, feelings were similar about the amount of material learned, the difficulty of the activity, the help required, and the extent of student participation in lessons. A majority of students reported, however, that outlining was a more helpful study aid than precis writing. Results of the study must be viewed cautiously, as measurements of student knowledge lacked validity and reliability. (MM)
PRECIS WRITING AND OUTLINING:
AIDS TO LEARNING SOCIAL STUDIES CONTENT

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Paper Presented at College Reading Association Conference, Atlanta, Georgia.
October 22, 1983
"Precis Writing and Outlining: Aids to Learning Social Studies Content"

What role does writing play in subject matter learning? Learning, in the content area classroom, usually occurs as a direct result of reading content textbooks. However, many students find that reading and remembering content material can be difficult. Recent theory and research support the integration of reading and writing, suggesting that the concurrent development of these skills can facilitate learning (Abartis & Collins, 1980; Anderson, 1980; Applebee, 1977; Lehr, 1981; Shanahan, 1980; Stotsky, 1982; Wilson, 1981).

Learning from text is one of the most critical skills students can acquire in school. From about third grade to the end of high school, learning from content textbooks comprises a considerable portion of every school day. Arthur (1981) contends that the expository writing of content texts presents comprehension problems for most students, and she suggests that when students are provided with experiences both in reading and writing exposition, that these problems can be alleviated. Applebee (1981) reports that even those students who possess well developed fundamental skills in reading and writing often do not possess effective content area reading and writing skills. Content area learning requires unique reading and writing skills not routinely stressed in basal reading programs, since content texts are not characterized by dialogue and narration found in basal readers. Content texts contain expository writing, various organizational patterns, and new vocabulary specific to each subject.
area (often more difficult technical words than those introduced in basals). Selecting appropriate information to be learned, storing a representation of this information in memory, and using this knowledge to perform well on achievement measures are three tasks required in order to be successful academically in content areas.

Certain types of writing can indeed enhance subject matter learning, if student attention is focused on important and appropriate information in text (Gagne, 1978; Reder, 1980). Gagne (1978) reviews the research on long-term memory and indicates that "any strategy that encourages the elaboration of information should improve long-term retention of that information" (p. 648). She believes that repetition of information strengthens and increases memory for it. Reder (1980), in another review, reports that the generation of "semantically useful elaborations" (p. 10) and attention to "aspects of the passage that are deemed important" (p. 11) result in better retention of information. She urges teachers to have students isolate those aspects of text that seem important, and then elaborate upon them. Two writing activities, precis writing and outlining, appear to hold promise for enhancing content area learning because they involve the identification of important ideas from text and the generation of these ideas in written form.

Precis Writing

The first activity, precis writing, involves the development of a precis, which is a paraphrased summary or abstract of a written composition. A precis retains the information and flavor of the original, but usually condenses the original to about one-third its length. Precis writing involves not only reading and understanding a sample of text, but also selecting, rejecting, and paraphrasing ideas.
in order to write a concise abridgement of that sample. Precis
cwriting, although not used frequently with students by classroom
teachers or reading specialists, is reported to improve both
vocabulary and reading comprehension (D'Angelo, 1983; Stotsky, 1982).

At the elementary level some research has been carried out with
summary writing following reading. Sixth grade students who were
given paragraph headings and then wrote an original one sentence
summary after each paragraph they read, demonstrated enhanced
comprehension and recall, over students who only wrote a one sentence
summary, students who only were given paragraph headings, and students
who had no cues and wrote nothing (Doctorow, Wittrock, & Marks, 1978).
In another study, sixth grade students who wrote a one sentence
summary after reading a social studies passage, comprehended and
remembered better than students who used a study guide, students who
answered questions after reading, and students who simply read the
passage (Taylor & Berkowitz, 1980). Additionally, fifth grade
students who wrote and reread their own summaries of science and
social studies material, were reported to show improved spelling of
content area vocabulary (Cunningham & Cunningham, 1976). Although
generally it appears that learning can be improved with some type of
writing activity geared toward summarizing main ideas, the most
effective technique has not yet been identified.

Outlining
The second writing activity, outlining, is one that also appears to
hold promise for improving content area learning. Outlining involves
the identification of main ideas and supporting details from a written
sample and the representation of this information in a specified
format. Although various forms of outlining are included in most
elementary language arts curricula, little research has been done with younger students who have been taught to outline. Anderson (1980) discusses the benefits of outlining as a study strategy and contends that research is needed to investigate whether or not students in the 9-14 age range can learn to outline.

