February 16, 2011
How Bill Gates' Favorite Teacher Wants to Disrupt Education, Gregory Foremstien, Fast Company


April 12, 2011. NCTM Conference
Free Online Degrees
ISMART: Integration of Science, Mathematics, and Reflective Teaching (ISMART), University of Houston

April 29, 2011
Shared Online Video (e.g., YouTube and the Royal Channel)

May 30, 2011
Moodle (42+ million users in 213 countries, 54,000 sites, 4.5+ million courses)

May 15, 2011
The Quiet Revolution in Open Learning, Kevin Carey, The Chronicle of HE
September 15, 2010
Study: Online learning might be less effective for some, eSchool News, Dennis Carter

Classroom students scored 84.5 percent on the first exam in the economics course, and online students scored 83.3 percent.

May 24, 2010
Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired

Let's Reflect Back 10 Years...

But I am not Content!!!
Technology of the 1980s

Radio Shack TRS-80 Model III

1. Inexpensive Laptops and Netbooks

#2. Online Language Learning
January 27, 2010 and Feb 5, 2010: The Web Way to Learn a Language, NY Times, ERIC A. TAUB (e.g., EnglishCentral, iTalki, Palabea, Babbel)

#3. Tablet Computers Hit (iPad)
April 16, 2010: Seton Hill Univ, 2,100 students an iPad and freshmen a 13-inch MacBook laptop
Feb 1, 2011: An Android Tablet Made Just for School, david zee, Pook Company

#4. Pocket Dictionaries and Digital Textbook Projects (Korea), Sept. 21, 2010:
What South Korean Schoolchildren Can Teach Colleges About E-Textbooks, By Jeff Young, Chronicle of H. Korea E-Learning Week, Cova, Seoul, Sept. 16-17, 2010

#5. Video Conferencing/Webcamming
December 20, 2010: Skype for iPhone adds two-way video calling, CNet Reviews
#6. Social Networking Gaming
December 24, 2010: CityVille 16.9 million daily users, FarmVille 16.4 million. CityVille 61.7 million monthly users, FarmVille 56.8 million users. Mashable.

"CityVille" is now bigger than "FarmVille"

#7. E-Book Readers
January 30, 2011: Amazon: Kindle Books Finally Eclipse Paperbacks, Doug Aamoth
March 2, 2011: Why Amazon would be smart to give away the Kindle, March 4, 2011, CNN Tech, Amy Geiman

Whether a surge in e-book sales can be sustained and what effect it could have on traditional bookstores remains to be seen.

#8. Artificially Intelligent Computers
February 18, 2011: Watson dominates at 'Jeopardy' — but what else can it do? As IBM seeks new uses, man still has edge over machines, Dan Pogue, USA Today.

#9. New Interfaces
February 18, 2011: Telekinesis 2.0, David Sax, Fast Company

#10. Group Video Chat, February 28, 2011:

#11. Mobile Apps, May 13, 2011:
USA Today, Mary Beth Marklein

Apps make college easier to access
Question: What is the Web?
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

No, it is a learning tool!

We are entering a jumping off point...
**It is Open in Norway...**
(May 23-26, 2011)

**Very open in Norway!**

**It is Open in the Philippines too!**
(May 29, 2011)

**Framework #1: WE-ALL-LEARN:**
Ten Forces that Opened the Learning World
- Web Searching in the World of e-Books (e.g., Darwin)
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (e.g., YouTube)
- Electronic Collaboration and Interaction (synchronous and asynchronous)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)

**Audience Participation!**

1. **WE**
2. **ALL**
3. **LEARN!!!**

**Triple Learning Technology Convergence of “WE-ALL-LEARN”**
1. **Pipes:** The availability of tools and infrastructure for learning.
2. **Pages:** The availability of free educational content and resources (OER—Open Educational Resources).
3. **Participatory Learning Culture:** A move towards a culture of open access to information, international collaboration, and global sharing.
99 Second Break for questions or reflections on models...

