



BRAIN BITES

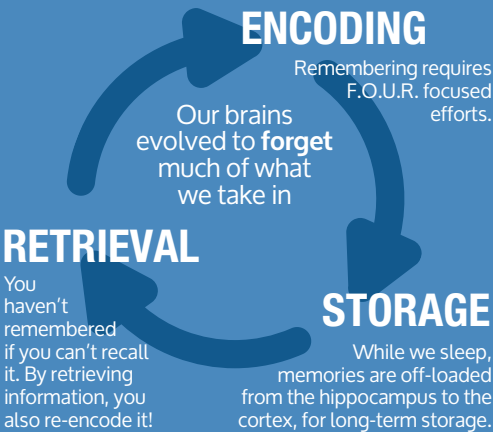
Use brain science to improve your training

“Memory is the residue of thought.”

Daniel Willingham, Ph. D.



THE MEMORY CYCLE



F.O.U.R. FOR ENCODING

- F FOCUS**
Desire. We must want to remember and work at it. The more effort, the more memorable!
- O ORGANIZE**
Chunking material into groups of related information helps, because we only remember 4-7 things at a time. And, it forces us to FOCUS (see above)!
- U UNDERSTAND**
Spending time to make sense of the material also takes effort (see FOCUS).
- R RELATE**
Tie the learning to something you already know or create a new “mental scaffolding” to hold those memories. [PSST: this is why learning something brand new is so difficult.]

BRAIN STORAGE

These brain parts are most critical in storing memories.



HIPPOCAMPUS

Behind your ears and shaped like a seahorse, it holds short-term memories, but has limited capacity. (Read below about sleep!)

CORTEX

At the back of your head, it stores long-term memories.

PREFRONTAL CORTEX

Near your forehead, it's the “CEO” of your memory system.

5 MEMORY SYSTEMS DISTINCT SYSTEMS WORK TOGETHER!

WORKING MEMORY

Top of mind info, (number, date or appt time).

SENSORY MEMORY

Sights, sounds, & smells usually fade in a few minutes.

SHORT-TERM MEMORY

LONG-TERM MEMORY

EPISODIC MEMORY

Events that happen in your life.

PROCEDURAL MEMORY

Repetition of movements or steps, unconscious habits, a.k.a. muscle memory.

SEMANTIC MEMORY

Facts, info, names, dates...

RETRIEVAL BOOSTERS



RESEARCH SHOWS...*

Sleep on it! First, it's hard to pay attention when you're tired. Second, although the hippocampus has limited storage capacities, the day's memories efficiently move from the hippocampus to the cortex during sleep cycles.

Music activates the brain's motor system & makes you feel good.

Exercise can enlarge the size of your hippocampus.

Positive Attitudes aid memory.

*pp 265, 283, 232, 287