

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

**Name:** \_\_\_Steve Sternberg\_\_\_\_\_

**University:** \_\_\_U Minnesota Duluth\_\_\_\_\_

**Number of semesters you have taught the MEB course:** \_\_\_3\_\_\_

**Summary of your fall implementation activity:**

Let the new guy teach it. I am going to teach it in summer (Maymester) 3 hours/day 5 days/ week, for three weeks – so one day is like a week of regular semester. I think of it as MEB bootcamp. I will assign 4 hours homework everyday using Sapling so they can get instant feedback on their work and I won't need to grade HW, just the daily quizzes and weekly exams.

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

I did one experiment with the MEB class where I had the students that failed the quiz on chemical reactions and limiting reactant calculations take an extra evening course to provide extra practice. It worked great almost every student was able to correctly perform the calculation on the final.

**What could have been improved?**

I will be trying to do some classroom flipping in summer. I am not sure I can or want to lecture 3 hrs/day every day.

I also used CATME for a group project. About 10% failed to register, yet I added them to the regular groups. Next time those who choose not to do it or cant for some reason all get grouped together so only that group will have time conflicts.

**What would you do differently next time?**

Use more web based resources