

# Why Repetition is Not Enough: The Contextual Interference Effect and Interleaved Practice WSMTA Conference 2024 Rachelle Ventura, NCTM

## Part 1: Concept

- A. Repetition
- B. Desirable Difficulties and the Contextual Interference Effect
- C. Interleaved Practice
- D. Research
- E. Possible Mechanisms
- F. Benefits of an Interleaved Practice schedule

## Part 2: Implementation - Ideas for Interleaved Practice

Beginner:

- 1. Mark challenging measures in one piece and interleave (serial or random). Repeat the series 3-4x or for 1-2 minutes
- 2. Divide Rep 1 into 4 parts and interleave. 3x or 1-2 minutes
- 3. Half of Rep 1 / Half of Rep 2 / Half of Rep 3. Reflect & Repeat 3x (next day do other half)
- 4. Rep / Scale / Sight read 4 m. / Technical exercise. Reflect & Repeat 3x

## Intermediate:

- 1. Mark challenging measures or passages in one piece and interleave (serial or random). Repeat 3-4x or for 5-10 minutes.
- 2. Divide Rep 1 into 4 parts and interleave. 3x or 5 minutes
- 3. 8 m. of Rep 1/ Scale / 8 m. of Rep 2 / Triad. Repeat 3x or set time. Choose a different scale or triad every 2 practice sessions.
- 4. Piece 2 / Sight read 8 m. / Technical exercise 8 measures. Reflect & Repeat

#### Advanced:

1. a) Divide pieces in major thematic/structural sections, eg., exposition, development, and recapitulation and interleave.

b) Divide each section into parts that you can make some progress on in 3 minutes (could be 3 measures or a page) and play in random order.

c) Interleave the large sections of Rep 1 with Rep 2 and Rep 3

2.

| Block 1              | Block 2              | Block 3                |
|----------------------|----------------------|------------------------|
| Scales - variation 1 | Repertoire 2         | Repertoire 4           |
| Repertoire 1         | Scales - variation 2 | Scales - variation 3   |
| Sight-reading        | Repertoire 3         | Jazz/improvisation/pop |

#### Selected Sources

Bjork, R. A. (1999). "Assessing our own competence: heuristics and illusions," in *Attention and Performance XVII. Cognitive Regulation of Performance: Interaction of Theory and Application*, eds D. Gopher and A. Koriat (Cambridge, MA: MIT Press), 435–459.

Carter, Christine E, and Jessica A Grahn. "Optimizing Music Learning: Exploring How Blocked and Interleaved Practice Schedules Affect Advanced Performance." *Frontiers in Psychology* 7 (2016): 1251–1251.

Stambaugh, L. A. (2011a). "Repetition and judgement of learning in wind instrument practice," in *Proceedings of the International Symposium on Performance Science*, Toronto, ON. 431–436.

Stambaugh, L. A. (2011b). When repetition isn't the best practice strategy: effects of blocked and random practice schedules. *J. Res. Music Educ.* 54, 368–383. doi: 10.1177/0022429410385945

Stambaugh, L. A., and Demorest, S. M. (2010). Effects of practice schedule on wind instrument performance: a preliminary application of a motor learning principle. *Update Appl. Res. Music Educ.* 28, 20–28. doi: 10.1177/8755123310361768

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