Realizing active learning in a physics classroom using Ubiquitous Presenter and Tablet PCs.

Ubiquitous Presenter (UP) is a digital presentation system that facilitates spontaneity and interactivity in the classroom. Using the system, an instructor with a Tablet PC can spontaneously modify prepared slides. Furthermore, students with web-enabled devices can add digital 'ink' or text to the instructor’s slides and submit them to the instructor during class. We have used this system to facilitate interactive engagement techniques in an introductory physics class where students worked in groups on Tablet PCs during class. Class time was used for Interactive Lecture Demonstrations, Peer Instruction, and group problem solving. We describe the implementation of these activities with UP and Tablet PCs, show examples of student contributions, and describe the impact on the classroom setting. (Received September 20, 2007)