A STUDY OF THE EFFECT OF A READING COMPREHENSION STRATEGY ON HIGH SCHOOL STUDENTS WITH LEARNING DISABILITIES

THESIS

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Abstract

This study evaluated the effectiveness of a particular text explicit comprehension strategy called, "stop and think." The strategy taught students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. This technique is intended to help students to self-monitor their own comprehension and to determine if they need to re-read. Students in a control group and an experimental group were used for the study. Both groups consisted of ten ninth-grade students with learning disabilities enrolled in a suburban high school.

Students in the experimental group were all participants in a corrective reading program which met for 40 minutes every day. Direct instruction on the use of the strategy and the students implementation of the strategy lasted approximately nine weeks. Activities involving the use of the stop and think strategy were incorporated two to three times per week. When the strategy was first introduced the students used narrative short stories to maintain motivation while becoming efficient at using it. Students practiced the strategy as a whole group and then individually. During the sixth week of instruction, students began using the strategy with content area readings. Students in the control group did not receive formal reading instruction.

To determine the effectiveness of the stop and think strategy, a pretest and a posttest of text-explicit reading comprehension was given to the experimental group and the control group. Two sections from a ninth-grade Global Studies book were used for the pretest and the posttest.

For the pretest, students were randomly given one of two sections from the textbook. For the posttest they were give the section they had not done for the pretest. A *t test* was used to determine if there was a statistically significant difference in the text-explicit reading comprehension level of the experimental group and the control group.

The findings indicated that there was a statistically significant difference between the posttest scores of the experimental group, who received the stop and think strategy instruction, and the control group, who did not receive the instruction, favoring the experimental group.

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CHAPTER 1

Statement of the Problem

Purpose

The purpose of this study was to evaluate the effectiveness of a particular text explicit comprehension strategy called, "stop and think." This strategy teaches students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. If the students are unable to recall what they have read, they know they need to re-read. The goal of this strategy is to prevent students from reading an entire section and not being able to comprehend what they have read.

Need for the Study

A large number of students at the high school level can decode the necessary material for their course work. The difficulty for these students lies in the comprehension of the content read. Some research has shown a correlation between implementing strategies and improving comprehension, while other studies have not found a significant relationship. Implementing strategies can be time consuming, therefore knowing the value of a particular strategy is beneficial to teachers working on improving comprehension. Once students have reached the high school level, the time spent on specific programs to help students with reading difficulties is limited or non-existent.

To be successful in high school, students must be able to comprehend their textbooks. Being expected to read and comprehend a section of these textbooks can be overwhelming for students with reading

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difficulties. As their frustration increases, their motivation to continue working will decrease. Knowing a strategy to use can make it less difficult to tackle.

At times the teachers who work with students with learning disabilities modify so much for them that they are left more helpless than helped. With this strategy, students are taught a way to cope with their reading difficulties that they can easily use on their own. Students at any level do not want to stand out as being different and this strategy can be used without doing that.

Research Question

Is there a statistically significant gain in text explicit reading comprehension of high school students with learning disabilities after the implementation of a "stop and think" strategy with content area reading?

Definitions

Metacognition : Awareness, monitoring and regulating of one's cognitive
           processes (Loxterman, Beck & McKeown, 1994).

Thinking aloud : Readers are asked to talk about what they are thinking
           as they read in order to expose how their processes
           function (Loxterman, Beck & McKeown, 1994).

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Stop and think : A strategy in which readers are asked to stop as they

read and write in their own words the main idea of the

reading.

Text Explicit : Factual reading from a textbook

Reading Comprehension : The ability to understand, recall and

paraphrase what has been read.

Limitations of the Study

The findings in this study are limited in their application based upon the

following conditions:

1. The was a limited number of subjects used.

2. One set of questions used for the pretest and posttest were about

culture, nuclear families and extended families which students

might be able to use background knowledge to answer.

3. Some of the narrative stories that were used to practice the stop

and think strategy might have been below the reading level of ninth

grade textbooks.

4. The same teacher who implemented the strategy, graded all the

pretests and posttests.

5. The instruction time between the pretest and posttest was only

three months, with the strategy being taught every other day.

