

AN EVALUATION OF THE EFFECTIVENESS OF THE
READING STRATEGY SKETCH-TO-STRETCH ON THE 9TH GRADE
READING TEXAS ASSESSMENT OF KNOWLEDGE & SKILLS TEST

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PREVIEW

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by

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Chapter 1

Introduction to Study

INTRODUCTION

The purpose of the study will be to determine whether a variation of the reading strategy, Sketch-to-Stretch, is an effective tool in assisting high school students on the 9th grade Texas Assessment of Knowledge and Skills (TAKS) standardized multiple-choice reading test. Reading strategies in general have successfully transferred to standardized tests when a teacher incorporates on-going dialogues between students and colleagues, through teacher reflection, incorporating necessary instruction, and through explicit comprehension strategy instruction (Beers, 2003).

The strategy to be tested in this study is known as Sketch-to-Stretch, originally developed by Jerome Harste, Carolyn Burke, Marjorie Siegel, and Karen Feathers. It was the focus of a research study by Marjorie Siegel at Indiana University in 1984 (Short, Harste, & Burke, 1996).

Standardized tests, like the TAKS, typically incorporate multiple choice questions to assess reading comprehension. The importance of returning to the text to answer multiple-choice questions after reading selections is paramount to a student's success. The questions are written at such a level that simply answering questions from memory from a one-time reading could render disastrous results. The ability to skim and scan a reading selection, i.e., to examine or read something quickly, but selectively (Harris & Hodges, 1995), is a necessary skill for students to perform to their maximum capabilities on these types of tests.

At this point it is necessary to define the words "skim" and "scan" to clarify the difference in their meaning. According to Leu and Kinzer (2003), "skimming" is reading rapidly to get a general idea of material that will be reread in detail. The important word here is "reread."

However, “scanning” is defined as reading rapidly to find specific information. Both of these strategies could be used on a test. Skimming takes place before reading to get the gist of what is to be read in detail. Scanning would be used to go back into the text to find specific information that already has been read to answer a question. For the purposes of this study, the word scanning will be used because the students will be encouraged to scan the pictures they draw to assist in locating information.

With the increase in the United States in minimum competency testing designed to measure the lowest level of performance acceptable for a high school diploma (Harris & Hodges, 1995) and in the elementary grades to be promoted, the ability to be successful on these tests is paramount. When these tests are tied to graduation and grade-level promotion, they become high stakes tests. A reading strategy that can help student meet the demands of answering multiple-choice comprehension questions could be an effective tool while taking these tests. The Sketch-to-Stretch strategy may fill that need.

The reluctant reader may be willing to go back and find the necessary information by scanning sketches rather than scanning words to locate needed information.

Description of Sketch-to-Stretch

To understand the variation on the Sketch-to-Stretch strategy, it is important to understand the original version. Sketch-to-Stretch is a strategy that is intended to assist students to go beyond the literal understanding of their reading experiences. It is also intended to help students recognize, share, and accept the diversity of ideas that a piece of literature can generate (Short, Harste, & Burke, 1996). It may also build confidence in a student’s ability to comprehend text and thus encourage students who are non-risk takers to contribute in-depth discussion (Short et al., 1996).

Whitin (1994) defines the Sketch-to-Stretch strategy as a visual representation of colors, lines, symbols, and shapes to convey one's understanding of conflict, character, theme, or emotions in a piece of literature. It is important to understand that this strategy does not depend upon the student's ability to draw. It is about conveying an idea and demonstrating understanding of a text through whatever visual representation the reader chooses to use, whether it is a literal or an abstract rendition of the reader's ideas. Whitin (1994) explained that Sketch-to-Stretch is by nature interpretive since sketches are metaphorical by nature, so it is virtually impossible to have literal retellings.

The Need for a Variation on the Strategy

The idea to develop a variation to the Sketch-to-Stretch strategy to fit the demands of a standardized test seemed reasonable. Critical thinking is paramount while taking a test of this type. Students not only must consider their own interpretation of the text, they must extend their understanding to those of the author of the test through the choices they are given and the text they have read to ascertain the correct answer.

