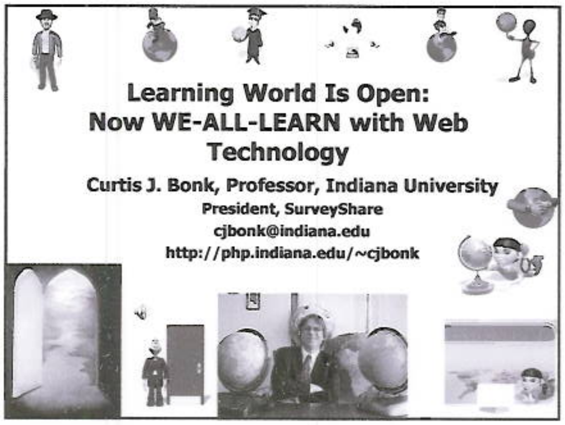


Learning World Is Open: Now WE-ALL-LEARN with Web Technology

Curtis J. Bonk, Professor, Indiana University
President, SurveyShare
cjbonk@indiana.edu
http://php.indiana.edu/~cjbonk

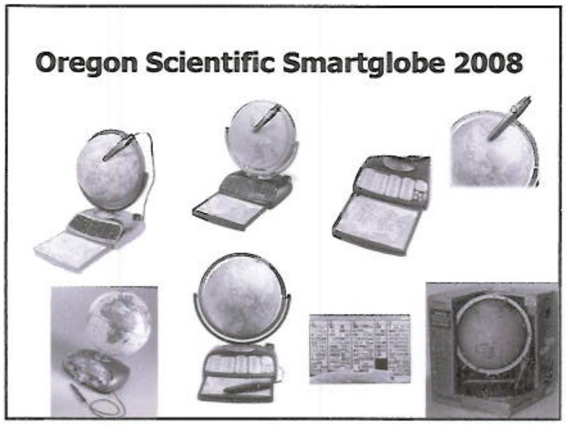
The Ten Forces that Flattened the World

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

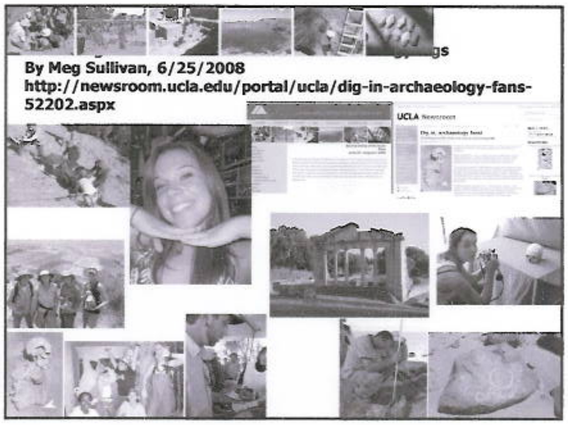
1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self organ collab communities; Mosiac, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
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)