6. The findings of this study are only applicable to ninth grade

students with a similar school environment.

<u>Summary</u>

This present study was designed to investigate the effectiveness of a stop and think strategy on text explicit reading comprehension of ninth grade students with learning disabilities. Research supports the instruction and implementation of particular strategies to improve reading comprehension. Teaching students to effectively use a reading strategy can be very time consuming, therefore it is vital for a teacher to know if a particular strategy is worth the instruction time required. The goal of this strategy is to help students monitor their own understanding as they are reading and to determine if they know the main idea or if they need to re-read. Many students will read an entire section of a textbook and are unable to recall what they have read. By using the stop and think strategy, this should not happen. With the number of subjects used in the study being limited, more research is needed to validate this reading strategy.

CHAPTER II

Review of the Literature

Purpose

The purpose of this study was to evaluate the effectiveness of a particular text explicit comprehension strategy called, "stop and think." This strategy teaches students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. If the students are unable to recall what they have read, they know they need to re-read. The goal of this strategy is to prevent students from reading an entire section and not being able to comprehend what they have read.

Reading Comprehension

A large amount of a high school student's day is spent reading textbooks, articles, short stories and novels. The comprehension strategies that these students utilise are incredibly important. Good information processors use strategies for academic tasks, know how and when to use the strategies they know, and articulate strategy use with nonstrategic knowledge as they read, write, problem solve and think (Loranger, 1994).

Reading comprehension has been defined as a process of constructing meaning from written texts. Students with learning disabilities typically exhibit substantial deficits in reading comprehension, which may include problems not only in understanding facts and details of text material, but also in interpreting and making inferences about the information presented (Mastropieri & Scruggs, 1997).

The type of reading required to comprehend content area subjects differs greatly from that which is required by developmental textbooks.

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Frequently, teachers fail to take these differences into account and falsely assume that students come to classes with the reading skills necessary to use the assigned content textbook effectively. Certain students are relegated to failure from the start because they are expected to read content materials that go beyond their ability (Baer & Nourie, 1993).

Recognizing that there can be no one right way of teaching reading and understanding that there can be no comprehension of text apart from context, particular teachers can nonetheless play a central role in helping particular students learn particular literacy practices in particular classrooms. Teachers need to consider how literacy works within their own classrooms, within their own disciplines and within their own schools (Underwood, 1998).

Impact of Reading Strategies

Many high school students experience difficulty comprehending content-area reading. Generally, they can decode words but cannot recall what has been read. The most common strategy these students use is to read through a chapter haphazardly attempting to memorize parts of it (Mueller, 1996). One of the most neglected areas in schools' curriculums is the area of reading in content subjects. When students lack knowledge about content area writing styles, they encounter difficulties in reading and comprehending material as they progress to higher grades (Ley, 1992).

Another strategy students with reading difficulties use is to over rely on their prior knowledge when reading. When teachers are able to recognize this overreliance on concept processing then instruction can focus on the integration of concepts and text. Misdiagnosing overreliance

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on concept processing as a comprehension problem or a word identification difficulty may result in faulty prescriptions for correcting the problem (Riley and Shapiro, 1999).

Research suggests that students can be taught to use strategies which will increase awareness of their own performance as they read (Dole, Brown, & Trathen, 1996). Study strategies, which Loranger defines as specific processes which students may use alone or in combination to learn content of the curriculum, have been identified by groups such as the College Board as key in learning how to learn. Effective learners are now seen as active information processors who use strategies to fit their needs and goals. Good teaching should teach students how to remember, how to think and how to motivate themselves (Loranger, 1994). Loranger researched the study strategies of successful and unsuccessful high school students and noted that successful students were motivated to succeed and used strategies to accomplish this goal, while unsuccessful students were less likely to access strategies on their own and lacked self-knowledge of inefficient strategy use.

Bakken, Mastropieri and Scruggs (1997) noted that secondary-age students with learning disabilities have difficulty studying textbooks to acquire specific information due to poor reading and study skills. Reading is the most frequent mentioned academic difficulty among adolescents with learning disabilities. Research analyzed by Bakken, Mastropieri and Scruggs proved that these students can benefit from being made aware that different strategies need to be applied to comprehend the important information in the passage. Students can increase their knowledge of content as well as acquire basic learning skills if they are directly

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instructed in strategies for content area texts (Ley, 1992).

