

MEMORY IS LEARNING THAT PERSISTS

Why We Forget

1. **Negative self-concept: we think of ourselves forgetting things.**

2. **We have not learned the material well.**

If something is to be retained, it must be correctly, clearly and forcibly impressed on the mind. We must give it the necessary attention and interest. **Self-questioning and spaced or periodic reviews are essential.**

3. **Psychological reasons: defensive forgetting**

Generally, unpleasant things are remembered better than pleasant things (especially by pessimists) and both pleasant and unpleasant things are remembered better than materials we are indifferent to.

Freudian theory holds that unpleasant things are often barred from consciousness. This is often referred to as active forgetting.

4. **Disuse**

Memories fade away rapidly when not reviewed or used. The curve of forgetting is like a playground slide; we forget most immediately after we learn -in the first 24 hours; then it proceeds slowly. Motor learning seems to be better retained than verbal learning because a motor act has to be completely done to be done at all and so requires a higher degree of organization and competency which involves over-learning.

But "forgotten" material can be relearned in less time than is required for the original learning, even after many years' disuse. **EVEN MATERIAL THAT WE DO NOT RELEARN HAS UNDOUBTEDLY BEEN TRANSFORMED INTO ATTITUDES AND VALUES THAT FORM THE FOUNDATIONS OF OUR JUDGMENT. EDUCATION PAYS IN SPITE OF ALL THE DETAILS THAT ARE FORGOTTEN.**

Forgetting through disuse is normal and unavoidable. The mind is a marvelous instrument, but not a perfect instrument.

5. **Interference**

Forgetting was formerly thought to be mainly the result of disuse, but now it is believed that disuse may be a less important factor than interference due to emotional problems, anxieties, distractions, intense concentration on something else, and intellectual interference.

Intellectual interference or mental overcrowding can be minimized if we reflect on our reading and experiences, understand them, clarify them, associate, synthesize and organize them so they will not interfere with each other. Above all, we must avoid pushing, cramming and overcrowding our learning hours with unorganized material.

Forgetting caused by later learning is called **retroactive inhibition**. There is more interference between two similar subjects than between two unlike subjects. (Follow study of history with chemistry rather than English history or literature.)

Since we cannot be awake without thinking, it should follow that there is more loss of memory for learned material when one is awake than when one is sleeping. (Study and then sleep.) Next to sleep, nonintellectual activities like exercise, music, dancing, recreation and the like cause the least interference with remembering what has just been learned.

When previous learning interferes with subsequent learning, this is called **proactive inhibition**. (An old poem interferes with a new poem-the more familiar the subject, the more interference.)

Life, it seems, should be more organized, certainly our mental life, and should be approached with a degree of deliberation. There should be rest periods at intervals to allow the brain to lie fallow. Continuous undifferentiated activities apparently fight for a place in the memory; some things are pushed out and forgotten. **FOR EXAMPLE, YOU WILL LOSE MOST OF THE KNOWLEDGE IF YOU QUICKLY READ BOOK AFTER BOOK WITHOUT ORGANIZING THE INFORMATION, REFLECTING ON IT, AND CLARIFYING IT.**

Blocking is another kind of interference. It occurs when one wishes to recall some quite well-known information but cannot do so, such as names. Relax and try association.

6. Changed Cues

You may have all the information you need stored away in your mind somewhere but be unable to get at it if the right cue is missing. Recall what happens on tests. You studied the material one way, the test question was presented in another (cues were changed). If you learn material with too great dependence upon the phraseology of the textbook, you may be at a loss to remember some of the material if you cannot recall the exact wording of the text. As with your outlining assignments, restate or rephrase the ideas in your own words to insure remembering.

7. Lack of Attention and Effort

The art of memory is the art of attention-attending to the material WHOLLY. Moreover, there must be effort to remember.

Memory Improvement General Principles

1. Attention (Concentration)

To remember something, we must attend to it; concentration is attending to something intensely or wholly. We may be able to do several things at once if some of them are habitual, but we can attend to one thing at a time, especially when studying. The learner must use determination. Often when we say we have forgotten something, it would be more correct to say we never learned it because we never gave it proper attention in the first place.

2. Interest

Inattention is often due to lack of interest. The subject of most interest to everyone is himself or herself. Take sides in the issues and problems you read about. Ego involvement not only promotes interest and attention, it aids intention to remember.

Give an "uninteresting subject" a chance; if you learn something about it, this will create some interest which will promote more knowledge and the circular spiral of interest-knowledge will continue to your benefit. Remind yourself, if necessary, of your secondary interest in the subject-the grade or credit

Nonsense material (material which we do not understand) fails to awaken interest and is quickly forgotten. While the assignment may be nonsense to us at first, attempts to work through it step by step-interpreting, associating, analyzing, synthesizing-will soon make it meaningful and interesting.

3. Intention to Remember

Bending of one's energies toward a given end is called a mental set, and a positive, open mental set affects memory positively. Ego involvement promotes intention to remember.

4. Confidence

When we intend to remember without having confidence that we can remember, the intention is weakened into **mere hoping**. The memory strengthens as you lay burdens upon it and becomes trustworthy as you trust it. Use written notes as a prompting device, but form the habit of trying to rely on your memory before referring to your written reminders.

