Big and Small: Active Learning in Online and Face-to-Face Courses

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Abstract

• Drawn from the literature and the experiences of two faculty members, this poster will highlight a variety of opportunities to promote active learning in online and face-to-face courses.

• Although some options may require substantial adjustment in pedagogical and logistical approaches, the presenters will demonstrate how even small changes in a course can result in big improvements in student engagement and student success.

• One of the key facets of this presentation is the promotion of student engagement through active and informal learning spaces, such as Mosaic classrooms and I-LEARN.
Big Changes Require a Large Investment by Faculty Members and the University

• One of the major initiatives with respect to active learning is redesign of formal and informal learning spaces.

• However, moving into an active learning classroom means that faculty members may have to grapple with rethinking how they deliver course content and how they can use newly redesigned spaces to their best advantage.

• Indiana University has embarked on an ambitious initiative called Mosaic to reconfigure a number of its classrooms, with some classrooms incorporating the latest and most sophisticated technology and others with flexible furniture that is moveable to facilitate small group discussions and offer a more intimate atmosphere.
Mosaic Active Learning Classroom
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Informal Learning Spaces

• Informal learning spaces are another opportunity for active learning.

• Research shows that adult/returning students and women are particularly interested in the opportunity to connect with a supportive community of learners who are facing the same challenges.

• A grant from the Center for Teaching and Learning was obtained to create an informal learning space for students in the B.S. in Informatics program.

• This new space is used for group study, group projects and tutoring and is nearly at capacity during a typical day.
I-LEARN Informal Learning Space
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Active Learning Promotes “Soft Skills”

• Although potential employers of graduates from the degree programs in the presenters’ school are anxious for students to have the requisite technology skills, they are perhaps even more eager for students to already have the “soft skills” that are necessary for success in the 21st century work environment.

• Thus, group projects and peer review are important components of our face-to-face courses and online courses.

• Peer review encourages active learning because a student’s participation and contribution directly determines his/her grades, particularly for group projects.
Small Changes Encourage Active Learning

• Even small changes in a course can encourage active learning and result in increased student engagement and student success.
• Easy to implement using simple tools and technology.
• Self-reflection and self-evaluation:
  • Online mid-point self-assessment questionnaire – easily delivered through Canvas.
  • In-class instrument that requires students to rate their participation based on engagement, attention and behavior.
  • DropThought – a chance for students to provide informal feedback on a course throughout the semester. One of the Next.IU pilot projects.
  • Snapshot, which is a system that will allow faculty members and students to see progress in courses. This system is particularly useful for “at risk” students because it clearly highlights which students are having the most difficulty or are the least engaged in their courses.
What Do Students Think About Active Learning?

• Do students believe that increased engagement has a positive impact on their learning, particularly as compared with traditional lecture-based courses?

• In a study by Lumpkin, Achen and Dodd (2015), students engaged in a variety of in-class and out-of-class exploratory writing assignments along with pair and small group discussions that were interspersed with short lectures.
  • As they report, both qualitative and quantitative data revealed that students valued their participation in engaging learning activities and affirmed that it had a positive impact on their learning.

• Likewise, the results of research by Freeman and colleagues (2014) indicated that active learning increased student performance in science, engineering and mathematics.
  • As they note, the results supported active learning as the preferred, empirically validated teaching practice in regular classrooms.
What Tools and Techniques Are You Using to Promote Active Learning?

• Over the years, the presenters have been willing to try almost anything:
  • to engage students.
  • to provide real-world course assignments, such as case studies and projects, so that students develop meaningful skills that future employers are looking for.
  • to encourage students take responsibility for their own learning.

• The presenters are eager to hear from participants about what they do to promote active learning and student engagement in their own courses.

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