

**Accessing Open Access Educational Resources:  
Augmenting and Accelerating the Apprenticeship  
Process**

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Professor, Indiana University**



Blink Tower: <http://vimeo.com/43401199>

**January 2013**

**MOOCs and the Collaboration Industry,  
Wainhouse Research Note,  
Analyst: Alan D. Greenberg**



2008	2009 - 2010	2011	2012	2013 - 2017
First MOOC: Athabasca U & Canadian National Research Council (2,300+)	MOOCs slowly take hold: PLENK2010, DS106, University of the People, P2PU	Stanford Intro to AI MOOC (130,000)	Udacity, Coursera, edX (rebranded MIT program)	Big Name U, trial and error, best practices, business "remodeling," mainstreaming

Figure 1: A Short Recent History – and Prediction for the Future – of the MOOC

**Learning is Becoming More Open**

**(80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)**

**THE TEXAS TRIBUNE**  
An 80-Year-Old Graduate With an Online Marketing Degree Kept His Promise



**Part I. Some MOOC news from the past year or two...**



**November 2, 2012**  
**MOOC News Item #1: The Year of the MOOC,  
New York Times, Laura Pappano,**

[http://www.nytimes.com/2012/11/02/us/politics/mooc-education.html?\\_r=1](http://www.nytimes.com/2012/11/02/us/politics/mooc-education.html?_r=1)



**Clockwise, from top left: an online course in circuits and electronics with an M.I.T. professor (edX); statistics, Stanford (Udacity); machine learning, Stanford (Coursera); organic chemistry, University of Illinois, Urbana (Coursera).**

**July 16, 2013**

**MOOC News Item #2: "Golden Era of Learning"  
Bill Gates Discusses MOOCs at Microsoft Research's Faculty Summit**

[http://chemwiki.com/curriculum/Concepts/MSR\\_Summit2013/0716/20130716-faculty-summit-microsoft](http://chemwiki.com/curriculum/Concepts/MSR_Summit2013/0716/20130716-faculty-summit-microsoft)



**September 16, 2013**  
**MOOC News Item #3:**

**Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O'Neil**  
<http://chronicle.com/article/Rwandan-Degree-Program-Aims/141631/>



Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

**May 6, 2013**

**MOOC News Item #4:**  
**Faculty Backlash Grows Against Online Partnerships**  
 Chronicle of Higher Education, Steve Kolowich

May 6, 2013  
**Faculty Backlash Grows Against Online Partnerships**



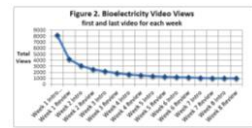
Michael Handel, a Harvard professor, taught an online course that last June. Steve Baker II, added to the Harvard professor's course on about all their own instructors. They wrote.

**June 19, 2013**  
**MOOC News Item #5:**

**2013 is "The Year of the Anti-MOOC"**  
 George Siemens, UW-Madison Summit

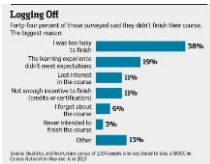
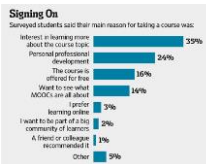


**February 24, 2013**  
**MOOC News Item #6: Retention**  
**Bioelectricity: A Quantitative Approach, Duke University's First MOOC**



**October 8, 2013**

**An Early Report Card on Massive Open Online Courses, Geoffrey A. Fowler, WSJ Online**



**August 18, 2013**  
**MOOC News Item #7:**  
**Virtual U: Master's Degree Is New Frontier of Study Online**  
 Tamar Lewin, The New York Times




**September 18, 2013**  
**MOOC News Item #8:**  
**MIT Will Offer MOOC Curricula, Not Just Single Courses, on edX, Steve Kolowich, Chronicle of HE**  
<http://chronicle.com/blogs/intel/comps/mit-will-offer-mooc-curricula-not-just-single-courses-on-edx/48215>

MIT Will Offer MOOC Curricula, Not Just Single Courses, on edX  
 September 18, 2013, 10:45 am  
 By Steve Kolowich

MOOCs (massive open online courses) are hardly newcomers in higher education, but some a provider wants to move beyond offering one-off courses.

