Small Teaching by James Lang

Think you might want to read this book?

Small Teaching by James Lang takes the body of research on learning, developed over the past several decades, and translates the findings into practical applications for educators. Lang organizes this research into three aspects of learning (knowledge, understanding, and inspiration) and provides strategies to enhance each aspect. The concept of "small teaching" provides any educator, regardless of discipline, with strategies for boosting student understanding. These strategies require minimal preparation and grading to fully implement. Lang organizes the strategies by first providing applicable examples of specific learning phenomena followed by research that supports each phenomenon to provide educators with not only strategies but explanations for their effectiveness. While specifically geared toward higher education, these strategies apply to K-12 education as well. Higher education research is finally recognizing what K-12 has known for years.

What would Socrates ask?

- How does our background knowledge affect our new knowledge attainment?
- How does Bloom's taxonomy apply to students' learning?
- What impact does retrieval have on knowledge attainment?
- What impact does predicting have on knowledge attainment?
- How does the illusion of comprehension affect our learning?
- What impact does interleaving have on knowledge attainment?
- How can I create small teaching opportunities in my class?
- What do I know about my students that will assist me in enhancing my teaching?

Research

- Small teaching activities have been proven to raise student learning performance by the equivalent of one full letter grade or higher.

Concepts

- We must continually evaluate the effects of small teaching experiences and determine which (if any) belong in your permanent teaching "repertoire".
- Background knowledge plays a large part in our learning because we have to have something to connect the new knowledge to.
- Knowledge attainment is divided into three sections: retrieving, predicting, interleaving.
    - Retrieval - the more you practice remembering something, the more you are able to remember it in the future (i.e., training a muscle, even though the brain is unlike a muscle). Frequency matters.
    - Predicting - Prediction causes us to pay closer attention, which can improve memory.

        - When we are forced to make a prediction or answer a question that we do not know how to answer, we naturally search for anything we know that may help us form an answer. That search activates prior knowledge and tells your brain to pay attention to the correct answer when it is found.
    - Interleaving
        - Involves two related activities that promote retention
- Understanding is divided into three sections: connecting, practicing, self-explaining.
- Inspiration is divided into three sections: motivating, growing, expanding.
    - "[Students] need inspiration as much as, if not more than, they need knowledge and skills."

Quotes from the author

- "Yet such activities, which may first find their way into your classroom as a means of filling an empty 10 minutes at the end of class or an unplanned course session, have the power to produce as much or more learning than your anxiously overprepared lesson. For me, that represents the real power and promise of small teaching."
- Prediction - "...taking a few seconds to predict the answer before learning it, even when the prediction is incorrect, seemed to increase subsequent retention of learned material."
- Practicing - "Whatever cognitive skills you are seeking to instill in your students, and that you will be assessing for a grade, the students should have time to practice in class."
- Self-explaining - "To help them fill in those gaps, they hypothesized that learners who self-explain while they are studying worked examples - doing things like monitoring their comprehension, or paraphrasing the textbook, or stating the relevant principles out loud - would improve their ability to solve future problems."

Gateways to further learning

- **ABLConnect**
- **Pedagogy Unbound**

Referenced books with the potential to impact leading and learning in education

Author(s) Last Name	Title
Schacter	*The Seven Sins of Memory*
Willingham	*Why Don't Students Like School*
Brown, Roediger, & McDaniel	*Make It Stick*
Angelo & Cross	*Classroom Assessment Techniques*
Carey	*How We Learn*
Ambrose	*How Learning Works*

Zull	*The Art of Changing the Brain: Enriching the Practice of Teaching by Exploring the Biology of Learning*

The applicability of this book to education is ….