

MECHANICAL AND AEROSPACE ENGINEERING SEMINAR

University of Virginia, Charlottesville

Collab - My Experience as an Early Adopter

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Time: Thursday, March 20, 2008, 4PM

Place: MEC 341, Mechanical Engineering Building

Refreshments at 3:30PM in Mae Faculty Lounge, MEC 305

ABSTRACT:

After over a decade we will finally say farewell to the Instructional Toolkit in the summer of 2009. Currently ITC staff is making presentations introducing Collab, the designated Toolkit replacement, to each department throughout the University. As an "early adopter," I have been using Collab exclusively in two courses this semester. One of them is MAE 314, our undergraduate heat transfer course with 85 students; the other is MAE 672, Computational Fluid Dynamics, which is being taught this semester through the CGEP (TV) to about 30 students at six different sites.

Collab is UVA's implementation of the open-source Sakai system, which has been under development for a number of years at dozens of major universities. It can be used for course management, research collaborations and committee work. As such, it has many new features that rectify many of the inadequacies of Toolkit. I will talk mainly about my experience using the Resources, Schedule, Assignments and Test and Quizzes features in these two courses. The Tests and Quizzes feature is really nice in that unlike Toolkit, where you make up a quiz and are stuck with it, Collab allows you to create question pools. From the question pools you can select whatever you want to make up a particular quiz. Quizzes may consist of a combination of machine scored questions of all imaginable types, as well as subjective questions such as short essays that you or the GTA grade manually. You can set up a quiz so that after all students have finished, they see their own results with feedback as to why a particular answer is wrong. You are provided detailed statistics on how they did on each question. Grades are sent to the integrated grade book automatically, a major improvement over Toolkit.

If time permits, I will also demonstrate some examples of how I use Excel with some simple Visual Basic for Applications (VBA) programming in both undergraduate and graduate instruction. This is an example of what an instructional technologist would call a "Low-Threshold" application (LTA) – in some cases involving only a few hours of prep time to create a good project.