Interactive Session: Whose Technology Is It Anyway?

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Abstract – Today it is common for students to have a handheld or notebook computer in the classroom. As with any form of educational technology, there are challenges for the instructor to make good use of the technology and motivate the students to do the same. At education innovation conferences like FIE, there is a strong need to model good teaching methods where people discuss the latest techniques as applied to teaching and learning of Engineering and Computer Science. Engineering and Computer Science faculty often develop cutting edge technology. However, we sometimes lag behind in the use of technology for teaching and learning. Keeping up with the fast pace of technology change can make it difficult to develop new applications of technology to teaching and learning. This session seeks not only to disseminate ideas but to also generate new ideas.

Index Terms – Technology for Education, Active Learning, Discovery Learning.

INTRODUCTION

This is an invitation to be part of an interactive session that promises to be of use to you even after the session ends at FIE’04. The session will be an active learning activity to generate and share ideas for applying technology to teaching and learning. We all wish to make our teaching the best it can be, therefore we should practice our methods and hear from others what methods they are using.

During the session small teams will gather together their ideas and pick one or two to present to the entire audience. The ideas should be limited to solutions to problems that occur in or out of the classroom. The solutions may include better use of technology, which might mean no technology at all. Each team will develop their own list of solutions and after small group discussion, present those to everyone with a short presentation or skit. Notes, comments, and photos from the teams will be consolidated and posted to: http://myweb.loras.edu/dn026711/FIE04

AGENDA FOR THE INTERACTIVE SESSION

Interactive sessions require a well planned time period. Our previous experience with this type of session is that the longer the session the better. The suggested time frame is 90 minutes. A shorter time slot leaves groups with too little time to develop their ideas.

- Begin with a brief description of the goal of the activity and guidelines for carrying out the activity (15 minutes).
- Suggested topics for discussion and an example of the desired outcome will also be presented. Some example topics can be found on the web site given earlier.
- Form groups of six or less (10 minutes).
- Groups discuss the sample problems and choose a problem as a group topic (20 minutes). Facilitators help groups focus and also ensure that no topics are repeated too many times.
- Groups are directed to develop a short presentation or skit that highlights some of the best ideas of their group (30 minutes). Facilitators again canvas the room helping with presentations as needed.
- Groups give presentations (40 minutes). One facilitator will keep time for each presentation short enough so that all may present. A video camera may be used to help create transcripts for all participants.
- Wrap up summary and evaluation survey (5 minutes).

RISKS

There are potential risks with any interactive activity. The most common risks when holding a session like this one or with using interactive techniques in the classroom are: participants are not able to decide upon a specific topic; participants spend too much time discussing “solved problems” or “unsolvable problems” instead of concentrating on solutions that are attainable; and several groups may choose the same topic. To limit the effects of these and other risks the facilitators of the session will circle through the groups to make sure that the topics and viewpoints are varied. Facilitators can assign problems if groups are having trouble choosing a problem or designate a group leader for groups that are having trouble staying on track. All three facilitators have been using active learning in their classrooms for many years. We assume that conference attendees are no more difficult to draw into the activity than the sleepy or uninterested student!

Individuals or groups may choose to implement their ideas and prepare a paper for FIE 2005. Facilitators will gather and disseminate materials and presentations to the attendees. The facilitators will also prepare a paper for FIE 2005 covering the results of the survey and the usefulness of the session.

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