Learning for the Next Decade: The Macro and the Micro

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Technology of the 1980s

Radio Shack TRS-80 Model III

New technologies hit us everyday!

Poll #1: Who finds it hard to keep track of all the technology-related changes today???

It's Nature (i.e., technology) and Nurture (i.e., pedagogy)!

Trend #1: Topical Lectures from Famous People (e.g., Big Think; Academic Earth)
Trend #2. Shared Online Video (e.g., TV Lesson (expert videos))

Trend #3. Bridges to World of Expert and Practitioners (e.g., Watch or Listen to Online Conferences, Expert blogs, chats, interviews)

Trend #4: Online Portals of Rich Data
United Nations Open World Digital Library, Turning the Pages from the British Library

Trend #5. Authentic Book Supplements (e.g., Listen and Reflect on Book Author Podcasts)

Trend #6. Self-Paced Learning (e.g., accounting lessons, Podcasting Lectures)

Trend #7. Online Warm-ups Activities Just-In-Time-Teaching (JITT)
http://webphysics.iupui.edu/jitt/jitt.html
Trend #8. Online Games and Simulations (e.g., Psychology Experiments)

Trend #9. Students Producing their Own Content (e.g., podcasts for students of pronunciation class; Tzu-Su Chen, Taiwan)

Trend #10. International and Global Education and Competitions (e.g., Global Game Jam, online role play, Global Videoconferencing)

Frame work #1: The R2D2 Model

Framework #2: TEC-VARIETY Model for Online Motivation and Retention
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Supports
3. Curiosity: Fun, Fantasy, Control
4. Variety: Novelty, Intrigue, Unknowns
5. Autonomy: Choice: Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactive: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Excitement
9. Tension: Challenge, Dissonance, Controversy
10. Yields Products: Goal Driven, Products, Success, Ownership
TEC-VARIETY Model for Online Motivation and Retention
- Tone/Climate
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- Autonomy
- Relevance
- Interactive
- Engagement
- Tension
- Yields Products

Where are you headed?

To a flat world?
Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.

To a shallow world?
May 24, 2010; Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired
https://www.wired.com/magazine/2010/05/ff_nicholas_carr/

To an open world?
OPENING UP EDUCATION
Old companies teach new tricks

Charles Wedemeyer, University of Wisconsin

August 9, 2010, Bill Gates Predicts Technology Will Make "Place-Based" Colleges Less Important in 5 Years
By Jeff Young, Chronicle of HE

The Web of Learning

Today we have the Web 2.0

August 2, 2010
Time spent on Facebook, Twitter, YouTube grows, USA Today, Jon Swartz
July 25, 2010,
Professors' Use of Technology in Teaching,
Jeffrey Young, Chronicle of Higher Education

David Thomas, Archeologist, La Trobe University, Australia (Discovery News)

Fox Sports News, August 21, 2010, 14-year-old Dutch female sailor

Perhaps people learning online are akin to the alien archaeologists in the 2008 movie, Indiana Jones and the Kingdom of the Crystal Skull, Indy said, "Their treasure wasn't gold, it was knowledge. Knowledge was their treasure."

UCLA Summer Digs Program
Dig in, archaeology fans! UCLA blogs to offer front-row seat at archaeology digs, Meg Sullivan, 6/25/2008

Framework #3: WE-ALL-LEARN
Ten Forces that Opens the Learning World
- Web Searching in the World of e-Books (i.e., Darwin)
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MTT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (e.g., YouTube)
- Electronic Collaboration and Interaction (sync and async)
- 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"

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.

Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) In the World of e-Books (i.e., Darwin, Shakespeare, etc.)

July 29, 2010
Amazon unveils 3rd-generation Kindle e-book reader, USA Today, Edward C. Baig

April 10, 2010: Seton Hill University, 2,100 students an iPad and freshmen a 13-inch MacBook laptop.
August 10, 2010, Can college students learn as well on iPads, e-books?, USA Today, Beth Marklein

July 23, 2010
India unveils $35 computer for students, CNN World, Harmeet Shah Singh

http://www.indiatimes.com/news/india/India-3s-laptop-project-will-smarten-up-the-know-how-game/article0-12686255.cms
Opener #2. E-Learning and Blended Learning

Salman Khan (Khan Academy) (videos on math, bio, trig, chemistry, money and banking, economics, statistics, etc.; http://www.khanacademy.org/)

Adora Svitak, age 12, World's Youngest Teacher

North Carolina, The enrollment figures are based on half-credit enrollments, and assumes an average growth of 50% per year (actual has been 71%). (per Dr. Bryan Setzer, Executive Director, North Carolina Virtual Public School Learn and Earn Online, July 6, 2010)

Capella Tower
225 South Sixth Street, Minneapolis
Formerly, the "Halo"
U. Of California System Proposing Online Ed
"The university plans to spend about $250,000 on
each course. It hopes to raise the money from
external sources like foundations or major donors."

iSMART: Integration of Science, Mathematics, and
Reflective Teaching (iSMART) is a FREE 2-year
online graduate program for middle school
science and mathematics teachers in Texas,
University of Houston
http://www.coe.uh.edu/depts/uris/uris/iSMART.htm

You see the big picture. You find the connections. Make it official — become iSMART.