SUMMARY OF LITERATURE REVIEW

Literature Review

To understand the importance of reading strategies used by students at every educational level, this literature review will encompass a definition of metacognition, which is the awareness and knowledge of one's mental processes such that one can monitor, regulate, and direct them to a desired end (Harris & Hodges, 1995). Metacognitive reading strategies encompass the mental processes of metacognition in the development of independent strategic readers.

This literature review also introduces research based reading strategies that are recognized and utilized in the field of reading comprehension. Reading teachers are often reminded that independent strategic readers must be developed. According to Harvey and

Goudvis (2002), strategic reading refers to thinking about reading in ways that enhance learning and understanding. It is more than calling out words accurately with correct pronunciation and appropriate expression.

This review of the Sketch-to-Stretch reading strategy will include a brief description of Dual Coding Theory in which the strategy is grounded, a definition of the strategy, its implementation, and variations on the original format.

Methodology

Chapter 3 includes the way in which the original Sketch-to-Stretch strategy was presented, the methods used to implement the variation on the Texas Assessment of Knowledge and Skills test, and the statistical methodology of analysis of the data.

The sample was a group of 47 students in 9th grade English classes during the 2006-07 academic year. The high school is a 4-year, urban Title I school in a large district in the Southwest with a high percentage of Limited English Proficient (LEP) students. The two classes were comprised of comparable numbers of general education, special education, and LEP students. The scaled scores on the 2005-06 and 2006-07 TAKS reading tests were compared to determine if there was a significant difference between the two groups. Twenty-seven students received explicit instruction in the Stretch-to-Sketch strategy before taking the test, and 20 students with the same instructor received no instruction in this strategy. In addition to the TAKS scores, this study included two attitude surveys to determine students' emotions about reading and about the TAKS test. Students also were polled about what strategies they used during the test.

The hypothesis is that the variation of the Sketch-to-Stretch reading comprehension strategy will assist students in making significant gains on the TAKS test. Analysis of the data collected determined the extent to which this hypothesis is accurate.

Chapter 2

Literature Review

INTRODUCTION

The purpose of this chapter is to provide a literature review of metacognitive reading strategies, instructional reading comprehension strategies, and the specific comprehension reading strategy of Sketch-to-Sketch.

The demands of an information society and the standardized tests that provide students a ticket to higher education and well-paying jobs require highly developed metacognitive thinking processes. However, the term “metacognition” has been used in the educational world in multiple ways with multiple meanings. This study uses the definition by Pressley (2002) -- the knowledge of thinking processes in the here and now and in the future.

METACOGNITIVE READING STRATEGIES

The relationship between cognitive and metacognitive processes becomes apparent during the complex task of deriving meaning from written text. Readers shift from cognitive automaticity to the complex act of metacognition in which readers reflect on their own thinking, make predictions, and alter those predictions according to the information they already possess and what they glean from the text.

Though there is an integration of cognition and metacognition in reading, the power of metacognition lies in the flexibility to solve problems by using more complex and effective strategies (Dominowski, 1998).

The demands of reading illustrate the necessity of well-developed skills in the use of metacognitive strategies. Readers are called upon to understand a variety of texts; this task can be affected by the author’s and reader’s purpose, vocabulary, and/or the subject of the passage. Aesthetic reading is a type of reading in which attention is focused on the reader’s mental state,

the ideas, and the feeling being evoked during the reading (Harris & Hodges, 1995; Rosenblatt, 1978), which may lead to a casual discussion. There may not be a need to call upon any metacognitive strategies. However, when readers are engaged in efferent reading for which they will be held accountable, they can call upon various metacognitive strategies to ensure text comprehension. If the reader is expected to explain the ideas in a format such as an essay or a speech, comprehension levels must increase even further.

