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### **Natural Sciences & Mathematics Students' Use and Perceptions of Tablet PC-Based Lecture Videos**

Tablet PCs are widely used in science and mathematics courses at UH. The lectures are recorded and the videos made available to students via streaming or download as supplementary material to a traditional course or as lectures supporting hybrid courses. Tablet PCs add value by allowing a professor to write or draw on the laptop screen as though it were pen and paper; these annotations are also captured in the videos. Professor Jaspal Subhlok of Computer Science received funding from the National Science Foundation to advance the technical quality of the videos by integrating automatic indexing and captioning. Professor Lecia Barker of UT-Austin is the project's evaluator and will present results of the spring 2009 end-of-semester survey (N=585; disciplines include Biology, Geology, and Computer Science). The evaluation describes the nature and frequency of use, students' perceptions of value of video lectures for learning, and the relationship among several motivational, individual difference, and disciplinary variables for use and perceived value (e.g., importance of maintaining a high GPA, length of daily commute to campus, hours worked to earn income, percent of classes attended, race/ethnicity/gender, etc.).

#### **Bio:**

Before joining the iSchool, Lecia led the Assessment and Research Center in the Alliance for Technology, Learning, and Society (ATLAS) Institute at the University of Colorado, Boulder. She is also Senior Research Scientist with the National Center for Women in IT (NCWIT). In this role, Lecia identifies effective practices for implementation by NCWIT members, consults with Academic Alliance members and NCWIT Hubs on their research and implementation projects, supports evaluation through advising, instrument development, and analysis, and disseminates NCWIT and outside research projects and findings.