Mobile Perspectives

By Mary Ann Gawelek, Mary Spataro, and Phil Komarny

On iPads

Why Mobile?

Most students entering our classrooms were born between 1978 and 1995. Commonly referred to as Millennials, Boomlets, or the Net Generation, they have been characterized as born consumers, digital natives, tech-savvy, highly social, always connected, collaborative, multi-tasking, impatient, lifestyle-focused, craving of diverse media, desiring open access to everything, and leading 24/7 lives. No matter their economic status, they know the World Wide Web, social media, and entertainment technologies such as film, music, and games as consistent and constant components of their everyday experience. They share their thoughts, feelings, and ideas with family and friends electronically, and they are accustomed to instantaneous information retrieval and communication. These students interact with the world in radically different ways than did the generations before them. At Seton Hill University, we are testing the proposition that they learn differently as well.
Given the recent and rapidly growing access to a dazzling array of intellectual technologies, faculty and staff at Seton Hill, a liberal arts university focused on excellence in teaching, have seized the opportunity to experiment with and, we hope, improve, the learning experience. In early spring 2010, the university decided to provide iPads to all full-time students in the coming fall. This announcement was made just days after Apple released the iPad. The university also committed to providing iPads for all full-time faculty, student affairs and academic support service staff, and employees responsible for student recruitment, retention, and athletics. The administration believed that to fully realize the benefits from the new technologies and tools, the majority of the campus community needed to have access to them. Moreover, the entire campus would need to change approaches to and uses of technology. Subsequently, 1,850 iPads were distributed, with one hour of training for every recipient before or during the first week of the fall semester.

The program, called the Griffin Technology Advantage, had the following key objectives: the creation of a teaching and learning environment that would go beyond the confines of the traditional classroom in time and space; widespread use of mobile technology for instantaneous access to information; deepening of critical and creative thinking through interactive teaching strategies; increased student engagement in learning; and decreased costs for students through the use of e-texts. The university also thought two related objectives might be achieved: enhanced campus vibrancy and increased administrative efficiencies.

We are mindful that questions have been raised about the educational value of an approach to learning so heavily dependent on the experimental use of a very new piece of mobile technology—skeptics have called the iPad a gimmick, a marketing tool, a toy, or a passing technology whim. Yet our faculty and staff believe that mobile technologies are leading to fundamental changes in teaching and learning.

Key to the success of the Griffin Technology Advantage program is visionary and nimble senior leadership. Having a president who understands current students’ learning styles and is willing to match university resources to meet these needs with the full use of technology is essential. Also indispensable are academic leaders who are keenly interested in learning theory, research on how technology may be rewiring our brains, the nature of teaching in an age of declining interest in the liberal arts, and the characteristics of students on (or off) campus today—along with faculty who are committed to teaching excellence and who are open to becoming active learners in emerging technologies. Equally important is an innovative technology leader. Predicting what technology will be like three to five years in the future, and which investments made now will pay off then, requires leadership willing to take risks. Had the leadership at Seton Hill not done so, the university might still be discussing the pros and cons of other mobile technologies and readers or, for that matter, of whether any mobile technology at all should be allowed in the classroom.

Of almost equal importance is a strong collaboration among technology and academic leadership, faculty, and students so that as many technology resources as possible can be directed to support the learning agenda at the university. Critical to the success of the Griffin Technology Advantage were the assurances that the campus infrastructure was ready and that the staff to support service to all students was in place and ready to go. To that end, in the summer of 2009, the university completely refreshed its network. To ensure a strong campus-wide wireless environment, an improved 3,000-port network included 300 access points to wireless connectivity. In addition, the university upgraded from a 25mb Internet connection to a private, full-gigabit fiber connection to a Level3 network. This connection, which is scaled in 10mb increments, can sustain growth and allows the campus community to experience the Internet without limitations. Confident in the robust nature of the infrastructure, the staff of the Information Technology Department developed a new help-desk model that leverages a cloud-based ticketing system called Zendesk. They selected a new help-desk location and modeled their services after those provided by an Apple Store. The new location has led to higher visibility of an important service on campus, and the use of just-in-time status updates for all service tickets has led to improved student satisfaction.

