The Ten Forces that Flattened the World

Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.

1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self organ collab communities; Mozilla, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (T2K)
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)

Learning World Is Open:
Now WE-ALL-LEARN with Web Technology

Curtis J. Bonk, Professor, Indiana University
President, SurveyShare
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Oregon Scientific Smartglobe 2008

By Meg Sullivan, 6/25/2008

Saudi Arabia: February 2009
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 (like YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massively Multiplayer 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.

4th P? Processing Speed
Scientists develop fastest computer
June 9, 2006, N. JOSEF HEBERT, AP
- 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.
Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)

Trend #1. Web Searching in the World of e-Books. What happens then? WE ALL LEARN!!!

A Blueprint for Big Broadband

Norm Kamikow
Editor in Chief, CLO, April 2009, page 4

- Recently, I read a startling statistic: More than 53 trillion digital pages will exist online by 2010.
- To be honest, the sound of this figure really didn’t shock me at first—probably because incessant talk about tax cuts, pork-barrel spending and budget deficits in recent months has distorted my perception of such massive amounts.
- For some reason, however, the potential enormity of this particular statistic stuck in my head. The harder I tried to wrap my mind around the actual impact of those 53 trillion Web pages, the more discomfort I felt. It sent me looking for an easy-to-grasp illustration of how large a trillion truly is.

Norm Kamikow
Editor in Chief, CLO, April 2009, page 4

- I found this metaphor, based on commonly accepted measures of time, explaining order of magnitude between a million, a billion and a trillion. A million seconds was 12 days ago. A billion seconds ago, it was roughly May 1977, a span of 32 years. A trillion seconds ago, the Stone Age started.
Norm Kamikow
Editor in Chief, CLO, April 2009, page 4

- Suddenly, the number 53 trillion--53 followed by 12 zeroes--seemed a lot more significant. As I imagined all those Web pages piling up and complained about the implications, I recalled a line from T.S. Eliot's poem, "The Rock:"
- "Where is the knowledge we've lost in information?"

Free Online Books
(Terry Anderson and Fabi Elloumi, eds. Theory and Practice of Online Learning; Canada: Athabasca University, 2004),
http://ceo.athabascau.ca/online_books/, 56,000 downloads in first year

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!!!

Capella Tower
225 South Sixth Street, Minneapolis
Formerly, the "Halo"

2 Million People Sign up for Part I of Oprah's Course on Spiritualism

Growth of Online Learning in Secondary Schools
(Florida Virtual School; AP American History)

Indiana University High School
4,000 students and 1,400 enrolled in diploma programs
(Internship from China, India, and Nigeria as well as military
and adults who never completed a high school degree)
(per Bruce Colston, Director of IUHS, Oct 2008)
Total and Online Enrollment in Postsecondary Institutions
Fall 2002 through Fall 2006
Non-Degree-Granting Institutions

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrollment</th>
<th>Online Enrollment</th>
<th>Online Enrollment as a Percent of Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002</td>
<td>10,017,780</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>10,300,778</td>
<td>1.7%</td>
<td>1,173,337</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>10,250,243</td>
<td>2.2%</td>
<td>2,224,123</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>10,150,000</td>
<td>0.9%</td>
<td>3,160,000</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>8,507,750</td>
<td>12.9%</td>
<td>3,466,000</td>
</tr>
</tbody>
</table>

Sara Cornell, professor of English at the University of Illinois-Springfield, says she feels online students become better writers because they get so much practice. NPR Special, Nov 29, 2007, Larry Abramson.

(67% of US Colleges and universities offer online courses; 35% offer fully online programs.)

Univ of Illinois at Springfield
UIS Online & Blended Enrollment

University of Illinois at Springfield, 2008. A special thanks to Ray Schroeder and Burks Oakley!!!!

