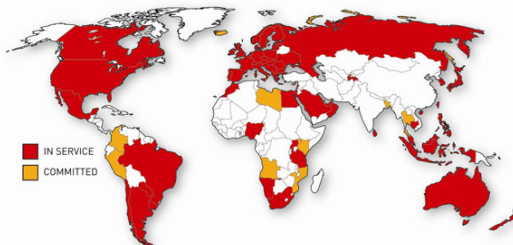


## We're Going Mobile... Apps, Activities, and Adventures

Curt Bonk, Professor, Indiana University  
President, CourseShare, LLC  
cjbonk@indiana.edu  
<http://mypage.iu.edu/~cjbonk/>



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



## The world's hottest smartphones, CNN, September 20, 2012

[http://www.cnn.com/2012/10/19/tech/survey/smartphone.hot.our.mobile.society/index.html?cid=article\\_sidebar](http://www.cnn.com/2012/10/19/tech/survey/smartphone.hot.our.mobile.society/index.html?cid=article_sidebar)



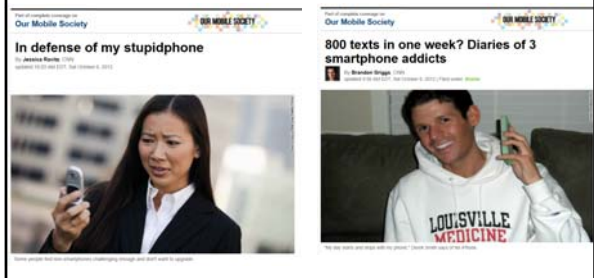
## Poll #1: Do you have own smartphone?

- A. Yes, one
- B. Yes, two or more
- C. No, none



## October 6, 2012 In defense of my stupidphone, CNN, Jessica Ravitz

[http://www.cnn.com/2012/10/05/tech/our.mobile.society.us.cnnradio/index.html?cid=article\\_sidebar](http://www.cnn.com/2012/10/05/tech/our.mobile.society.us.cnnradio/index.html?cid=article_sidebar)



## September 10, 2012 CNN Radio How mobile tech affects the family Have smartphones killed boredom?

[http://www.cnn.com/2012/09/10/tech/mobile-tech-affects-the-family/index.html?cid=article\\_sidebar](http://www.cnn.com/2012/09/10/tech/mobile-tech-affects-the-family/index.html?cid=article_sidebar)



**Seven ways mobile phones have changed lives in Africa, CNN, Stephanie Busari, September 14, 2012**

[http://www.cnn.com/2012/09/14/africa/mobile-phones-changed-lives/index.html#h=article\\_slideshow](http://www.cnn.com/2012/09/14/africa/mobile-phones-changed-lives/index.html#h=article_slideshow)



**Cell phone culture: How cultural differences affect mobile use, CNN, Naomi Canton, September 28, 2012**

[http://www.cnn.com/2012/09/28/tech/mobile-culture.sagep/98sks.html#h=article\\_slideshow](http://www.cnn.com/2012/09/28/tech/mobile-culture.sagep/98sks.html#h=article_slideshow)

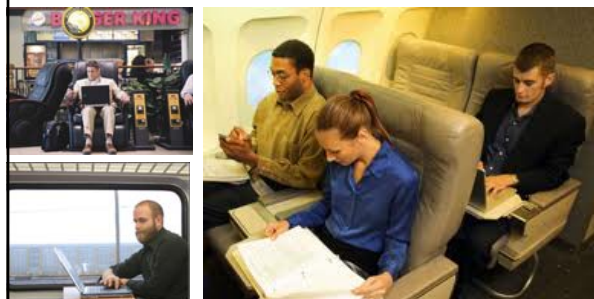
**Cell phone culture: How cultural differences affect mobile use**

