Interleaving Overview

Use the following overview of interleaving as a handy reference or share it with your team.

What is it? Interleaving is mixing up the order of items on an activity or assessment so that students must frequently switch between the knowledge and skills needed to answer each question.

Why use it? Interleaving increases mastery, long-term retention, application, and transfer skills (Apfelbaum, Hazeltine, & McMurray, 2013; Brown, Roediger, & McDaniel, 2014; Kang & Pashler, 2012; Wahlheim, Dunlosky, & Jacoby, 2011).

How to use it: Change the order of questions in an activity so that the same learning targets do not appear back to back in problems.

Traditional		Interleaved	
Question Number	**Learning Target**	**Question Number**	**Learning Target**
1	A	1	C
2	A	2	A
3	A	3	B
4	B	4	A
5	B	5	C
6	B	6	B
7	C	7	C
8	C	8	A
9	C	9	B
10	C	10	C

Boundary conditions: Interleaving should not be used during first exposure unless you are building classification or identification skills (Firth, Rivers, & Boyle, 2021; Rohrer, 2012). Additionally, interleaving questions that are not similar, such as a mathematics question and an English question, has not shown to be beneficial (Hausman & Kornell, 2014).

Other similar terms: interleaved practice, mixed practice, varied practice

References

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