While research on summarizing has been carried out with elementary students, research on notetaking and outlining has traditionally been done with high school and college students. Palmatier (1974) reports that most of these students do not know how to take good notes or outline well. Although educators are in general agreement that some type of notetaking or outlining strategy can enhance learning, disagreement exists within the research as to the most effective technique, as may be seen from a few of the studies discussed here.

In one study, college students who took notes that reorganized information in the passage recalled more than students who took verbatim notes (Shimerlik & Nolan, 1976). In another study with college students, those students who took notes and reviewed both their own notes and the lecturer's notes performed best (Annis & Davis, 1975). Annis and Davis reported that reviewing one's own notes was only equal to reviewing the lecturer's notes, if the personal notes of the student accurately represented important information to be remembered. In a third study with high school students, outlining in three column notes, two column notes, and in a free choice situation were compared. Two column outlines achieved the best results (Palmatier, 1971). Thus it appears that for high school and college students, some form of notetaking and outlining can aid the learning of content information, but research has not yet established one best technique (Palmatier, 1974).
Purpose

The purpose of the study described here was to compare the effects of two writing activities, outlining and precis writing, on the learning and attitudes of fifth grade students. Specifically, I wanted to know how the use of two different ways of isolating and elaborating on important text information would affect students' learning of social studies content and their attitudes about these writing strategies.

Subjects and Selection

The study was conducted with two groups of fifth grade students from a suburban middle school in a lower-middle to middle class community. Group 1 consisted of 26 students (13 females, 13 males) and was matched on sex, IQ, and achievement with Group 2 which consisted of 24 students (11 females, 13 males). (Two students from Group 2 moved during the study and did not complete the experiment.) Mean IQ scores on the Short Form Test of Academic Aptitude (CTB/McGraw-Hill, 1970) were: Group 1, X=111.88, SD=11.87 and Group 2, X=109.73, SD=9.05. Mean scores on the reading subtest of the California Achievement Tests (CTB/McGraw-Hill, 1977) were Group 1, X=57.68, SD=8.99, and Group 2, X=56.45, SD=9.07. Subjects had not previously received instruction in either precis writing or outlining.

Design

A counterbalanced design was employed in which each group received both experimental treatments, outlining and precis writing, with the order of exposure to treatments differing for each group (Borg and Gall, 1983).

Materials
Reading materials used in this study included a) several short practice passages, from one to six paragraphs in length, on various science, social studies, and general interest topics and, b) two units of study on the Middle Ages, from subjects' social studies text (Yohe, Cahill, Gross, & Gritzner, 1980). All reading materials had readability levels of 5th grade or lower (Fry, 1977).

Social studies learning was assessed with 30 multiple-choice items and one essay question following each unit of study. Multiple-choice items tested knowledge of main ideas (20 questions) and details (10 questions), with main ideas receiving more emphasis because of their relative importance. Detail questions included both literal and paraphrased questions requiring knowledge of facts stated explicitly in text. Main idea questions were content bound but involved reading between the lines and required interpretation of text to determine the central thought. Essay questions assessed knowledge of cause-effect and comparison-contrast relationships. Validity of both multiple-choice and essay questions was established by two classroom teachers and this researcher.

Attitudes toward lessons were assessed with a short written measure called "Postclass Reactions" (Fox, Luszki, and Schmuck, 1966) composed of seven likert response items following each unit of study to determine how students felt about the instruction they received. Attitudes about the two strategies were also assessed following the study with a short three question written measure.

Method

Since it is critical that students master the mechanics of any strategy itself before actually using the strategy, these students received initial instruction in writing a precis or outline before
using the strategy with content material. All lessons, whether during initial instruction or during treatment, were of 45 minute duration, occurred once a day, and were taught by the same research assistant under the supervision of this investigator.

In the first treatment, during the first week, Group 1 received four lessons on the mechanics of precis writing, while Group 2 received four lessons on the mechanics of outlining. Selected practice passages from various content areas were used for initial teaching. To evaluate initial teaching, students wrote either a precis or an outline, depending on the instruction they had received. Students who had not mastered the strategy were given extra help after class until mastery was achieved. All students then were given the first attitude assessment and a pretest covering content of the social studies material they were about to read.

During the next three weeks Group 1 received 11 lessons in which they read portions of the unit and wrote precis to accompany the material. In the first five sessions students worked together in composing precis, then spent three sessions working part of the time together and part of the time independently. In the last three sessions, students composed precis independently following reading. Multiple-choice and essay tests were given, followed by a second attitude assessment. Group 2 followed the same procedures but used outlining to accompany their reading.