By Naomi Canton for CNN

Updated 10:00 AM EDT on September 28, 2012



**Poll #2:**  
**Do use the Internet when on a plane, train, or when in the airport?**



**Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012**

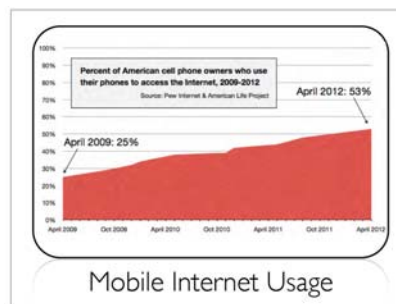


**Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012**

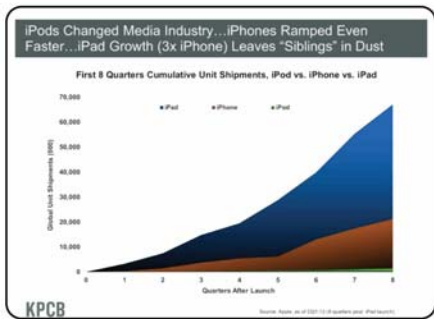
**Rate Of Change**

- 1.4 M PCs worldwide - 1.4 M mobile phones available
- By 2016 there will be approximately 7.3 billion people on earth – and 10 billion mobile connected devices [Cisco]
- It took Japan's most popular social network (miki) 4.5 years to move from 14% to 85% mobile traffic [Keiner Perkins]
- October 2011 1.1 billion page views on The Weather Channel and 1.3 billion on mobile
- At the start of 2009 13% using Facebook on mobile - just over 2.5 years later over 50% [TechCrunch]

**Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012**



Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012

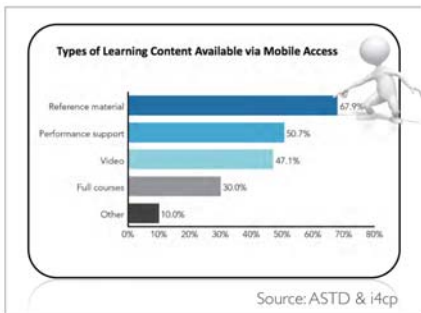


Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012

### Here Today

- 360° cameras
- Anticipation
- Augmented reality
- Biometrics
- Charging options
- Face recognition
- Gestures
- Gimbal Geofence
- Language translation
- Location-aware
- M2M
- NFC
- QR codes
- Sensors
- Voice recognition
- Wearable

Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012



Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012

### SEPARATION ANXIETY

- 55% of women would rather leave home without makeup
- 29% of smartphone users would leave the house without cash
- 11% of Americans with smartphones would rather leave home without their pants than their phone
- 28% would leave the house without a credit card
- 15% of U.S. smartphone users would begin to miss their smartphones more than their hair
- 1 VS. 1 (1 VS. 1)

### Nomophobia

**Poll #3:**  
Do you suffer from nomophobia?



Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012

	Beijing 2008	London 2012
Smartphones	139.3 million	657 million
Facebook	90 million	901 million
Twitter	< 1 million	300 million
Tweets / day	1.1 million	140 million
Tablets	0	54.8 million
App store downloads	300+ million	25+ billion

Sources: Nielsen, eMarketer, Forrester, Apple

## March 13, 2011 iPads for Learning

MCCSC 6th-graders to get iPads  
By Anthony Nelson  
October 9, 2011

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

## 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).  
Josh Keller, The Digital Campus, The Chronicle of HE, May 8, 2011

### An iPad for Everyone

Seton Hill University will give a new Apple iPad to every full-time student in fall 2010.

Read it all: The Philadelphia site of the Chronicle's Digital Technology Advantage Program. This new program provides students with the best in technology and collaborative learning tools, ensuring that Seton Hill students will be uniquely prepared whatever career they choose. Learn more that has not yet been posted.

For more information on the Digital Technology Advantage Program, please visit the website: [www.setonhill.edu/techadvantage](http://www.setonhill.edu/techadvantage)

[Continue to our website](#)

## Lessons on iPad (e.g., ShowMe: <http://www.showme.com/>)

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

### AERA Journals Go Mobile

The journals of the American Educational Research Association are now available on websites optimized for mobile devices. The mobile-optimized websites were developed in October and give users an interface specifically designed for the small screens on smart phones and other Web-enabled mobile devices.

Features of the mobile sites include access to current, Online First, and archived full-text content; a mobile-friendly search page; and links among all AERA journals. Full-text articles are available in HTML and PDF formats.

The SAGE Journals Online platform, hosted by Stanford University's HighWire Press, will automatically recognize mobile devices and redirect users to the mobile-optimized site for the desired journal. Each site links through to its full-text website if the user prefers. Supported devices include Android phones, BlackBerry phones, the iPad, and the iPhone. Users with iPads, notebooks, and other personal computers can access the mobile-optimized sites as long as their operating system has an Internet browser installed.