Houston, Texas: Oct. & Dec. 2008

Saudi Arabia: February 2009

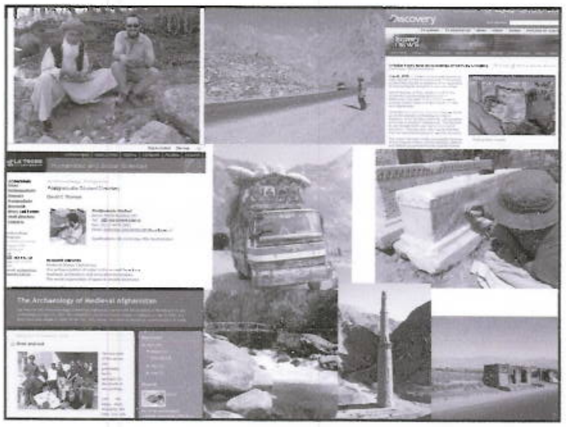


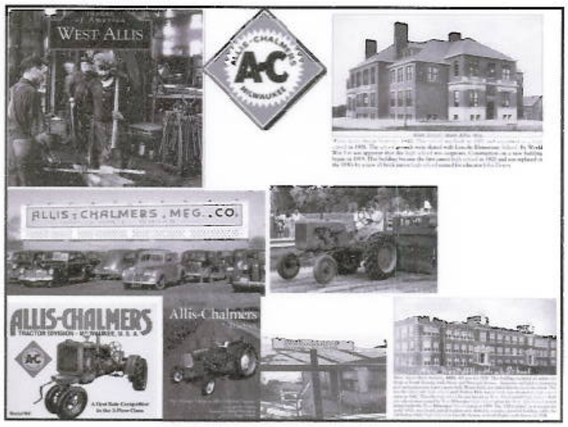
Oregon Scientific Smartglobe 2008

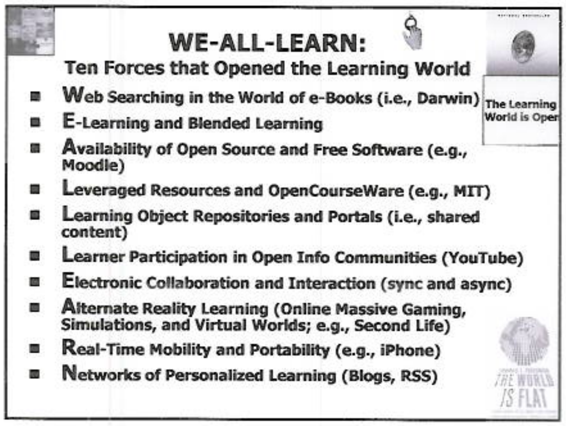


gs

By Meg Sullivan, 6/25/2008
http://newsroom.ucla.edu/portal/ucla/dig-in-archaeology-fans-52202.aspx


Discovery
The Archaeology of Medieval Afghanistan


WEST ALLIS
A-C
ALLIS-CHALMERS MILWAUKEE
ALLIS-CHALMERS MFG. CO.
ALLIS-CHALMERS
Allis-Chalmers

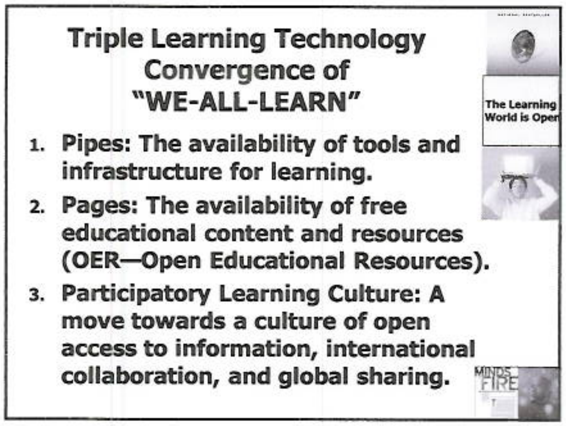

The Learning World is Oper
THE WORLD IS FLAT

WE-ALL-LEARN:
Ten Forces that Opened the Learning World

- **W**eb Searching in the World of e-Books (i.e., Darwin)
- **E**-Learning and Blended Learning
- **A**vailability of Open Source and Free Software (e.g., Moodle)
- **L**everaged Resources and OpenCourseWare (e.g., MIT)
- **L**earning Object Repositories and Portals (i.e., shared content)
- **L**earner Participation in Open Info Communities (YouTube)
- **E**lectronic Collaboration and Interaction (sync and async)
- **A**lternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- **R**eal-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)

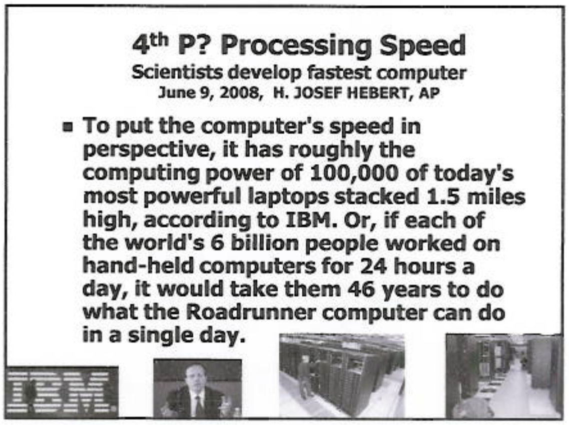
Audience Participation!

