People want anytime, anywhere access to services for which they used to need a connected laptop.

Higher education increasingly provides mobile access to a range of services, apps, and websites that previously required a desktop or laptop (e.g., campus maps, the LMS, textbook viewing and purchasing, emergency/weather alerts, and collaboration and communication through social media), resulting in on-the-go convenience, efficiency, and greater end-user satisfaction.

Students, faculty, administrators, and higher education staff now have an expectation for the enablement of existing services, apps, and websites. They want anytime, anywhere access to services for which they formerly needed a connected laptop.

ECAR surveyed more than 300 institutions to assess the current state of mobile IT in higher education. The results in this report are compared to data collected in 2011 where possible.
The Greatest Mobile IT Demands Are in Student-Facing Services, Applications, and Websites

The two years since 2011 have seen progress in meeting the demands for mobile IT among all constituents: students, faculty, administrative staff, and other staff. Student needs for mobile IT take precedence over those of other constituents. Currently, three-fourths of institutions are meeting student demand for mobile services at least moderately, up from approximately one-half in 2011.
The top five mobile-enabled services are safety alerts, primary web presence, LMS, campus map, and campus events. Over half of institutions report that mobile versions of these services are deployed either sparsely or broadly. The largest changes in mobile enablement since 2011 have been in the deployment of a primary web presence, the LMS, faculty information, access to grades, and library services.

Note: Items without a small dot were not measured in 2011.
The Present: Current Deployment of Mobile IT Services, Applications, and Websites

Deployment of mobile services closely aligns with the priorities of mobile enablement. In other words, institutions are effectively focusing their mobile efforts in the areas they view as priorities. The only exceptions are in the areas of course registration, financial aid, and advising. Although these services received a higher than average priority rating, mobile deployment of these services is below average. These results indicate a need for future development of mobile enablement in these (mainly academic) service areas.

Communication services tend to be highly prioritized and highly deployed, whereas administrative services tend to have low prioritization and low deployment.
The Future: Predicted Demand for Mobile Services in the Coming Year

The greatest mobile IT demands are predicted to be for general communication and instruction, and this demand is predicted to be greater in these areas than was predicted in 2011. Little demand is predicted for mobile enablement in research, although this figure is up from 2011.

Are Institutions Prepared to Meet the Challenges of Mobile IT in the Coming Year?

The heaviest demand for mobile IT is predicted in the areas of general communication and instruction, and approximately two-thirds of institutions agree that they are prepared to meet the challenges of mobile IT in these areas next year. Although that figure leaves room for improvement, confidence in preparedness is markedly increased from 2011.
Native apps are designed for specific devices and are able to take advantage of each device’s unique capabilities, providing users with more-interactive features than what is available on the web. Native apps generally have faster performance and are easier to use. Web-based apps are typically easier to develop, using skills that are common to most IT groups. Web-based apps are also more accessible from a wide range of devices and can be easily linked from other sites.

For all services, apps, and websites, the preferred strategy for mobile deployment is web-based apps. This may be because native apps require more servicing and support. Native apps are used more frequently in services with higher levels of interactivity (LMS, campus map) compared to other services, although web-based strategies dominate here as well.

There was a significant difference in strategy for the LMS with respect to institution size: The smallest institutions were more likely to have web-based apps for the LMS, and larger institutions were more likely to have native apps.

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**Note:** These results are based only on those institutions responding that these mobile services were deployed sparsely or broadly.
Responsive Design Is Favored Over Mobile-Optimized Design

Responsive design (RD) has the advantage of providing users with a mobile experience without eliminating features of the standard web app. RD can be more difficult to retrofit into existing apps because of the rework involved. Mobile-optimized design (MOD) works—and in many cases looks—like a native app. MOD can take advantage of some device-specific functions but does so by limiting the number of features delivered. It can be easier to add MOD to existing services, but it potentially increases support requirements.

As with the web-based vs. native-apps strategy, the notable exception to the dominance of RD is with more-interactive apps, where use of MOD is relatively more common but still less popular than RD. Again, there was a significant difference in approach for the LMS with respect to institution size: Smaller institutions were more likely to have RD for the LMS, and larger institutions were more likely to have MOD.6

Biggest Challenges in Mobile Enablement

Note: These results are based only on those institutions responding that these mobile services were deployed sparsely or broadly. Those services with n < 45 are not included.
Conclusions

Institutions have growing confidence in their ability to meet the expanding demands of mobile services. The greatest mobile IT demands are in student-facing services, and institutions have responded by making students their priority constituency for mobile services. Providing mobile access to grades and to the LMS is on the rise; however, mobile deployment of course registration, financial aid, and advising services currently does not match the priority placed on these services. Predicted demand for mobile services is heaviest in the areas of instruction and communication, and most institutions expect to meet those demands in the coming year. The biggest challenge in mobile enablement is integration with existing services. Problems with integration include the transition to responsive design, the creation of mobile-centric content, alignment of mobile apps with the website, and maintenance. Overcoming this challenge of integration will be key to making continued progress in meeting the demand for mobile IT.

Acknowledgments

Many people made significant contributions to this report. Bill Allison, Director of Campus Technology Services at UC Berkeley, and Kyle Bowen, Director of Informatics at Purdue, served as subject-matter experts and contributed to the content. Pam Arroway, Eden Dahlstrom, Gregory Dobbin, and Susan Grajek provided many important insights to help shape the direction of the report. Tyson Anderson created the graphics and contributed to the stylization of the report.