We’re Going Mobile…
Apps, Activities, and Adventures
Curt Bonk, Professor, Indiana University
President, CourseShare, LLC
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/

Poll #1:
Can you hear me ok?
A. Yes
B. No

Poll #2:
Can you see me ok?
A. Yes
B. No

Poll #3:
Do you have a smartphone?
A. Yes, one
B. Yes, two or more
C. No, none

Are you totally mobile?

January 23, 2011
As the Web Goes Mobile, Colleges Fail to Keep Up,
Chronicle of Higher Ed, Josh Keller
https://chronicle.com/article/Colleges-Search-for/126016/

“...Laura Patterson, a junior at Nevada State College, about her iPhone. “I used it all the time, for everything. “More than 40 percent of all college students, like Nevada State’s Laura Patterson, used mobile devices to get on the Internet every day last year, compared with 10 percent in 2008.
March 13, 2011
iPads for Learning

At Pepperdine U. Timothy Lucas, an assistant professor of mathematics, shows a class how to use iPads for calculus. Linda Johnson, an assistant professor of biology at Chatham U., for her plant-physiology

October 28, 2011
Polar Bear Cams

http://explore.org; http://www.polarbearsinternational.org/

June 27, 2012
Remote Animal Streaming

Remote Maine puffin colony up close on HD web cam

Clarke Canfield, The Stateman, June 27, 2012


June 24, 2012
Primate Intelligence

What Was He Thinking? Study Turns to Ape Intellect

ABC News, SETH BORENSTEIN

http://abcnews.go.com/Technology/wireStory/thinking-study-turns-ape-intellect-16638414

November 2011
AERA Journals Go Mobile (e.g., Ed Researcher)

February 2012
Smartphones: Teaching or Brain Candy?, Campus Technology
May 4, 2012
Flexible displays bend what’s possible for computers, Jon Swartz, USA Today
http://mediagallery.usatoday.com/Flexible+screen+displays/G3657.A12064

Components of the wrist-worn display prototype developed at HP Labs are shown in this illustration. When completed, the device will incorporate a working flexible display powered by solar cells.

May 4, 2012
"Top Gear presenter James May meets his virtual self", BBC
http://news.bbc.co.uk/2/hi/programmes/click_online/9718563.stm

May 8, 2012
"Project Re: Brief | Coca-Cola | Mobile Ad Demo"
http://www.youtube.com/watch?v=-45Z-GevoYB8&feature=relmfu

March/April 2011
Educause Review Mobile Devices, Jim Davis and Rosemary A. Rocchio

“Mobile use of the Internet is on target to surpass fixed use by 2014. Three-fourths of all college/university students have purchased or intend to purchase an Internet-enabled handheld device within the next year. The smartphone market is changing almost monthly.”

May 13, 2011
The Digital Campus
The Chronicle of HE
https://chronicle.com/article/Info-Tech-on-Campuses/127405/

Do we need laptops anymore?

Mobile is the fastest growing industry ever
- 88% American adults have smartphone
- 57% laptop
- 19% tablet

Data now over 85% of the mobile traffic in US
6% of organizations are investing in mobile technologies for their employees
We spend > 1/3 of our time on mobile apps rather than desktop web

The average person has cell phone within reach — 17 hours a day
US mobile phone owners pick up device 150x per day
US smartphones have average 41 apps — up from 32 last year

June 27, 2012
Google Glass
ABC News, Google I/O Conference: Project Glass Prototype For Sale

June 27, 2012
Google Glass
ABC News, Google I/O Conference: Project Glass Prototype For Sale

Mobile Internet Usage


Types of Learning Content Available via Mobile Access

Source: ASTD & 4cp


How Phones Function In Our Lives

Current Usage


Nomophobia
Poll #4: Do you suffer from nomophobia?
A. Yes
B. No

Poll #5: Do any of your immediate family members suffer from nomophobia?
A. Yes
B. No