Free and Open Courses
(Connectivism from George Siemens and Stephen Downes, 18 enrolled, 2,000+ sitting in)

A Grain of Rice: A Bloomington man’s computer vocab game feeding the world
Herald Times, Wednesday
February 6, 2008
Mike Leonard
Opener #3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle, Sakai)

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

Moodle (620,000 registered users in 204 countries speaking 78 languages, 2/10/2009)

The Sakai Project

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

Wendy Ernold is a scientific programmer and field technician for the Polar Science Center. She primarily works jointly with Mike Steele in the study of Arctic Circulation, and the mechanisms controlling it. She joined the Polar Science team in 1994.
Post Courses in YouTube and iTunes (e.g., Berkeley)

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

From left, three views of a fragment of one of the Dead Sea Scrolls: a plain digital image, a color scan and an infrared scan. August 27, 2008, Israel to Display the Dead Sea Scrolls on the Internet, By ETHAN BRANDENBERGER, The New York Times

United Nations Opens World Digital Library, April 21, 2009

The International Children’s Digital Library (ICDL) project (Univ. of Maryland, Black Beauty, Aesop’s Fables, Little Red Riding Hood, Grimm’s Fairy Tales, Robinson Crusoe, and Mother Goose)

The Complete Works of Charles Darwin and Shakespeare

Reflection on Online Contents: The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys, John Evelyn (Great Plague, Great Fire), Charles Dickens, Erasmus Darwin (grandfather of Charles Darwin), Mary Wollstonecraft Shelley, Robert Browning, John Stuart Mill, Ralph Waldo Emerson, Elizabeth Barrett Browning, and Alfred Tennyson)
What if the World was Beyond our World?
http://earth.google.com/sky/index.html

Explore Human Body and Museum Exhibits

Tracking Live Internet Thawing:
A Colossal of an Idea

Deep-Sea Bohemian
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.

Referatory: MERLOT.org
(67,000 members, 21,000 learning materials,
2/10/2009)

Connections Growth, January 2009

Opener #6. Learner Participation in Open Information Communities
(e.g., Slashdot, Digg, Wikipedia, YouTube)
Conference to Conference
(You Ustreamed my Ustream: Now that’s a Twitter of an Idea)

Wikis: Wikipedia and Wikibooks

Employee Film Competitions
(why accounting/finance is great!)

Individual Produced Videos
(e.g., African School Dream in CurrentTV)
http://current.com/items/77146282_african_school_dream

Global Nomads Group
http://www.gng.org/home.html
Monster Writing (describe monster in writing to partner and must draw it); monsterproject.wikispaces.com

Chinswing (audio threaded conversations)

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

EPals has for-profit and nonprofit arms. Candace Pauchner, standing, uses its tools in her class.

By STEVE LOHR
Published: February 24, 2008
New York Times

Adult pen pals for books read
1kg More Project for Rural China
(http://www.1kg.org/)

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

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

Mobile Learning and Social Networking
(e.g., Mixi, Yaoqi Anzai, Professor Japan)

Mobile Learning
(April 21, 2009, USA Today)

Leading a big parade of iPhone apps
Ocarina, Leaf Trombone lead big parade of iPhone apps, April 21, 2009, USA Today
Jefferson Graham

- Their Ocarina, a 99-cent application that turns the iPhone into a virtual flute, has become one of the iPhone's best-selling apps—to the tune of nearly $400,000. Now out is the sequel, the Leaf Trombone World Stage.
- "We believe in the potential of interactive sound; we believe that everyone is inherently creative; and we want to unlock that creativity in everyone," says Wang, 31. "We want to find new types of ways to connect people, using the technology we have before us."

Alexandria in our Pockets! What if every early elementary kid could have a terabyte (1,000 gigabytes or 1 trillion bytes) of data on a thumb drive? (Wired Magazine, October 26, 2007 says it will be possible in a few years; research from Arizona State)

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

TECHNOLOGY

Wireless in Africa and Pocket School in Latin America (Paul Kim, 2008)

OLPC 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.
Jerry Kronenberg Monday, August 4, 2008
Boston Herald
Designers on quest to build $12 computer

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

Create a Social Networking Group
(MySpace, Facebook, LinkedIn)

Learning Towns are Popping up!

Twitter (Micro-blogging)
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 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

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

WE ALL LEARN!!!