MIT, a division of the Massachusetts Institute of Technology that offers courses on the nonprofit edX's platform, announced on Tuesday that it would soon offer special certificates to students who completed a prescribed sequence of massive open online courses from MIT. The sequence will be called XSeries.



**September 10, 2013**  
**MOOC News Item #9:**  
**Google and edX Create a MOOC Site for the Rest of Us, Steve Kolowich**  
<http://chronicle.com/blogs/intel/comps/google-edx-create-a-mooc-site-for-the-rest-of-us/>

Google and edX Create a MOOC Site for the Rest of Us  
 September 10, 2013, 10:00 am  
 By Steve Kolowich


Until now, massive open online courses have mostly reinforced existing hierarchies in higher education. MOOC providers have recruited elite institutions and offered them and their professors the opportunity to broadcast their courses to the world.

But now edX, a nonprofit provider founded by Harvard University and the Massachusetts Institute of Technology, is joining forces with Google to create a spinoff Web site whose ordinary folks—and professors at colleges that have not been invited to join high-profile MOOC consortiums—can not only sign up for a MOOC but also build one themselves.



**December 13, 2012**  
**MOOC News Item #10:**  
**UK universities in online launch to challenge US, BBC News, Sean Coughlan**  
<http://www.bbc.co.uk/news/education-20667594>

UK universities in online launch to challenge US  
 13 December 2012, 1:01pm GMT  
 By Sean Coughlan  
 BBC News education correspondent



The Open University's Martin Bean says UK universities cannot "stick their head in the sand"

A partnership of UK universities is launching an online project, challenging US universities that have dominated the emerging market.

**Coursera List of Courses**  
**National Taiwan University**  
<https://www.coursera.org/taiwan>



**October 16, 2013**  
**MOOC News Item #11:**  
**'Walking Dead' comes alive in the online classroom, Patrick Ryan, USA Today**  
<http://www.usatoday.com/story/tech/2013/10/16/walking-dead-online-classroom/259427/>

'Walking Dead' comes alive in the online classroom




MOOCs Meet the Zombie Apocalypse  
 September 16, 2013  
 By Steve Kolowich

How do you get thousands of people excited about an online course in math, physics, and public health that will not ease their financial crisis or any kind of zombie?!

**September 2013**  
**MOOC News Item #12:**  
**Professional Development (PD) (practical) MOOC**



Stanford ONLINE  
 Technology Entrepreneurship Part 1




**October 27, 2012**  
**MOOC News Item #13:**  
**Flying Office Hours, 42,000 sign up**  
**Chuck Severance (U Michigan/Coursera) in Barcelona, Seoul, Manila, Melbourne, etc.**  
<http://www.youtube.com/watch?v=JzNtXvM5v8TI>  
<https://www.coursera.org/#course/insidetheinternet>



**June 11, 2012**  
**MOOC News Item #14:**  
**MOOC Cases, Examples, and Testimonials from students and instructors**  
<http://chronicle.com/article/4-Professors-Discuss-Teaching/132125/>


4 Professors Discuss Teaching Free Online Courses for Thousands of Students  
 By Jeffrey A. Young




**August 5, 2013**  
**MOOC at UPenn; Recession Fuels Explosion of Online Learning, Peter Struck, Professor, UPenn, Mythology class to 54,000 students, AOL News, 1:33 minutes**  
**Video:** <http://on.aol.com/video/recession-fuels-explosion-of-online-learning-51785502>



**February 27, 2013 (Inside HE)**  
**MOOC News Item #15:**  
**Grade My Course, CourseTalk (i.e., Yelp for Ed)**  
<http://www.grademycourse.com/>; <http://coursetalk.org/>



**April 27, 2012**  
**Introduction to Blackboard/CourseSites MOOC, With Dr. Curt Bonk: "Instructional Ideas and Technology Tools for Online Success" (4,039 now enrolled)**  
<http://www.youtube.com/watch?v=rBNe8CUEPTQ&feature=youtu.be>



