

10 Tips from Smart Teaching Stronger Learning

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Retrieval Practice: Smart Teaching Strategies for Stronger Learning by Dr. Janell R. Blunt

TIP: Make retrieval practice flexible with **white boards with markers**. Have students do a brain dump or create examples of a concept they're learning using words, drawings, tables, etc. They can share their examples at their desks, hold up drawings for the class to see, or swap white boards with peers.

Early Childhood Education: Retrieval-Based Learning for Children by Dr. Lisa K. Fazio

TIP: Use **cognitive processing language** to support young children's thinking about their own thinking. For example, "How did you figure out which pieces you needed to build a sturdy structure?" (metacognition) or "If you're having trouble thinking of a connection, you can look at the picture" (a strategy suggestion).

Spaced Practice: Optimize Class Time to Boost Learning by Dr. Shana K. Carpenter

TIP: Space out student learning and **break up long lessons into smaller sessions** over multiple days. There is no optimal amount of spacing, and research shows that any amount of spacing is better than none, so provide spaced opportunities for learning on a schedule that works best for you.

Interleaving: Mix Things Up to Support Long-Term Learning by <u>Dr. Veronica X. Yan</u>

TIP: Shuffle previous and current homework problems together, not just what students are learning right now. Ask students to compare and contrast, draw connections between related concepts, and practice applying different roles or sides of a debate in a mixed up order.

Metacognition: Monitoring, Control, and Trusting in the Self by Dr. Lisa K. Son

TIP: Give students opportunities to **self-reflect on learning** *during* **the learning process**, not just at the end. For example, rather than asking students, "Do you understand?," ask them, "You might understand this now, but when might you forget it?" This encourages students to think about how learning is difficult and knowledge can decay.

Concept Mapping: Strengthen Learning with Linking Words by Dr. Kripa Sundar

TIP: When students are creating concept maps, **be mindful of the link words** they use, not just the overall structure of big ideas. Linking words between concepts (like "leads to," "reduces," etc.) make individual learning visible because connections are learned in different ways for different people.

The Effective Teaching Cycle: Motivation, Scaffolding, and Reinforcement by <u>Dr. Cynthia</u> <u>L. Nebel</u>

TIP: Motivation leads to learning, but **learning leads to motivation, too**. Increase motivation by sharing everyday examples that students can relate to and reminding them of their previous learning success.

Transfer of Learning: Foster Students' Application of Knowledge by Dr. Steven C. Pan

TIP: Transferring knowledge to new situations is tough for everyone. To improve transfer, mix question complexity (fact, concept, and application questions), give students time to process feedback, and **provide hints about how previous knowledge connects to new knowledge**.

Bringing It Together: Bite-Sized Adjustments for Powerful Engagement by <u>Dr. Michelle</u> <u>L. Rivers</u>

TIP: Have students answer "questions du jour" *before* a lesson. Instead of giving them learning objectives, **present learning objectives as questions** to encourage retrieval practice and activate prior knowledge.

Neuromyths Debunked: Why They Persist and How to Think Smarter by <u>Dr. Roberta</u> Ekuni

TIP: Myths about how the brain works are everywhere, especially in education. Pay attention to claims that include the words "neuro" or "brain," which take advantage of our hunger for brain-related information. If someone is trying to sell a product, lesson, or book about the brain, **request more details about the science** behind it before investing your classroom time or money.

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About the Editor

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