Students must experience success in reading before any reading strategy can be introduced. A series of short, easy, but interesting reading assignments is necessary to focus the students upon the mental tasks that comprise reading. Once a strategy has been introduced, students must understand that they are being taught a strategy for reading and its value is determined by the degree to which it is internalized and practiced (Mueller, 1996).

There are many apparent advantages to strategy instruction, however, studies have not demonstrated conclusively the value of this instruction over more traditional instruction. One study indicated that after an intensive year of instruction, students who received strategy instruction did not outperform their control peer on all comprehension measures. However, these students did perform significantly better with strategy awareness and comprehension monitoring (Dole, Brown & Trathen, 1996). Reading strategies in content area materials can improve the efficiency of instruction in fifth and sixth grades, if teachers are competent in their application (Ley, 1992).

For high school students with low levels of literacy, the question of whether compensatory programs should emphasize outcomes other than reading and writing is controversial. For these students, the end of their public schooling is near and they cannot afford unfocused and ineffective programs. One can argue that vocational preparation is where the greatest emphasis should be, but a strong argument can be made that improved literacy will contribute more to life-long success. Another question to

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consider is, are these methods sufficiently time efficient to become part of a high school teachers' everyday planning for individual students (Espin, & Denol, 1993)?

Because reading comprehension skills form the basis of learning in other areas, it is critical that teachers focus on developing optimal instruction techniques for enhancing comprehension. Seven instructional guidelines assist teachers in analyzing and modifying their curricular programs; specifying instructional objectives, determining reader knowledge, identifying task requirements, addressing text features of comprehension passages, devising reading comprehension strategies and developing teaching procedures, providing practice and review, and monitoring student progress (Jitendraan & Gardill, 1996).

Identifying Main Points and Summarizing

A study performed by Wood and Carney (1995) found that high school students can benefit from explicit instruction in summarization skills. The strategy was implemented to help students acquire information from texts and boost their learning of main ideas. Gardner (1982), concluded that high-efficiency summarizers also process and store information efficiently. They integrate pieces of information into semantic wholes and lose track of unimportant pieces of information.

High school students can become more systematic in their construction of summaries when they are given explicit instruction about the structure and procedures for generating summaries. The students

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trained were more likely to translate information into their own words (Woods & Carney, 1995).

Mastropieri and Scruggs (1997) noted a study in which eighth and ninth grade students with learning disabilities were taught a five step strategy to help with summarizing. The five step plan included: (a) question what you are studying the passage for; (b) find the main idea in the paragraph and underline it; (c) think of a question about the main idea you have underlined; (d) learn the answer to your question; (e) always look back at the questions and answers to see how each successive question and answer provide you with more information. Results indicated that students who were taught to use the five step strategy performed better on idea unit identification and factual recall than students who received no training.

Strategies that involve summarizing require students to identify main points in what they are reading. Deciding which information is important is a skill many students lack. Most research on main idea comprehension and summarization of texts attempts to learn more about the process of finding main points. Schellings and Van Hout-Wolters (1995), considered the ambiguity that surrounds the term "main idea" in their study. The findings of this study concluded that it is important for students to assess which parts of an instructional text their teacher thinks is important because the teacher will transform the instructional objectives into task demands and test questions about the text. However, the

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teachers showed considerable variation in selecting main points (Schellings, & Van Hout-Wolters, 1995).

Several researchers have found that student who are asked to summarize text while studying for a recall test perform better that students who use other study techniques. Summarization is thought to be beneficial because it provides practice in retrieving important information and retrieval practice has been shown to be beneficial for later performance in a variety of situations. A study of college students indicated that students who wrote one summary of an entire text were superior to students who wrote two summaries or who did not write any summaries. These results support the hypothesis that less frequent summarizing, which requires greater effort, produces better performance (Foos, 1995).