It would be appropriate to conclude that metacognition is all about solving problems at various levels. Because the process of problem solving is so commonplace, it is easy to lose sight of the fact that it can be mentally and intellectually rigorous. Metacognitive processing in problem solving includes analysis of problem requirements, solution monitoring, deliberate construction, and evaluation (Davidson & Sternberg, 1998; Dominowski, 1998).

Categories of Metacognition

We cannot assume that this level of thinking is always smooth or even successful. If it were, those students who have not been progressing in their reading skills could be assessed easily, and a precise plan could be developed for remediation in the problem areas. However, there are very few metacognitive experiences when everything is running smoothly (Baker & Brown, 1984).

As in all scientific endeavors, the researcher must take into consideration all the variables at work. Chi (1987) and Hacker (1998a) divided the variables of metacognitive knowledge into three basic categories.

METACOGNITIVE AWARENESS. The knowledge a person has about his or her thinking processes is an intra-individual understanding where he or she becomes aware of personal strengths and weaknesses. An example of this is observed when students recognize their

particular learning preferences and realize that they learn best by hearing rather than viewing information.

Within this category of **intra**-individual understanding is an **inter**-individual understanding in which a person is able to compare himself or herself to other people. This is observable when a teacher adjusts lesson delivery to accommodate as many learning preferences as possible in an instructional unit. Though the teachers may prefer a particular teaching style, such as lecturing to deliver content, they must be aware that the students may not be able to access needed information effectively through the teacher's preferred mode of instruction.

Intra-individual understanding also leads to a universal understanding among people. A person begins to develop the awareness that he or she is not alone in the world and shares like experiences in society with others. The realization that other people may have the same experiences as oneself is developed. A child becomes aware that something can be true because it is part of human nature (Chi, 1987, Hacker, 1998a). A simplistic example of this development may be observed when an individual lends a pen and the pen is not returned. The development of a universal understanding that people do not always return borrowed items may prompt the individual to hesitate before lending in the future.

METACOGNITIVE PROBLEM SOLVING. The second metacognitive category deals with problem solving. Metacognitive maturity allows the individual the ability to analyze a problem, determine solutions that are possible, and plan steps to solve the problem.

This can be observed when a child is given a task to complete. The task may be to read a selection and draw a visual representation of what was read. The student will need to determine the main focus of the selection, determine the style of drawing needed, gather the necessary materials, pre-plan the drawing, and finally engage in the completion of the drawing.

Chi (1987) cautioned against viewing this planning process as an obvious transition in an individual's thinking. Students may not necessarily make the connection between a task and the procedures to accomplish the task. They may be mystified concerning the purpose of any given task (Walker, 2002). Thus, some students are prone to take on a task without any thought to planning. The goal would be to make children aware that there is a need for problem analysis and subsequent planning.

METACOGNITIVE STRATEGIES. The third category that Chi (1987) and Hacker (1998a) explored was concerned with the variability of strategies that must be considered in solving a problem. An individual must choose whether cognitive strategies are sufficient to deal with the problem or whether a metacognitive strategy is needed to ensure absolute confidence that the goal has been achieved.

This process can be observed when a student determines how closely the text must be read for a homework assignment. If the teacher is going to discuss the reading in class, the student may only skim the text, knowing an explanation and details will be provided by the teacher in class. If, however, the student knows an assignment will be given in class based on the reading without discussion by the teacher, the student may use strategies such as rereading, outlining, or group studying to prepare for the assignment.

To summarize, the three categories of metacognitive variables are (a) intra- and inter-individual understanding; (b) problem analysis and planning; and (c) student awareness of the necessary strategies to solve a given problem effectively.

These metacognitive variables do not develop in the same manner or at the same pace in everyone. This can help explain why thinking is very seldom smooth. There are multiple ways to process incomplete or erroneous information. Since humans often err in thinking, the

metacognitive processes must include a monitoring and checking system that will assist in ensuring effective problem solving.

