Teaching Reading Comprehension through Content Areas

Summary: While integrating reading and content subjects such as science and social studies is often a goal, precise strategies for enhancing reading comprehension through content area instruction can remain elusive. In an article for the *Journal of Educational Psychology*, a group of researchers from Columbia Teacher's College discuss specific ways to do just that.

Practical Applications

The authors focused their study on 2nd graders with the goal of enhancing students' skills in comparing and contrasting through explicit instruction using science texts about animals. Additionally, the authors wanted to see if students were able to extend those compare/contrast skills with minimal instruction to comprehension of pro/con clue words. The authors had teachers utilize the following system of instruction:

- 12 lessons in 22 sessions (45 minutes each) over two months
- The first two lessons focused on introducing the genre, purpose for non-fiction, and distinguishing between compare/contrast paragraphs and descriptive paragraphs
- Lessons 3-9 focused on the "compare-contrast structure" and clue words by using two of five target animals chosen for being popular with students, having readily accessible texts about them, and representing a different category of vertebrae (e.g. mammal, bird)
- Lessons 10-12 had mixed structure paragraphs with both compare/contrast statements and pro/con clue words, and included five new animals

For each lesson, teachers followed this structure:

- Reviewing compare/contrast clue words (e.g. alike, both, however), and in lessons 10-12 reviewing pro/con clue words (e.g. bad, advantage)
- Teacher-led reading of trade books followed by class discussion
- Vocabulary development [lesson-specific]
- Student reading of the target compare/contrast paragraph followed by teacher re-reading
- Student analysis of target paragraph, with coloring of different clue words and discussion of the differences/similarities between the animals
- Graphic organizer in a matrix style to compare/contrast animal characteristics
- Compare/contrast questions from the teacher
- Student summary using a paragraph frame
- Lesson review

All told, at the end of the cycle, compared both to groups of students receiving no additional instruction and students receiving instruction on the science content but no instruction on reading comprehension or text structure, the students getting this intervention did *significantly* better in nearly all reading comprehension measures – averaging a 73% on a post-test of locating pro/con clue words versus 5% and 6% for the other student groups, for instance – and did equally as well on comprehending the content as the students who focused solely on the content.

Conclusion and Citation

Strategically planning to target specific reading comprehension skills through other content areas can have a tremendously positive effect.

Williams J., et. al. "Embedding Reading Comprehension Training in Content-Area Instruction." Journal of Educational Psychology, 101.1 (2009), pp. 1-20.