Poll #6: Do you think Dr. Grace Lin should research nomophobia?
A. Yes
B. No


Museum of London’s Streetmuseum App Puts Historic Photos in Perspective
Written by Chris Cameron, June 1, 2010
"Hundreds of images from the Museum of London’s extensive collections showcase both everyday and momentous occasions in London’s history, from the Great Fire of 1666 to the swinging sixties"

Digital Tools, Almanac of HE 2012
Chronicle of HE, August 31, 2012
http://chronicle.com/article/Almanac-2012-Technology/133769/

Student Ownership of High-Tech Devices, 2011
Laptops are readily found on campuses, and so are half of students own desktop computers. In addition, 9 percent of students had access to an iPad by June 2011, even though the device had been available for only 14 months at the time of this survey.

Digital Tools, Almanac of HE 2012
Chronicle of HE, August 31, 2012
http://chronicle.com/article/Almanac-2012-Technology/133769/

Use of Mobile Devices by College Presidents, 2011
Almost all college leaders were quick to adopt student technology, and 62 percent of college presidents reported using mobile devices in 2011. Women were more likely than men to own smartphones in 2011 (62 percent vs. 55 percent), and younger presidents were more likely than older presidents to own mobile devices (63 percent vs. 52 percent).

Digital Tools, Almanac of HE 2012
Chronicle of HE, August 31, 2012
http://chronicle.com/article/Almanac-2012-Technology/133769/

Mobile-Enabled Services at Colleges, 2011
Students used mobile services more often than laptop computers, and 80 percent of students reported using mobile services at least once a week.

Digital Tools, Almanac of HE 2012
Chronicle of HE, August 31, 2012
http://chronicle.com/article/Almanac-2012-Technology/133769/

College tech ‘catching up’ with students
Kathleen Gray & Robin Erb, USA TODAY, October 6, 2009

Abilene Christian University: ...about 2,800 students and 70% of the 250 professors use the Apple technology for instructional purposes.
- Art students use app to draft sketch and send it to the teacher and other students for advice before starting the real art pieces.
- A drama teacher takes video of the lead dancer in a production and sends that along to other students for rehearsal.
DUKE UNIVERSITY
Duke gave iPods to all incoming students in 2004 but scaled back the program two years later. Tracy Futhey, chief information officer, says campus officials are now focusing on improving Duke’s mobile application and making existing campus data available on new platforms.

SETON HILL UNIVERSITY
April 10, 2010: Seton Hill University, Greensburg, PA, 2,100 students an iPad and freshmen a 13-inch MacBook Pro laptop ($500 student tech fee).

Some Ideas from Educause Review
March/April 2011, Scott Perkins and Michael Casdorph, Georgia Health Sciences University, “The Digital Swiss Army Knife”

1. Attendance
2. Class roster
3. Class assignment due dates
4. Course calendar
5. Deliver course videos
6. Digital flashcards
7. Course blogging
8. Internet searching

Poll #7:
Which of these ideas interests you the most?
A. Class roster
B. Course calendar
C. Digital flashcards
D. Course blogging
E. Internet searching

Top Smartphone Apps to Improve Teaching, Research, and Your Life
By Jeffrey R. Young, January 2, 2011, Chronicle of HE

1. Taking Attendance (David M. Reed, a computer-science professor at Capital U.) Calling roll may not seem like an activity that needs an upgrade..."I used to use a piece of paper," he said. "What would happen is invariably I would lose that piece of paper halfway through the semester."
2. Collecting Data
A professor at the University of California at Davis is asking drivers to help him with his research on roadkill by logging any dead squirrel, possum, or other critter they see along the highway...the research team built an iPhone app to let citizen-scientists participate at the scene. It’s more convenient, and it gives the researchers better data, because a phone’s GPS feature can send along exact location coordinates (and the app encourages users to take a picture with the phone’s camera).