Metacognitive Monitoring and Checking

Hacker (2004) noted that personal awareness, task, and strategy variables work in unison as students learn more about their own thought processes, build knowledge, and store that knowledge to be used again when needed. Chi (1987) and Hacker (1998a) referred to this process as monitoring and checking thinking. Monitoring is knowledge of the current state of a person's memory, and it is continuous. For example, when students are assigned a research paper, they will need to assess what knowledge they already have about the topic, gather more information, and then check the accuracy of the new knowledge against what they know and what others know to ensure the accuracy of their research report. Another example of memory monitoring is when a student is taking a test. There is a need to continuously think about what has been learned to answer the questions on the test.

The effectiveness of metacognitive monitoring may be impaired when an individual has trouble judging difficulty. For example, a child may see another child riding a bike and attempt to ride a bike without any instruction. It appears easy; therefore, it must be easy. Sometimes it is not until children try and fail that they will seek instruction.

Accurate self-efficacy is needed to enable students to predict how well they have learned something; however, they may not be able to determine the difference between minor details and major information. Teenagers may spend a few hours of driving time in an automobile and believe that they have learned enough about driving to venture onto the interstate during peak traffic time in a large city.

The lack of individual metacognitive monitoring could also help explain the many instances when a child or teenager has engaged in inappropriate or risky endeavors, leading to

negative consequences and a response of, “I don’t know,” to an adult’s question of, “What you were thinking?”

Metacognitive checking is operating when a person knows whether the outcome of the problem-solving attempts is correct. Students often do not know that they can check their results to ensure accuracy. An example of this could be learning long division in mathematics. Long division problems can be lengthy and tedious, but a student can perform some checks as he or she works through the problem, and the problem can be checked through multiplication after completion. Either through ignorance of the checking process or by choice, a student would not know if the answer he or she calculated is correct or not ... if checking is not done. Upon completing the problem, the student may simply assume that he or she answered correctly.

SPECIAL CONDITIONS. Metacognitive processes may not be called upon with every thought. Special conditions will elicit the need for this form of rigorous thinking; reading is one such.

The two overreaching purposes for reading are for aesthetic reading in which the reader is not held accountable for the material, and efferent reading in which the attention is focused on abstracting, analyzing, and structuring what is to be retained after the reading (Harris & Hodges, 1995; Rosenblatt, 1978). The act of aesthetic reading does not usually elicit a high-level need for metacognitive skills because it is marked by comfortable reading levels and personally interesting or familiar subject matter. Efferent reading, however, can trigger the need for complex metacognitive reading strategies.

Flavell (1987) and Hacker (1998b) agree that metacognitive processes are necessary when a person’s experiences explicitly demand or elicit the need for their use. Metacognition occurs when a person’s basic cognitive resources seem to be lacking. This may come into play

when someone needs to go beyond completing a rote task. The metacognitive processes are also called upon to justify the conclusion or defend a claim derived from that task.

For example, at about fourth grade the demands in reading shift from learning to read and aesthetic reading to efferent reading. Students will be held accountable for proving their understanding or analyzing information they have read. Writing also shifts from mostly narrative to include technical writing. The student will be expected to write essays, construct short answers, analyze selections, and be tested through standardized tests. These tasks can take the student well beyond aesthetic reading. The importance of metacognitive development becomes more apparent at this time in education.

METACOGNITION AND EDUCATION

Metacognitive processes with impressive outcomes can be cultivated by teachers' thorough instruction, patience, persistence, and flexibility in the initial stages of student development (Flavell, 1987; Hacker, 1998b; Langer, 2004 & Newell, 1972).

At this transitional time, when independent comprehension of text is critical, students need to be taught strategies, such as reading ahead or going back to reread to assist understanding, asking questions, predicting, or making inferences about the text to help them comprehend. Having the skill to teach and model metacognitive strategies is vital to enhancing student understanding, implementation, and internalization of the strategies.

Teaching metacognitive strategies must be presented at the appropriate time for the student to recognize its worth. Attempting to teach a high- level metacognitive reading strategy with reading that is relatively easy for a student could be a failure because the student is unlikely to use the strategy and thus not recognize its worth (Hacker, 2004). For a student to see the need for using a metacognitive strategy to assist comprehension, the reading experience must fall