Mnemonic Strategies

Why Is This Strategy Useful?

Mnemonic strategy is a memory-enhancing instructional practice that uses keywords and visual cues to link new information to information the students already know. All students benefit from mnemonic strategies, with a greater improvement seen in students with learning disabilities. Mnemonic strategies improve students’ retention and ability to learn vocabulary words.

Description of Strategy

For each new vocabulary word, the teacher establishes a keyword (a familiar, acoustically similar proxy for the vocabulary word) and creates an interactive picture in which the keyword and the meaning of the vocabulary word are linked. The teacher introduces a vocabulary word, the definition, the keyword, and the illustration to the students. When asked to produce the vocabulary word’s meaning, the student is prompted to (a) think of the keyword, (b) think of the picture, (c) remember what else is happening in the picture, and (d) retrieve the answer. Initially the teacher guides students through the process, and as the students’ proficiency with the process improves, the students learn to use prompts independently. Mnemonic strategies are used in a number of settings, including inclusive classrooms and special education classrooms, and can be used with any age group. Research indicates that the use of the keyword method improves students’ immediate retention. However, additional practice is necessary to sustain long-term retention.

Research Evidence

At least four experimental studies documents in two articles support this strategy. The first study implemented a mnemonic strategy with 10th-grade students with learning disabilities who were in a self-contained special education English class. Findings showed statistically significant positive effects for vocabulary recall in the mnemonic condition. A second study included a series of three scenarios that looked at the long-term effectiveness of mnemonics. Participants were 176 students from a general psychology class. Findings showed statically significant positive effects on immediate vocabulary recall but also found a greater degree of long-term forgetting associated with keyword mnemonics compared to non-mnemonic strategies. When students practiced the words three or five times, long-term retention was higher than when the words where rehearsed two times.

Sample Studies Supporting This Strategy


A teacher wanted to know whether mnemonic strategies would be useful for high school students with learning disabilities. Over a 6-week period, this teacher taught the students SAT vocabulary words using either a traditional instructional approach or pictorial mnemonic keyword strategies she had developed. At the end of the instructional period, the students had learned 92% of the words under mnemonic instruction but only 49% of the words under the more
traditional approach. Implications for vocabulary instruction of high school students with learning disabilities are discussed.


Three experiments assessed the long-term effectiveness of the keyword mnemonic relative to a nonmnemonic (i.e., semantic-context) learning strategy. Following incidental-learning instructions, cued recall was assessed either immediately or after a 2-day delay. The keyword mnemonic produced superior immediate performance relative to the semantic-context strategy. However, after 2 days, there was a marked reversal in performance, with higher levels of delayed recall associated with semantic-context learning. This pattern of findings was obtained when obscure English words (Experiment 1) and second-language vocabulary (Experiment 2) were the learning stimuli. When practice frequencies were manipulated (Experiment 3), increased opportunities for study were more likely to boost the long-term retention of keyword learners compared with semantic-context learners. The implication is that keyword-based memories are especially fragile over time and will benefit from repeated testing and rehearsal.

**Sample Activity**


To teach students the definition of the new word, the teacher will ask the students to remember the keyword, envision the picture and how it relates to the definition, and finally recall the definition. If a teacher is trying to teach her students the definition of the old English word *carline*, she will first identify a good keyword. In this instance, “car” is appropriate because it is easy to represent visually and it sounds like the first part of the vocabulary word. *Carline* means “witch” so the teacher shows the students a picture of a car with a witch sitting in it. When asked to recall the definition of *carline*, students engage in a four-step process:

1. Think back to the keyword (car),
2. Think of the picture (a car),
3. Remember what else was happening in the picture (a witch was in the car), and
4. Produce the definition (witch) (Scruggs & Mastropieri, n.d., p. 2).

**Additional Resources**

