Active Study
Back on Track

• **Introduction**
  Learning takes time. Very few people have photographic memories. Learning requires repetition—meaningful repetition. This is why active study techniques are so vitally important. The "recording disk" of the brain accepts new material much faster if it "hears," "sees," "feels," "tastes," and detects motion (kinetic energy) during input or recording time. Then too, the more times around the learning circuit, the longer lasting the impression. If you are able to place abstract ideas into diagrammatic form, you will remember the concept.

• **Mnemonics**
  Material that is difficult to master can be organized by finding the key words in each point, noting the first letter, and arranging the letters into a sense or nonsense word (the sillier, the better). Examples:
  • What are the qualities of a scientist? (mnemonic answer: PIPOC)
    P erserverance
    I ntelligence
    P atience
    O riginality
    C uriosity
  • Why did the U.S. enter World War I? (mnemonic answer: SPRENCZ)
    S ubmarines, Germans lifted restrictions on use of
    P ropaganda, British control of
    R ussians overthrew the tsar
    E conomic ties of U.S. with Britain and France
    N eutrality, German violations of U.S.
    C ultural ties with Britain
    Z immerman telegram

  Note: in example 2, the student has devised a mnemonic based on key words. If you have a basic understanding of each point, you ought to be able to write a complete essay from the mnemonic SPRENCZ. Example 1, however, represents the type of mnemonic a student could use to learn a short list of items for an objective test. If you need to memorize a long list of items such as the states in the union, alphabetize and learn in small "chunks." You can always depend on the alphabet. Break down a list, rearrange, put on a study card and master. In the example of learning the states in the union, it is easier to remember that there are four states whose names begin with "A," no "Bs," one "D," etc., then to try to memorize the list.

• **Study Cards**
  In printing study cards, the student is using kinetic energy (energy in motion), thus making the impression stronger on the brain, and the student will be able to use the cards for overlearning. Another reason for having students make study cards is that they are convenient to carry and flip through for mastery. Reading the cards silently, however, is too passive. Go over the cards orally. A student will not master the cards by passively reading them. Learning requires the expenditure of energy. The student must be actively engaged in producing the sounds, using muscles and burning energy to make the sound.

Adapted from: Ann Algier, Everything You Need To Know About Learning
• **Memory**
  - General points to consider
    - The student must focus his or her attention on whatever needs to be remembered. If you intend to remember something, you probably will.
    - The student must be "sold" on the course. Why is this subject worth knowing? Correlative reading may enhance the student's interest. For example, historical novels are a marvelous way to learn history. The greater the knowledge, the greater the interest.
    - Help the students classify and associate. Many authorities feel that you will master information faster if you learn in groups of seven or fewer at a time.
    - Have the students overlearn through repetition.

  - Association is a key to memory:
    - You remember approximately 10 percent of what you read.
    - You remember approximately 20 percent of what you hear.
    - You remember approximately 30 percent of what you see.
    - You remember approximately 50 percent of what you hear and see together.
    - You remember approximately 70 percent of what you say (if you think as you are saying it).
    - You remember approximately 90 percent of what you do.