**Part II: What about the Instructor in the Online World?**  
**(Instructor as Cat Herder?)**



**Learning is More Interactive and Collaborative**



**1. Instructor as Counselor**



**2. Instructor as Consultant**



**3. Instructor as Conductor**



**4. Instructor as Course Ambassador**



**5. Instructor as Curator**





### 6. Instructor as Concierge



### 7. Instructor as Camping Trip Guide



### 8. Instructor as Cultivator



### To Instruction as a Cognitive Apprenticeship



### Part III: Expert Apprenticeship from Video



### Experts On Demand



**February 22, 2013**  
**NASA's spacey Google+ Hangout shows off zero-G antics – and cats!**



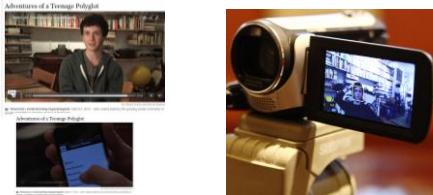
**May 7, 2012**  
**Google+ Hangouts On Air: broadcast your conversation to the world**

<http://googleblog.blogspot.com/2012/05/google-hangouts-on-air-broadcast-your-conversation-to-the-world.html>



**March 9, 2012**  
**Online Learning Polyglots**

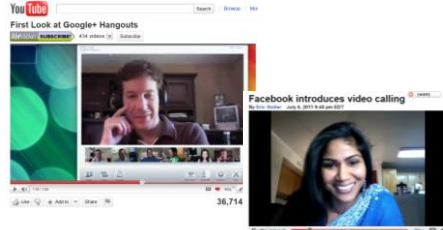
[http://www.youtube.com/watch?v=6L95afvX7A&annotation\\_id=annotation\\_389528&feature=youtu.be](http://www.youtube.com/watch?v=6L95afvX7A&annotation_id=annotation_389528&feature=youtu.be)



Timothy posts videos of himself speaking several languages on YouTube.

**June 29, 2011 and July 6, 2012**  
**Google+ Hangouts and Facebook Video calling**

[http://www.youtube.com/watch?v=6L95afvX7A&annotation\\_id=annotation\\_389528&feature=youtu.be](http://www.youtube.com/watch?v=6L95afvX7A&annotation_id=annotation_389528&feature=youtu.be)

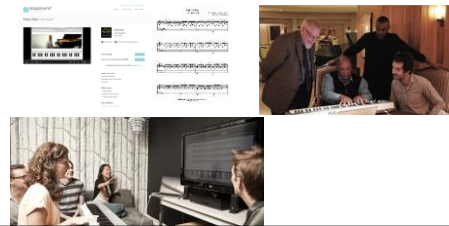


**Experts from Lynda.com**



**April 18, 2013**  
**Quincy Jones goes high-tech for the lowdown on music, Marco della Cava, USA TODAY, Playground Sessions**

<http://www.playgroundsessions.com/about.html>



**October 15, 2012**  
**Reusable Khan**  
**Lacking Teachers and Textbooks, India's Schools Turn to Khan Academy to Survive, NY Times, Anupama Chandrasekaran**  
<http://online.khanacademy.com/2012/10/15/looking-teachers-and-textbooks-indian-schools-learn-the-khan-academy-the-way/>  
 The New York Times | International Herald Tribune





Students at Sree Karpagavalli Vidhyalaya school in Chennai, Tamil Nadu, watching Khan Academy math videos.

**Bill Gates' classroom of the future**



Gates: How to make digital classrooms work

**TED Talks**  
**(Build a School in the Cloud; Self-Organized Learning Environments (SOLEs), February 2013, TED Talk from Sugata Mitra**  
[http://www.ted.com/talks/sugata\\_mitra\\_build\\_a\\_school\\_in\\_the\\_cloud.html](http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html)


TED Ideas worth spreading	TED Ideas worth spreading
<b>TALKS</b> Sugata Mitra: Build a School in the Cloud 	<b>TALKS</b> Sugata Mitra: Build a School in the Cloud 

**Educational Video Anchors**  
**TED-Ed: <http://education.ted.com/>**



TED-Ed LESSONS WORTH SHARING

**TEDx**  
**Aaron Doering, Chasing Seals**  
<http://chasingseals.com/>



Speaking for Change and Humanity

**BETT Talks**  
**Global voices in education technology: Daphne Koller, Coursera BETT 2013 Keynote Talk (posted March 14, 2013)**  
[http://www.youtube.com/watch?v=BMii6RdINQ&WT.trc=Email&WT.mc\\_id=NWS14](http://www.youtube.com/watch?v=BMii6RdINQ&WT.trc=Email&WT.mc_id=NWS14)



