Come Back and Recall

Why spaced practice and retrieval beat one and done

Two of the most reliable findings in the science of learning are simple to state. First, spreading practice out over time works far better than cramming it into one sitting. Second, pulling knowledge out of memory, by recalling or being tested, strengthens it more than putting it in again by rereading. Both point the same way, revisit and recall.

The best studied techniques

A major review of learning techniques rated practice testing and distributed practice as the two with the highest usefulness across subjects and ages, while popular habits like rereading and highlighting were rated low **(Dunlosky, Rawson, Marsh, Nathan, & Willingham, 2013)**. The habits students reach for most are often the weakest, and the strongest are the ones we must build into instruction.

Recall builds memory

The act of retrieving a memory is itself what strengthens it. When students took a recall test after reading, they remembered far more on a delayed test than students who simply reread the same material, an effect known as the testing effect **(Roediger & Karpicke, 2006)**. Every time a student pulls a skill back up, the path to it gets stronger.

> Rereading feels productive, but recalling is what actually builds lasting learning.

What this means for Teach BIG

This is why our program spirals. A skill is not taught once and abandoned, it returns across the year in new passages and new tasks, so students practice it spaced out over

time and recall it again and again. That distributed, retrieval based design is exactly what the research says makes learning stick.

References

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques. *Psychological Science in the Public Interest, 14*(1), 4 to 58.

Roediger, H. L., & Karpicke, J. D. (2006). Test enhanced learning: Taking memory tests improves long term retention. *Psychological Science, 17*(3), 249 to 255.