



Interleaved Practice

Interleaved Learning (Brain Hack)

<https://www.youtube.com/watch?v=WbDpYMp8F6o>





Interleaving

Interleaving is a process where students mix, or interleave, multiple subjects or topics while they study in order to improve their learning.

- Suppose a student plans to spend an hour studying Spanish vocabulary on a particular night. Would it be better for her to study an individual word until she feels she's mastered it—or mix up the word list?
- Interleaving applies not just to a single list but to broader principles. For example, if you're trying to learn what makes a Monet look like a Monet, it's helpful to contrast his paintings with those of other impressionists, and that's easier to do if you see a Cassatt or Renoir right after seeing a Monet (Kornell & Bjork, 2008).

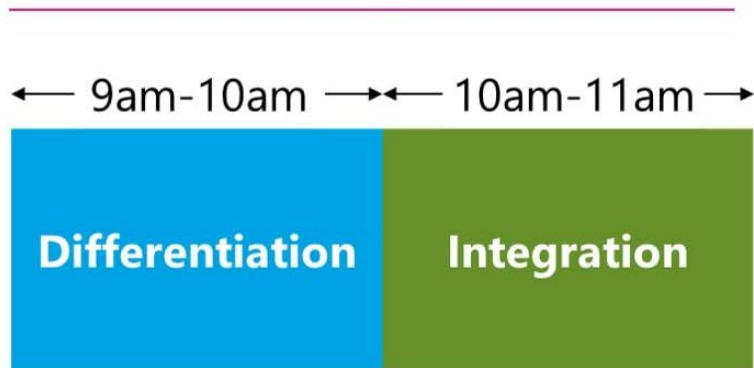


Interleaving

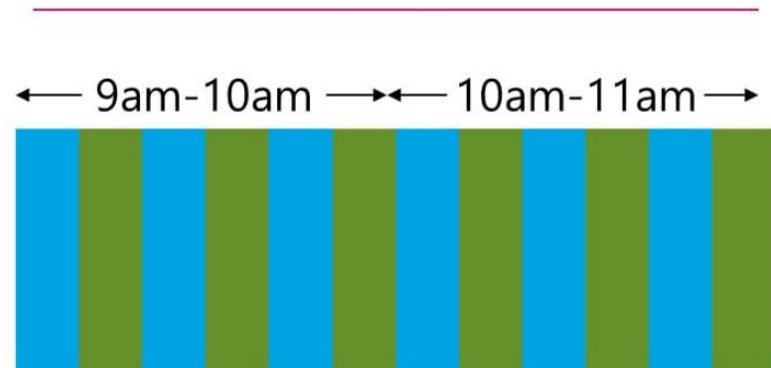
This process is rare in science and math textbooks.

Typically, a new concept is introduced in a chapter; some sample problems are solved step-by-step; and a set of practice problems appears at the end of the chapter, all of which draw on the same concept algorithm. The drawback is that there is no practice discerning one type of problem from another.

Blocked practice



Interleaved practice





Interleaving

Implementing interleaved practice is not terribly difficult, but it does call for a bit of planning:

