

Power-Up Smartphones to Access Knowledge and Electrify Class Participation

Using mobile phones in the classroom is seen by many instructors as the nemesis of learning. Mobile phones ring and interrupt lectures or in class discussions while students constantly receive and respond to text messages. Web browsing in the classroom is distracting and gaming while fun does not appear to be a productive pedagogy. However, using mobile phones in the classroom is more likely to enhance rather than erode learning if used properly. Such a widespread and popular technology should give instructors an incentive to revision a proper use of mobile phones in the classroom in order to harness this tremendous tool for economic education.

Approximately 98 percent of all students own some form of technology, such as a desktop, laptop, netbook, or an internet capable handheld device such as a phone or tablet. However, in the past few years a shift in ownership to more mobile devices is occurring. Approximately 43 percent of students report the daily use of an internet capable handheld device with another 25 percent reporting weekly use of such devices; an unsurprising trend given that there are more than 100 million smartphone subscribers in the United States.

Instructors should resurrect rather than resist using smartphones in the classroom. Internet capable phones allow instructors to engage students by conducting immediate polls. Polling provides instructors an opportunity to assess student comprehension while anonymously allowing students a venue to express their opinions on discussion topics. Polling is an opportunity to give each student a voice along with giving the instructor a compass in tailoring a lecture-presentation.

Mobile phones allow professors to send instant messages to an entire class that alerts members to class announcements such as upcoming tests, due dates or important news releases along with calendaring. Data access and fact checking occur in real-time during a class session while animating students, honing understanding and piquing interest. Communication with students improves and conference calling is also possibility.

Smartphones provide students with learning on demand that is unbound by the time and space constraints of the traditional classroom environment. Learning economics is possible anywhere and at any time with hand held technology. Students can review course notes, audio and video lectures, podcasts, use apps that provide self-assessment tools, take quizzes and check grades along with audio or video chatting with their class mates. Students are also able to more easily connect with members of a class, so that social networking within a class is able to create a more dynamic learning community among a generation of students where social media is second nature. Collaboration among students increases and photo journalism is also a possibility for creative projects.

In our digital future a course syllabus will include a listing of useful mobile phone compatible app resources to achieve learning objectives along with the traditional identification of the textbook, required readings, exams and scheduling. Possible mobile apps could provide access to financial calculators, data links, news feeds, financial market conditions, stock quotes, and graphing. Additionally, instructors may develop a custom app for a course such as one that includes digitized course materials like the syllabus, textbook, readings, assignments and lectures.

A Chinese proverb states, "I hear, I forget. I see, I remember. I do, I understand." Using mobile phone technology will encourage new genres of in and out of classroom experience by engaging students

personally on physical, emotional and intellectual levels. Smartphones enable access to knowledge for different levels of cognitive ability while offering connections to learning styles that link to personal strengths.

Smartphones will make the study of economics more enticing and satisfying for both students and instructors. Moreover, student enrollment in economics coursework could increase when students are known to have fun in a course along with learning the subject. Reimagining the utility of smartphones in the class room could reinvigorate learning the dismal science. Empirical analysis of a qualitative survey instrument will provide evidence that supports smartphone usage as an effective pedagogy while also identifying the most popular and effective apps for learning economics.

The session will be interactive as the poster presenters will use smartphones during the session to demonstrate a variety of smartphone apps that enhance learning both in and out of the classroom. Session attendees will “learn by doing” when they follow along with the presenters in utilizing their own mobile phones. Attendees should be able to incorporate some suggestions immediately into their coursework.

The poster will be delivered in billboard format, one poster sheet, probably three foot by five foot (space permitting), and designed using graphic visual aids to attract and engage participants. A reduced version of the poster will be available as a handout and will include suggestions for using mobile phones to teach a course. The poster will be organized into the following sections:

- Overview of smartphone subscriber growth and usage among students
- Research on the use of mobile phone and hand held technology for course delivery within higher education
- How mobile phones are able to move learning to higher cognitive domains while encompassing different learning styles
- Recommended mobile phone applications that facilitate both teaching and learning objectives
- Evidence that powering up mobile phones inside and outside of the classroom improves both student satisfaction and learning
- Next Steps: How to implement teaching with smartphones while overcoming barriers

Author Contact Information:

Howard H. Cochran, Jr., D.A.
Professor of Economics & Finance
College of Business Administration
Belmont University
1900 Belmont Boulevard
Nashville, TN 37212

Phone: 615-460-6477
Fax: 615-460-6487
Email: Howard.Cochran@Belmont.edu

Marieta V. Velikova, Ph.D.
Associate Professor of Economics
College of Business Administration
Belmont University
1900 Belmont Boulevard
Nashville, TN 37212

Phone: 615-460-5510
Fax: 615-460-6487
Email: Marieta.Velikova@Belmont.edu

Bradley D. Childs, Ph.D.
Associate Professor of Accounting
College of Business Administration
Belmont University
1900 Belmont Boulevard
Nashville, TN 37212

Phone: 615-460-5510
Fax: 615-460-6487
Email: Brad.Childs@Belmont.edu