

# At Your Fingertips



## The Impact of Mobile Devices on Student Services and Engagement

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## **Abstract**

This study evaluates how mobile devices can increase information, communication, and provide notification to keep students aware and informed on our college campuses. Technology use is changing rapidly. Ninety percent of students carry a mobile device. Web use is decreasing and mobile apps are projected to become the digital communication platform of choice for a new generation of mobile natives. Mobile devices offer quick and easy access to services that are otherwise place-based, confusing, and difficult to navigate. Mobile devices maximize investment in integrated student service systems, many of which are moving into app solutions, and offer a more effective digital architecture. These devices offer creative access to information, tools, and solutions. Mobile devices are convenient, creative, innovative, and engaging.

My placement with the Tennessee Board of Regents Office of Mobilization and Emerging Technology offered an opportunity to research, explore, and survey campuses regarding their use of mobile devices and apps for student engagement and communication.

Research analyst, Brian Fleming with Eduventures, the leading independent research and advisory firm exclusively focused on analyzing the forces that are transforming higher education, states that, "Colleges and universities need to deploy a mobile app strategy to improve the quality and delivery of student services for a new generation of mobile natives. Mobile apps are the next horizon to how students access everyday services any time of day and from any context, quickly, easily, and seamlessly. Institutions need to embrace mobile apps not just to keep up with a frenetic change of pace to enhance commitment to access and student success."(Eduventures, 2013)

## INTRODUCTION

My project was to survey the Tennessee Board of Regents institutions to verify if students on those campuses had access to a campus mobile application and identify the student services features available on their applications. The areas of investigation are listed in the chart below:

Area of Investigation	
Mobile Campus Student Support Services	ADA
Campus Events- Social Networks	Campus Safety and Security
Campus Tours and Map	Communication and Notification Features
Academic Support	Productivity Tools

**Project Terminology:** mobilization (mobile devices and apps), smart phones and tablets, campus mobile app, mobile devices, BYOD (bring your own devices), IT (information technology), ADA (American Disability Act), Social Media (Facebook, Twitter, YouTube, Flickr), TBRm (TBR Office of Emerging Technologies and Mobilization)



## BACKGROUND

The TBR Office of Emerging Technology and Mobilization (TBRm) Strategic Goal is to assist campuses in developing a campus mobile app based upon best features and student support services for increasing student enrollment, engagement, retention, and graduate rates. This study was designed to identify the TBR institutions that deployed a mobile application that had integrated student support service features. As a Maxine Smith Fellows participant, my project was initiated to assist TBRm in this endeavor by researching, surveying, and collecting data on the current status of mobile technology and its impact on student services and engagement at TBR campuses.

## REVIEW OF THE LITERATURE

The mobile phone is one of the single most transformative tools impacting the college campus. 87% of college students have some type of mobile phone (Pew, 2012). 82% of college students are users of mobile phones at East Tennessee State University, one of the TBR's prestigious universities (2014). Mobile technology is uniquely positioned to deliver student support services in the hands and at the fingertips of the student anytime and anywhere!

*U.S. Today* states that 2/3 of Americans now connect to the internet via a mobile device (*USA Today*, 2012). This impact has forced some colleges and universities to jump on the mobile app bandwagon. From mobile bookstores to mobile dining halls, colleges are developing some pretty innovative mobile applications. Students are increasingly moving to mobile apps in order to stay connected with the happenings at their schools.

As one of the most rapidly adopted technologies in history, mobiles are increasingly ubiquitous in today's world. Relatively inexpensive and easy to use, mobiles do not have the same barriers to access as other technologies, such as broadband internet, which needs a fixed line infrastructure.

Eduventures, reports that students desire and need better mobile solutions. In fact, mobile technology positively affects student achievement because they have better access to services which frees the student to focus on being a student. Mobile technology in the long-term will improve student retention and learning outcomes. These apps especially are targeted to increase student satisfaction and have increased the institution’s brand and reputation. Mobile apps have created a more sustainable architecture for long-term digital services strategy (Eduventure, 2013).

Eduventures research has shown that students are able to access important information (FAQs) on their mobile devices anywhere and anytime at the tips of their fingertips. Mobile apps use an effective blend of offline and online content, and therefore are still useful without internet access. They are searchable and use common vernacular, e.g. rather than term “financial aid,” students can ask “Where is my money?” The information is clearly and intuitively presented.