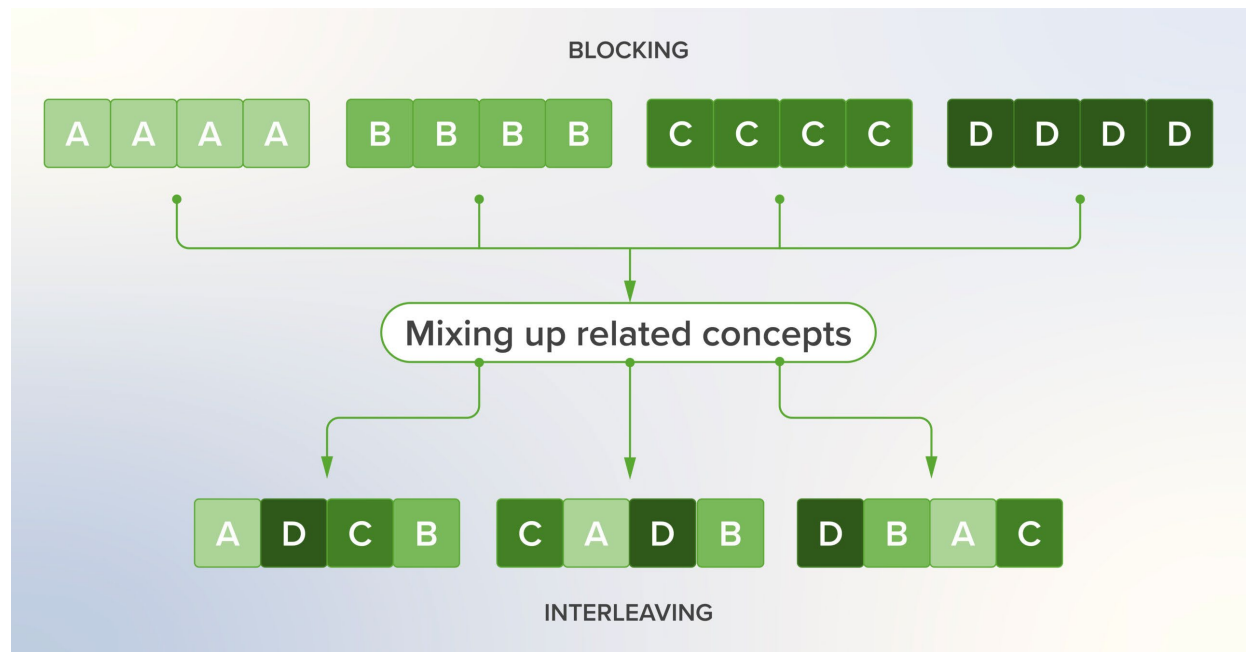
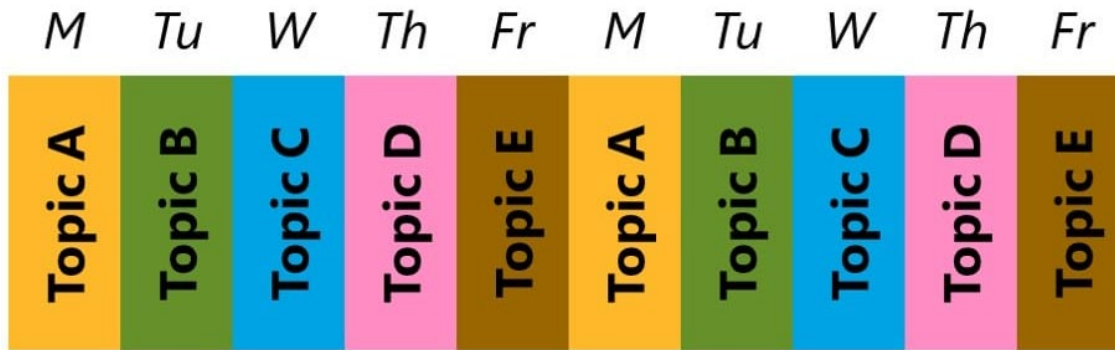
- Set up the study and practice of different concepts within a single session.
- Do a cut-and-paste job of concepts/ subjects (as appropriate).
- Don't get disheartened!

Students sometimes feel they're learning less, not more, as it is tougher when problems are interleaved. Eg. If a homework assignment asks the student to do 15 problems, all of them variants on the same mathematical algorithm, the student will have an easier time than if the 15 problems call for any of five different algorithms.

Even as the you struggle more with drawing the answer/conclusion you are learning to draw information from different areas of short and long term memory which will help when the same concept occurs in exams.



Integrating into study schedule



The Do's and Don'ts of Interleaving

by @Inner_Drive | innerdrive.co.uk

Don't: Interleave subjects instead of topics



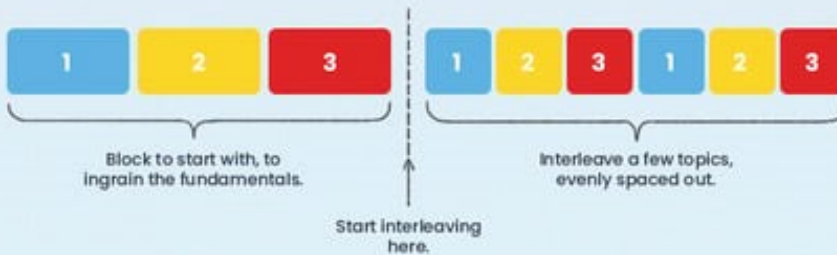
Don't: Interleave too many topics



Don't: Leave too long between interleaving sessions



Do: Master the basics first, choose a few related topics, and leave consistent gaps between sessions



The Spacing effect

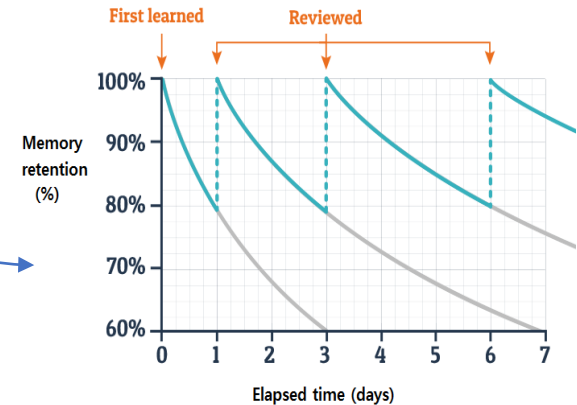


Figure 1: The forgetting curve and review cycle (Ebbinghaus, 1885)