Masterclass Part 1: Stretching the Edges of Technology-Enhanced Teaching: From Tinkering to Tottering to Totally Extreme Learning

Tinkering

Tinker #1. Reading from Open Access Journals (e.g., PLOS)

Tinker #2. Webcast Lectures (Tegrity, Echo360, Mediasite, etc.)

Tinker #3. Timeline Tools (e.g., SIMILE from MIT [http://simile.mit.edu/], Learning Tools from UBC)
Tinker #5. Video Animations and Self-Testings

Tinker #6. Simulations (e.g., Foldit, puzzles that explain the shape that proteins fold into; the results can have huge impacts on scientific discoveries needed for Alzheimer's, AIDS, cancer, etc.)

Tinker #7. Pubcasts. (videos of authors of scientific papers and science; e.g., SciVee)

Tinker #8. Collaborative Groups (Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups)

Tinker #9. Track Life of a Scientist or Famous People (e.g., Brian J Ford, independent scientist)

Tinker #10. Online Portals of Rich Data
United Nations Opens World Digital Library, Turning the Pages from the British Library, etc. (history, culture, literature, writing, art, etc.)
Tinker #11. Online Experiments (e.g., psychology)

Tinker #12. Educational Simulations

Tinker #13. Online Role Play (e.g., Tulane University, Exercise for Renewable Energy, Freeman Sch. of Business, roles include power traders and utility dispatchers, etc.)

Tinker #14. Simulations and Video Animations and Self-Testings

Tinker #15. Online Self-Testing (e.g., self-study in accounting, vocabulary, anatomy, chemistry, dissection, etc.)

Tottering
**Totter #1. Bridges to World of Expert and Practitioners**
(e.g., Watch or Listen to Online Conferences, Expert interviews, blogs, chats, etc.)

**Totter #2. Famous Expert Via TED (shared online video), Fast Company, Anya Kamenetz, September 1, 2010**

**Totter #3. Real World Problems (PBL online): Real-time Cases**

**Totter #4. Class Synchronous Sessions and Archives (Breeze/Adobe Connect, Pro, Eluminate, WebEx, Dim Dim)**

**Totter #5. Global Class Videoconferencing**

**Totter #6. Global Class Videoconferencing and Remote Lands**
(Reps. The lecture was structured as a series of videoconferences and virtual visits to a site, with a speaker from the United Nations, TDY, a veteran of the Task Force South of the Regional Command West, which is highly involved in the search for a vaccine for tuberculosis in the province of Herat.)
Totter #7. Combining Asynchronous and Synchronous Events

Totter #7b. Asynchronous and Synchronous Events (e.g., William and Mary, March 3, 2011)

Totter #8. Online Language Learning and Conversations (e.g., PalTalk, iTalki, Palaba, Babbel)

Totter #9. Wikibooks, Wikipedia editing, wiki syllabi, wiki glossaries (Ron Owston, York University, Toronto)

Totter #10. Student YouTube Products

https://www.youtube.com/watch?v=Enz2Xz9P0Q
http://www.youtube.com/watch?v=Cj96bPnL
http://www.youtube.com/watch?v=CJ1xawpa3Up
http://www.youtube.com/watch?v=67jzj0t_genB

Totter #11. Podcast Productions and Virtual Performances for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)
Totter #12. Video Blogging

Totter #13. YouTube as Class

Totter #14. Collect Student Data for Shared Online Videos (e.g., Michael Wesch, Kansas State)

Totter #15. Podcasting Medical Lectures (School of Dentistry, University of Michigan)

Totally Extreme Learning

Totally Extreme #1. Live Science (Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)
**Totally Extreme #2.** Immediate Science  
Ida (a transitional species) 47-Million-Year-Old Fossil the Missing Link? (May 10, 2009)

**Totally Extreme #3.** Armchair Archaeology  
UCLA Summer Digs Program

**Totally Extreme #4.** Google Earth Archaeology (David Thomas, Archaeologist, La Trobe University, Australia)

**Totally Extreme #5.** Adventure Learning  
e.g., GeoThentic, Earthducation, Polar Husky, GoNorth; Aaron Doering, Univ of Minnesota; cars and bikes—Dan Grec and Mark Beaumont

**Totally Extreme #6.** Learning on the Sea. (May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.)

**Totally Extreme #7.** The LAST OCEAN  
Website and The Last Ocean Project  
Totally Extreme #8. MBAs from War Zones...!


