Mobile Learning — learning within various contexts and locations facilitated by networked and highly portable devices.

OVERVIEW

In fall 2010, the College of Education and Human Development (CEHD) launched a mobile learning pilot project to examine how iPads could be used for teaching and learning. The entire first-year class of 447 received iPads at no cost to them. The project was funded by private donation. Twenty-seven instructors in CEHD’s Department of Postsecondary Teaching and Learning (PsTL) chose to participate by agreeing to incorporate the iPad into their curriculum. An interdisciplinary project team, consisting of staff from CEHD’s Academic Technology Services (ATS) and the Office for Information Technology (OIT) collaborated to distribute iPads to students and faculty, provide student training and faculty professional development, and evaluate the project.

WHAT WE LEARNED

Through instructor and student interviews, focus groups and surveys, we learned a great deal about mobile learning and the affordances of personal electronic devices for teaching, learning and personal productivity. What we learned falls into six broad categories:

The Digital Divide | Instructors expressed optimism that the iPad could reduce the digital divide in the classroom. They emphasized finding apps that are free or very inexpensive for students. Because all first-year students had an iPad, instructors could integrate it into their first-year course, confident that they were disadvantaging no one. Working to make app and e-book purchases easy for all students will be a significant step towards reducing the digital divide in the future.

Media Production | Instructors frequently asked students to create media using their iPad, including development of individual photo journals, e-documents, speeches with image projections, short movies on a course theme, photomontages of images, and pictures or videos for class presentation. Digital stories, photo essays, and e-publications were also created.

Personal Productivity | Instructors were overwhelmingly positive about the convenience and ease of accessing email and calendars on the iPad, and many used the iPad to schedule appointments or send email to students “on-the-spot” during class. Students acknowledged taking advantage of these same productivity features of the iPad.
Information Literacy | Instructors and students agree that information access and consumption is one of the primary strengths of the iPad. Many instructors reported encouraging student classroom use of the device to retrieve and report on articles relevant to the course. To prepare their course work students used their iPads to: conduct primary research for speeches, research current trends, survey their audiences, collect data using Google Forms, complete online assessments, reference information online, and access learning management system (Moodle), internet, and library resources.

Sustainable Classroom | To reduce the use and related cost of traditional course materials and to take advantage of the features of the iPad, some faculty, for example, used an e-version of required texts, encouraged students to access and annotate course readings via a reader app, and checked and sent assignments using their iPads. The efficacy of using e-texts to their full advantage for the distribution of interactive and multimedia course materials has yet to be tested. This type of digital course material will be explored in the second year of the project.

Learning Beyond the Classroom | Several faculty members developed curriculum that used the iPad to change the learning context. For example, in an introduction to psychology course students used the portability of the iPad and the college’s online survey tool to collect data in the community related to their research questions.

MOVING FORWARD

In year two the project team will focus on increasing student use of the iPad for personal productivity and the creation and use of sustainable classroom materials. Working with the observation that iPad use by students for personal productivity increases the likelihood of use for learning activities, the project team will work with student advisers to identify and implement related training opportunities for students. Building on what was learned in year one, the project team will work with PsTL faculty to design instruction that builds confidence in the use of technology for learning. Incorporating iPad activities into future capstone projects will give students and faculty the experience needed to make the iPad an effective tool for learning.

One of the challenges to the Sustainable Classroom goal is the limited use of digital course content by instructors and students. The project team will work with instructors to pursue solutions that increase the use of digital course materials such as interactive e-books and digital textbooks and course packets.

In the fall 2011, the project team launched a project website, Mobile Learning at http://cehd.umn.edu/Mobile. The site showcases project achievements and provides instructors and students with a single point of access to project information, resources, and support.