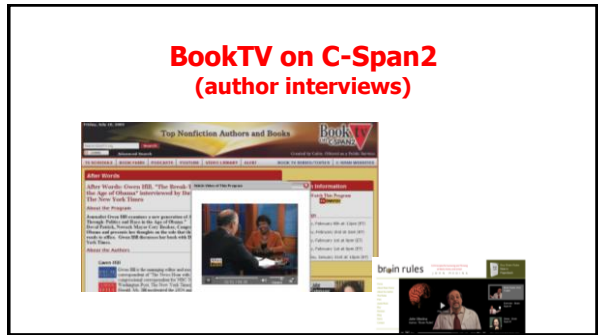
Global voices in education technology: Daphne Koller, Coursera



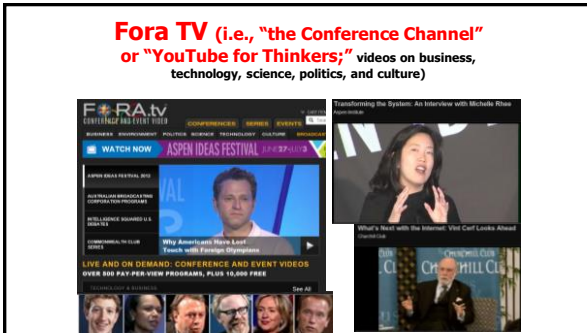
## Academic Earth



## BookTV on C-Span2 (author interviews)



## Fora TV (i.e., "the Conference Channel" or "YouTube for Thinkers;" videos on business, technology, science, politics, and culture)



## Big Think (short topical video interviews and blogs posts from famous people)



## Flipgrid

Short video-based discussions



## Tracking the Life of a Scientist (e.g., Brian J. Ford, independent scientist)



**The Virtual Choir**  
 (e.g., Eric Whitacre)  
<http://vimeo.com/22960177>  
<http://www.youtube.com/watch?v=D7o7BrlbaDs>

**Segment Video Anchors**  
 (e.g., TubeChop of V-PORTAL: Video Primers in an Online Repository of e-Teaching and Learning; "Wikibooks Hooray for Us")  
<http://www.tubechop.com/watch/378752>

**Poll #1:**  
**But is this a revolution?**

A. Yes  
 B. Maybe  
 C. No

**Part IV: Ten Anchors and Enders:  
 Instructor Centered**

**1. Online Video Anchoring**

Online videos are used as an anchor or advance organizer of a class lecture.

**Learning and Memory Videos**

## 6. Pause and Reflect

The instructor(s) plays a portion of a YouTube video and pauses for reflections and then continues playing the video which is followed by still more class reflection.



## 7. Key Concept Reflections

Instructor shows the YouTube video and asks students to reflect on concepts embedded in it. He may replay the video 1-2 more times while prompting the class for certain key concepts. He might ask students to say "pause" when they see a concept from a particular chapter or unit displayed.



## Part V: Ten Anchors and Enders: Student Centered



## 1. Course Resource Provider Handouts

Students find videos and show them in class and discussion unfolds. Students assigned as the cool resource providers for the week are asked to create a handout for the videos and other course resources selected.



Interactive Multimedia Glossaries  
Umida Khikmatillaeva, Dec. 2011, P540  
<http://learningplanet.shutterfly.com/>



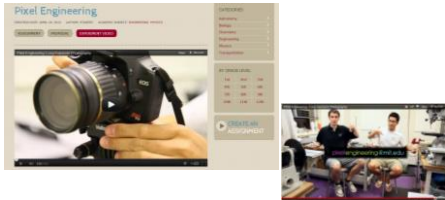
## 4. Student Anchor Demonstrations

Each student brings a video to class and presents and explains how each one is related to course concepts. A coinciding handout of videos and concepts is recommended.