Mobile apps have proven their impact in student services processes. Students are able to access and print course schedules, promissory notes, transcripts, etc. from their mobile devices. These documents are also available in PDF or other published formats. Documentation has been configured for mobile platforms. Apps offer impressive delivery of a variety of documentation request and connect with a device’s phone, email and SMS capabilities for quick and easy access to the university staff.

Students are also able to register for courses, electronically sign documents, and make payments from their mobile devices. Mobile apps are powerfully linked to institution’s student information systems and are update regularly. The app design is crisp and intuitive, and processes are made up of simple steps (e.g. 3rd step course registrations).

The University of Central Florida has taken a lead in the arena of mobile campus transformation. The UCF mobile app is the ideal app with student support features that are phenomenal (Campus Technology, 2015). Each feature has options for different modes of communication: email, directional maps, phone number, etc.

<b>Innovative Campus Technology App with Student Services and Engagement Features</b>	
1 <sup>st</sup> Year Transition	Housing
Financial Aid	Career Services
Veterans Resource Center	Student Rights and Responsibilities
Social Media	Student Life
Today News and Stories	Events
Phonebook (with contact for people and organizations)	Athletics
Registrar’s Office	Testing Center
Wellness Center	Safety and Security

This study also revealed that 85% of incoming students tour college campuses virtually prior to visiting on-site. The 3D Virtual Campus Tour ([www.3dvirtualcampustours](http://www.3dvirtualcampustours)) can easily be one of the features

embedded in a college mobile app. It is a fully collaborative online recruitment tool aimed at increased college enrollment through accessibility, interaction, and engagement.

Another mobile application that is highly recommended is Access My College Library through Gale College [www.Gale.com/app](http://www.Gale.com/app)) TBR, Emerging Technology and Mobilization purchased this mobile app and has made it accessible free of charge to all students attending a TBR institution. This mobile application allows the student to have access to rich, relevant, and current resources that is downloadable from their personal email address. The student locates the state, finds their city, with a touch of their fingertip, enters their student email address and can search from their school library or any library in the nation.

The YouCanTutor mobile application developed on the campus of University of Southern California is another excellent app that allows students to have free tutoring that is accessible 24 hours a day, seven days a week. Students that have excelled in specific discipline can become a license tutor and be paid for their services through this mobile app.

As a result of this study, my mentor and I identified some best practice features for campus mobile applications:

<b>Best Practice Features for Campus Mobile Applications</b>	
ADA Compliance (Section 508-Accessibility)	BYOD (downloadable on all mobile devices)
Direct Access to Campus Safety/Notification Alerts	Integrate SIS/Banner Admissions: Registration, Grades, Pay Tuition
Direct Access to Campus Student Services-Advising Support	Full Service Student Registration Portal
Access to Campus IT Networking Support	Library Portal
Bookstore for downloadable eTextbooks	Single Sign Portable to Learning Management Systems (LMS)
Zoomable Campus Maps and GPS	Campus News and Events
Campus Sports and Clubs	Social Media and Networking (interactive blogs, wikis, Chat, and texting)
Career Center	Health Center
Community Map of Businesses	Gamification (Games)
Access to Apps/Music/Entertainment	International-Global (Translation tools)

### **Project Findings**

Survey findings resulted in five universities and nine community colleges that had deployed a campus mobile application. The remaining TBR institutions will be working with the TBR Emerging Technologies and Mobilization office for assistance with this endeavor.

Each campus mobile application was downloaded to an iPad and available features were reviewed and posted in the two spreadsheets below:

**TBR Universities Spreadsheet:**

TBR Universities							
Mobile Apps with Student Services features							
6 campuses	APSU	ETSU	MTSU	TSU*	TTU	UofM	Total
Academic Calendar	X	X				X	3
Athletics	X	X	X		X	X	5
Bus Services and Campus Rides		X	X				2
Campus Directory	X	X	X		X		4
Campus Events	X	X	X		X	X	5
Campus Life			X				1
Catalogs	X	X	X		X	X	5
D2L		X	X				2
Dining	X						1
Emergency Contact	X		X		X		3
Enrollment Services	X		X	X			3
ePay	X	X	X			X	4
Faculty and Staff Directory		X	X				2
Feedback					X		1
Grades	X					X	2
Library		X					1
Live Streams		X					1
Jobs	X				X		2
Maps	X	X			X	X	4
News Feed	X	X			X		3
Notification	X						1
Parking		X	X				2
Safety		X	X				2
Schedules	X	X	X			X	4
Social Media	X	X					2
Shopping		X				X	2
Virtual Tours		X	X			X	3
<b>27 features</b>	<b>16</b>	<b>19</b>	<b>15</b>	<b>1</b>	<b>9</b>	<b>10</b>	