Metacognition and Thinking Aloud Strategies

The quality of school textbooks has long been of concern to professionals in educational research and practice. A goal of enhancing the quality of what students learn from their textbooks has led researchers to develop processing strategies to promote students' active engagement with text. Studies have suggested that teaching metacognitive strategies can have a positive influence on reading comprehension. Metacognition refers to the awareness, monitoring and regulating of ones cognitive process. The goal of metacognitive instruction is to make students aware of the mental process involved in reading to help them become more active readers (Loxterman, Beck & McKeown, 1994).

Metacognitive reading skills can be taught, or at least learned, through teacher modeling and student practice. Students who have

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metacognitive knowledge know about themselves as learners, know what skills and strategies they have and the ability to monitor and regulate comprehension. To help students develop this knowledge, students can be instructed to stop at the end of each paragraph or section and ask themselves whether the meaning "clicks' or "clunks." If it "clicks", readers put the meaning into their own words. If it "clunks", readers pinpoint sources of trouble or formulate questions that might lead to resolution of the difficulty (Underwood, 1997).

If teachers are well informed about the mental processes involved in the use of skills as strategies and clearly explain this information to students during instruction, the students would be more aware of the content of the lessons and the need to be strategic. The combined awareness for both teachers and students can result in more meaningful instruction and improved student performance in comprehension (Meyers, 1991).

One example of a metacognitive strategy involves readers talking about what they are thinking about as they read. This process is referred to as verbal reporting or thinking aloud. Being able to stop and talk about a text can give students opportunities to reflect and think through information. Some thinking aloud procedures are more direct and powerful because students are asked to summarize a segment of text. Thinking aloud procedures work the best with text that explicitly connects information and provides adequate explanations (Loxterman et al., 1994). Even though a teacher-directed strategy may help a student understand a text at hand, a student-centered strategy like this may be more likely to

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help students with texts they read on their own (Dole, Brown & Trathen, 1996).

Baumann, Seifert-Kessell and Jones (1992), researched the effectiveness of explicit instruction in thinking aloud procedures as a means to enhance young students' comprehension monitoring abilities. The results of this study agreed with Loxterman, Beck and McKeown(1994), demonstrating that explicit teacher-led instruction in thinking aloud procedures is an effective means to enhance students' comprehension monitoring abilities.

Rikard and Langley (1995) concluded that the think aloud procedure can aid in describing the subjective experiences of learners as they interpret instruction. Understanding how instruction is experienced by the learner is a necessary step toward developing a holistic view of the teaching and learning process.

Another example of a metacognitive strategy involves teaching students to question themselves. The research for this strategy was based on the notion that students with learning disabilities were inactive learners with metacognitive deficits and, therefore, could benefit greatly form training in such strategies as activating prior knowledge and organizing and summarizing text. Students were taught to stop and question themselves before, during or upon completion of reading to promote understanding of the printed material. (Mastropieri & Scruggs, 1997).

Comprehension Instruction

Ezell and Hunsicker (1997), performed a study comparing the instructional procedures of group versus individual instruction. They used

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a strategy called Question Answer Relationship (QAR) with fourth grade students. A peer-assisted procedure involved twenty-five students working in groups of two asking and answering comprehension questions regarding a reading passage. Another group of twenty-three students worked in a teacher-assisted procedure. These students worked alone to develop questions followed by a class discussion that focused on asking, critiquing, and answering students' questions. All students increased their reading comprehension skills, but their was no significant difference between the two groups on standaridized reading assessment.

Educators at the secondary level are faced with a serious dilemma when working with students with reading difficulties. These students have limited time left in their school careers, and teachers must decide the most efficient and effective way to use that time. Considering this time factor, Espin and Deno (1993), conducted a study proving that reading from text can be used by teachers as a diagnostic tool to identify educationally relevant subtypes of students with learning difficulties in the content areas. The two subtypes are general disabilities and content-specific reading disabilities. The results also indicated that these two groups differ in their performance on educationally relevant tasks, and that these differences are likely to be related in part to differences in content-area background knowledge on the part of the content-specific group.

