Top 10 Evidence-Based Teaching: Suggested Strategies

homework) another, similar problem for each student to complete.

how I think about X."

- I. **State Clear Learning Goals** for every class session. "Students will be able to *<action verb>*." **Strategy:** Post outcomes for a class session or a unit alongside the homework assignments.
- II. Share and Model to explain and then demonstrate how students will do a task, whether a physical task like a lab or a critical thinking task like problem solving.
 Strategies: include modeling and demonstrating, which differs across disciplines. When you introduce each new topic, use a clear signal statement: "Now I'm going to walk you through the process" or "Now I'm going to explain
- III. Check for Student Understanding by getting feedback from students in a variety of ways, regularly. Strategy: Use Classroom Assessment Techniques (CATS). For example, at the end of a class, survey students by asking them: "what was the clearest point today? What was the muddiest point?" Collect, read, and report back in brief what you learned and/or respond to clarify muddy points. For Clemson instructors, search #otei for surveys you can import to your course.
- IV. Give Feedback to Students regularly—with low stakes grades—in a feedback loop.
 Strategy: When giving feedback, use the feedback sandwich: complement, correct, complement. Aim for 3 corrections to 1 complement. Let students know what they should keep doing!
- V. Record information in graphical ways by both instructor and students for visual learning and deeper processing.

 Strategies: Ask students to complete a cognitive ("mind") map on a concept. Vary the structures of mapping: http://www.mindmapping.com/ is commercial site but with information to assist. Microsoft Word has "smart" graphs that could guide student work.
- VI. Allow Repeat and Spaced Practice through assigned work out of class & work during class with opportunities for feedback to instructor and from instructor.
 Strategy: The 4-2-1 activity allows for repeat practice. Provide a problem for students to solve in a group of four-and debrief as a class. Provide a similar problem for a pair of students-debrief. Then provide (in class or as
- VII. **Create Peer-to-Peer Learning** for students to work in pairs, triads, larger groups, so students assist each other for deeper understanding of concepts, practicing skills, building learning communities, and developing professional and life skills.
 - **Strategies**: See above 421 strategy. "Pair-share" is a quick activity where students turn to a partner, brainstorm, hypothesize, problem-solve. Usually 1-2 minutes.
- VIII. **Build in Time to Succeed** by allowing for variation in the length of units to account for learning difficult concepts. **Strategies:** for information on designing a course around difficult ("threshold") concepts. Work in ways for students to review other students' work, to help them overcome the barriers to learning difficult topics. For a short discussion, visit Stanford's blog.
- IX. **Teach Strategies for Learning** with general resources and techniques specific to learning a discipline. **Strategies:** Ask students to debrief their learning habits by asking: How much time / effort did you put into learning for that day/week? Provide list of strong habits and have students rate themselves, and set goals for improvement (find a partner and hold responsible). Assign a reading on <u>"25 things skilled learners do differently"</u> and have students discuss. As always, recommend university academic support center programs.
- X. **Nurture Metacognition** by prompting students to think about how they are thinking, how they use prior knowledge for a learning task; take steps to problem solve; reflect on and evaluate results; and modify their approach. **Strategies**: 1. Use an activity called KLEW for college (K: what do you know? L: what did you learn? E: what is the evidence of your learning? W: what are you wondering (next questions)? 2. After a test, use an "exam wrapper" to help them think about their work.