The Demand for Mobile

Nearly a decade ago, administrators at Abilene Christian University noticed many students arriving on campus with a portable laptop computer. For Abilene Christian University (ACU), a small, private four-year institution located in Abilene, Texas, this trend resonated with the university’s leadership. For years, ACU had been searching for a portable technology that could connect students with educational materials and resources, wherever and whenever they needed them. However, ACU also realized that laptops were not quite the right tool to fulfill this vision; they were expensive, fragile, and bulky. Students weren’t willingly bringing them to class, since they were heavy and perceived as easily damaged by wear and tear. Furthermore, the infrastructure changes necessary to support hundreds of laptops in the classroom environment, such as electrical outlets, were considered a financial and technical burden.

ACU recognized the potential of emerging smartphone technology as a way to provide students with constant access to their academic world. Mobile phones were already the center of a student’s social life and network; to stay connected with peers, students had their phones with them at all times. As George Saltsman, the Executive Director of the Adams Center for Teaching and Learning at ACU put it, “You know students just don’t leave the dorm room or apartment without their cell phone.” Friends were only a phone call or text message away, and the web-enabled smartphone also allowed for on-the-go social networking, email, and access to all other sorts of information. From ACU’s perspective, it was only a matter of time before the learning experience would go mobile.
When ACU formalized its Mobile strategy in 2007, it was estimated that about 12% of all United States college students already owned a smartphone device*. By the end of 2011, that number is expected to be 75%**. Now that students were consistently coming to class equipped with the equivalent of small computers in their pockets, ACU was tasked with making them applicable in the academic setting.

Goals of ACU’s Mobile Strategy:

- Anytime, anywhere access to learning materials
- More open communication lines between students and faculty
- An enhanced educational experience consistent with the available technology

Requirements of ACU’s Mobile Strategy:

- Web and socially enabled technology
- Highly portable devices that are voluntarily carried with users at all times
- Platform that would support customization and innovation of educational technology

ACU’s Mobile Solution

Starting in the Fall 2007, ACU equipped each member of its incoming freshman class with an iPhone® or an iPod touch®; the iPad™ was also introduced as an option after its debut in 2010. ACU incorporates a broad range of technology on these devices, including real-time polling technology and custom-built apps for data entry in subjects like statistics and psychology. To harness the media capabilities of these devices, professors began experimenting with podcasts to cover course content. And already a heavy user of the Blackboard Learn™ learning management system, Blackboard’s mobile application Blackboard Mobile™ Learn became the perfect solution to complete the experience for students and faculty.

The Blackboard Mobile Learn application makes key Blackboard Learn course content available on smartphone devices, with custom-built screens and navigation designed to fit perfectly on each available platform (Android™, BlackBerry®, iOS (iPad, iPhone, and iPod touch) and HP WebOS). The application offers students and faculty on-the-go access to their course materials, as well as the ability to update announcements, blogs, discussions, journals, and tasks directly from the users’ mobile device. Any updates made from the mobile device are seamlessly integrated with the course environment and available on a computer, and vice-versa. Additionally, unique features of the smartphone can be utilized to enhance the learning experience; for example, photos and videos taken directly from the device can be shared in blog and discussion posts.

ACU also makes use of Blackboard’s McGraw-Hill digital content offering, which provides instructors with an efficient way to build modules into their courses. When combined with Blackboard Mobile Learn, McGraw-Hill digital content provides faculty and students with full access to their texts on their mobile devices, directly from the course environment. However, ACU does not just view mobile devices as a means to access course materials; for ACU, mobile learning fundamentally expands the way that students learn and faculty teach. As ACU’s Director of Faculty Enrichment Dr. Dwayne Harapnuik describes mobile learning, “You can’t stuff a classroom into a little device. Because you can’t do traditional things, you are forced, actually, to do things that are innovative. It forces the rethinking of learning. And that’s a good thing.”

