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ABSTRACT

Teachers can confront issues of students' infrequent reading and infrequent choice of content area texts by using specific instructional strategies that are highly motivating. Five research-based language arts strategies that many teachers use to successfully teach content area information are: (1) previewing vocabulary and content; (2) developing questions as guides to comprehension; (3) using realia, concrete objects, and manipulatives; (4) retelling and summarizing; and (5) creating visual representations. Underlying all of these activities is the assumption that students have access to a lot of books and are provided time and encouragement to read. (Contains 20 references.) (RS)

Diane Lapp, Douglas Fisher & James Flood

Integrating the Language Arts and Content Areas: Effective Research-Based Strategies

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As a self-contained classroom teacher, your "teaching load" is often quite "heavy" because it includes language arts as well as the content areas of science, math, social studies, art, music, and PE. Fortunately, each of these areas invites students to read, write, listen and communicate as they learn, but unfortunately, many students report that they infrequently read in their classrooms (Lapp, Flood, & Farnan, 1996). For example, 56% of the 13-year olds surveyed in the National Assessment of Educational Progress (1997) indicated that they read ten or fewer pages per day of content area material in school and for homework. Ley, Schaer, and Dismukes (1994) also noted that children rarely chose to read content area (information) texts on their own.

We believe that teachers can confront these issues of infrequent reading and infrequent choice of content area texts by using specific instructional strategies that are highly motivating. In this column, we present five research-based language arts strategies that many teachers use to successfully teach content area information.

Strategy 1: Previewing Vocabulary and Content

Students have a much easier time learning new content when they understand the language of the text. Researchers have suggested that while teachers can address vocabulary instruction in many ways (Graves & Slater, 1996; Readance, Bean, & Baldwin, 1992; Wood, 1996), the following two strategies are very successful.

1. Clarify concepts through discussion. Teachers and students together preview words in context. For example, the teacher might say, "Open your social studies textbook to page 89 and read along with me as I read it aloud." When finished, the teacher converses with the students about the information in the paragraph as well as any target words that may not be totally known by students. For example, the word "distribution" may be a difficult word in the paragraph. The teacher may say, "If corn and cotton can be distributed to people across the United States for their use, what do you think 'distribution' means?" This may be followed by, "Are there things that you think could be given out or distributed in our classroom?" When the students understand the word, the teacher relates the word to other words with similar meanings such as share, portion, and quota. This helps students see relationships between words.

2. Getting meaning of unknown words through brainstorming, conversing, and multiple sources. A second way that teachers can easily assist students in understanding vocabulary is by:

- Presenting the target word and asking students to brainstorm about the meaning. For example, in a sixth grade class the teacher taught the target word *spondylolisthesis* because she knew it was going to appear in a science reading that the students would encounter. She did this by:
  - Asking students to share their definitions and to tell what part of the word influenced their definition. For example, one student wrote that the word *spondylolisthesis* meant spontaneous writing or writing a thesis.
  - Sharing the word in context. For example, it was discovered that the chronic back pain that Linda was having was due to spondylolisthesis.
  - Asking students to revisit their definitions to confirm or revise. For example, the student above deleted the references to writing and added ideas about back pain.
  - Checking the dictionary for the definition. For example, spondylolisthesis means forward slippage of the lower lumbar vertebrae on the sacrum. When the dictionary also contains unknown words, it is important to use less difficult resources such as books with pictures and diagrams or another person.

Strategy 2: Developing Questions as Guides to Comprehension

Working with students to create a series of questions to answer as they read the text helps focus their reading for specific information (Anthony & Raphael, 1996; Raphael, 1982, 1986). This may be as simple as having students read the end of chapter questions prior to and throughout the reading of the chapter. This helps students focus, chunk, summarize, and synthesize the newly acquired information.

If there are no "end of unit" questions, teachers and students should create several questions that will focus the students' reading. These may be developed during the "what I want to learn" part of the KWL (Ogle, 1986, 1996) or by changing text subheadings into questions. For example, in a third grade class in the study of a Native American culture unit that required students to access a number of text sources beyond the target textbook, the teacher used the KWL strategy to create a set of questions. These were questions that members of the class were very interested in, including "Why did they live in teepees," "What did they eat," "Who was the President of the Indians," and "Where are they now?" As students found information in their various texts, they recorded it in their journals. Periodically throughout the unit, the teacher held discussions on the questions and allowed students to share "what they had learned" thus far.

Strategy 3: Using Realia, Concrete Objects, and Manipulatives

Researchers from Dewey to contemporary educators have suggested that "hands-on" experiences are invaluable. Students learn more vocabulary and content when they can touch and see information (Peregoy & Boyle, 1997; Roney, 1994). Many teachers use real objects in their lessons to demonstrate vocabulary and meanings. For example, concrete objects and manipulatives are used during math and science (Christ, 1995). For example, many teachers have their students grow bean seeds to learn about plants. Using realia, or objects that represent the topic of study, can also increase understanding. This

strategy is also very helpful for students who are second language speakers. For example, in a recent gold rush unit, the fourth grade teacher transformed an area in the classroom into a mining town. There were old photos, period clothing, gold pans, gold painted rocks for nuggets, and a covered wagon. This helped the students to gain insights through experience. When they encountered terms from the old west, such as gold pan, nugget, and wagon in their social studies book and the novel *Sarah, Plain and Tall* (MacLachlan, 1985) the words were familiar. It had become a part of their schema because they had touched and discussed the concrete objects.

