

Straightforward Active Learning Modalities for the Higher Education Classroom

Introduction

A strong body of evidence supports the use of active learning modalities in the higher education classroom. Active learning is an approach to instruction in which students engage the material they study through reading, writing, talking, listening, and reflecting. (UMN Center for Educational Innovation) Research reveals numerous reasons to use active learning, including: increased student engagement, increased student performance, and an improvement in student's ability to think critically. Considering the aforementioned benefits active learning modalities can provide, many instructors find themselves looking for ways to incorporate these methods into their teaching. While the thought of revamping a course to incorporate active learning can feel overwhelming and be time-consuming, there are relatively simple ways to incorporate active learning into a course, regardless of its size or format. Three low-commitment active learning modalities include: think-pair-share, the pause procedure, and the one-minute paper. These active learning exercises get students engaged in talking, writing, and reflecting on course material.

Think-Pair-Share

Think-pair-share is an easy to institute active learning modality and requires minimal time investment by instructors and students. In this modality, students are presented with a question or problem to be solved. Prompts that push students to use higher order thinking skills within Bloom's Taxonomy are ideal. Students are asked to consider the prompt individually for a set period of time (1-2 minutes), then they team up with classmates to compare their thoughts and further work on the problem (additional 1-2 minutes). Finally, results are shared with the class. The course instructor may ask all groups to report out or call on individuals to report. This type of exercise helps to clarify student understanding, bring to light student misconceptions, build relationships between students, and further learning by allowing students time to consider the perspective of peers.

Pause Procedure

If an instructor is willing to give up six minutes of time during a standard lecture, students can have deeper, improved learning and improved engagement (Bachhel et al, 2014). The Pause Procedure involves instituting pre-planned breaks of 2-3 minutes during class every 15-20 minutes. During the breaks, students are encouraged to rework their notes and clarify class material with peers and the course instructor. The instructor may use the time for a think-pair-share exercise as well. An additional component of the pause procedure is to provide students with two to three minutes at the end of the class session to write down everything they remember from class that day. This simple but powerful active learning tool allows students to clarify what they are learning and reflect upon their learning. The pause allows students a brief time to refocus. Research into the use of the pause procedure supports its use and consistently shows an increase in student performance and student satisfaction when the technique is used (Chowdhury, 2016).

One Minute Paper

The one-minute paper is another quick, easy to institute active learning modality. Simply put, at the end of each class session or at any convenient transitional point during the class session, students are asked to spend a few minutes (or any pre-set amount of time) answering reflective questions about the class session. Questions typically include variations of those originally described by Cross and Angelo, 1988:

1. What is/are the big point(s) you learned in class today?
2. What is the main, unanswered question you leave class with today? (Cross and Angelo, 1988)

This exercise requires students to engage in metacognition. Students must consider what they have learned, and what they have not learned to complete the exercise. One-minute papers provide the course instructor with a window into the minds of students and allows the instructor to revisit points of confusion in a subsequent class session. While simple, one-minute papers can have a profound effect on student learning and may lessen student anxiety in relation to the course subject (Chiuo, 2014), especially when used consistently throughout a course.

Think-pair-share, the pause procedure and one-minute papers get students involved in reflecting upon what they are learning in relatively straightforward ways. These easy to implement class activities are a great starting point for instructors looking to add active learning modalities to their courses.

References

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