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


The Learning World is Oper
MINDS FIRE

Triple Learning Technology Convergence of "WE-ALL-LEARN"

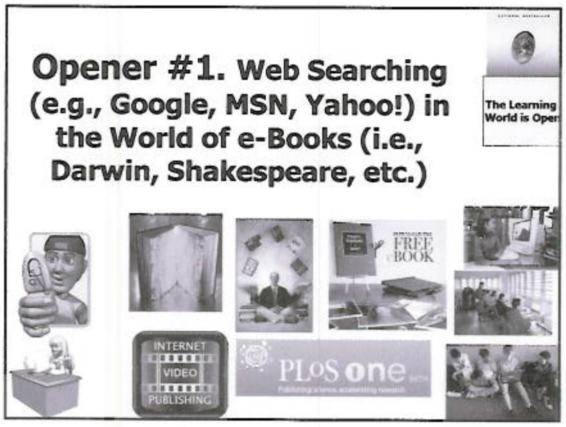
1. Pipes: The availability of tools and infrastructure for learning.
2. Pages: The availability of free educational content and resources (OER—Open Educational Resources).
3. Participatory Learning Culture: A move towards a culture of open access to information, international collaboration, and global sharing.



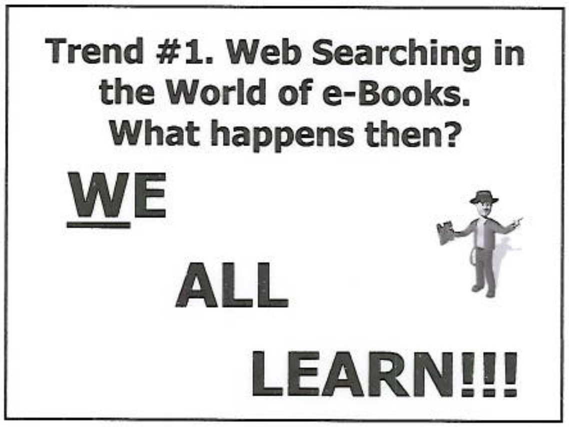
4th P? Processing Speed

Scientists develop fastest computer
June 9, 2008, H. 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.)

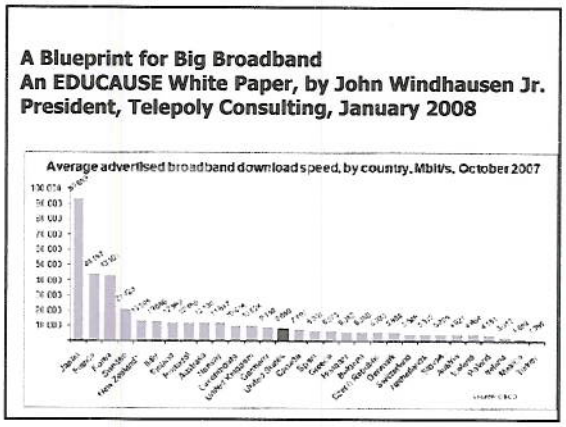


Trend #1. Web Searching in the World of e-Books. What happens then?

WE

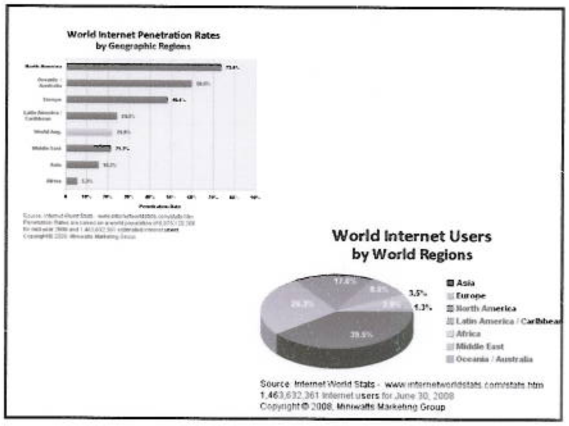
ALL

LEARN!!!