Totally Extreme #10. On-Demand Multi-Participant Synchronous Conferencing

Totally Extreme #11. International and Global Education and Competitions (e.g., Global Game Jams, online role play, Global Videoconferencing)

Totally Extreme #12. Learn Anytime, Always On/Mobile. Will Technology Kill the Academic Calendar? Online, semester gives way to students who set their own schedules, Marc Perry, Chronicle of Higher Ed, October 10, 2010

Robert Johnson, who championed the open-format Learn Anytime program at a two-year college in Louisville, Ky, checks students’ e-mail while waiting for a flight. “Everything I need to do today, I can do on my phone,” says Robert Johnson. He often grades papers and communicates with students from a café near his home.

Totally Extreme #13. Pocket School and Videoconferencing in Developing World (Paul Xiong, Stanford, Rwanda, August 2015, Kigali Institute of Education)
Poll: Is your brain mush?
1. Yes.
2. No.
3. Not sure yet...

Masterclass Part 2: The Rise of Shared Online Video, the Fall of Traditional Learning

Technology
Let's Think Outside the Box!
(For 99 Seconds—how can video be used for learning and what might students today prefer to use?)
March 10, 2011: iPad 2 is even better than the original, USA Today, Edward C. Baig

April 21, 2011: Apple iPad 2 stars in vacation videos, Jefferson Graham

Professor Celebrity YouTube Videos (Michael Wesch, millions of views)

YouTube Growth
Randy Pausch’s last lecture
April 2008 ~2 millions
October 2008 ~7.5 millions
May 29, 2011 ~13.3 millions
January 2008 ~79 million viewers watched more than 3 billion user-posted videos on YouTube (Yout, 2008)

December 10, 2010: Mobile Music; Virtual Bands, Choirs, Singers, etc.
IBand Rocks Tunes on iPads and iPhones; PadGagget.

Bonk (2008)
"Clearly, YouTube technology is something in which students in higher education settings in the United States are highly familiar. It is a tool of the culture. And it is one that instructors from K-12 to higher education to corporate training need to begin experimenting with in their classes."
Elliott Masie, Learning Trends, March 2, 2010
"Raising bandwidth, lowered equipment costs, ease of editing and growing expectations of learners will make video a profound component of our learning efforts going forward."

Elliott Masie, Learning Trends, March 2, 2010
- Video "YouTube" story segments
- Video Podcasts
- Video Reports – Webcam Captures
- Produced Video for Learning Modules
- Skype (with video)
- Webinar Video Elements
- High Definition Video Conferencing (up tp 4 Megas)

Elliott Masie, Learning Trends, March 2, 2010
- Telepresence Video (Beyond 6 megs)
- Flipcam and iPhone Video Clips
- Webchat Video
- Video Capture of Seminars and Classrooms
- Video Keynotes Live and Asynchronously.
- Video Guests in Workshops and Conferences
- Video Coaching


February 21-24, 2011: E-Learning and Distance Learning (ELI) Conference in Riyadh

Multimedia Enhancements and Trends
Multimedia Enhancements and Trends

Animation of Videos (e.g., RSA Animate - Drive: The surprising truth about what motivates us)
http://www.youtube.com/watch?v=uy6XAPnuP3c
http://comment.rabble.org.uk/videos/

Graphic Facilitation of Speeches (e.g., ImageThink)
http://www.imagethink.net/

Why Use Video?
1. Importance of shared online video: educational psychologists such as David Ausubel (1978) argued that knowledge was hierarchically organized.
2. New learning concepts and ideas to be subsumed under or anchored within prior learning experiences.