**April 25, 2012**  
**MIT+K-12**

**Making Video to Make a Difference**  
<http://k12videos.mit.edu/>



**WonderHowTo and Howcast**



**5. Anchor Creators**

**Students create their own YouTube videos to illustrate course concepts.**



**10. Anchor Creator Interviews**

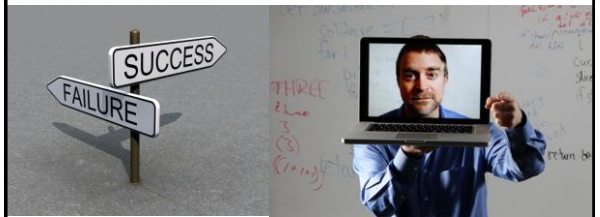
**Students find YouTube videos relevant to course concepts and email interview the creator about the purpose and potential uses of the video or perhaps request that the creator join the class in a synchronous chat.**



**Karl Fisch, Did You Know?**  
**Shift Happens—Globalization, Information Age**



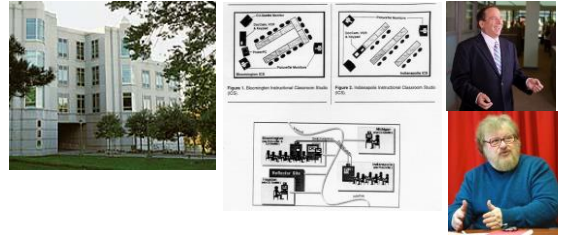
**Part VI: Lessons Learned...**



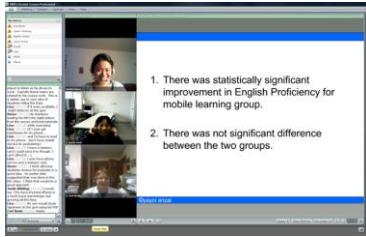
**Lesson #1. Combining Asynchronous and Synchronous Events**  
 (e.g., guest was David Merrill, 2007)



**Synchronous + Asynchronous**  
 (e.g., Elliot Soloway and David Palumbo, 1995)



**Lesson #2. If Plan, No Instructor Required**  
 (Guest Session Run by Assistant)



**Lesson #3. Test the System**  
 (e.g., Guest No Video)



**Lesson #4. Guest Starts Semester**  
 Michael Horn and Curt Bonk, R685, August 20, 2012



**Lesson #5. Multiple Guest Experts**  
 Sara de Freitas and Jim Hensman, U of Coventry, UK  
 (https://connect.uu.edu/p2e1yx6zbx/)   
 Jay Cross, Berkeley (https://connect.uu.edu/p4bytsorohj/)

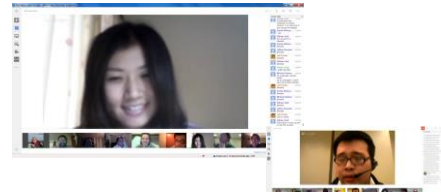




**Lesson #6: Be Willing to Reciprocate**



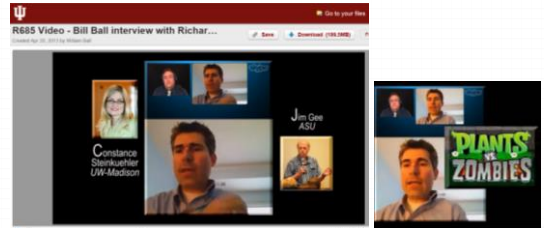
**Lesson #7: Experiment with Technology**  
**Collaboration and Discussion in Google Hangouts (1/29/2013)**



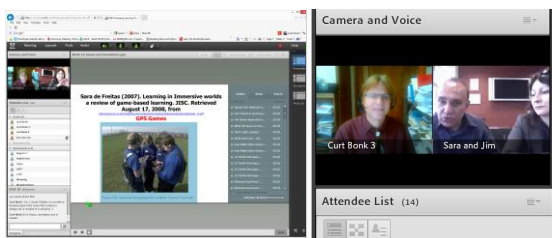
**Cross-Institutional Wikibook Project**  
 (e.g., IU and the University of Houston)



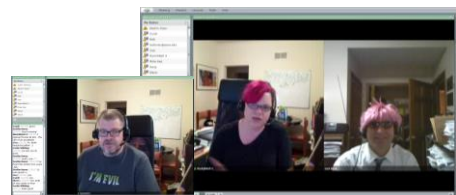
**Lesson #8: Solicit Student Recommendations**  
**Expert Interviews (Rich Culatta, Acting Director, Office of Educational Technology)**



