

**NSF Material and Energy Balance (MEB) Virtual Community of Practice (VCP) – 2013
Individual Project Summary**

Name: _____ Don Comfort _____

University: _____ University of Dayton _____

Number of semesters you have taught the MEB course: ___5___

Summary of your fall implementation activity:

Utilized concept tests as just-in-time teaching screening method.

Reduced HW load to allow students more time to read/prepare for concept tests

Used CATME to assign groups and receive group feedback

Continued to use notes with gaps in class

Used video lectures for chapter 8 material while at AIChE

What worked well? Feel free to share qualitative and quantitative assessment results, if any, to describe student performance.

CATME – group assignment primarily based upon student schedule compatibility.

- Didn't have too many complaints about being able to meet
- Group dynamics still did not seem to improve, students continue to use divide and conquer approach

ConcepTests provided a little guidance on material familiarity for the students, but maybe not weighted enough to encourage them to take them seriously...it was added into the HW score and counted about 400/2200 HW pts of which HW was 20% of course grade. I had hoped to focus in class concept discussion on a few challenging concepts, but I went over the ConcepTests in class and it took almost as long as going through the material.

Notes with gaps worked well, but students were responsible for printing them and an increasing number elected not to print them (even though free to do so at department computer lab)

What could have been improved?

I'm still looking for some way to get the HW groups to work together on problems, rather than dividing and conquering. CATME assessment continues to indicate lack of team work.

I had hoped to flip the classroom for a class, but that did not end up happening due to time prep time constraints. Although short video lectures were developed while traveling at AIChE.

What would you do differently next time?

I will continue to use notes-with-gaps.

I would like to bring in out-of-the-book, type problems like youtube Fridays for a couple assignments to have the students apply engineering skills to alternate systems.

I plan to continue with ConcepTests as I think that was a gap in my teaching, not spending enough time on the concepts, but illustrating them through problem solutions. I think in addition to the JITT CT, I will probably also use some in-class concept tests for additional assessment.