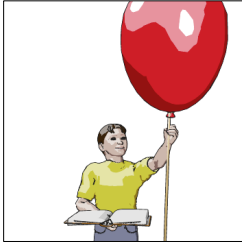


## *Keywords: A Memorization Strategy*

**Description:** In this mnemonic (memorization) technique, students select the central idea of a passage and summarize it as a 'keyword'. Next, they *recode* the keyword as a mental picture and use additional mental imagery to *relate* other important facts to the keyword. They can then recall the keyword when needed, *retrieving* the related information.



Reserve at least a full instructional session to introduce this comprehension strategy. (For effective-teaching tips, consult the guidelines presented in “*Introducing Academic Strategies to Students: A Direct-Instruction Approach*”).

### **Materials:**

- Overhead transparencies of sample passages taken from expository texts, transparency markers
- Student copies of *Memorizing Facts: The Keyword Strategy* and practice expository passages (optional) or text books

### **Preparation:**

- Prepare overheads of sample expository passages.
- Review the procedures in the worksheet *Memorizing Facts: The Keyword Strategy*

### **Intervention Script:**

1. Tell students that a good way to remember lots of facts is to use keywords. With the keyword approach, students:
  - highlight important facts or ideas in a passage
  - write a “gist” sentence that summarizes the highlighted ideas or facts
  - select a ‘keyword’ that will help them to recall a central idea about the article or passage.
  - create a mental picture to remember the keyword, and then
  - add details to the mental picture or create a story around the keyword to memorize additional facts or ideas.

If you have *younger* students (e.g., 5<sup>th</sup> grade or below), read through several sample passages with the group. Then display a drawing or collage that represents your own representation of the passage’s main ideas as mental imagery. Using a “think-aloud” approach, explain the mental imagery of the picture and show how it encapsulates the

main facts of the original passage. Show students how they can more easily recall facts using this approach.

If you have *older* students (e.g., 6<sup>th</sup> grade or above), read through several sample passages with the group. Write a description of the mental imagery that you used to memorize the keyword and related facts. Using a “think-aloud” approach, explain the mental imagery of your keyword and related story and show how the imagery encapsulates the main facts of the original passage. Show students how they can more easily recall facts using this approach.

2. Pair students off and give them a sample passage. Assign each pair of students to:
  - identify the main idea of the passage
  - write a “gist” sentence to summarize the passage’s main idea and related important facts
  - select a keyword based on the main idea
  - write out a description (or draw a picture) of the mental imagery that they will use to recall the main idea and important facts of the passage.
3. When students are able to use the keyword strategy independently, have them use the technique when reading through expository passages. Monitor students’ use of the method and their accuracy in recalling key facts. Conference individually with those students needing additional guidance and support.

**Tips:**

**Encourage Students to Share Helpful Keyword Examples With Peers.** Your students will probably come up with clever and memorable ways to recall information using the keyword strategy. Note any students who do especially well at memorizing complex information and invite them to share their mnemonic strategies with other students.

**References:**

Levin, J.R., Levin, M.E., Glasman, L.D., & Nordwall, M.B. (1992). Mnemonic vocabulary instruction: Additional effectiveness evidence. *Contemporary Educational Psychology, 17*, 156-174.

Levin, J.R., Shriberg, L.K., & Berry, J.K. (1983). A concrete strategy for remembering abstract prose. *American Educational Research Journal, 20*, 277-290.

Peters, E.E. & Levin, J.R. (1986). Effects of a mnemonic imagery on good and poor readers’ prose recall. *Reading Research Quarterly, 21*, 179-192.

## Memorizing Facts: The Keyword Strategy

In most of your school courses, you are probably expected to remember lots of important facts and ideas. One useful method that can help you to do a better job of memorizing facts is called the ‘keyword’ strategy. With this technique, you:

- highlight important facts or ideas in a passage
- write a “gist” sentence that summarizes the highlighted ideas or facts
- select a ‘keyword’ that will help you to recall a central idea about the article or passage.
- create a mental picture to help you to remember the keyword, and then
- add details to the mental picture or create a story around the keyword to memorize additional facts or ideas.