“We realized that we basically had a choice that we needed to make about mobility. We could either sit back and allow mobility to continue to shape the kinds of things that we could do in the classroom without our involvement. Or, we could choose to be proactive, and really take the opportunity to use this revolution to our advantage, to be able to use these tools to enact real learning in the classroom in ways that we could never do that before.”

George Saltsman
Executive Director of the Adams Center for Teaching and Learning
Abilene Christian University
Results of ACU’s Mobile Solution:

Though ACU’s full-blown mobile-learning initiative is just two academic years in the making, it has already made a significant impact on the teaching and learning experience. Preliminary research and analysis conducted by ACU’s Mobile-Learning Fellows have shown the following:

- Increased student participation, involvement, and interest in classes
- Increased contact between students and professors
- Increased positive ratings of class quality and experience
- Major innovation in teaching practices

While the Blackboard Mobile Learn application is just one piece of ACU’s mobile strategy, its crucial role in the mobile learning experience cannot be ignored. From a pedagogical standpoint, the fact that Blackboard Mobile Learn enables students to engage with their course materials from virtually anywhere has empowered professors to re-think their teaching practices. For example, Professor of Economics Dr. Ian Shepherd was one of the first to truly embrace the concept of mobile learning at ACU; currently, his ECON 261 class is taught entirely on the iPad. Dr. Shepherd is particularly impressed by the way mobile devices enable groups to work together both inside and outside the classroom. For him, the fact that students can move around the classroom and interact with each other while maintaining access to their course materials infinitely expands the learning scenarios he can offer his students.

For example, Dr. Shepherd often assigns projects that involve collecting and entering data directly onto their mobile devices, which in turn can be uploaded directly to the course environment via the Blackboard Mobile Learn application. These activities can take place within or beyond the classroom walls, which allows for observation and learning from real-life examples. After completing such a project, ECON 261 student Lilly Assaad remarked, “We could do it anywhere from campus. We weren’t limited to the classroom and we weren’t limited to being together ... we could collaborate and corroborate regardless of where we were and regardless of what time it was as long as we have the iPad, which basically modeled the professional life ... and so it really helps us be prepared for the professional world.”

Via the Blackboard Mobile Learn application, anytime/anywhere access to course materials has also greatly improved the learning experience for ACU students. As Ms. Assaad
quickly discovered, having your academic world with you at all times on a mobile device is fundamentally different than “... a traditional class, where you have to either take a big fat textbook or you’re not going to get any work done. You realize that you can get your homework done and your reading done and interact with other students very easily. It’s just a whole different mindset.” This different mindset also extends to professors, who are encouraged to expand the methods and mediums used to deliver academic content to take advantage of the mobile devices. Students are now interacting with course subject matter on their mobile devices using blogs, discussions, podcasts, and other modern forms of media.

It should also be said that while many institutions and instructors do not allow students to bring mobile devices into the classroom for fear of distraction, ACU professors find that they add new dimension to the learning experience. For starters, mobile devices open up a channel of communication for students who might otherwise be too shy to comment or ask a question during a class discussion. Students also benefit from instant access to web-based information during class; for example, Information Technology student Mark Foster notes that “When a teacher comments about something you want to know more about, you can pull out your (mobile device) and search for additional information. It encourages students to learn more.” ACU students also have new levels of responsibility to play an active role in class, thanks to real-time polls, discussions, blogs, and other course activity taking place on mobile devices. With this responsibility, professors have noticed increases in student engagement and participation in their courses. For example, Political Science students recently watched

President Obama’s State of the Union Address together. Rather than passively listening to the speech, students used Responseware polling technology to provide instant thoughts and feedback on the topics being addressed.

As of Fall 2010, every full-time undergraduate student at ACU is equipped with a mobile device. With a fully developed mobile-learning initiative that strategically incorporates the Blackboard Mobile Learn application, ACU is one of the first institutions to fully integrate mobile technology into the academic experience. This initiative has already resulted in major improvements in student engagement and innovative teaching practices at ACU, and the benefits are expected to increase as the mobile learning movement evolves.


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Dr. Dwayne Harapnuik
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