CETL Teaching Workshop
Project Presentation
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Farhad Reza, Ph.D., P.E.
Dept. of Mechanical & Civil Engineering
Teaching with Technology

- Used the Jing Project as presented by Linda Jacoby in the fall.
- Studies suggest teaching with technology leads to many beneficial student outcomes:
  - Increases the preparation of students for most careers and vocations
  - Significantly improves student problem solving skills
  - Can increase opportunities for student-constructed learning
  - Provides instructional opportunities otherwise not available
Structural Analysis Software

- Structural analysis software is essential in the modern commercial world of engineering
- Significant time saving, ability to analyze complex structures, and consider multiple loading scenarios, improved accuracy
CIVE 341/ME 415 Structural Analysis

- Junior level class taught in fall
- The class places emphasis on fundamental principles. The computer assignments are just a supplement.
- Six one-hour computer labs in the semester. Expectations – students are first walked through an example and then complete a problem on their own.
- Twenty students and only 15 licenses for SAP 2000.
Experience

- Things did not go smoothly.
- Students had problems following written instructions.
- Difficult for instructor to assist multiple stations.
- Common problems – “where is this command?”, clicking the wrong thing.
- Assignments were seldom completed in the one hour block.
Video/Audio Instructions with Jing

- SAP 2000 Problem 8.31 Part 1
  - http://www.screencast.com/users/rezaf/folders/Jing/media/02aa114f-2712-49db-9cbe-556573785868
- SAP 2000 Problem 8.31 Part 2
  - http://www.screencast.com/users/rezaf/folders/Jing/media/97f1e182-f1a3-43c1-8dbd-ffb64e0858f4
- SAP 2000 Problem 8.31 Part 3
  - http://www.screencast.com/users/rezaf/folders/Jing/media/241d4d5d-337b-4224-9f7d-fb691db1dd78
- SAP 2000 Problem 8.31 Part 4
  - http://www.screencast.com/users/rezaf/folders/Jing/media/ceadd533-dd54-4d81-b530-fdf32e193d7f
Two Way Street

- Students can also use Jing to communicate with me.
- Previously I had to assign a blanket grade for wrong answers.
- Jing will allow me to provide better feedback e.g. one student drawing their model in inches instead of feet versus a student deliberately skipping time consuming steps.
Challenges

- Takes time to develop the videos.
- Increased time for grading.
- Computer freezes.
- Only 5 minute blocks for recording.