A study performed by Manning (1998), found that reading conferences can be used to teach strategies or skills. As students read, they write in journals and eventually share their responses with the teacher. When using reading conferences with older students, teachers can have

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them retell the plot of a story and then ask questions to further their understanding of the plot. Teachers can also read through literature-response journals during the conference to gain cluse about misunderstandings that interfere with comprehension. Students should be encouraged to think critically by asking questions that help them examine a particular point of view.

One reason why many students with mild disabilities do not develop adequate reading proficiency is that they are not afforded adequate opportunities to practice reading. Peer tutoring can be an effective way for student with disabilities to practice and improve reading skills (Mathes & Fuchs, 1994).

A study performed by Fielding and Pearson (1994), found four practical guidelines for teachers to follow when thinking about reading instruction. A successful program needs to have: a large amount of time for actual text reading, teacher-directed instruction in comprehension strategies, opportunities for peer and collaborative learning and occasions for students to talk to a teacher and one another about their responses to reading.

CHAPTER III

Design of the Study

Purpose

The purpose of this study was to evaluate the effectiveness of a particular text explicit comprehension strategy called "stop and think." This strategy teaches students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. If the students are unable to recall what they have read, they know they need to re-read. The goal of this strategy is to prevent students from reading an entire section and not being able to comprehend what they have read.

Methodology

Subjects

The subjects involved in this study were twenty freshmen students with learning disabilities enrolled in a suburban high school. Ten of the students served as the experimental group. They were all participants in a corrective reading program, which met for forty minutes every day after school. The school district decided that enrolment into the program was based on Degrees of Reading Power (DRP) raw scores of 50 or below at the end of their eighth grade year. Students at grade level would have a DRP raw score between 65 and 70. The other ten students served as the control group. The DRP scores of the control group were between 60 and 70.

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Materials

As a pretest and posttest for comprehension, two different sections from a ninth grade Global Studies book that the students were not familiar with was used. A variety of short narrative stories were used to introduce the stop and think strategy. As students became comfortable with the strategy, they read short content-area articles continuing to use the stop and think strategy. All narrative stories and content-area articles came from supplemental classroom materials. Some of the material was below grade level to avoid frustration and help students become more familiar with the strategy and some of the material was at grade level to encourage growth in comprehension while using the strategy.

Procedure

Students in the control group and the experimental group were given a section of a global studies textbook to read silently followed by comprehension questions to answer as a pretest measure. The textbook was unfamiliar to students in both groups.

The experimental group, which met every day for 40 minutes, received instruction on the stop and think strategy. This strategy involved students stopping themselves every few paragraphs and writing in their own words what the reading was about. The students received instruction on this strategy every other day. Using a narrative short story, these students practiced the strategy together as a whole class. The students took turns reading the story, were instructed where to stop, and brainstormed together how to put in their own words what was happening

in the story. Students were expected to write on their individual sheets what was happening in the story. This whole group instruction was presented four times to help students become familiar with the procedure. If the students were having trouble, the whole group instruction could be practiced more times. The narrative short stories that were chosen were at a variety of reading levels. This helped the students gain confidence and stay interested in the material before using the strategy with grade level texts.

Next, students worked with partners, each taking turns reading the story aloud and together deciding where to stop and what to record on their individual sheets. This was done two times, both with narrative stories. The partner activity gave the students more practice in a way other than whole group instruction. The students then tried the stop and think activities, reading silently on their own, again using narrative stories. They had to determine on their own where to stop and what to record in their own words, on their individual sheets. The students were given feedback from the teacher after they completed each individual stop and think activity to further help them understand the procedure.

Individual activities could continue until the students were comfortable with the stop and think strategy. The subjects of the readings then changed to content area articles. The class again worked as a whole group brainstorming together where to stop and what to write in their own words on their individual sheets. Once the teacher felt the students were confident implementing the stop and think strategy with content reading, they moved to doing the stop and think activities individually. The teacher had to provide feedback to the students after each individual stop and

think activity. The amount of time spent on instruction of the strategy depended upon the students' understanding and confidence using the strategy. The students in the control group did not receive any formal reading instruction.

As a posttest measure the control group and the experimental group were given another section of the global studies textbook to read and comprehension questions to answer.