AERA members receive complimentary print and online subscriptions to Educational Researcher and one other AERA journal of their choice. Members may purchase additional AERA journal subscriptions as a donation.

For details on how to access our AERA online journals, visit [www.aera.net/journals.htm](http://www.aera.net/journals.htm). For details on how to donate the AERA journals you prefer, visit [www.aera.net/membership.htm](http://www.aera.net/membership.htm).

## User-Designed E-Books. Sept 18, 2012 How to turn Wikipedia into an e-book, John D. Sutter

[http://www.cnn.com/2012/09/18/tech/mobile/wikipedia-e-book/index.html?hpt=hp\\_t3](http://www.cnn.com/2012/09/18/tech/mobile/wikipedia-e-book/index.html?hpt=hp_t3)

Part of a mobile coverage on Our Mobile Society

**How to turn Wikipedia into an e-book**

by John D. Sutter | CNN | September 18, 2012 | First order

Wikipedia has just unveiled a new feature that lets users generate e-books.

**STORY HIGHLIGHTS** [CNN] — Wikipedia this week created a new feature that allows readers of that online encyclopedia to create their own e-books with

## Social Books (e.g., Subtext)

The first community in the pages of your books.

Read an e-book with friends. Discuss it. Get recommendations. Share your thoughts. It's all here.

Read an e-book with friends. Discuss it. Get recommendations. Share your thoughts. It's all here.

### 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 nearly ubiquitous on campuses, and just over half of students own desktop computers. In addition, 9 percent of students had acquired iPads by June 2011, even though the devices had been available for only 14 months at the time of the survey.

Laptop	87%
iPod	62%
HDTV	56%
Smartphone	55%
Digital camera	55%
Webcam	55%
Desktop computer	53%
Netbook	11%
iPad	8%
Other tablet	2%

Note: Results are from a survey of a nationally representative sample of 3,000 college students from 1,179 institutions, conducted in June 2011.  
Source: Educause Center for Applied Research

### Some Ideas from Educause Review March/April 2011, Scott Perkins and Michael Casdorff, 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 #4: Which of these mobile ideas might you use?

- 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."**

### Top Smartphone Apps to Improve Teaching, Research, and Your Life

By Jeffrey R. Young, January 2, 2011, Chronicle of HE

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).

### Top Smartphone Apps to Improve Teaching, Research, and Your Life


By Jeffrey R. Young, January 2, 2011, Chronicle of HE

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)

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

**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.



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

**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.



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

**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.



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

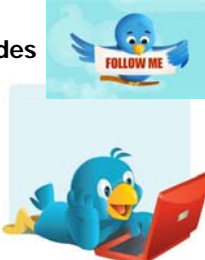
**7. Multimedia study guides on the go.**

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 #5:**  
**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



**8. Medical Training**




### 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



An app called Aspects of Anatomy brings flashcards into the YouTube age. Designed by a professor at the U of Warwick, in Britain, the software includes three- to seven- minute videos. Medical students can, say, review a dissection of the thorax and upper limb while on a break.

### iPads in Medical Training: Videos of Procedures

The Slow-Motion Mobile Campus, Josh Keller, The Digital Campus, The Chronicle of HE, May 8, 2011

- 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...**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.



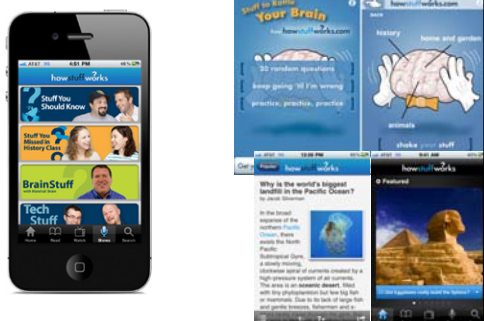
### 10. Mobile Dictionaries

(September 2010, Chronicle of HE)



### 11. Mobile Referenceware

August 18, 2011, HowStuffWorks, iPhone App, USA Today, Marc Saltzman



### 12. Language Training

(October 27, 2011)



**December 16, 2010**  
**Introducing Word Lens**  
<http://www.youtube.com/watch?v=h2OfQdYrHRs>

**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.usatoday.com/printedition/money/20100811/flipboard11\\_st.art.htm](http://www.usatoday.com/printedition/money/20100811/flipboard11_st.art.htm)

**15. Military Mobile Learning** (See: the U.S. Army Learning Concept for 2015; 2011, January 15).  
<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)

**Tutor.com To Go™**  
for iPhone, iPad & iPod Touch

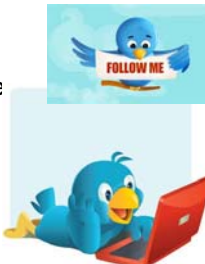
**17. Discounts for Attending Classes**  
**The Slow-Motion Mobile Campus**  
 Josh Keller, The Digital Campus, The Chronicle of HE, May 8, 2011

**Stanford University:** Weston McBride (right) and Andrew Bellay 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. (Note: it verifies attendance by checking students' GPS locations when they check in to class.)




