# OTEI

## **EVIDENCE-BASED TEACHING**

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### TOP TEN EVIDENCE-BASED STRATEGIES FOR COLLEGE TEACHING

If instructors are given evidence that a change in our instructional practice would increase student learning, would we make that change? Not always. Sometimes, it is not clear whether the evidence applies to our discipline, or the level of the course; it's not always clear how easy the data is to understand and apply. We want to avoid "fads" while making changes that are worthwhile. At this point in the gathering of research on educational practices, though, there are some that have risen to the top. These changes can result in large benefits for student learning!

#### The TOP TEN:

- 1. **State clear learning goals** for each teaching session.
- 2. **Share and model** to explain then demonstrate how students will do a task.
- 3. **Check for student understanding** by getting feedback regularly in various ways.
- 4. Give regular feedback to students
- 5. **Record information graphically** for instructor and student to aid in visual learning and deeper processing.





- 6. Allow repeat and spaced practice through homework, as well as in-class opportunities.
- 7. **Create peer-to-peer learning** with students working in pairs, triads, and larger groups, so students can help each other understand concepts
- 8. **Build in time to succeed,** allowing for variation in length of units to give room for understanding difficult concepts.
- 9. **Teach strategies for learning** with general resources and techniques specific to a discipline
- 10. **Nurture metacognition** by prompting students to think about how they are thinking through the subject matter

#### DEEPER DIVE:

It is vital that clear learning goals are stated for each class session. An easy way to state learning goals is to say to yourself "Students will be able to [action verb] by the end of the class". These learning goals can be paired with homework or another form of learning apart from the classroom environment. When beginning a new concept, it is important to show and model how to do the task to the students.



Be sure to get feedback from students to make sure that they are not confused about the lesson. Get students to report back in brief on what they learned so you are able to clarify potentially confusing parts of the day's lesson. Getting feedback has proven to help student learning more so than giving feedback!

Give feedback to students in a feedback loop. Let students know what they are doing correctly so they will continue to excel. Repeat and spaced practice through assigned homework allows opportunities for further feedback between student and instructor.

Encourage metacognition so that students are prompted to think about their own thought processes. A popular metacognition activity for college is called KLEW: K—what do you know? L—what did you learn? E—what is the evidence of your learning W—what are you wondering? Even just talking about thinking as a disciplinarian can help!

All of these evidence-based learning strategies will aid students in becoming better thinkers. Additionally, instructors who employ evidence-based learning strategies are more efficient teachers. For example, tell students that you are going to "walk them through the process" of the new task so they will be able to follow along with the steps of the new process.

Having students work on the board or in groups allows for metacognition and understanding of the learning material to grow. While there are many different categories of how various people learn, there are several studies that show group work to be beneficial to all types of learners.

Peer-to-peer learning is very helpful to students as they work in groups and are able to bounce concepts off one another. Through peerto-peer learning, students understand concepts better, practice skills, build learning communities, and develop professional skills.

Mind maps and other graphic organizers are helpful to both student and instructor as these aids are beneficial to learning and deep processing.



#### Resource:

https://www.facultyfocus.com/articles/teachingprofessor-blog/evidence-of-evidence-based-teaching (http://www.evidencebasedteaching.org.au/evidencebased-teaching-strategies/)



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