In this counterbalanced design, the second treatment consisted of the administration of the second writing strategy to each group. Procedures used in the first treatment were followed, but with the next unit of social studies material. One week following treatments, the third attitude assessment was administered.
Analysis of variance between treatments was performed on scores from multiple-choice, essay, and the first and second attitude measures, since pretest scores established that groups were matched. (ANCOVA, controlling for pretest effects, was also computed and results were similar). Chi-square tests were performed on the third attitude measure administered one week following treatments.

Results and Discussion

When the effects of outlining and precis writing on learning and attitude were analyzed, there were no significant differences in knowledge of social studies content as measured by detail, main idea, or essay questions (Table 1). Must be noted that these measures lacked reliability and validity and may not have been sensitive to improved learning. Some measure of vocabulary growth also appears appropriate and might be used in future studies of precis writing and outlining, since examination of student precis indicates consistent use of synonyms for key words. The use of standardized measures with established reliability and validity is suggested for future research. Additionally, there were no significant differences on attitude measures administered during the study, indicating that regardless of the activity learned, feelings were similar about how much was learned, how difficult the activity was, how much help was needed, and how much each student participated in lessons (Table 2). Neither were there any significant differences in response to the three questions administered a week after treatments (Tables 3-5). Students were almost equally split as to which strategy was reported as more enjoyable (Table 3) and which they would choose for future use (Table 5). When order of treatment is examined however, more students reported that they enjoyed better the activity with which they were last...
involved and would choose it for future use (Tables 3 and 5). Students may have preferred the writing activity they just finished using because they remembered it better than the first activity. Also, working with a new teacher and learning the first activity may have made learning the second activity easier. Regardless of order of treatment however, twice as many students reported that outlining rather than precis writing would help them understand better and do better on tests (Table 4). More of these students apparently felt confident with outlining rather than precis writing in terms of content learning.

The fact that there were no significant differences in either learning or attitude of these fifth grade students has implications for student and teacher preference in choice of lesson type, since both writing activities appear to work equally well in light of the assessment instruments used. It must be noted that these measures lacked reliability and validity and may not have been sensitive to improved learning. Some instructional implications may cautiously be drawn from this pilot study. Currently, outlining appears to be more widely used than precis writing by elementary and secondary teachers although both writing activities can aid students in writing reports and research papers, as well as provide material that can be reviewed and studied for tests. Perhaps the "outline precis" (Donley 1975) that stresses the systematic hierarchy of a set of ideas is also worth exploring with students. Although further research is needed with both outlining and precis writing, it may be suggested that precis writing warrants close attention by teachers and more use with students in content area classes.


Lehr, F. "Integrating Reading and Writing Instruction." The Reading Teacher, 1981, 34, 958-61.


Reder, L. M. "The Role of Elaboration in the Comprehension and


Table 1
Means and standard deviations of pretest, multiple choice, and essay questions by treatment

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Detail</th>
<th>Main Idea</th>
<th>Essay</th>
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<tbody>
<tr>
<td><strong>Precis</strong></td>
<td>M</td>
<td>3.70</td>
<td>9.10</td>
<td>15.42</td>
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<tr>
<td><em>(n=50)</em></td>
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<td>1.54</td>
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<td>4.25</td>
<td>8.84</td>
<td>16.20</td>
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<tr>
<td><em>(n=50)</em></td>
<td>SD</td>
<td>1.78</td>
<td>1.69</td>
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Table 2
Means and standard deviations of attitude scores for precis and outlining

<table>
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<tr>
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<th>Attitude 1</th>
<th>Attitude 2</th>
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<tr>
<td><strong>Precis</strong></td>
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<tr>
<td><em>(n=50)</em></td>
<td>SD</td>
<td>2.35</td>
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FREQUENCIES AND PERCENTAGES FOR ENJOYMENT OF STUDY SKILL BY GROUP

<table>
<thead>
<tr>
<th>Group by Order of Treatment</th>
<th>Precis/Outlining</th>
<th>Outlining/Precis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Precis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>35</td>
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<tr>
<td>Outlining</td>
<td>15</td>
<td>65</td>
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<tr>
<td>(No Response)</td>
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Table 4
FREQUENCIES AND PERCENTAGES FOR UNDERSTANDING OF CONTENT BY GROUP

<table>
<thead>
<tr>
<th>Group by Order of Treatment</th>
<th>Precis/Outlining</th>
<th>Outlining/Precis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Precis</td>
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<tr>
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<td>73</td>
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<td>(No Response)</td>
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<tr>
<td></td>
<td>Precis/Outlining</td>
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<tr>
<td>------------------</td>
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<tr>
<td><strong>Group by</strong></td>
<td><strong>Frequency</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td><strong>Order of Treatment</strong></td>
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<tr>
<td>Precis</td>
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