Conclusions drawn from learning and memory retention research which are applicable to adult learning are provided in this brief review. Findings indicate that: (1) teaching methods which stimulate the widest variety of senses will generally be the most effective; (2) the greater the degree to which a student participates orally, the greater the amount of retention; and (3) if students do not participate during the first two weeks, they generally will remain silent for the entire semester. Seven characteristics of adult learners which should guide instructional planning are then listed, followed by descriptions of five basic laws of learning which have direct application to the success or failure of instructors. (DC)
A REVIEW OF FINDINGS FROM LEARNING AND MEMORY RETENTION STUDIES

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A REVIEW OF FINDINGS FROM LEARNING AND MEMORY RETENTION STUDIES

Whether an instructor of adult learners is teaching for the first time or is a classroom veteran, there is value in reviewing factors which lead to effective instruction. Experts generally agree we cannot "pour" information into the heads of adults. The lecture method is fine when accompanied by a variety of other stimulating activities, but should not be the sole method of presenting information.

Studies in memory retention indicate that persons retain:

- 10% of what they read
- 20% of what they hear
- 30% of what they see
- 50% of what they see & hear
- 70% of what they say
- 90% of what they do & say

Conclusion: Methods which stimulate the widest variety of senses will generally be the most effective.

Two other items relating to memory retention are worthy of noting: (1) Generally, the greater the degree to which a person participates orally, the greater the amount of retention; and (2) If a student doesn't participate during the first two weeks of the semester, she generally will remain silent for the entire semester. These factors indicate students should be encouraged to participate frequently and instructional methods should include planned activities for the participation of all class members early in the semester.

Experts in educating adults also indicate a number of characteristics of adults which should guide instructional planning:

1. Adults are impatient with long lectures.
2. Adults like to see theory applied to practical problems.
3. Adults are generally not a captive audience; if they don't like what they are getting, they are inclined to leave.
4. Adults are accustomed to being treated as mature persons; they resent having instructors talk down to them.
5. Adults enjoy having their talents and information made use of in a teaching situation.
6. Adults can, through middle age and well beyond, learn as well as younger students--and are frequently better motivated.
7. Adults are sometimes fatigued when they attend classes; therefore, they appreciate any teaching devices which add interest and a sense of liveliness--a variety of methods, comfort breaks, audio-visual aids, change of pace, sense of humor, etc.

There are five basic laws of learning which appear to have direct application to the success or failure of instructors:

- **Law of Effect:** This law means that people will accept and repeat responses that are pleasant and avoid those that are annoying. If an adult enrolls to learn a new skill and quickly finds that he is learning and enjoying, he will probably keep attending... and he will enroll in additional classes. "Success breeds success" is more than a cliche.

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Law of Primacy: This law emphasizes the fact that first impressions are vital and lasting impressions. The instructor who puts this law into practice will make this first class session an outstanding one, one so interesting and stimulating that adults cannot wait to return. Unfortunately, too many instructors have as their “highlight” of the first evening, “Well, we don’t have any textbooks yet, so we’ll cut the class short tonight.” (Student interpretation: “I have an incompetent, lazy teacher. I have a teacher who is going to lead me by the hand through the textbook; because I can read by myself, I might as well stay home”—and many do!)

Law of Exercise: This law is practiced extensively in sports but unfortunately too infrequently in education. It means that the more an act is repeated, the more quickly the habit will be established. Practice (if of the right type) does in fact make perfect. The most deceiving aspect relating to this law is: remembering is not understanding. Every student in a class may understand a new concept presented in a class; yet 50 percent of the information will soon be forgotten. Standing in the way of retention is the “Curve of Forgetting,” which has repeatedly shown that if the only activity is listening, about 50 percent is forgotten almost immediately, another 25 percent a relatively short time later, and still more later on until there finally is only a 5 percent residue which appears to remain. To combat the “Curve of Forgetting,” schedule frequent quizzes and reviews, provide students with specific objectives and encourage note-taking and oral participation.

Law of Disuse: This law is actually the opposite of the above and indicates that skills not practiced and knowledge not used are largely forgotten. Repetition reinforces learning. Experts on effective study habits say the period immediately following initial learning is one of the most important in final retention. Therefore, in the two and three hour evening sessions that are frequently the pattern in adult programs, the last 15 to 20 minutes can be very productively used in review (and reinforcement).

Law of Intensity: The final law of learning emphasizes the fact that a vivid, dramatic learning experience is more likely to be remembered than a dull or routine one. Instructors most remembered seem to be those who were able to “make their subjects come alive.”

You are the specialist with something to offer. You can and should set the tone for students—arrive on time, observe breaks, begin instruction at the end of a break, and end on time. If you have a one-hour test scheduled for a three-hour class, plan two hours of activity preceding or following the test. A half hour lost each evening over a semester amounts to a loss of 8.5 hours of instruction in most cases.

I have students evaluate you early in the semester rather than at the end. Find out if they are getting what they expect out of class—if you are an effective instructor in their eyes.

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