3. Reading Scholarly Articles
“Instead of clicking print when saving an article for later reading, many professors now send the document to their phone or tablet computer. Those I talked with cited a range of apps designed for the task, though Dropbox was cited most frequently. The commercial app is available for iPhones, iPads, and for smartphones or tablets running Google’s Android operating system. David Parry, an assistant professor of emergent media and communications at the University of Texas at Dallas, said he uses Dropbox for both scholarly reading and keeping track of documents for the courses he teaches. " (for syllabus storage and deadlines)

4. Recording Notes
Aaron Delwiche, an associate professor of communication at Trinity, often uses the camera built into his Android phone to snap a picture of his whiteboard before he erases it. When he breaks the class into groups for a project, the photos remind him who was on each team and what they came up with. High-end whiteboards offer a function to print out or e-mail their contents, but some professors say their phone cameras do just as well.

5. Using Textbook Tools
Cellphone screens are tiny...CourseSmart, a company that sells electronic versions of textbooks from major publishers, offers a free iPhone app to read books purchased through its service. It may not be ideal for long reading sessions, but it could be a handy way for professors to look over the material to remember what their students are reading.

6. Planning Lectures
Brainstorming for classroom talks has gone high-tech with “mind mapping” software that encourages arranging thoughts and ideas in nonlinear diagrams...the touch-screen interface of smartphones or tablet computers enhances the process, letting scholars toss around ideas with a flick of the finger. Gerald C. Gannod, director of mobile learning at Miami University, in Ohio, recommends Thinking Space for Android devices, MindBlowing for the iPhone, and Popplet for the iPad. Mr. Delwiche, of Trinity University, likes MindJet. “It’s great when organizing papers or project ideas,” he said.

7. Multimedia study guides on the go.
A cellphone screen may seem too small to use as a study aid. But then again, those screens are about the same size as standard 3 by 5 index cards, an age-old format for flashcards. So the space can be just right when it’s time to cram for a test. Unlike paper flashcards, though, a smartphone can display video clips, audio, and interactive features that go far beyond flipping a card over to see an answer.
Poll #8: Which of these mobile activities did you like best?

A. Collect Data  
B. Multimedia Study Guides  
C. Plan Lectures  
D. Record Notes  
E. Take Attendance

Top Smartphone Apps to Improve Teaching, Research, and Your Life,  
By Jeffrey R. Young, January 2, 2011, Chronicle of HE

Peter H. Abrahams, a professor of clinical anatomy at the University of Warwick, in England, recently released a video reference manual app called Aspects of Anatomy for the iPhone. The software quizzes students by presenting them with medical scenarios, and asks them to name the relevant body part. It includes 38 short films of Dr. Abrahams guiding viewers through anatomical models of human organs.

iPads in Medical Training: Videos of Procedures  

- Stanford's School of Medicine lent iPads to all new students. Medical students spend most of their third and fourth years in hospitals, working with patients. They can watch a video in the hospital showing how to conduct a complex procedure right before they are about to perform it. In an emergency, they can pull up a cheat sheet on an iPad showing the steps they should follow.

Top Smartphone Apps to Improve Teaching, Research, and Your Life  
By Jeffrey R. Young, January 2, 2011, Chronicle of HE

9. Clickers/Student Response Systems

Professors at the mobile-device summit at Abilene Christian stressed that more study needs to be done on whether these services improve education and are worth the cost. Some research done at Abilene Christian on the clicker application, for instance, showed that while students liked the ability to take quizzes by phone, their grades did not improve compared with those of a control group that did not use the clicker approach.

