

The Decisive Dozen

*The twelve most important learning factors, as compiled by Dr. Will Thalheimer, PhD.
Based on an exhaustive decade-plus review of research from scientific refereed journals.*

Basic Enablers

1. Content

When learners learn, they ought to learn from content that is correct and true and relevant to their future needs.

2. Exposure

When learners have a need to learn, they must be exposed to relevant or targeted learning content or learning events.

Creating Engagement and Understanding

3. Guiding Attention

When we guide learners' attention to the most critical information or contextual stimuli, their learning improves.

4. Creating Correct Conceptions

When we structure learning so that learners can quickly build correct understandings, they learn more effectively and more efficiently.

5. Repetition

When we provide repetitions (in a manner that engages), learners more effectively understand and remember.

6. Feedback

When we utilize feedback appropriately, we correct learners' misconceptions and support correct retrieval.

7. Variation

When we vary the learning materials, proper contingencies can be learned, future memory retrieval is improved, and learners stay more engaged with the learning content.

Supporting Remembering

8. Context Alignment

When we integrate workplace cues (or other task-relevant cues) in our learning events, future memory retrievals are more likely to be triggered (and triggered when needed).

9. Retrieval Practice

When we provide practice in memory retrieval, learners are more likely in future circumstances to have successful memory retrieval of the information learned.

10. Spacing

When we space repetitions of learning content and learning events over time, future memory retrieval is improved.

Enabling Future Application

11. Persuasion

When we persuade learners, they will be more likely to reinforce the concepts learned—and engage in attempts to use what they have learned in their work and in their lives.

12. Perseverance

When we support our learners in persevering in both learning and in subsequent learning application, we enable them to engage with goal-directed metacognitive effort.

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To learn how the Decisive Dozen can inform your work, contact Dr. Thalheimer at info@work-learning.com.
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