MOBILE LEARNING
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Smartphones: Teaching Tool or Brain Candy?

As smartphones become ubiquitous, educators debate how to take advantage of their unique strengths for learning while minimizing their disruptive influence.

LET'S GET ONE THING STRAIGHT. Smartphones are a permanent feature of college classrooms, whether you like it or not. Most students already have them, and it's just a matter of time before the rest follow suit. From ordering a late-night pizza to posting pictures on Facebook of their roommates eating it, students rely on their phones for everything.

Yet students' attachment to these devices isn't necessarily a bad thing. Like any internet-connected computer, smartphones can play a valuable—even exciting—role in teaching and learning. What better way to reach students than via a device they treat like their significant other? At the same time, smartphones do have a dark side. They are the ultimate opiate of today's students—a wonderland of games, friends, apps, and YouTube videos. Does the bored kid in the back row really need such easy diversions? As educators work to come to terms with these devices, the challenge will be to find ways to accentuate the positives while minimizing the distractions.

Smartphone as Learning Tool

Today's smartphones have the computing power of a mid-1990s personal computer. They are computers, and it's time we started thinking of them as such. What's more, they come with the added benefit of being constantly connected to the Internet.

What makes them different, obviously, are their tiny size and weight. An iPhone weighs less than 5 ounces and fits in your pocket. Unlike a laptop, it's truly portable. If you don't buy into that, try sprinting to class with a 7-pound laptop smacking you in the kidneys.

Portability is what makes the smartphone such a powerful learning tool. As the concept of the walled classroom breaks down, the smartphone is perfectly suited to support the untethered world of teaching and learning. Students in the field can use the camera to take pictures or videos, the built-in microphone to record interviews, the Qik app to broadcast live video, the browser to perform research, and the keyboard to jot down their notes—anytime, anywhere.

The smartphone's potential as a learning tool is rapidly being discovered by faculty. Paul Wallace, assistant professor of instructional technology at Appalachian State University (NC), taught students to use Scvngr as a way to apply their classroom knowledge to benefit the local community. Students partnered with Watauga River Conservation Partners, a local organization, to create mobile scavenger hunts to help the community learn about...
wetlands and conservation. Not only did students learn to use mobile technology, they were also able to apply their classroom knowledge in the field.

Another demonstration of smartphone-enabled learning is Project Noah, which is based on the premise that students can create and share knowledge using their mobile devices. Students use the app (iPhone or Android) to document and take photos of sighted insects, birds, and bushes, and then share their findings with an online community.

Within the confines of a classroom, the smartphone’s advantages are obviously more limited. Some instructors are using polling applications such as Poll Everywhere to ask students if they read a particular chapter, or what they found most compelling about it. Instead of raising their hands, students respond by anonymous text message, with their answers appearing on a screen for all to see.

**RESOURCES**

For links to the products, vendors, and organizations mentioned in this article, visit campustechnology.com/0212_smartphones

Even if you take this Darwinian approach, no teacher likes to be ignored, and faculty on campuses nationwide have tried a variety of tactics to control smartphone use in class. One of the most successful is not to ask students to put their phones away, but simply to leave them visible on their desks. This discourages students from holding the devices on their laps while they text and tweet away. Indeed, classroom instructors might want to take a page from the airlines, asking students to power off their electronic devices for the duration of the flight.

It would be a mistake, though, to try to close smartphones down altogether. An increasing number of apps—available free or for a nominal price—are being written for educational purposes. Students can learn everything from mathematics to science, history, and geography. Teaching statistics? There’s an app for that.

Nevertheless, instructors should probably avoid using smartphones in each and every class session. The novelty will wear off with overuse, especially if the use is not intuitive. Think about how you already use your smartphone and how those tasks might translate to a classroom setting. If you’re comfortable with the technology, the applications will follow. CT

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How can you stay up-to-date or get new ideas?
Check out Gizmodo to learn about the toys, Mashable to learn about the technology, and the Centre for Learning & Performance Technologies to learn about teaching with new technology.

Smartphones also allow students to Google information that can add to class discussions. Gone are the days of frantically flipping through a textbook to find the answers. In addition, in lieu of old-fashioned study guides, students can make their own electronic flash cards using applications such as FlashCards++, Quizlet, or CoboCards.

Instructors have to understand the technology’s limitations, however. In many ways, the smartphone is the fast-food restaurant of technology. It’s where you go for simple, quick information when you’re on the road. When you need something more substantial—data analysis, multimedia editing tools, or software development, for example—it helps to have a more powerful computer, with a full keyboard and large screen.

And what of the frivolous flip side of smartphone use? For generations, disengaged students have amused themselves in class with everything from magazines to doodling to full-blown siestas. Compared with the capabilities of the smartphone, though, these are all small ball. The smartphone is the world at their fingertips. As exciting and useful as this may be for a motivated student, the smartphone is also the ultimate digital diversion for the disengaged. Among this group, Economics 101 is always going to lose to Angry Birds.

Is there anything lecturers can do to counter the tendency among certain students to zone out with their smartphones? Or is it even the lecturer’s responsibility? These are, after all, voting-age adults. They either do the work and succeed, or they goof off and fail.

Don’t Make Me Talk to Your Mama

When in doubt, bring in mother. It’s a strategy for combating cell phone use that has worked well for faculty members at various institutions. Warn students that if their phones ring in class, you will answer it for them. Chances are it will be Mom on the other end of the line, and you can go for the double play: old-fashioned guilt trip and an appeal to the fiscal worrywart within.

Time is money, you explain, and then break down the financial ramifications of students receiving phone calls during class. With tuition hovering at $35,000 per year, for instance, each hour of class costs approximately $80. Mom’s short phone call is costing each student in the class—not just her son—$5.

Then, take her side. Reassure her that she couldn’t possibly be aware of her child’s class schedule, and that it’s her child’s responsibility to turn the phone off before class. Now you’ve set the hook. Needless to say, if you can get Mom to stop apologizing, the student’s phone will never be on during class again.

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