Jen Cheuvot and Mimi Lee, Univ.
of Houston

Opener #3. Availability of
Open Source and Free
Software (e.g., Linux, Apache,
Moodle, Sakai)

Open U of
Malaysia, March
25, 2010

Opener #4. Leveraged
Resources and OpenCourseWare
(OCW) (e.g., free courses from
MIT, Utah State, CORE, OOPS)

Moodle (35+ million users (930,000
registered) in 213 countries, nearly 50,000 sites,
3.5+ million courses, June 27, 2010)
Open Educational Resources (OER)
Post Courses in YouTube and iTunes (e.g., Berkeley)

OpenSource OpenCourseware Prototype System (OOPS) funded by the Foundation of Fantasy, lactifer Chu, Chairman and Janitor of OOPS, Taipei

National Repository for Online Courses (NROC) Commons

Nixty, Peer2Peer University and University of the People (free!)
Neev Paharia is behind Peer2Peer University, Fast Company, September 2009, How Web-Savvy Educators Are Transforming American Higher Education

Opener #5. Online Learning Object Repositories and Portals (shared content)

How about rich video portals?
Most of the Websites below did not exist 5 or 10 years ago.

1. BBC News Video and Audio
2. CNN.com Video
3. MSNBC.com
4. Google Video, Yahoo Video
5. Current TV
6. Fod TV
7. MIT World
8. YouTube, YouTube Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, Explo.TV, NASA TV, ClipShop, TV Lessons, BookTV, Education videos, MonkeySee, doPlick, the Research Channel, TVideosong
Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

John Dewey, Seymour Papert, John Seely Brown, Ivan Illich, Stephen Heppell, Henry Jenkins

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

TravelinEdMan (YouTube)
http://www.youtube.com/user/TravelinEdMan

Participatory E-Books

Scribd: Documents on Web
(http://www.scribd.com/; 50 million unique visitors per month, 10's of millions of documents, April 2010)
The Next Generation of Videoconferencing
Chronicle of HE, October 21, 2009

Opener #8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)

Second Life
(business, law, education, English, medicine)

Opener #9. Real-Time Mobility and Portability (e.g., iPhone, low cost wireless devices)

We Are Going Mobile!
40,000 new mobile subscribers a week in Rwanda; Rwanda News report, January 2009
Africa is the continent with the fastest growth, International Telecommunications Union (ITU), March 2009

India: In January, 2009, the number skyrocketed to 15.4M Globally: 60,000 new mobile subscriptions every hour!!

(jos Paul Kim, Stanford, 2009): Nokia Research Lab

June 9, 2010
TwitterPeek: Restricted to Twitter.

WikiReader: Updating can be a pain.
Opener #10. Networks of Personalized Learning (Blogs, Podcasts, MySpace, Flickr, and RSS)

September 30, 2009
the Samsung DualView TL225

Teaching With Twitter
Chronicle of HE, Jeffrey Young, November 22, 2009

August 10, 2010
Flipboard pretties up social-media updates Facebook statuses and tweets feed into magazine-like format in free app for iPad
Jefferson Graham, USA TODAY
http://www.usatoday.com/practices/news/story/2010-08-10/flipboard/1_14054018.htm

July 21, 2010 vs. Sept 28, 2009
Status update: Facebook logs 500 million members, USA TODAY, Kristin McGrath

Social Networking Gaming (e.g., Farmville)
For social networks, it's game on, USA Today, Jon Swartz, Thursday October 15, 2009

Some Papers Are Uploaded to Bangalore to Be Graded, Chronicle of Higher Education, April 4, 2010, Audrey Williams June

Lori Whisenant, who teaches business law and ethics at the U. of Houston, has outsourced the grading of students' papers to a private company.
Predictions

1. Five Billion “Have-Nots” have at it!
2. Emergence of Lifelong Super E-Mentors/Coaches
3. Quarter-Century Learning Clubs
4. TeraByte Learning Access Points
5. The Veneration of Learning
6. Personalization+ Portfolios
7. The Selection of Global Learning Partners
8. The Shared Learning Era
9. Teaching-Learning Paradoxes
10. Teachers, Teachers
11. The Rise of the Super Blended
12. Self-Determined Humane
13. Free Learning Zones
14. Authentic Learning Amalgamations
15. Axellidian Aristocrats

This book is an attempt to reveal a wide range of learning options in front of you while also offering you a framework to make sense of them. As the Grail Knight said in the 1989 movie, *Indiana Jones and the Last Crusade,* “choose wisely.” If you do, WE-ALL-LEARN. The world is now open to you!

Decisions for this Open Ed World?

- Technology and Admin Folks:
  - What do to about OER, open sources, E-books, mobile, etc.?

- Instructor decisions:
  - Act as Concierge, Counselor, Course facilitator, Credit manager?

- Students decisions:
  - Should I attend traditional university or create your own degree path?
  - How to report use of OER on resumes?

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

The World is Open.
What happens then?

WE
ALL
LEARN!!!