Technology Trends Opening Up Access to Education Worldwide: Now, we all can learn!

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Plato's academy: 387 BC - 529 AD

Conference to Conference (You Ustreamed my Ustream: Now that's a Twitter of an Idea)

The Ten Forces that Flattened the World
Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.

1. 11/9/09: Berlin Wall came down
2. 9/11/01: Sept 11th, public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self orgas, collab communities; Mosaic, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
8. Insourcing (UPS fixing Toshiba laptops)
9. In-forming (e.g., Google, Yahoo, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video camera in phone)
WE-ALL-LEARN:
Ten Forces that Opened 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., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (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)

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.

What if our minds were on fire for learning?

Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)
What happens then?
WE
ALL
LEARN!!!

Scientists develop fastest computer
June 9, 2008
By H. JOSEF HEBERT, Associated Press Writer

- To put the computer's speed in perspective, it has roughly the computing power of 100,000 of today's most powerful laptops stacked 1.5 miles high, according to IBM. Or, if each of the world's 6 billion people worked on hand-held computers for 24 hours a day, it would take them 46 years to do what the Roadrunner computer can do in a single day.

Home Broadband 2008: Adoption Stalls for low-income Americans even as many broadband users opt for premium services that give them more speed (Pew Internet & American Life Project, 2008, July 2008)

Next, we need new ways to search for that info in those pipes!

Terabyte thumb Drives and Magic Pens!
(The Pulse from Livescribe)
Second, we need new ways to record info: Smartpens: “Never Miss a Word”

Need new ways of representing & accessing info (e.g., Google is working on Timeline and Map Views)

New ways to read information (e.g., Thinner, Crisper, and Cheaper eBooks; Kindle = $400-500)

Global Text Project (free textbooks for those in less developed countries) http://globaltext.org/

Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

Opener #2. E-Learning and Blended Learning
Trend #2. E-Learning and Blended Learning. What happens then?

WE ALL LEARN!!!
Trend #3. Availability of open source and Free Software. What happens then?

WE

ALL

LEARN!!!

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

Trend #4. Leveraged Resources and OpenCourseWare. What happens then?

WE

ALL

LEARN!!!
Post Courses in YouTube and iTunes (e.g., Berkeley)

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

Trend #5. Learning Object Repositories and Portals. What happens then? WE ALL LEARN!!!

Tracking Live Internet Thawing: A Colossal of an Idea

Deep-Sea Behemoths:
Captain John Bennett examines the world's first intact adult male colossal squid on board his New Zealand fishing boat in February, 2007, in the Ross Sea near Antarctica. The gigantic sea creature weighs a world record 1,089 pounds. After being frozen whole for over a year, scientists at New Zealand's national museum will thaw the squid for further study.

The Complete Works of Charles Darwin

What if the World was Beyond our World?
NASA's Hubble Space: Google Sky) USA Today, August 22, 2007
http://earth.google.com/sky/index.html

Referatory: MERLOT.org
(62,000 members, 20,000 learning materials)

Repository: Connexions (6,000+ modules, Rice Univ) & Curriki (K-12, Sun Micro)

Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

Trend #6. Learner Participation on Open Information Communities. What happens then?
WE ALL LEARN!!!

Skype, Google Talk, Chinesepod, LiveMocha, VoiceThread, Yackpack, Dotsub, Chinswing, and many other Collaborative Language Learning
But now there is TeacherTube!

Individual Produced Videos
(e.g., African School Dream in CurrentTV)
http://current.com/items/77346082_african_school_dream

Global Nomads Group
http://www.gng.org/home.html
Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

Trend #7. Electronic Collaboration and Interaction. What happens then?
WE
ALL
LEARN!!!

1kg More Project for Rural China
(http://www.1kg.org/)

EPals has for-profit and nonprofit arms. Candace Pauchnick, standing, uses its tools in her class.
By STEVE L. HEP
Published: February 24, 2008
New York Times

Room to Read
http://www.roomtoread.org/programs/schools.html

Adult pen pals for books read
Opener #8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)

Trend #8. Alternate Reality Learning. What happens then?
WE
ALL
LEARN!!!

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

Trend #9. Real-Time Mobility and Portability. What happens then?
WE
ALL
LEARN!!!

Wireless in Africa and Pocket School in Latin America
http://www.receivervodafone.com/mobile-learning-in-developing-countries
Traxler, John (in press). Mobile learning in "developing" countries—note to different. Vodafone Receiver. See
http://www.receivervodafone.com/
The Age of Wireless

MOST UNWIRED SCHOOLS?

From K-12, public schools, world-renowned schools, the top 50 universities in the world, schools with no electricity, they are all wireless.

O LPC in Nigeria: School Galadima
One Laptop Per Child foundation (OLPC) provided School Galadima in March 2007 with an XO laptop for each child in Primary 4, 5 and 6 and also for each member of the staff.

Opener #10. Networks of Personalized Learning
(Blogs, Podcasts, MySpace, Flickr, and RSS)

Trend #10. Networks of Personalized Learning
What happens then?

WE

ALL

LEARN!!!

Learning Towns are Popping up!

Map Mash-ups
(e.g., Shakespeare's Globe: PopSci, June 13, 2008, Michael Schar
GOOGLE EARTH ENVIRONMENT GUIDE: THE FREE SOFTWARE FROM GOOGLE GIVES SCIENTISTS A NEW WORLD VIEW [ASIAN FLU, EMOTIONS IN CITIES, VOLCANIC FLAMES ICE MELTING].)
Video Supported Language Learning (e.g., ECPod)

Predictions
1. Five Billion "Have-Not" 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 Perpetuities
10. Teachers, Teachers
11. The Rise of the Super Blends
12. Self-Determined Humans
13. Free Learning Zones
14. Authentic Learning Amalgamations
15. Alexandrian Aristotles

TutorVista has 600 tutors in India and 10,000 subscribers in the United States, including Kenneth Tham in Arcadia, Calif.

It is the End!!!
Learning is Now Flat/Open...
Remember that WE-ALL-LEARN!