Why Use Video?
3. Ausubel suggested that new info is going to be meaningful if it is anchored (i.e., attached or related) to what learners already know and understand.
4. YouTube videos can help in that regard. A key part of this effort is finding ways to link prior learning experiences to new concepts and ideas.

Why Use Video?
5. Advance Organizers: Provide a context, richer learning, can be replayed for key concepts, bring students to the real world, discussion, reflection, common experience, and the potential for higher order thinking skills.
Why Use Video?
6. Dual coding theory (learning information verbally and visually is more richly stored): Alan Paivio.
7. Anchored instruction and macrocontexts: John Bransford and colleagues.

Which of these video sharing sites do you use?
1. BBC News Video and Audio
2. CNN.com Video
3. MSNBC.com
4. Google Video, Yahoo Video
5. Current TV
6. Foe TV
7. MIT World
8. YouTube, YouTube Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, Explo.to, Exploitv, NASA TV, ClipChimp, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideoSong

Video Sharing Websites

CNN Video and MSNBC
http://www.cnn.com/video/

Current TV

MIT World
1. Online Video Anchoring
Online videos are used as an anchor or advance organizer of a class lecture.

Anchored Instruction (find anchoring event [YouTube, CNN, BBC, TeacherTube, CurrentTV])
- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.
Learning and Memory Videos

2. Online Video Ender
Online videos are used after discussion and activities as a class "ender" or capstone event.

3. Anchoring and Ending
One or more online videos are used to start discussion as well as others at the end of the class to draw a sense of closure to that discussion.

4. Online Class Previews and Discussions
The instructor(s) finds videos and then posts them to the course management system for students to watch prior to or after class. If students participate in an online discussion based on such videos, the instructor should be clear about the length of post (e.g., two paragraphs) and how many comments of peers to respond to.

5. Anchor with Discussion
The instructor(s) finds videos and shows them in class and students discuss them in small groups with certain assigned tasks.

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.

8. Video Anchor, Lecture, and Test (VALT)
Instructor(s) might show 1-2 YouTube videos at the start of a class and then lectures on topics related to concepts in those videos. When done lecturing, the instructor might show the same YouTube videos and ask for student reflection papers or discussion of what concepts are displayed in them. Such an activity might be embedded in a course quiz or examination.

9. On-Demand Conceptual Anchoring
Instructor pauses a class activity or discussion at any moment and shows a YouTube videos related to a concept, theory, or idea being presented or discussed.

10. Videoconferencing Anchors and Enders
YouTube videos might be shown in a videoconference or Web conference with other classes and then used to spur discussion and interaction across sites. Controversial videos might be purposefully chosen to foster such interaction.

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.
2. Class Previews of Student Anchors
Have students (as cool resource providers) find videos and share with the class which previews them prior to the class meeting and discussion of them.

3. Collaborative Anchoring
A pair of students as well as the course instructor each find a few relevant videos for the week and then share what they have found with each other and decide which ones to use in class.

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.

5. Anchor Creators
Students create their own YouTube videos to illustrate course concepts.

6. Anchor Archives
An archive is created of videos from previous years and students are asked to update them.

7. Video Anchor Competitions
Students find relevant videos and send the list to the instructor(s) for viewing and selecting. The students whose videos are selected might receive special class recognition or bonus points.
8. Video Sharing and Ranking
Students might share YouTube videos across class sections or institutions and perhaps rate those posted by their peers.

9. Video Anchor Debates
Students are asked to find YouTube or other online video content on the pro and con sides of a key class issue and then use them in face-to-face or online discussions and debates.

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.