A Blueprint for Big Broadband
An EDUCAUSE White Paper, by John Windhausen Jr.
President, Telepoly Consulting, January 2008

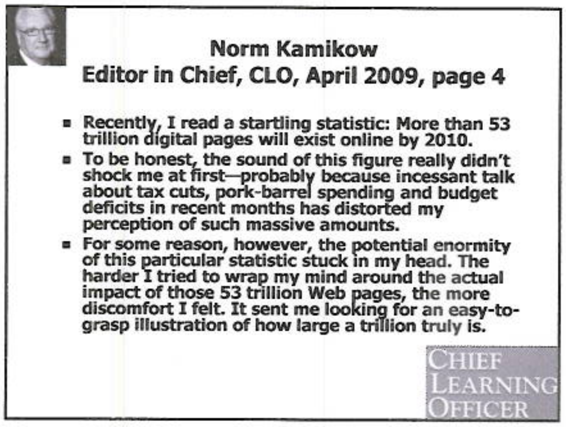
Average advertised broadband download speed, by country, Mbit/s, October 2007



World Internet Penetration Rates
by Geographic Regions

World Internet Users
by World Regions

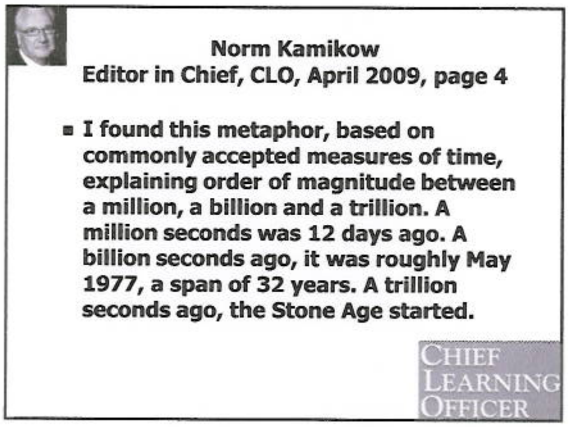
Source: Internet World Stats - www.internetworldstats.com/stats.htm
1,463,632,361 Internet users for June 30, 2008
Copyright © 2008, Miniwatts Marketing Group



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.

