Forum on the Use of Automated Systems and Technology for Managing Homework, Testing and/or Tutoring in Quantitative Classes

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ABSTRACT

Panel led open discussion of experiences with the use of automated systems and technology for subject areas that include statistics, economics and management science. Panelists have experience with clickers, Tablet PCs, Blackboard, WebCT, Respondus, Camtasia, Mimio, Adobe Captivate, LiveScribe smartpen, Sympodium, ALEKS, Aplia and MyStatLab. They will share their level of satisfaction with products and technologies along with perceptions of student satisfaction and issues that are important for a faculty member to consider relative to using such a system or technology.

SESSION OVERVIEW

In the face of budget cuts most faculty have experienced increased workloads and are seeking ways to be more productive. At the same time students are becoming more accustomed to using technology. Experience and research has shown that students who do homework regularly learn more and as a result have better grades. Ideally someone could sit with the student while he/she does their work and provide immediate feedback telling the student whether the completed work was correct or not. If the student was stuck and did not know how to proceed, a helpful hint could be given. If that was not successful then an explanation of the correct way to solve a problem of this nature Today several of the textbook publishers are providing automated systems for managing homework and providing tutoring in quantitative areas. These systems provide immediate feedback to the student along with assistance and can be used whenever the student has time or chooses to study. Examples of these systems for statistics classes include Aplia from Cengage, MyStatLab from Prentice-Hall, Hawkes Learning Systems: Statistics, and McGraw-Hill has ALEKS and its new product Connect Business Statistics.

In addition to the publisher supplied systems that are generally linked to the textbook for the course, there are other systems for course management such as Blackboard and WebCT that are available at most institutions. Faculty can use these tools to create quizzes/tests/assignments that can be taken with the computer and graded automatically. Also they can be used to provide students with files that may contain lecture materials stored in PowerPoint, Word, Excel or PDF files. Faculty can use tools like Camtasia to create recordings of lectures or other instructions that can be saved and made available to the class. Tablet PCs can be used during lectures to

record written notes and annotations to PowerPoints or other presentation materials, then these files can be made available.

Collectively, the four session leaders have varying degrees of experience with clickers, Tablet PCs, Blackboard, WebCT, Respondus, Camtasia, Mimio, Adobe Captivate, LiveScribe smartpen, Sympodium, ALEKS, Aplia and MyStatLab as instructors of statistics, economics and management science classes. The panel will present their experiences in using the technology enabled tools to improve the quality of their quantitative classes. Several of these are certainly applicable in classes other than quantitative courses. After their initial presentations, the moderator will engage the audience in an open discussion of issues and experiences with the use of the technologies and automated systems. The presentations and discussions will include the level of faculty satisfaction with the respective products and the perceptions of student satisfaction. A major goal of the session is to discuss the issues that are important for a faculty member to consider relative to making the decision about using one of the discussed systems.