The keyword strategy can seem a bit silly when you first try it—but it works! Here are the main steps of the keyword strategy—along with two examples:

- **Step 1: Read a passage from a textbook or article and highlight the most important ideas or facts.** The first trick in effective memorization is to decide what facts are important enough to remember. Read the passage carefully and note what ideas, terms, or phrases are most important. Highlight only these important ideas.

Here is a sample passage from a history text. The student has read through the passage and highlighted the main points (underlined text):

“Long before the start of the classical period, Greeks had spread beyond the limits of Old Greece. After the great migrations to the coasts of Asia Minor and the Aegean Islands (c. 1000-800 BC) there were extensive colonizing movements, in which settlers from individual Greek cities founded a new city either in a different part of Greece or in a barbarian land. The main colonizing age lasted from the eighth century to the sixth century BC, although colonies were still being founded in the classical period”

--from Hooker, J.T. (1995). Hellenic Civilization. In A. Cotterell (Ed.) *The Penguin encyclopedia of classical civilizations* (pp. 1-40). London: Penguin Books.

- **Step 2: Write or think about a summary (“gist”) sentence that captures the important ideas of the passage.** The “gist” sentence reduces the original passage to the bare essentials—just the information that you want to memorize.

In our example, the student wrote a “gist” sentence that sums up the central facts from the longer passage on the movement of peoples in ancient Greece:

*The Greeks spread beyond the limits of Old Greece, migrating first to Asia Minor and the Aegean Islands and later founding new cities in other parts of Greece or*

*in barbarian lands.*

- **Step 3: Write (or think of) a keyword that provides a mental picture to represent a main idea in the passage.** Add details to the mental picture or create a story around the keyword to memorize the facts or ideas. (Feel free to use silly keywords or stories, as silly examples can stand out and be easier to recall.)

In our example, the student selected the keyword “old geese” (to represent the term “Old Greece” that appears in the original passage). The student then weaves a story around the keyword to make it easier to remember the main facts of the passage:

*A flock of old geese [keyword: represents Old Greece] left their pen [“great migrations”] and flew off to a tiny Chinese restaurant [Asia Minor] on a giant island [Aegean Islands]. There the geese found an undiscovered city [founded new cities], filled with other geese [“in a different part of Greece”] and cavemen [“or in a barbarian land”].*

In the next example, the student uses the keyword strategy to remember facts from a textbook on natural ecology:

- Step 1: Read a passage from a textbook or article and highlight the most important ideas or facts.

“Three major classes of processes cause the cycling of carbon in aquatic and terrestrial systems. The first includes the assimilatory and dissimilatory reactions of carbon in photosynthesis and respiration. The second class includes the physical exchange of carbon dioxide between the atmosphere and oceans, lakes, and streams. The third type of process that drives the cycling of carbon consists of the dissolution and precipitation (deposition) of carbonate compounds as sediments, particularly limestone and dolomite”

--from Ricklefs, R.E. (1993). *The economy of nature*. (3<sup>rd</sup> ed.) New York: W.H. Freeman

- **Step 2: Write or think about a summary (“gist”) sentence that captures the important ideas of the passage.**

*Carbon cycles through ecological systems in three ways: (1) photosynthesis and respiration, (2) physical exchange between the atmosphere and bodies of water, and (3) depositing or dissolving of mineral sediments such as limestone.*

- **Step 3: Write (or think of) a keyword that provides a mental picture to represent a main idea in the passage.** Add details to the mental picture or create a story around the keyword to memorize the facts or ideas.

*A man on a sooty bicycle [keyword: represents “carbon cycles”] rode into a*

*greenhouse* [“photosynthesis and respiration”]. *The man put on an air tank and jumped into a pool of water* [“physical exchange between atmosphere and bodies of water”], *where he chiseled limestone off the bottom of the pool* [“depositing or dissolving of mineral sediments such as limestone”].