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Applying Effective Reading Techniques In Content Area Classes

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I'm a history teacher. Why should I use reading strategies? — Learn reading techniques for a math class? Gimme a break!

These comments are typical of the ones heard at the beginning of every semester in my class titled "Improving Reading in the Secondary Schools." This course is required of all candidates for a secondary teaching credential so attendance is not voluntary and, as might be noted from the above comments, not especially desired. Even the body language of my students was telling — many of the students did not want to be there. They were content teachers, not reading teachers. To exacerbate the problem, the class was comprised of both preservice undergraduates and those who were already in the classroom teaching with an emergency credential. I knew that the information I had to present was useful for any content area and I was determined to prove to these students the many benefits of applying reading techniques in all classes. The methods presented in class are interdisciplinary in nature; they are just as useful in a social studies class as they are in an English class.

Effective techniques

Most teachers teach the way that they were taught, and most of us were taught by being lectured to. The practice of

assigning reading, lecturing and then answering the questions at the end of the chapter, while getting the job done, is not a very inspired way to teach. Instead, some of the newer techniques which provide for active class involvement and demand a higher level of thinking by the students are a more effective way of educating secondary students. Two underlying themes predominated in this class for secondary teachers — active involvement and strategies using metacognition. Below is a short discussion of some of the strategies which were used in class to prove the efficacy of using reading strategies in content area classes.

Active involvement. Techniques which encourage the active involvement of students were primarily thought to be best suited to elementary school. I have found that secondary students respond just as well to activities which both mentally and physically involve them to a higher degree than merely sitting in the classroom listening and taking notes. One of the best means to accomplish active involvement is through cooperative learning techniques. Cooperative learning is a "structured experience where students, preferably in groups of two, three, and four, practice learning by using study skills emphasized by the teacher for a particular lesson" (Richardson and Morgan, 1990). Even high school students will participate if they are held accountable for some type of product. Vaughan and Estes (1986) note that one advantage of cooperative learning is there is "an increase in the amount of understanding of ideas; with two people studying a text, the chances are that one of them will understand something that confuses the other. Hence we find again… that the object of study is understanding."

The Jigsaw method. The jigsaw method (Aronson, 1978) is a cooperative learning technique which has proved to be an effective means to promote comprehension of material as well as working to reduce the anxiety of some students who

are intimidated by the length of required reading. In Jigsaw, students are assigned to teams of four to six members. Academic material is broken down into as many parts as there are members of the team, with each member being assigned a particular section. Members of the different teams who have the same section form expert groups and study together. Experts then return to their teams and teach the section to that group. A quiz on the entire set of material is often given to the class following the cooperative study. The only way students can do well on this quiz is to pay close attention to their teammates' sections: therefore students are more motivated to support and show interest in each other's work.

Figure 1
Anticipation/reaction guide: Social studies

Read the statements below carefully. In the "Before reading" column, check those statements with which you agree. After reading the selection, re-read the statements and check those with which you still agree in the "After reading" column.

**BEFORE   AFTER
READING   READING**

_____   _____   1. Fidel Castro's rise to power was based primarily on the business and professional classes alienated by President Batista.

_____   _____   2. Castro's political philosophy was originally based on ideas of Marxist-Leninist thought.

_____   _____   3. Castro was greatly admired by the United States when he came to power.

_____   _____   4. United States intervention in Cuba had little or no effect on Castro's political beliefs.

Anticipation/reaction guides. These guides are another means of getting students to become more actively involved with their reading. An anticipation/reaction guide consists of a series of statements to which students must respond individually before and after reading the text.   Anticipation/reaction guides help activate thought about the content before students begin reading and then allows students to use the knowledge gained from reading to validate or reformulate their earlier predictions (see Figure 1).

Metacognition. Metacognition is usually defined as thinking about thinking. It involves the knowledge and control individuals have over their own thinking and learning activities (Baker and Brown, 1984). Skilled readers are aware that different types of reading demand different strategies. When they come to a word or a concept that they don't understand, they have a variety of strategies at hand to help them solve their problem. Poor readers, however, do not have such an arsenal of strategies. They usually know one technique and try to apply it in all situations (Paris and Myers, 1981). Metacognitive strategies can be taught. Fitzgerald (1983) suggests that the development of metacognition can be enhanced if students 1) watch the teacher model comprehension monitoring; 2) rate their own confidence in what they've read; 3) rate the adequacy of instruction; 4) question themselves while reading; and 5) use some type of question-answer relations technique to find where the answer lies. Two strategies I present to my students which encourage metacognitive thinking are the *What I know* chart and *Self-questioning* techniques.

What I know charts. Mary Heller (1986) suggests using a chart (see Figure 2) as a structured procedure for modeling metacognitive strategies in content area classrooms.   The *What I know* chart is made up of three columns to help students differentiate between their previous and new

knowledge and to help determine what it is they still need to know about a topic.

Figure 2		
What I know chart		
TOPIC:	Earthquakes	
PURPOSE QUESTION:	What is the cause of earthquakes?	
A *What I already knew*	**B** *What I now know*	**C** *What I don't know*
Earthquakes are associated with faults.	Energy waves released by earthquakes are detected by a seismo-graph.	How do *P* waves differ from *S* waves?
Earthquake magnitudes are measured by the *Richter Scale*.	The epicenter is the point on the surface directly above the focus of an earthquake.	What is a *tsunami*?
Earthquakes can be destructive.	Three kinds of earth-quake waves are 1) a compressed wave, 2) a shear wave, 3) a Ray-leigh wave.	Can earthquakes be predicted?

Self-questioning. Encouraging students to raise questions such as *What is the main idea of this selection?* and *Is there anything I don't understand in this paragraph?* is a way of encouraging metacognition (Tierney and Cunningham, 1984). Teachers can teach students to generate different types of questions (literal, inferential, critical, and creative), by modeling these in their oral discussions. Students can work individually, in pairs, or in small groups to formulate these types of questions (Roe, Stoodt, Burns, 1991).

Conclusion

The techniques and strategies mentioned above have been singled out by members of my class as being responsible for their change in attitude about the use of reading

techniques in the content area. Many students came up to me at the end of the semester and told me that they were one of the ones who didn't believe that the knowledge and application of these strategies could be beneficial in a math, physical education, or history class. They said, however, that they had completely changed their minds and were eager to try out some of the techniques presented in class. They realized that no matter what the subject area, the students had to be able to read the text in order to comprehend the material. Using a variety of techniques which keep the students more actively involved with their reading, increase the likelihood that they will master their content area material.

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