I attended a workshop with Tom Laughner at Bryn Mawr on blended learning in liberal arts colleges. The group consisted of approximately a dozen faculty and staff from Bryn Mawr, as well as faculty and quantitative center or IT staff from Bowdoin, Colgate, Grinnell, Haverford, Ithaca, Skidmore, Smith, Union and Wesleyan Colleges, plus Candace Thille (Project Director of the Open Learning Initiative [OLI] at Carnegie Mellon University). Other guests included Josh Fischman from the Chronicle of Higher Education.

Kim Cassidy (Bryn Mawr Provost) led off the morning discussions by providing a quick history of the grant which brought this group of 35 liberal arts colleges together, and a preview of the day as well as plans for the future. Bryn Mawr is looking for partners to adopt the OLI materials as part of this project, and to undertake a formal assessment of how these efforts fare.

The OLI repertoire of classes includes a variety of statistics, computational discrete mathematics, engineering statics, biochemistry, French, Spanish, Arabic, logic & proofs, economics, modern biology, chemistry and physics.

Candace Thille (Director of the OLI) provided an extended introduction to the project, which built from the same framework that the CMU CIO (Joel Smith) gave at the January Futures Initiative panel discussion at Smith.

One of the main tools of the OLI project has been to create a flexible framework to provide directed practice and targeted feedback as well as cognitive tutoring. The tutor ideally makes comments when the student errs, answers questions about what comes next, and maintains a low profile if the student is doing well.

Feedback plays a key role, and facilitates more effective out of class involvement. Candace reiterated the results of their assessment (published as Lovett et al JIME 2008) of an accelerated OLI course (which met for 8 weeks with 2x/week "lectures") compared to a traditional course (which met for 15 weeks with 3x/week lectures plus 1x/week lab). Students who declined participation in the trial constituted one control groups, while those randomized to the traditional option comprised a second control group.

The results were striking:
  • There were no significant differences in the characteristics nor the outcomes for the two control groups
• OLI students the completed course in half the time with half the number of in-person course meetings, but had showed significantly greater learning gains (on the CAOS test that I use in my courses)

• No significant difference between OLI and traditional students in the amount of time spent outside of class

• No significant difference between OLI and traditional students in follow up measures given 1+ semesters later

OLI is always used at CMU in a hybrid mode according to Lisa Dierker of Wesleyan, there is a nice interface to Moodle. Others noted that the system provides a safe space for practice. A new CMU project is working jointly with the Univ of Toronto Knowledge Forum folks.

Candace closed with the same quote from Herb Simon, calling for a wholesale conversion from course development as a 'solo sport' to a community based research activity.

The next session was a panel discussion featuring Lisa Dierker (Wesleyan), Jonas (Chemistry), Peter (Biology) + Candace (CMU OLI). Lisa has created an active learning intro statistics course that integrates many of the OLI modules. She reiterated her thoughts on why OLI is successful:

I know what students know, students know what students know, and probably most importantly, students know that I know what students know

As we tend to see in our existing courses, students are engaged by working with each other.

Other panelists discussed the need for layered approach (the use of the online tools needs to be made clear to students).

The last session broke up into small groups based on interests. Tom and I ended up with the social scientists, many of whom were interested in statistics.

At the end of the day, Kim Cassidy noted that Bryn Mawr will soon be hiring an instructional support technologist to move the project forward. This individual will help to set up a website with the goal of facilitating conversations between the 35 schools and the participating faculty. Funds are available to those who choose to become early adopters. This includes course development funds, plus potential for visits by Bryn Mawr (or CMU?) folks. Early adopters would need to sign onto assessment of persistence of students and other measures.
I left feeling that there is good potential for Smith to engage with this project, particularly for statistics courses.