ACTIVE LEARNING TO INCREASE TEACHING EFFECTIVENESS

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LEARNING OBJECTIVES

- Recognize research-based benefits for active learning
- Describe active learning strategies
- Become familiar with active learning strategies for the initial and closing minutes of class
- Recognize importance of retrieval practice
- Create a plan to implement active learning strategies into your class
FOCUS ACTIVITY

- Take 1-minute to write reflections on the following prompt (question #1 on handout):
  - What is active learning?
  - What does active learning look like in a classroom?
  - What is research-based teaching?
WHAT IS ACTIVE LEARNING?

- Active learning refers to teaching strategies that “involve students in doing things and thinking about the things that they are doing” (Bonwell & Eison, 1991, p. 2).
Freeman and colleagues (2014) conducted a meta-analysis of 225 studies in undergraduate STEM courses that used lecturing or active learning. Students in active learning classes had average examination scores that were 6% higher than students in lecture-only classes while students in lecture classes were 1.5 times more likely to fail.
**WHY USE ACTIVE LEARNING STRATEGIES?**

- Most learners pay attention for 15-25 minutes before attention begins to decline.
- Students take responsibility for their learning.
- Students create a sense of community and collaboration in the classroom.
- Students receive formative and ongoing feedback from their peers and instructor.
- Students engage in higher order thinking such as application, creation, and integration.
- Retrieval practice.
WHAT ARE SOME COMMON MISTAKES WITH ACTIVE LEARNING STRATEGIES?

Dr. Michael Prince
WHAT ARE SOME CHALLENGES WITH ACTIVE LEARNING?

- Professors feel that they cannot cover as much content
- Professors feel that they are the experts
- Active learning strategies take too much class time
- Some students resist active approaches to learning
- Some students are not prepared to engage in class activities
Why Aren’t Students Prepared for Active Learning in Class?

- Doyle (2014) explained: “Students don’t do their reading and other assigned prep work because, based on their experience, they believe that teachers will discuss any important information included in the readings during class” (p. 67).
- It might be important to structure a class so that students are accountable for their pre-class activities and cannot do well without reading.
FOCUS QUESTION

- What is retrieval practice?
- How is retrieval practice related to active learning?
WHAT IS RETRIEVAL PRACTICE?

- Retrieval practice refers to thinking and recalling something that was learned.
- Retrieval practice is linked to students’ learning, success, and engagement.
- https://www.youtube.com/watch?v=xK6J1UfcOXg
Active Learning and Retrieval Practice in the First 5-Minutes of Class

- Open-ended quiz (retrieval practice; interleaving)
- One-minute paper for students to reflect on content covered in previous class (what did we learn last time?)
- One-minute paper for students to reflect on questions on assigned readings
- Background knowledge probe
- Focus with a quote, question, story, problem, or video
- 3 minute news report
ACTIVE LEARNING AND RETRIEVAL PRACTICE IN THE MIDDLE OF CLASS

- Think-pair-share
- Write-pair-share
- Muddiest point
- Make it meaningful team
- Invent the case study
ACTIVE LEARNING AND RETRIEVAL PRACTICE IN THE FINAL 5-MINUTES OF CLASS

- One-minute paper (What did you find most meaningful today? What did you learn?)
- 5-minute application exercise (students must identify five ways in which the material they learned can be applied in outside contexts)
- 5-minute metacognitive five (How are you learning? What can you do to improve your learning?)
- One-minute paper for students to predict what will be covered in next class
- Interleaving quiz (retrieval practice)
- Invent the quiz
FINAL FOCUS ACTIVITY

- Take **1-minute** to reflect and write responses to the following questions (question 2 on handout):
  - What did you learn about active learning?
  - What did you learn about retrieval practice?
  - How can you apply what you learned to your teaching and/or learning?
REFERENCES AND HELPFUL RESOURCES


Honeycutt, B. (2016). FLIP the first 5 minutes of class: 50 focusing activities to engage your students and create more time for learning. FLIP It Consulting and barbihoneycutt.com, Raleigh, NC.
REFERENCES AND HELPFUL RESOURCES