\*TSU is in the process of revamping their mobile app

**TBR Community Colleges Spreadsheet:**

TBR Community Colleges										
Mobile Apps with Student Services features										
9 campuses	Chattanooga	Cleveland	Columbia	Jackson	Northeast	Pellissippi	Roane	Southwest	Walter	Total
Academic Calendar	X					X				2
Athletics			X						X	2
Bookstore			X							1
Bus Services and Campus Rides								X		1
Campus Directory		X	X					X	X	4
Campus Events		X	X	X	X	X		X	X	7
Campus Life		X	X	X		X				4
Catalogs	X	X	X				X	X	X	6
D2L	X		X			X	X	X		5
Dining						X				1
Emergency Contact			X		X			X		3
Enrollment Services	X		X				X	X	X	5
ePay							X		X	2
Feedback					X		X	X	X	4
Grades	X	X						X		3
Library	X	X	X	X		X				5
Live Streams			X						X	2
Maps	X	X	X	X	X	X	X	X	X	9
News Feed		X			X		X		X	4
Notification									X	1
RODP	X									1
Safety	X						X			2
Schedules	X	X	X		X	X				5
Social Media		X	X	X	X		X	X		6
Shopping									X	1
Tutoring	X		X							2
<b>26 features</b>	<b>11</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>11</b>	<b>12</b>	

The findings reveal that each campus mobile app with student services and engagement features is unique to that campus. The comparative data indicate that although 27 features were identified; the



TRB institutions shared a common interest in a total of five. The top five features are listed in the chart below:

<b>Top Five TBR Institution Campus Mobile Application with Student Services and Engagement Features</b>
1. Campus Events
2. Campus Maps
3. Catalogs
4. Schedules
5. Social Media: variation of Facebook, Twitter, Flickr, and YouTube

Students on several of the TBR campuses have indicated that they would like to be able to use the campus mobile app to pay their tuition and fees, read emails, schedule meetings with their advisors, and find a parking space on campus.

Austin Peay State University received national recognition for its mobile application this year. Peay Mobile is the free Austin Peay app for Apple and Android mobile devices. Students can view their schedules; find a map of the main campus, an event calendar, dining information such as menu and hours for a given day, a faculty and staff directory, and a course catalog. News feeds are also included for both campus life as well as AP sports, and users can even pay their tuition and fees from the app!

On August 27, 2015, Columbia State Community College announced the launch of its new mobile application. Students, prospective students, alumni and the community at large can now download the free mobile app to remain up-to-date with latest Columbia State news and events. The app give students secure access to view their current schedule, class roster and search for upcoming courses. Students enrolled in online courses can also view class assignments and discussions. In addition, the app connects to important resources such as admissions, financial aid, tutoring, library, and the bookstore. Users will find quick access to maps, emergency numbers and the college's employee directory. The app also connects to the college's social media accounts.

In November of 2015, the i4 Success Zone mobile application should be available for release. This mobile will be a one-stop-shop portal for testing services personnel and a resource center for all persons interested in academic and certification testing preparation ([www.patharlan.weebly.com](http://www.patharlan.weebly.com)).

The TBRm will continue to investigate mobile assistive technology and devices for students with disabilities. The Swivl Project is a pilot project that focuses on the use of close caption technology with projector screens.

The TBRm has a mobile app resource center for Student Support Services, Mobile Apps for Campus Engagement. It is an excellent tool for any department that is interested in advancing their skill set in the area of mobile technology. This office offers workshops, conference, seminars, and training sessions on-site as well as in a webinar format ([www.TBRMobile.org](http://www.TBRMobile.org)).

## **Project Recommendations**

1. All campuses should deploy a mobile campus app with notification features and one stop portal to student support services.
2. Campus mobile apps must be ADA compliant.
3. Campus mobile apps should adhere to national standards and best practices.
4. Campus mobile apps must be student centered-tools for celebrating student diversity and success.

## **Conclusion**

Regardless of where colleges stand now, one thing's for sure: Mobilization (the use of mobile devices and apps) is not going away, so colleges and universities had better keep up if they want to remain current and in touch with the young people that populate their campuses. (*USA Today*, 2012).

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