Prep for “Engaging Students Through Interactive Lessons”

Prior to the 3:45p.m. session on Tuesday, January 12, please do all required reading and viewing.

**Required Reading**
The Torch or the Firehose: A Guide for Teaching Assistants

- **Section 1**: The Glass Wall: Encouraging Interaction
- **Section 2**: Questions: Theirs and Yours
- **Section 3**: Before You Walk In…
- **Section 4**: A Word About Pedagogy
- **Section 5**: In the Classroom
- **Section 6**: Getting Off to a Good Start
- **Section 7**: Basic Communication Skills
- **Section 8**: Seeing is Understanding: Using the Blackboard

Review the summary sheet called “The Basics of Giving a Good Lesson.”

**Required Viewing** (just 12 minutes!)
In this lesson on the chain rule, the instructors asks a lot of different questions and a lot of different types of questions.

- View segment 6:53 to 13:11.
  - [https://www.youtube.com/watch?v=8dr1dZjfhmc](https://www.youtube.com/watch?v=8dr1dZjfhmc)

This is a good example of an instructor who encourages questions and allows appropriate wait time.

- View segment 0:21 to 0:57.

This clip shows several examples of the instructor taking inaudible responses from the students and restating them so the rest of those in the group know what was said. It also shows the instructor integrating questions into a lecture.

- View segment 3:07 to 8:00.

What could the instructor have done differently between 6:00 and 6:55 to have increased interaction?

**Optional Reading**
Interactive Teaching Methods Double Learning in Undergraduate Physics Class

- *ScienceDaily* (May 12, 2011)
  - [http://www.sciencedaily.com/releases/2011/05/110512150817.htm](http://www.sciencedaily.com/releases/2011/05/110512150817.htm)

Undergraduate Science and Engineering Teaching Needs Improvement

- *ScienceDaily* (May 21, 2012)
  - [http://www.sciencedaily.com/releases/2012/05/120521115702.htm](http://www.sciencedaily.com/releases/2012/05/120521115702.htm)

Engaging students in conducting Socratic dialogues: Suggestions for science teachers

  - [http://www2.phy.ilstu.edu/~wenning/jpteo/issues/jpteo4(1)aut06.pdf](http://www2.phy.ilstu.edu/~wenning/jpteo/issues/jpteo4(1)aut06.pdf) (This is a link to the whole issue. Scroll to page 10 to get to the start of the article.)

**Questions?** Contact Paula Quinn: 413-231-3009 or paula@quinnevaluation.com