Learning Theory: Elaboration and Self-Explanation

Definition: Connecting learning material to other concepts, experiences, or memories and explaining/describing concepts in greater detail.

Effect: Elaborative interrogation and self-explanation enhance learning by integrating new information with existing prior knowledge. This integration increases retention of facts and improves performance on testing.

Why it works:

Research: Improving Students' Learning With Effective Learning Techniques: Promising Directions From Cognitive and Educational Psychology (Dunlosky et al., 2013)

Key Points from the article:

- Elaborative interrogation strengthens associative memory in short-delay recall. More research is needed regarding its effectiveness across longer delays as well as in different educational contexts.
- Self-explanation can similarly strengthen memory, as well as comprehension and transfer, across many task domains and age ranges.
- There is not enough conclusive evidence to claim that elaborative interrogation and self-explanation are as effective as repeated and distributed practice testing but there is sufficient evidence to consider them valuable additional techniques.

Curricular Design Application at the Larner: Students need to have a rich understanding of material that spans different topics. We structure pedagogy in a way that encourages using elaborative techniques so that students can create more durable memories and transfer and apply knowledge to new situations.

1. Case Based Learning

2. Problem Based Learning

3. Integrative Review Sessions

Other Resources: Study Strategies: Elaboration