10. Mobile Dictionaries  
(September 2010, Chronicle of HE)
11. Mobile Referenceware
August 18, 2011, HowStuffWorks, iPhone App, USA Today, Marc Saltzman

12. Language Training
(October 27, 2011)

13. Twitter
Some ideas from Educause Review March/April 2011, David Parry, “Teaching Mobile Literacy”
1. In class say “I am not sure, look it up.”
2. Have students tweet on class activities.
3. Have students text each other during class.
4. Have students take pics with phone to document cameras in their daily life, share those photos with each other, and make a map of all the cameras (http://cameraseverywhere.us/)

14. Custom News (Zite and Flipboard)
(Personalized Online News and Magazine on iPad, March 9, 2011 and August 10, 2010, USA Today)
http://www.zite.com/
http://www.youtube.com/watch?v=KD9NGAV3-3k (4:26 minutes)

16. Tutoring and Mentoring  
April 7, 2011, Expert Tutors as Mobile Apps (e.g., Tutor.com)

17. Discounts for Attending Classes  
The Slow-Motion Mobile Campus  

Stanford University: Weston McBride (right) and Andrew Belay created an iPhone application that rewards students for attending class. Students with better attendance records will receive cheaper campus meals, and eventually discounts on bigger-ticket items like student loans and car insurance. The application, which is supported by Stanford, verifies attendance by checking students’ GPS locations when they check in to class.

Poll #9: Which of these mobile activities did you like best?

A. Custom News  
B. Language Training  
C. Mobile Referenceware  
D. Mobile Tutoring  
E. Twitter

Global Mobile Internet Coverage  
(source: Dr. Paul Kim, Stanford)

August 2011  
Seeds for Empowerment in Argentina

Pushing Mobile Around the Global...

Alex in Dar es Salaam
February 2012
Pocket School and SMILE: Stanford Mobile Inquiry-based Learning Environment

February 14, 2012
Per Paul Kim, Director, Seeds for Empowerment: “Children in Newala, Tanzania learning English with mobile videos and writing stories. (Mobile Task Based Learning Workshop - Seeds of Empowerment). No electricity for 3 straight days, but we keep going!”

Seeds of Empowerment, India, Paul Kim, Stanford

Powering the device on bicycle
PocketSchool on Two Wheels

5 K-12 Applications

“Kids have grown up their whole lives with computers, but they need to be taught how to harness the technology for education,” says Mitchell Salerno, principal of the Master’s Academy in Florida.
Five ways readers are using iPads in the classroom
eschool News, May 27, 2011

1. For intervention.
"I found an app called Math Drills, to help students with their math facts. After a school-wide math fact program, there were a certain number of students that still didn't know their addition facts. Essentially, they had trouble with 'at a snap' recall of facts," she explained.

2. For enrichment.
"There are several apps out there for the 'smart kids.' I found one for the iPhone, which I use on the iPad, called Miss Spell's Class," she said. "It gives students a series of challenging vocabulary words, and they need to decide if it's spelled correctly or incorrectly. I've seen my gifted kids get so frustrated (it shows them that they're not always No. 1), and consequently, so proud of themselves because they've finally conquered it. The success is made much sweeter when you have to work for it."

3. For assistive technology.
One reader, Eva, said she uses the iPad to help a boy in her classroom who has autism. Supposedly, the iPad was the only tool that could engage him for any length of time with his speech therapist.
"Upon first seeing it, he stared at it for a few seconds then reached for it," she explained. "We gave him the iPad and he immediately started mimicking us by pushing all the right buttons to see the interactive app. We love it so much that his mother, with the help of a therapist, wrote a mini-grant to one of the local organizations so that he could have one of his own."

Poll #10:
Which of these mobile activities did you like best?
A. Assistive Technology
B. Digital Literacy
C. Enrichment
D. Intervention
E. Organize Notes
Where are we headed?

Life in the Cloud...?

Smaller, thinner, lighter, and new interfaces for mobile

Poll #11. How many ideas did you get from this talk?
A. 0 if I am lucky.
B. Just 1 or 2.
C. Do I hear 3-5? 3!!!!
D. 6-10.
E. More than 10.

Poll #12: Is your brain mush?
1. Yes.
2. No.
3. Not sure yet...

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/

Questions and Comments?