Bonk (2008)
This is just a small sample of possibilities that each of us now has to learn with shared online video. Seems nearly everyone can find educational uses for shared online video. The potential is immense. Access is increasing. Better evaluation methods and indexing schemes are needed. The time has ripe to put these millions of free videos to work. It may be up to you!

Turn and Share 1-2 ideas you can use...
But who can use shared online video?

Audiences and Uses of Shared Online Video

1. Instructors: start or end a class with online video as an anchor for student discussion and debate, while asking students to reflect on concepts embedded in the videos that relate to course content.

2. Formal Learners: find and present online videos to show to the class that demonstrate concepts, provide an historical context for learning material, or integrate multiple topics as well as those that they simply find inspiring within a field of study.

3. Informal Learners: browse and watch instructional video sites for situation specific needs and personal interests, including business and finance, healthcare, cooking, crafts and hobbies, sports and fitness, relationships, parenting, travel, technology, and so on.

4. Curriculum Developers: embed critical video snippets or complete lectures at key points in a course for learner reflection.

5. Librarians: create videos to demonstrate how to use technology resources and tools to access information as well as call attention to any changes in materials, networks, procedures, and operations.
Audiences and Uses of Shared Online Video

6. Executives, Administrators, and Consultants: open or close meetings using short online videos to foster debate or reflection on recent problems, strategic plans, or upcoming events.

7. Training Managers: make available a series of videos that employees can watch on-demand when the need arises; especially short, instructional ones that are adapted to hectic schedules and pressing demands.

8. Conference Directors and Keynote Speakers: post complete or short summary videos of invited talks and keynote speeches prior to or after a workshop, conference, institute, or summit as a means of sharing and reflecting upon that event.

9. Bloggers: point to online videos that exemplify a recent issue or emerging trend linking to their blog reflections or extending well beyond them.

10. Podcasters: embed links to shared online videos that relate to a particular podcast session or set of online audio files.

11. Global Educators, Consultants, and Heads of Non-Profit Agencies: post videos that exemplify a mission statement or stated goals as well as recent societal issues and problems as a means of attracting attention and dialogue.
Audiences and Uses of Shared Online Video

12. Government Agencies and Politicians: post online videos that relate to proposed or newly adopted policies, activities, and events.

13. Retirees: watch online videos to learn new skills and competencies or explore personal hobbies and interests.

Audiences and Uses of Shared Online Video

14. Unemployed: search for and access videos that can add new skills, fine-tune existing ones, or arouse new career interests altogether as well as share what has been found with others in the same situation.

Advice and Guidelines

1. When using shared online videos, consider the learning theory or approach makes them more powerful than other media.
2. Assign students to reflect on why or how you used them.

Advice and Guidelines

3. Length of video for activities should be less than 10 minutes and preferably under 4 minutes.
4. Considering offering online video creation as an option—can foster student creativity.

5. Instead of finding all course videos, offer the student the chance to find and show 1-2 free online videos.
6. Watch and approve all videos before selecting.
Advice and Guidelines

7. Test videos online (or, if FTF, in the room you will use) to check for link rot or video removal.
8. Have back-up videos in case do not work or are taken down.

Advice and Guidelines

9. Have a guidesheet, job aid, or scaffold to help students evaluate the validity of sources (issues of credibility/authority, quality, design, etc.)

Advice and Guidelines

10. Many unconventional videos might be used to emphasize key points from class (e.g. old television programs or other non-educationally produced).

Final Thoughts

It is important for instructors to begin to reflect on the power of such online video technology, to experiment on their use, and to share their results.

Poll: How many ideas did you get from the second part of this talk?

a. None—you are an idiot.
b. 1 (and it is a lonely #).
c. 2 (it can be as bad as one).
d. 3-5 
e. 6-10 
f. Higher than I can count!

Stop and Share: Top Three Things Learned!
Stand and Share Ideas

- Will Work: _____________
- Might Work: _____________
- No Way: ________________

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
The World is Open.