

make it stick: *The Science of Successful Learning*
Handout for Discussion led by Stefnie Evans

Foundational principle: The most effective learning strategies are not intuitive.

Definitions for learning:

Acquiring knowledge and skills and having them readily available from memory so you can make sense of future problems and opportunities;

Picking up new knowledge or skills and being able to apply them later;

Encoding, Consolidation, Retrieval

Key Ideas about learning: 1) Learning requires memory; 2) Learning is an acquired skill.

Memorable Quotes

- Making mistakes and correcting them builds bridges to advanced learning.
- Repeated exposure doesn't burn information into memory.
- Students studying has 2 liabilities: a failure to know the areas where learning is weak, and preference of study methods.
- Mastery requires both the possession of ready knowledge and the conceptual understanding of how to use it.
- Testing is practicing retrieval of learning from memory, therefore a shift in thinking to with the use of testing as a tool for learning.
- Retrieval ties the knot of memory. Repeated retrieval snugs it up and adds a loop to make it fast.
- A central challenge to improving the way we learn is finding a way to interrupt the process of forgetting.

- My teaching is only a component of students' learning, how I structure it may have even more to do with it.
- You don't lose from long term memory most of what you have learned well in life
(emphasis mine)
- Good judgment is a skill one must acquire
- Incompetent people lack the skills to improve because they are unable to distinguish between incompetence and competence.
- Everyone has learning preferences
- When instructional style matches the nature of the content, all learners learn better regardless of their differing preferences for how the material is taught.
- Emphasizing effort gives a child a rare variable they can control.
- Becoming expert is not beyond the reach of normally gifted people who have the motivation, time and discipline to pursue it.
- Images cue memory
- Effortful learning changes the brain, building new connections and capability