Strategy 4: Retelling and Summarizing

Asking students to retell or summarize a text has many benefits (Carr & Ogle, 1987; Marshall, 1996). First, retelling requires students to read for detail and meaning. Students come to understand that reading is important and that they will be asked about the content as well as their reaction to the text. Second, teachers can assess comprehension during retellings. Students who understand the material are able to resequence events, recall details, and make inferences and connections. Third, teachers can quickly check students' literacy processes such as grammar knowledge, voice pitch, and fluency. There are a number of retelling inventories available in the professional literature (for example, see Lapp, Flood, Fisher, & Cabello, in press).

Strategy 5: Creating Visual Representations

Visual representations of complex ideas help students organize information. Developing concept or semantic maps is one strategy used by teachers because it provides insights about students knowledge about the topic (Armbruster, 1996; Irvin, 1998). Typically the main idea is placed in the center of the paper with a small circle drawn around it. Then lines are drawn from the circle to ideas that connect with the main idea. As you can imagine, there can be several sub-ideas to a main idea, and each sub-idea can have branches of ideas from it. For example, a class was studying the environment. One day the teacher asked each student to take out a piece of paper and write inside a small circle the words "ways to save the environment." The students were then asked to brainstorm lots of ideas that were connected to their main idea. Following this brainstorming, students were asked to transform their concept map into a three-paragraph paper. In addition to concept maps, teachers use art, illustrated vocabulary, videos, and computer websites to assist students in creating visual representations (Flood, Heath, & Lapp, 1997).

Conclusions

These are a few of the many strategies that have been successfully used with students to enhance content area reading. Underlying all of these is an assumption that students have access to lots of books and are provided time and encouragement to read. While research provides us with many well-developed strategies and successful interventions, we have selected only a few that are "tried and true" to share with you.

References

Anthony, H.M., & Raphael, T. (1996). Using questioning strategies to promote students' active comprehension of content area material. In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 307-322). Needham Heights, MA: Allyn & Bacon.

Armbruster, B.B. (1996). Considerate texts. In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 47-57). Needham Heights, MA: Allyn & Bacon.

Carr, E., & Ogle, D. (1987). KWL Plus: A strategy for comprehension and summarization. *Journal of Reading, 30*, 626-631.

Christ, G.M. (1995). Curriculums with real-world connections. *Educational Leadership, 52* (8), 32-35.

Flood, J., Heath, S.B., & Lapp, D. (Eds.). (1997) *Handbook of research on teaching literacy through the communicative and visual arts.* New York: Macmillan.

Graves, M.F., & Slater, W.H. (1996). Vocabulary instruction in content areas. In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 261-276). Needham Heights, MA: Allyn & Bacon.

Irvin, J.L. (1998). *Reading and the middle school student* (2nd ed.). Boston: Allyn & Bacon.

Lapp, D., Flood, J., Fisher, D., & Cabello, C. (in press). An integrated approach to the teaching and assessment of language arts. In J. Tinajero & S. Hurley (Eds.), *Literacy assessment for bilingual learners*. Boston: Allyn & Bacon.

Ley, T.C., Schaer, B.B., Dismukes, B.W. (1994). Longitudinal study of the reading attitudes and behaviors of middle school students. *Reading Psychology, 15*, 11-38.

MacLachlan, P. (1985). *Sarah, plain and tall*. New York: HarperTrophy.

Marshall, N. (1996). The students: Who are they and how do I reach them? In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 79-93). Needham Heights, MA: Allyn & Bacon.

National Assessment of Educational Progress. (1997). *Report in brief: NAEP 1996 trends in academic progress*. Washington, DC: Author.

Ogle, D. (1986). KWL: A teaching model that develops active reading of expository text. *The Reading Teacher, 30*, 364-370.

Ogle, D. (1996). Study techniques that ensure content area reading success. In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 277-290). Needham Heights, MA: Allyn & Bacon.

Peregoy, S.F., & Boyle, O.F. (1997). Reading, writing, and learning in ESL: A resource book for K-12 teachers (2nd ed.). White Plains, NY: Longman.

Raphael, T.E. (1982). Question-answering strategies for children. *The Reading Teacher, 36*, 516-522.

Raphael, T.E. (1986). Teaching question-answer relationships, revisited. *The Reading Teacher, 39*, 516-522.

Readance, J., Bean, T., & Baldwin, R. (1992). *Content area reading: An integrated approach* (4th ed.). Dubuque, IA: Kendall-Hunt.

Roney, M.W. (1994). Moving beyond the trick of the trade, or using common, everyday items as realia. *Hispania, 77*, 298-300.

Wood, K.D. (1996). Preferred instructional practices in content areas. In D. Lapp, J. Flood, & N. Farnan (eds.), *Content area reading and learning: Instructional strategies* (pp. 415-426). Needham Heights, MA: Allyn & Bacon.

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