**Lesson #9: Don't Give Up!**  
**Serious Gaming Institute, Coventry, UK**



**Lesson #10: Make a List of Those You Know**  
**Intellagirl Sarah Smith-Robbins and Mark Bell**  
**(Second Life for Dummies)**



## Part VII: Ten Pedagogical Activities for Class-Related Videoconferencing or Web Conferencing with Experts



11 Big Ideas in Distance and Flexible Learning (2011)

### 1. Expert Presentations with Audience Questioning and Commenting

The guest expert makes a formal or semi-formal presentation of ideas, activities, cultural norms and practices, or research to the class.



### Jay Cross, April 15, 2013 (Adobe Connect + Google Hangouts)



### 2. Expert Demonstrations and Audience Questioning

The guest expert demonstrates a certain technique, idea, principle, etc., while the learners observe and ask follow-up questions.



### University of Wisconsin and students in Mexico (agriculture classes)



### 3. Question and Answer Sessions

The guest expert responds to questions posed by the audience based on a particular topic (the audience might read or watch ahead of time).



#### 4. Responding to Book or Article Quotes

The learners come to the synchronous session with quotes from those articles or resources for the guest expert to respond to.



#### 5. Responding to Publication Visuals

Students find visuals from the culture or country of the guest to respond to; alternatively, they might find charts, tables, figures, and graphs from articles, books, or presentations of the guest expert.



#### 6. Expert Panel

A panel might set up to discuss a particular issue, trend, controversial topic, cultural practice, research finding, announcement, etc.



#### 7. Expert Cultural Sessions

The guest might conduct a short presentation of some aspect of their culture followed by questions from the class.



#### 8. Expert Interviews and Discussions

Students might read the biography or resume of the guest as well as available articles, books, and other resources about this person. Next, the guest might respond to questions from the class based on these resources.



#### Videoconference Shanghai, China, April 28, 2013



**Videoconferencing (first demo in 1964 at the World's Fair; use increased in 2003)**

Tablets Rock On: Education Tech Through The Ages, Information Week, February 26, 2013  
<http://www.informationweek.com/education/2013/02/26/tablets-rock-on-education-tech-through-the-ages/>



**9. Expert Life Stories**

The guest expert might detail different stories or situations that he or she has encountered related to a certain topic of the class. Students in the class can comment on them and ask questions as needed.



**10. Expert Session Archive Reviews and Discussions**

A class might watch one or more guest expert sessions from a previous semester and form discussion groups based on controversial, confusing, or complex aspects of such sessions.



**GETideas Channel, Cisco**  
 (Thought Leader Series uploaded to YouTubEdu), July 22, 2011



**Part VIII: What's Next? Some Predictions...**

The Next 30 Years, USA Today, Sept 2012

<http://www.usatoday.com/video/news/1183913956001>



**1. Video Walls of Experts**



## 2. Mobile Video Connections to Experts and Friends



## 3. Expert Access from Our Watches



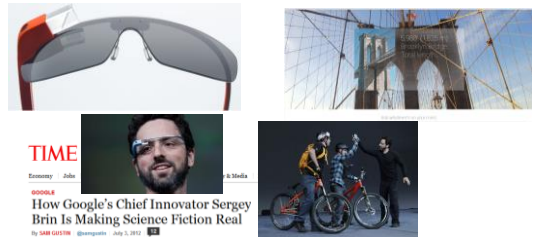
## 4. Interactive Globes

(e.g., NY Times Interactive Photo Globe)

[http://www.nytimes.com/interactive/2010/05/03/blogs/a-moment-in-time.html?\\_r=0](http://www.nytimes.com/interactive/2010/05/03/blogs/a-moment-in-time.html?_r=0)

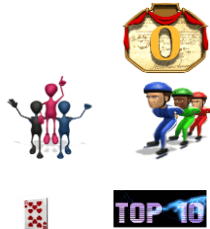


## 5. Experts Apprenticeship via Our Glasses



### Final Poll: How many new ideas did you get?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.



### Questions?

Slides at: [TrainingShare.com](http://TrainingShare.com)  
 Papers: [PublicationShare.com](http://PublicationShare.com)  
 Book: <http://worldisopen.com/>  
 Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)

