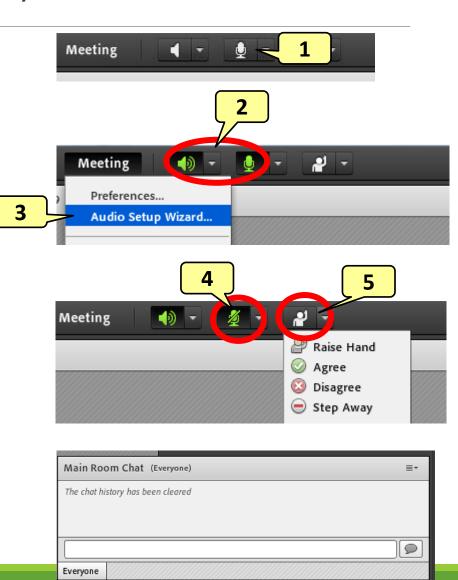
Welcome! Every time you enter the VCP.....

- 1. Enable your speakers and mic
- 2. The top bar icons should be green.
- 3. Run the audio setup wizard (use "Meeting" menu on top left).
- 4. After testing your mic, mute yourself



Start Recording

Faculty Virtual Community of Practice Mechanical Engineering

Session 2: Pedagogies of Engagement

Chuck Krousgrill

Purdue

krousgri@purdue.edu

Julie Linsey

Georgia Tech

julie.linsey@me.gatech.edu

Tentative Agenda

Welcome and learning objectives (5 minutes)

Brief Review of Pedagogies of Engagement (15 mins)

Group Breakouts- discuss assignment (15 mins)

Report out (20 mins)

Breakout & Open Discussion- Challenges for Active Learning & Solutions (20 mins)

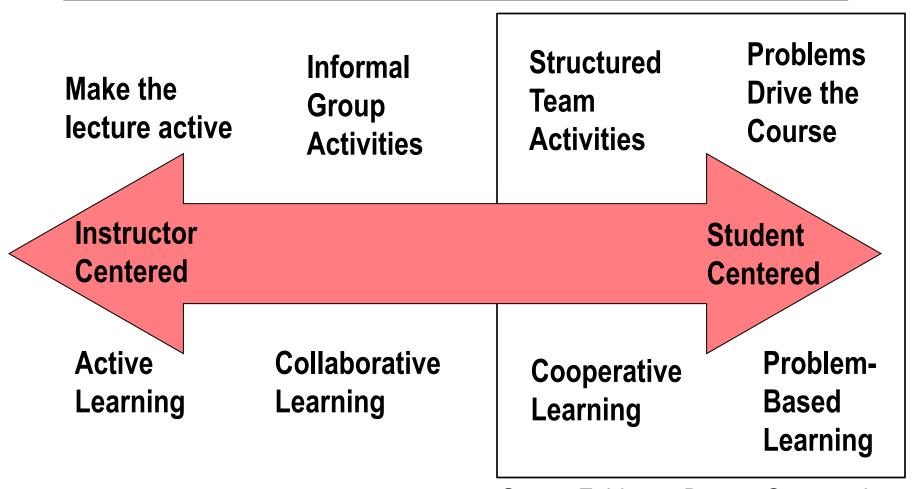
Poll Question & preparation for next time (2 min)

Session 3: Learning Objectives

Describe key features of pedagogies of engagement (active, interactive & cooperative learning and challenge-based learning) and explain the rationale for using them

Apply pedagogies of engagement to design activities for your class

The Active Learning Continuum



Strong Evidence Base – Cooperative Learning & Challenge-Based Learning

Pedagogy in the Classroom, 2005 & 2008

Methods Used in "All" or "Most"	All faculty 2005	All faculty 2008	Asst Prof 2008
Cooperative learning	48%	59%	66%
Group projects	33%	36%	61%
Grading on a curve	19%	17%	14%
Extensive lecturing	55%	46%	43%

*The American College Teacher. National Norms for the 2004-2005 and 2007-2008 HERI Faculty Survey, www.heri.ucla.edu/index.php

Group Activity: Breakout Session

For today's session, you were asked to prepare two activities for active learning in your classroom. For each participant of each group:

- Provide a brief presentation of one of your activities to your breakout group.
- Ask your breakout group members to list the strengths and weaknesses of the activity that you described.
- Also, what are the *barriers to successful implementation* of this activity in a classroom? How can these *barriers be overcome*?

In the following report-out session, reporter will briefly summarize activities discussed, along with strengths/weaknesses and barriers discussions.

Time: 20 minutes

Assigned scribe (2nd person on list) and reporter (4th)

Breakout & Open Discussion- Challenges in General for Active Learning & Solutions

Poll

Assignment for Next Week

TOPIC: Learning objectives and Bloom's taxonomy

1. Read the following:

- Appendix D of How Learning Works: "What are learning objectives and how can we use them?" (scan available in Mechanical VCP folder)
- Website on changes to Bloom's taxonomy: www4.uwsp.edu/education/lwilson/curric/newtaxonomy.htm
- Website on the revised Bloom's taxonomy: www.celt.iastate.edu/pdfs-docs/teaching/RevisedBloomsHandout.pdf

2. Activity:

Choose a course that you have recently taught. For this course, create a list of 4-5 learning objectives and relate each objective to a level of Bloom's taxonomy. Create a mini project for the course that emphasizes the creation of higher-order thinking skills.

3. Post your activities to the Mechanical VCP Folder by <u>5:00 PM Sunday Nov. 10th</u>