Mechanics VCP Session 7 (May 16, 2013)

Breakout Session and Chat Notes

Breakout Session 1: What are the three things you want to try next time you teach mechanics?

Group 1

- Christine flilpping; nervous about going into without the materials developed first
- CY Flipping; will try to work on it this summer
- Class time will be spent on problem solving.
- Theory/deriviations in videos.
- Rick Flipping as well; No time to generate the materials/videos and in-class activities. Creating multiple choice questions. Find animations, videos and demonstrations already available. Improve ability to assess: oral quizzes (video taped), difficulty in quantifying learning.
- Rick has small classes, already taking up a lot of time.
- Amelito Flipping, asking student students to create videos, hands-on acitivities
- Carissa hands-on activities, clickers
- How about sharing materials?
- Statics: Carisa, CY, Christine
- Dynamics: Amelito Rick, CY
- Camtasia, Doceri, Jing
- Challenge: How do we get over the need for perfection?
- Sharing of other resources (assessments, e.g., multiple choice questions);
 Qualitative assessment of both student learning and impact of new ideas/activities

Group 2

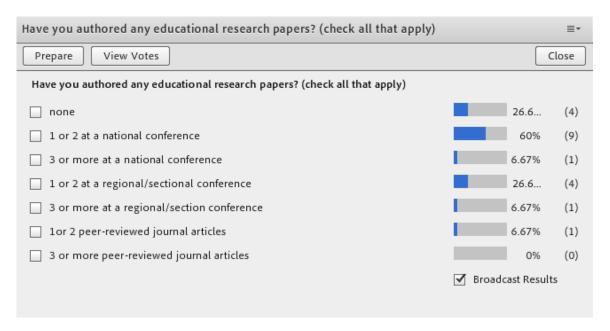
- Goals for Fall:
 - Add active learning / group work in class (Mousa, Scott)
 - Add semester end project (Ed, Scott)
 - Weekly quizzes with peer grading (Matthew)
 - o Class response system (Ed)
 - o Teaching an online-only version of Statics (Anna)
 - Develop Demonstrations (Scott, Ed)
 - Weekly quizzes with peer grading (Matthew)
- Things to Do to Overcome (What might hinder your attempts?)
 - Students unwilling to participate (Mousa, Scott)
 - o Lack of support from administration (Anna)
 - Perfect is the enemy of adequate (Ed) -- focus just on one course

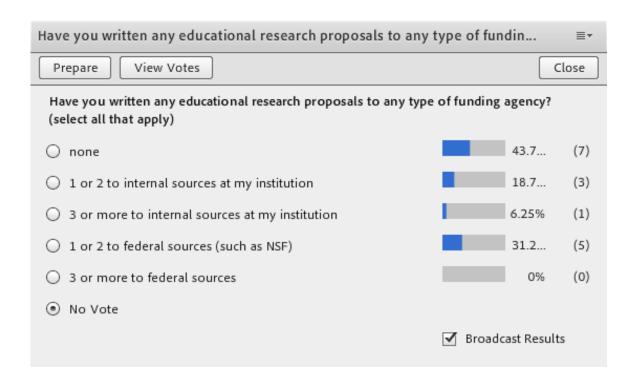
- Peer grading might be poor quality (Matthew)
- o Lack of time to complete work (Anna)
- Funding available (Mousa)
- What Assistance would be Helpful:
 - Funding for purchasing models (Mousa)
 - o Grader to help with double checking student grading (Matthew)

Group 3

- Start each class with concept questions to see where students are; need source of questions or time to write questions. Would help if we have a way to share questions as we develop them.
- Had 60% D/F/W in statics this year; needs new approach. Not sure if the problem is motivation, math skills, or concepts.
- Need to have uniform standards for all statics courses (for all instructors).
- Give an exam the first day of class; use as early warning for students who are weak in areas of prereqs.
- In statics, will give more exams (7 or 8 exams); will try flipping the class for one chapter; will have student groups develop and present a video.

Polls





Chat Window Activity

- *Amelito Enriquez*: Is it okay to share the resources we have with other colleagues? I am attending a teaching workshop this summer..
- *Edward Berger*: That's fine with us! Actually it would be really useful if you could let us know how many people you've shared with. We're trying to keep track of the overall dissemination effort. Thanks!
- *Amelito Enriquez*: I will do that. Thanks Ed!
- *Anna Howard*: Gimp rocks!
- *Taher Abu-Lebdeh*: I have shared resources with three (3) other faculties
- *Anna Howard*: That's one of the things that scares me the most:
- *Anna Howard*: I am not an expert in the literature but I'm sending papers to the people who are.
- Amelito Enriquez: Maybe it would be worth creating a repository of sources/resources/literature that would help us with "theoretical frameworks" related to learning.
- Amelito Enriquez: How about a list of validated instruments?
- *Amelito Enriquez*: I mean how about giving us a list.
- Amelito Enriquez: Thanks.
- *Edward Berger*: How Learning Works talks about something called an "exam wrapper", which asks the same types of questions about study habits, etc. that Joan just mentioned. Appendix F of HLW.
- *Anna Howard*: Might be interesting to team up with someone at a huge research-1 institution to examine that.