**Poll #6:**  
**Which of these mobile activities did you like best?**

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



**Where are we headed?**



**Smaller, thinner, lighter, and new interfaces for mobile**




**May 4, 2012**  
**Flexible displays bend what's possible for computers,**  
**Jon Swartz, USA Today**  
[http://mediagallery.usatoday.com/Flexible+screen+displays/G3657\\_A12064](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.

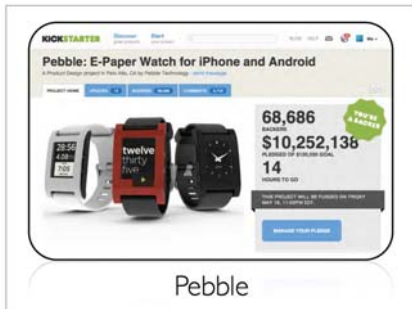
**September 4, 2012**  
**The truth about India's \$35 computer**  
**Deccan Herald, Prasanto K. Roy,**  
<http://www.deccanherald.com/content/83739/truth-indias-35-computer.html>



**June 27, 2012**  
**Google Glass**  
**ABC News, Google I/O Conference: Project Glass Prototype For Sale**  
<http://abcnews.go.com/Technology/google-glass-prototype-for-sale-20120627/>



Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012



May 4, 2012

"Top Gear presenter James May meets his virtual self", BBC

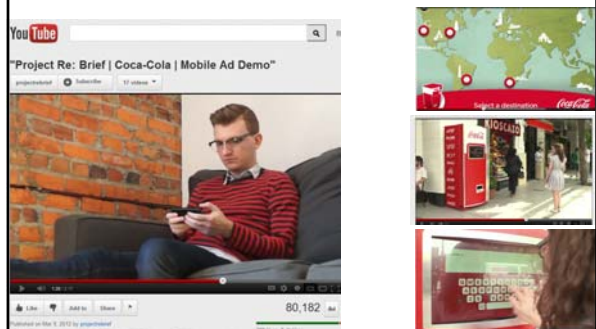
[http://news.bbc.co.uk/2/hi/programmes/click\\_online/9718563.stm](http://news.bbc.co.uk/2/hi/programmes/click_online/9718563.stm)



May 8, 2012

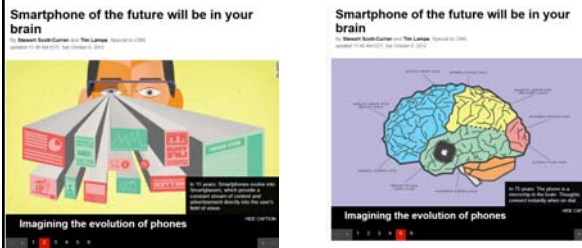
"Project Re: Brief | Coca-Cola | Mobile Ad Demo"

<http://www.youtube.com/watch?v=45Z-GevoYB8&feature=relmfu>



Smartphone of the future will be in your brain, CNN, Stewart Scott-Curran and Tim Lampe, October 6, 2012

[http://www.cnn.com/2012/10/05/robots/curran.lampe\\_mobile\\_phones/index.html](http://www.cnn.com/2012/10/05/robots/curran.lampe_mobile_phones/index.html)



Readers: Are we headed for a smartphone zombie apocalypse?, CNN, Nicole Saidi, October 4, 2012

[http://www.cnn.com/2012/10/04/mobile/zombie-apocalypse-community/index.html#article\\_slideshow](http://www.cnn.com/2012/10/04/mobile/zombie-apocalypse-community/index.html#article_slideshow)



Slides at: [TrainingShare.com](http://TrainingShare.com)

Papers: [PublicationShare.com](http://PublicationShare.com)

Book: <http://worldisopen.com/>

Questions and Comments?

