Research: The FIRST-Letter Mnemonic Strategy

Overview
This study investigated the effects of instruction in the FIRST-Letter Mnemonic Strategy on students’ performance with regard to remembering lists of information. For example, the steps of the scientific process constitutes a list of information. The FIRST-Letter Mnemonic Strategy involves the use of several first-letter devices including (1) using the first letters of the items in the list to form a word, (2) inserting a letter among the first-letters to form a word, (3) rearranging the letters to form a word, (4) creating a sentence using the first letters of the items in the list as the first letters of words in the sentence, and (5) using combinations of the first four devices. A multiple-baseline across-students design was used, with two students in each repetition of the design. Six students with LD in grades 10 and 11 participated.

Two types of tests were given to the students. For the first type of test, which was administered before and after instruction, students were given a piece of paper on which three lists were printed. These lists had been derived from textbooks written at the 5th-grade level, and the tests containing them will hereafter be referred to as “ability-level tests.” Each list had a heading and four items related to the heading listed underneath the heading. Students were given time to study the lists and were told that they would have a test over the information on the next day. On the next day, they took a test with three items on it. Each test question asked them to name the items in one of the lists they had studied (e.g., “Name the four types of spiders”).

For the second type of test, which was also administered before and after instruction, students were given a piece of paper with four lists that had been derived from textbooks in the courses the students were currently taking (hereafter referred to as “grade-level tests”). However, the students had not yet had instruction over the information in class. Again, each list had a heading and four items that were related to the heading. The students were given time to study the information, and on the next day, they were asked to take a test over the information. All of the tests required the student to write the answer to each question (i.e., the items used an open-ended format). Thus, students had to know the information and write it on the test versus recognize or guess an answer.

Results
The results showed that the students learned to use the strategy quickly, requiring just a few practice trials on each type of first-letter device. During baseline, they earned a mean score of 53% on the ability-level tests and a mean score of 51% on the grade-level tests. After instruction, they earned a mean score of 95% on the ability-level tests and a mean score of 85% on the grade-level tests.

Conclusions
This study showed that high school students with LD could master a strategy for studying for tests containing information in list form. After using the strategy, they were able to perform, on average, at the “B” level on the tests that were constructed from information derived from grade-level textbooks.

Reference