Analysis of the Data

When the pretest had been completed a *t test* was used to determine if there is a statistically significant difference in the reading levels of the experimental group and the control group. Once it was evident that the two groups could be used as a comparison, a *t test* was again used for the posttests to determine if there was a statistically significant differrence.

CHAPTER IV

Analysis of the Data

Purpose

The purpose of this study was to evaluate the effectiveness of a particular text explicit comprehension strategy called "stop and think." This strategy teaches students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. If the students are unable to recall what they have read, they know they need to re-read. The goal of this strategy is to prevent students from reading an entire section and not being able to comprehend what they have read.

Analysis of the Findings

The following null hypothesis was investigated in this study:

1. There is no statistically significant difference between the mean posttest scores in text explicit reading comprehension of ninth grade students with learning disabilities in the experimental group who were taught a reading comprehension strategy called, "stop and think" and the control group who did not receive specific reading comprehension.

Findings

Table One summarizes the statistical findings of the analysis of the pretest.

This pretest and analysis was completed to determine that the two groups

were not statistically significantly different and could be used as a

comparison.

Table 1

Pretest Text Explicit Reading Comprehension Scores

Group	Size	Mean	Degree of Freedom	Standard Deviation
Experimental	10	2.8	18	2.39
Control	10	2.6	18	1.26
Calculated t		0.234		

Critical t ($= 0.5$) $= 2.101$

A *t test* of independent samples was used to determine whether the

difference between the mean pretest scores of the experimental group and

the control group were statistically significant. A calculated *t* score of

.234 was the result of the analysis.

The critical value of *t* with 18 degrees of freedom at 95%

confidence level is 2.101, therefore the null hypothesis must not be

rejected. There is not a significant difference between the pretest score of

the experimental group and the control group, therefore these groups were

appropriate to be used to determine if teaching the stop and think strategy

was effective.   21

Table Two summarizes the statistical findings of the analysis of the posttest.

Table 2

Posttest Text Explicit Reading Comprehension Scores

Group	Size	Mean	Degree of Freedom	Standard Deviation
Experimental	10	7.3	18	3.71
Control	10	3.6	18	1.94
Calculated t		2.26		

Critical t (= .05) = 2.101

A *t test* of independent samples was again used to determined whether the difference between the mean posttest scores of the experimental group and the control group were statistically significant. A calculated *t* score of 2.26 was the result of the analysis.

The critical value of *t* with 18 degrees of freedom at 95% confidence level is 2.101, therefore the null hypothesis must be rejected. There is a statistically significant difference between the experimental group that received instruction in a comprehension strategy and the control group that did not receive specific reading instruction.

Interpretation of the Data

The present study was designed to determine whether or not a stop and think reading strategy significantly affected the text explicit reading comprehension of ninth grade students with learning disabilities. An

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experimental group and a control group were both given pretests to determine that they were not statistically significantly different and the groups could be used as a comparison. An analysis of the data indicated that the two groups were not statistically significantly different, for the puropse of forming experimental and control groups.

After the experimental group received instruction in the stop and think strategy, both groups were given a posttest to determine the effectiveness of the strategy. There was a statistically significant difference between the experimental group and the control group in favor of the experimental group. This evidence suggested that the stop and think strategy affected the text explicit reading comprehension of ninth grade students with learning disabilities.

Summary

An analysis of the data from this study indicated that there was a statistically significant difference between the posttest scores of an experimental group and a control group, favoring the experimental group who had received the stop and think strategy instruction. The difference between the scores was not due to chance or error.

Chapter V

Conclusion and Implications

Purpose

The purpose of this study was to evaluate the effectiveness of a particular text explicit comprehension strategy called "stop and think." This strategy teaches students to pause briefly while reading to note in their own words what has happened so far in the reading before they continue. If the students are unable to recall what they have read, they know they need to re-read. The goal of this strategy is to prevent students from reading an entire section and not being able to comprehend what they have read.

Conclusions

Analysis of the data indicated that the implementation of a stop and think strategy was found to improve text explicit reading comprehension of ninth grade students with learning disabilities. These findings, consistent with previous research, support the claims that direct instruction of comprehension strategies facilitates the reading comprehension of students with learning disabilities. The stop and think strategy is very structured, which is beneficial to students with learning disabilities. This strategy may not have been beneficial to ninth grade students without learning disabilities.

