

## The Science of Learning

### Learning Theory: **Interleaving**

**Definition:** Switching between ideas or concepts while studying to avoid mass practice. For example: studying a mixture of flashcards on anatomy, normal and pathological physiology, and pharmacology in a random order, rather than studying all anatomy flashcards, then all pharmacology flashcards, then all physiology flashcards.

**Effect:** Interleaving produces better scores on final tests of learning.

#### Why it works:

**Research:** [Rohrer, D. \(2012\). Interleaving helps students distinguish among similar concepts. Educational Psychology](#)

Key Points from the article:

- Interleaving makes it easier for learners to identify distinguishing features of one category compared to another.
- Interleaving inherently incorporates spacing rather than massed practice, which is known to improve learning.
- It is easy and inexpensive to implement interleaving in curriculum or in studying.

**Curricular Design Application at the Larner:** The Vermont Integrated Curriculum contains horizontal threads so that students avoid massed practice of a topic. We structure pedagogy in a way that encourages interleaving and spaced review and discourages massed practice:

**1. Integrated Curriculum**

**2. Peer Teaching**

**3. Integrated Review as a modality**

**Other Resources:** [Interleaving Osmosis Video](#)