The Science of Learning

Learning Theory: **Spaced Practice**

**Definition:** Spacing out learning of new knowledge

**Effect:** Superior long-term retention that improves educational outcomes.

**Why it works:**


  Key Points from the article:
  
  - The timing or arrangement of review/practice affects learning.
  - Practice is more effective when spaced out over time, instead of massed or grouped together (equating total practice time).
  - Spaced practice enhances memory, problem solving, and transfer of learning to new contexts.
  - Spaced practice offers great potential for improving students’ educational outcomes.

**Curricular Design Application at the Larner:** Students need to recall content at increasingly longer intervals. We structure pedagogy in a way that encourages spaced review and discourages massed practice. The Integrated curriculum pulls threads forward so that key topics are covered over a longer period of time, avoiding massed practice.
The Science of Learning

1. Assign Independent Learning, ideally with knowledge checks built in.

2. Require Knowledge Check Recall information for Quiz or IRAT.

3. In-class application. Recall foundational knowledge to apply in class.

4. Block Exam/ Course Exam/Board Exam: Prepare by recalling/revisiting material that is was previously learned.

5. Review of FoCS material in subsequent courses/clinical settings disrupts forgetting while capitalizing on elaboration.

Other Resources: Osmosis Video