The direct instruction of a reading comprehension strategy is a very time consuming process. Students need to receive specific instruction in the use of the strategy and have ample amounts of opportunities to practice

using it. The one instructing students on how to use the strategy needs to continuously evaluate the progress of the students to determine if they are using the strategy effectively. With the current study, the majority of the students needed continuous re-instruction of the strategy before they could start trying to implement the strategy independently.

In addition, informal observations of the students indicated a decrease in motivation and interest level before the students were at the point of using the strategy independently. The goal of the strategy was to help students with their textbook reading, so the selections chosen for practice were from textbooks. Some students complained about the reading selections being "boring" and "stupid." If the students scores were shared with them and they could see improvement, than motivation may have increased.

Implications for Further Research

Further investigation into the effectiveness of strategy instruction to facilitate text explicit reading comprehension is suggested. Though the current study indicated positive effects of strategy instruction for high school students, there is limited research about using strategies with high school or college students. The majority of the research focuses on elementary students or middle school students.

Further review and analysis of strategy instruction with high school students is needed. A more conclusive study would have larger groups of subjects and involve a variety of schools and teachers. The subjects of the current study were all students with learning disabilities. Further research

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would involve students without learning disabilities.

Other studies could implement the strategy instruction within the high school students' content classes. The subjects of the current study were receiving a reading class in addition to their content classes. Researchers could investigate if it was the strategy instruction that improved students' text explicit reading comprehension or if extra exposure to textbook reading influenced scores.

Implications for Classroom Practice

The direct instruction of reading strategies can have a positive effect on reading comprehension. In any classroom time is precious and the implementation, practice and evaluation of any strategy is a time consuming process. When choosing a particular strategy to teach, teachers need to consider the overall needs of that particular class. The strategy must be one the students are willing to work with. Teachers need to be able to keep students motivated in using the strategy until they become proficient in using it independently.

When working with students with learning disabilities, teachers often need to find ways to help them deal with frustration. If these students can learn a strategy that they are willing to use to help them comprehend their textbooks, then they would be less frustrated with homework and their classes. The key to the success of any strategy is the students must be willing to use it on their own.

If the stop and think strategy from this study was again used in a classroom, the teacher might consider only using text explicit reading

instead of starting with narrative readings. The reason for starting with the narrative readings was to keep the student's movtivation high with the interesting readings while they became familiar with the strategy. The transition from using the strategy with narrative readings to text explicit readings was not a problem for most students. The problem was some students became tired of using the strategy before the class moved into using the strategy with text explicit readings. Because of time constraints, the strategy might be able to be implemented directly with text explicit readings.

This study and prior research indicated positive effects of using strategy instruction. Educators should consider using this approach to improve reading comprehension.

Summary

The purpose of this study was to determine the effectiveness of the stop and think strategy on improving text explicit reading comprehension of students with learning disabilities in ninth grade. Half of the subjects in this study received instruction in the stop and think strategy and the other half did not receive instruction. Analysis of the data indicated a statistically significant difference between the experimental group and the control group, favoring the implementation of the stop and think strategy. The results are consistent with other research on direct instruction of strategies.

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Appendix

Text explicit Reading Comprehension Tests

Comprehension Questions

1. When was the Stone Age?

2. When was the Agricultural Revolution?

3. What technological advances did the stone age people make?

4. What is a nomad?

5. What is an archaeologist?

6. What main features do most civilizations have in common?

7. How does cultural diffusion affect civilization?:

8. Define civilization.

9. What is an artisan?

10. What areas of the world were centers of power in 1300?

Comprehension Questions

1. What is culture?

2. What is a nuclear family?

3. What is an extended family?

4. What is monotheism?

5. The chapter covered the major features of a culture, name as many as you can.

6. Describe three elements that give a culture its identity.

7. How are family patterns related to culture?

8. How does religion strengthen a culture?

9. What three basic economic questions must every society answer?

10. What is a dictatorship?