With the infrastructure in place and the IT staff ready to go, the question remained: how should faculty be assisted in using the tools? Without comprehensive and continually refreshed faculty development, the Griffin Technology Advantage would have struggled to reach its goal of educational innovation. Fortunately, in 2008, the university was the recipient of a Title III grant that focused on increasing student retention through training faculty and staff in the multiple uses of interactive and assistive technology. Ongoing technology training sessions include the following: the use of the iPad as an instructional tool; the interactive application of working with multi-user virtual environments (MUVEs) such as Second Life; Web 2.0 applications such as screenconning, podcasting, wikis, and other collaborative tools; multimedia resources such as iMovie; assistive technology tools and resources such as the built-in accessibility features of a computer operating system, popular screen-reading applications, and scan/read devices; and the use of video-gaming concepts to support the instructional process.

Faculty are primary to the success of
the Griffin Technology Advantage program. They have devoted the time needed to redesign instruction. With their students, they have become co-learners and pioneers in the classroom as they test out the power of this new technology. With no models to work from, they had to explore, practice, and discover—on their own—the iPad’s potential for expanding learning. Although a few faculty use the technology rarely, and then only in response to student demand, the most enthusiastic faculty report deep satisfaction from the critical reexamination of their course syllabi (“the first time I’d done so in a long time,” one said) and excitement about the discovery of new resources available whenever they or their students happened to be.

Early assessment data show that faculty use the iPads in several areas:

- **Immediate and Authentic Information Gathering:** Google Earth in history class; pulling up information about a piece of art on display while in the art gallery; researching information presented in class
- **Instruction and Reinforcement:** using apps for building resource directories for small group discussions; creating excitement about writing; illustrating concepts taught in class; backchanneling to allow the active participation of students of all abilities
- **Instructional and Student Presentations:** using interactive games to illustrate concepts; pulling statistical information to support or refute an argument; having students in laboratories view podcasts on instructions for the experiment

In addition, the faculty and students happily endorse the decreased use of paper for handouts, readings, and syllabi and benefit from formative assessment opportunities such as in-class quizzes that can be discussed immediately, clicker responses for understanding attitudes and knowledge, and short essays as examples of developmental writing. Some Seton Hill faculty also benefited from being in an e-textbook pilot program. iBooks and other e-book sources provided easy access to free primary sources and allowed students and faculty to use these resources in class, including text search and dictionary functions.

Readers may be questioning whether the Seton Hill story is about mobile technology or about the use of the cloud. We would say both. Faculty and students report they use MacBooks for creating documents, for accessing multimedia, videos, and software programs that are not compatible on the iPad, and for whenever they need to use a keyboard. They use the iPad for convenience, portability, communication, information gathering, note taking, reading, and interactive work. The desire to “stay connected” continues to move everyone toward mobility.

We continue to ponder important questions about iPads in the classroom. With the use of technology and highly interactive pedagogical approaches, how can we ensure time for integrative and reflective thinking? Does use of the iPad help or hinder the building of community? Does the iPad distract from learning? Do mobile technologies provide broader opportunities for cheating? The classroom-management challenges are hardly unique, but at Seton Hill, we hope our technology endeavors will help us find better answers to these vexing questions.

As implied above, a widespread implementation of any new campus initiative calls for a comprehensive assessment plan. Assessment activities currently under way at Seton Hill include evaluation components of the professional development program, student focus groups to explore out-of-classroom reactions to and use of the iPad, faculty focus groups on iPad use in the classroom, and survey results from faculty and students. One semester of assessment information shows that 66 percent of faculty use the iPad in classroom instruction once a week or in every class session, that 61 percent of students use the iPad to achieve course learning objectives at least once a week if not in every class session, and that 52 percent of students believe iPad use has had a positive effect on communication with faculty.

The fact that there is little prior scholarship in this area presents challenges but also opportunities. Challenges include a paucity of measurement tools or theory from which to borrow or base assessment strategies. Opportunities include collaboration with colleagues within the Seton Hill community and with peers at other colleges and universities piloting the use of iPads. Seton Hill University’s pioneering efforts to assess and research student learning outcomes will contribute knowledge to the best practices for iPad use and will also add to an understanding of the constraints and advantages of implementing widespread, systematic technological change on campus.

**Note:** The authors wish to acknowledge the work of the assessment group on the Griffin Technology Advantage program: Drs. Edith Cook, Terrance DePasquale, and Marilyn Sullivan-Cosetti.

© 2011 Mary Ann Gawelek, Mary Spataro, and Phil Komarny

Mary Ann Gawelek
(gawelek@setonhill.edu)
is Provost and Dean of the Faculty at Seton Hill University.

Mary Spataro
(spataro@setonhill.edu)
is Director, Center for Innovative Teaching at Seton Hill University.

Phil Komarny
(komarny@setonhill.edu)
is Vice President for Information Technology at Seton Hill University.