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DIGITAL LEARNING

Scaling Mobile Technology for Community College Students: 5 Tips for Entrepreneurs

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After three years of utilizing a BYOD (bring your own device) policy with my classes at Nassau Community College, I have seen how tools like tablets and laptops can lead to better academic engagement. In particular, at a busy New York commuter campus like ours, students juggle schooling among other personal and professional commitments. It's why mobile access has been one of the most important means of connecting students to their academic resources.

This is not to say that the mobile medium provides a better learning experience; however, students' work schedules often prohibit them from dedicated time in front of a stationary computer.

Many professors are still skeptical about utilizing smart phones in the classroom, but I believe we could get more professors on-board if entrepreneurs better understood the challenges and resistance faculty face to use mobile technologies. Here are 5 tips for entrepreneurs looking to make scalable impact in the community college market.

Bridge the screen to scene divide

The tools that have the most impact are the ones that will help professors easily differentiate content for a wide range of learners. Remind is a good example of this because professors can easily and privately share with a whole class, or groups within a class, relevant course materials.

For example, I could send a message through Remind to my students who missed class linking to the appropriate pages in an interactive course reader, alongside a link to the phone number for the tutoring center. These mobile messages keep students connected to course material and let students know we care about them, but the system is still too one-size-fits-all.

In order to scale this approach, there needs to be an easier way for less tech-adventurous professors to reach out to students with the appropriate next steps when they are unable to make it to campus. Ideally professors need a way to synch attendance with an automatic mobile alert for students and have the option to quickly choose retention strategies differentiated for each learner's specific on-campus needs (ex: a list of today's available tutoring sessions, or upcoming MLA Citation workshops at the library). Students need to have an option to reply where they can briefly indicate why they were absent and, if they are in crisis, be automatically redirected to on-campus (ex: counselling center) and neighborhood assistance (immigration advocacy).

This type of interaction is something we desire not just for the students currently on our roster, but for students once they leave our class. The community college population ebbs and flows and students often take time off between starting and completing their degree. So even when students are no longer available via campus email, we still want to keep them connected to academic resources, campus food pantries, crisis centers, and childcare facilities. An app that allows students in transition to stay connected to campus and community resources, and the professors who care about them, could help retain students.

Design with a cracked screen in mind

When asked about their greatest challenges to using mobile in the classroom, students cite lack of charging stations or outlets, slow wifi and cracked screens. Access to connectivity is vital to a successful classroom BYOD policy, so these issues are largely taken care of by an institution. A cracked screen, however, is a burden shouldered entirely by students.

In 2013, PC Magazine reported that people between the ages of 18 to 24 are 16 percent more likely than any other demographic to have a cracked screen. Reading a document or composing an essay on a phone with a cracked screen is frustrating, humiliating, and potentially error-enhancing, but my students say they do it anyway because the cost of repair can be expensive and timely.

Where an app that allows text to to be easily read on a cracked screen might be a viable short term solution, access to self-healing screens would be better. Researchers at the University of California, Riverside are currently looking into this, and developing a polymeric material that could enable smartphone screens to repair themselves. Investing in and creating more durable devices will help remove costs

associated with repair that often prohibit some students from easily using mobile technology.

Acknowledge the presence of paper

Google Docs can be a great resource when guiding students through the writing process and also for turning in digital submissions of essays. Many professors still expect a physical paper for major assignments due at the end of a unit. Faculty vary greatly in terms of how they prefer materials to be delivered, which is why mobile resources for students need to be designed with an end-product either a hard copy or digital copy in mind.

Many of my students find themselves composing essays across a variety of devices, phones, personal laptops or campus desktops. A student might bang out a few lines of their essay between breaks at work, or while waiting for the bus, or even while resting in their car before the start of class (some of my students work a night shift and arrive to campus long before the labs open). But companies might not be attuned enough to how the user experience shifts from one device to another.

For instance, what might appear to be a mammoth piece of writing composed on a mobile phone, is in actuality a brief paragraph once it has been printed. The first time many of my students look at their writing on a bigger screen is when they rush into the lab to print it 15 minutes before class. At this point, it's too late to make changes. The more we can enhance the user experience to make the translation from screen to screen and finally to printed-page, the more powerful a mobile tool becomes.

Consider device variation

Whenever I want to try something new in the classroom, I have to first determine whether or not the tools I use are accessible to all students' mobile platforms and if the tool works on both a Mac or PC. In many college classrooms there is a traditional whiteboard and a projector hooked up to a PC; screen sharing technologies like Apple TV are rare. This means that unless I can pull up the desktop version of a program on the computer attached to the projector, I will have to slowly walk my phone or tablet around to give each individual student a view of my screen. This is time consuming and ineffective. In order for a mobile app to be adopted into BYOD curriculum, it has to also have a web app component.

Enhance OER access

It has been well documented that students are reluctant to pay for textbooks and that the price of textbooks is particularly crippling for community college students. Even modestly priced e-texts are still out of reach for some students. The future instead lies in OER (Open Educational Resources) and we need better, more organized OER with accessible APIs (Application Protocol Interface) that are customizable for our campus learning management system.

Most importantly, OER need to be compatible with both the campus LMS and as independent resources that can be shared through a mobile message. Not all professors have access to the mobile version of the campus LMS and some campuses have adopted LMS mobile apps with limited functionality. This means that students sometimes need to be in front of a stationary computer in order to access course content. OER resources that can be either shared through a mobile message on an app like Remind or that have their own independent mobile version would be highly desirable.

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