5. Starting Right

Be cautious in learning a new knowledge and habits right at the start. Concentrate on accuracy, not speed, at the beginning. A mistake once learned is difficult to unlearn. Become self-conscious about the error first and then little by little work slowly to replace it with the right information.

6. Selection

Concentrate on the most significant things, as it is impossible to master any subject in its entirety. The selection should be **judicious** in that for some subjects the fundamentals, major ideas, concepts, patterns, and trends may be important, but in some subjects details are also important.

Select a field of interest for intense cultivation. Maximilian Berlitz became so interested in languages, he spent his life studying and teaching them. Before he died he learned 50 languages. His grandson Charles knows 20 but hopes to equal his grandfather.

Any book will have some material you already know, some material you can easily recall after one reading, and a great deal of explanatory and illustrative material. Give your attention to that which is new, difficult to understand, and that you must remember.

7. Understanding

There are two ways to memorize: by rote (mechanically) and by understanding. Multiplication tables, telephone numbers, combinations to safes, and the like are better learned by rote. Ideas, concepts, theories and significances and the like are learned by understanding. Sometimes they work simultaneously.

The more association you can elicit for an idea, the more meaning it will have; the more meaningful the learning, the better one is able to retain it. Always note similarities in ideas and concepts, and put them in their proper place in a larger system of ideas, concepts and theories. A bare literal understanding is often of little value. Never be satisfied with a hazy idea of what you are reading. If you are not able to follow the thought, go back to where you lost the trail.

Experiences-both real and vicarious-that are systematically related or associated with previous knowledge will improve your memory. What do they suggest? What do they remind you of? Note differences as well as similarities, or else there will be confusion.

8. Building Background

The more background we have on a subject the better we form associations and discern relationships. It is difficult to fully understand anything that stands alone. Every event is compared or associated with others. A WELL STOCKED MIND ALLOWS MORE POSSIBILITIES OR ASSOCIATION between new material and previously known material. The best way to improve your memory of a subject, hence, is to learn more about it.

The more background you bring to a subject or reading, the more interest and understanding you will have also. Indeed, if we do not have sufficient background for something, our learning will be more difficult, even suffer.

9. Organization

A place for everything and everything in its place applies to the mind also. A good memory is like a well-organized and well-maintained filing system. When a new fact presents itself, the first consideration is whether to keep it or throw it away. If you keep it, then you must decide where to put it. Thus, after understanding it and associating it with other facts already filed, you will file it in its natural or logical group.

Organization is the innate tendency of the mind and it prevails above the chaos of stimuli it can process.

Dr. George Miller of Harvard found that college students can remember only about 7 separate items from one presentation. He/she feels, however, we can go beyond this barrier by classification or organization or categorization. Items are learned in rememberable bunches, and these little bunches of knowledge are tied together with other little bunches... ever and ever into larger and larger bunches. Textbooks present materials in small bunches or bite-sizes; it is for us to establish the chain of relationship and through related organization master much more information. Shakespeare's 37 plays are less difficult to remember if you remember them in 3 groups: comedies, histories, tragedies.

Keep the larger pattern of the chapter and of the book as you progress through it in mind so that you can relate or hook subordinate ideas or details to the larger pattern. These latter will be lost or meaningless unless you can bunch them with, associate, or relate them to the big bones of the article, chapter or book.

10. Whole and Parts

Survey the reading. When studying it, break it into parts, but keep in mind the whole. If not extremely long, tackle the whole.

11. Recitation

Recitation should first take place as you read through each paragraph or section. Quiz or test yourself. This promotes understanding as well as faster learning because it is a more active process than reading or listening. It also tests understanding, revealing mistakes or gaps. Recite in your own words.

Auditory learners should spend more time in reciting orally what they are learning than visualizers. Read aloud passages you find difficult.

12. Notetaking

Visual learners should take fuller notes during lectures and their readings, as they learn more readily by visualizing than hearing. Auditory learners should take fuller notes perhaps on their readings. Notes should be in your own words, brief, clear but succinct. They should be legible and neat. Writing notes better reinforces memory than mere underlining, which is frequently done mechanically, often to excess and does not check understanding.

Review notes when study of chapter is completed. Use notes to test yourself.

13. Review

The best time to review is soon after learning has taken place. The beginning and the end of material is best remembered, so pay close attention to the middle which is likely to be forgotten. The peak of difficulty in remembering is just beyond the middle, toward the end. change your method of review.

The best review is immediate use.

14. Spaced Practice or Distributed Practice

The principle of spaced practice involves periodic review such that forgetting is made nearly impossible. If the intervals between the practice are too long, this useful principle is negated.

15. Overlearning

Reviewing something that has already been learned sufficiently is called overlearning. Everything you can recall instantly without effort has been overlearned, probably through frequent use. The more important and the more difficult the learning, the more we should reinforce it with frequent practice. Don't waste your time on easy material.

16. Sleeping Over It

Study before going to bed unless you are physically or mentally overtired. freshly learned material is better remembered after a period of sleep than after an equal period of daytime activity because retroactive interference takes place. However, for some people this may not work.