Promoting Engagement in Remote Learning Environments

Strategies & Examples
Alex Wasdahl | 11 Aug 2020
Overview

- Instructional Practices and Student Engagement
- Graduate Experience During COVID-19 Survey
- Active Learning/Interactivity
  - Examples of Active Learning
  - Examples of Interactivity
  - Strategies for Instructors
- Assessment Types
  - Three assessment types comparison
  - Formative assessments and remote learning environments
Instructional Practices and Student Engagement

- Previous research has found that two of the strongest factor correlations between instructional practices and student engagement are:
  - Interactivity with Peers
  - Assessment Type
Graduate Experience During COVID-19 Survey

- Top 3 Issues of Concern for students in remote environment
  - #1: “learning effectively in the remote instruction environment” (47% very concerned, 26% concerned)
  - #2: “ability to conduct research” (43%/21%)
  - #3: “doing well on tests and assignments” (36%/26%)

- Learning effectively and performing well on assessments are key indicators of student engagement
  - Important for both faculty and students
Graduate Experience During COVID-19 Survey

- Access to learning resources is of lower concern overall
- Not getting a job after graduation is a prominent concern
  - Important for faculty to emphasize practical applications of course material
Interactivity and Active Learning

- Active learning: strategies where students are actively or experientially involved in their own learning
  - Crowdsourcing course material
  - Case Studies
  - Polling Students
  - Role Play
  - Debates
  - Experiments in the Field
Interactivity and Active Learning

- Interactivity: type and frequency of student interactions with a course - 3 types
  - Student to Faculty
    - Student-sourcing course materials
    - Zoom Q&A sessions with submitted questions
    - Polling
  - Student to Student
    - Role play, teams, project groups
    - Discussion boards
    - Collaborative annotation, document creation
  - Student to TA
    - Synchronous online section meetings
    - Whiteboard brainstorms
    - Responding to feedback in discussion boards
Interactivity and Active Learning

● Strategies for instructors to encourage interaction
  ○ Give ownership
  ○ Use targeted questions
  ○ Assign roles

● Designing for Effective Group Work
  ○ Peer to Peer Assessment - students get opportunities to provide formal and informal feedback to classmates
  ○ Discussion/Lab Sections
Interactivity and Active Learning

- Using Polling Technology to Foster Effective Group Work
  - Find out what students learned from assigned reading
  - Measure what students know before and after teaching
  - Measure attitudes and opinions honestly if the topic is personal or embarrassing
  - Get students to confront common misconceptions
  - Facilitate discussion and peer instruction (having peers learn from one another)
  - Increase student retention through engagement and peer instruction
  - Involve all students in prediction and reasoning
Assessments

- Three types
  - Assessment for learning (formative, low stakes)
    - Feedback only, no grades
  - Assessments of learning (summative, high stakes)
    - Not an effective measure of ability to communicate and manipulate prescribed learning outcomes
  - Assessment as learning
    - Not graded externally
    - Teacher guides opportunities
    - Encouraging self assessment and metacognition
    - Self-given feedback/performance comparison
Formative Assessments (low-stakes)

- Useful for remote learning environments
  - Low stakes assessments are good for engagement because they are given frequently, individually have low impact on final grade, and allow students to self-assess before midterms or finals
  - High stakes assessments are not focused enough on student goals
Formative Assessments (low-stakes)

- Benefits for students
  - actively involved in the learning process
  - more accurately aware of their performance at many points in the semester
  - given opportunities for improvement and reflection
  - more likely to attend class and be actively engaged
  - able to seek specific resources for additional support
  - more inclined to ask for help
  - more prepared for exams or high-stakes assessments
Formative Assessments (low-stakes)

- Benefits for teachers of frequent formative assessments
  - analyze data to guide exam creation and course revisions
  - use data to prepare class lessons
  - develop effective groups
  - address gaps in student learning
  - create supplemental activities
Main Takeaways

- Practical studies of remote engagement have identified the instructional practices of active learning/interactivity and assessment type as two main factors that influence student engagement.
- Instructors can facilitate interactive learning through various strategies including case studies, polling, discussion/lab sections, peer to peer assessment, and other strategies where students are actively or experientially involved in their own learning.
- The three forms of assessments all have their pros and cons, but formative assessments are uniquely suited to remote learning environments.
Formative Assessments (low-stakes)

- Concerns
  - Teachers don’t really change planning based on results
  - Results are surface level and not very rich (similar to those from high stakes formative assessments of learning)

- In sum, it is important for instructors to provide “alternative modalities for expression” for students in remote learning environments
