

Class Notes: Interleaving (Contextual Interference)

Definition

Interleaving, also known as contextual interference, is the practice of mixing multiple skills or topics during a learning session rather than focusing on one at a time. Unlike blocked practice (mastering one concept before moving on), interleaving alternates between topics in a random or varied order.

Why It Works

Although interleaved practice can feel more difficult and result in more errors during training, it improves long-term retention and enhances the learner's ability to transfer knowledge and skills to real-life, unpredictable situations.

The increased difficulty creates 'desirable difficulties,' which require the learner to continuously retrieve, discriminate, and adapt responses, building stronger mental models over time.

Benefits of Interleaving

- Enhances long-term memory and learning retention.
- Promotes better problem-solving and adaptability.
- Help learners make connections between related concepts.
- Builds versatility and improve decision-making in novel or high-pressure situations.

Example in Practice

Rather than practicing skill A repeatedly until it's mastered, learners might alternate between skill A, skill B, and skill C. For instance, in law enforcement training, a session might include alternating between communication tactics, de-escalation, and report writing instead of focusing on just one topic per session. This trains the learner to shift thinking and apply the right skill at the right time.