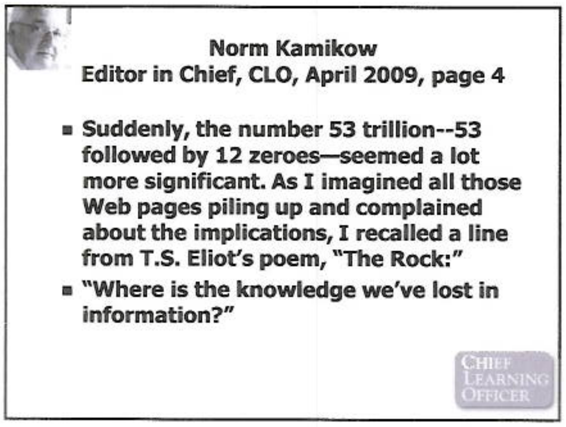
CHIEF
LEARNING
OFFICER



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.**

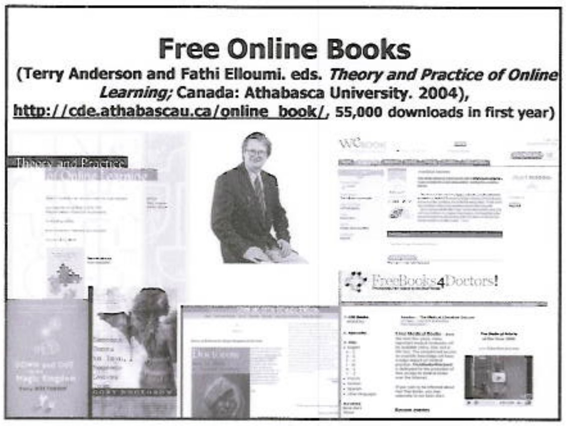
CHIEF
LEARNING
OFFICER


CHIEF
LEARNING
OFFICER

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

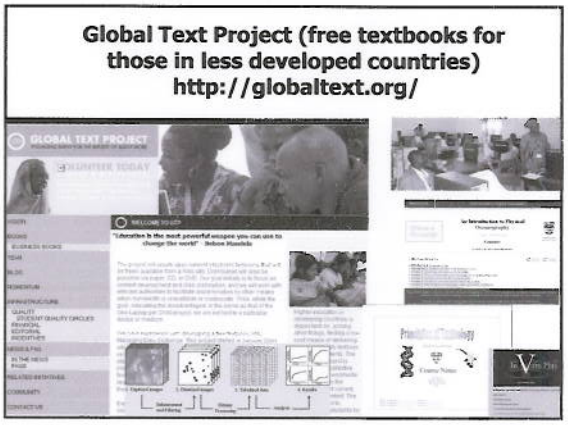
- Suddenly, the number 53 trillion--53 followed by 12 zeroes—seemed a lot more significant. As I imagined all those Web pages piling up and complained about the implications, I recalled a line from T.S. Eliot's poem, "The Rock:"
- "Where is the knowledge we've lost in information?"

View Web by decade, year, month, or date.

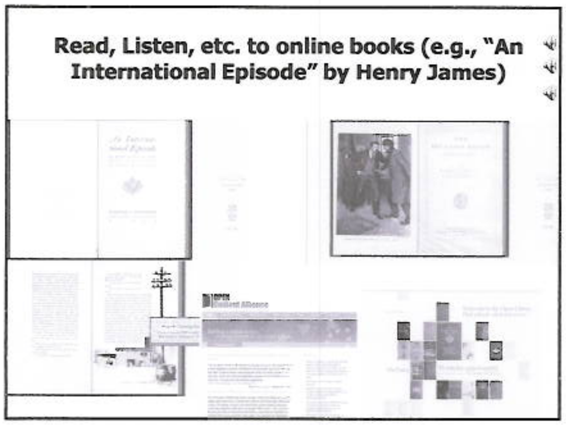

Theory and Practice of Online Learning
FreeBooks4Doctors!
Doctorow

Free Online Books

(Terry Anderson and Fathi Elloumi. eds. *Theory and Practice of Online Learning;* Canada: Athabasca University. 2004), http://cde.athabascau.ca/online_book/, 55,000 downloads in first year)

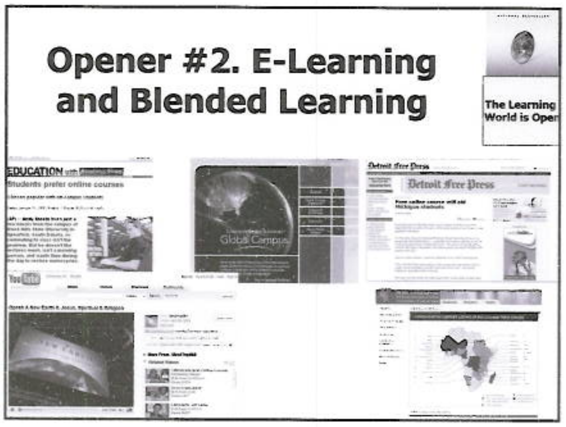

GLOBAL TEXT PROJECT
VOLUNTEER TODAY
WELCOME TO GTP
"Education is the most powerful weapon you can use to change the world" - Nelson Mandela

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


Open Content Alliance

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

Microsoft's Book-Search Project Has a Surprise Ending
Google
Google Book Search
Newsweek
Books Aren't Dead



Opener #2. E-Learning and Blended Learning

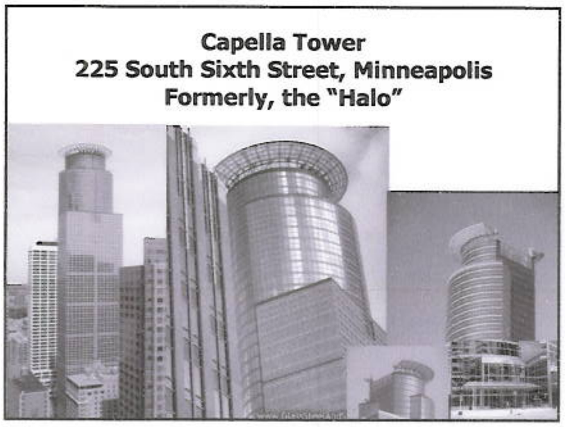
The Learning
World is Ope
EDUCATION
Students prefer online courses
Global Campus
Detroit Free Press
Detroit Free Press
YouTube
Oprah A New Earth & Jesus, Spiritual & Religion

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

YouTube
Home
Videos
Channels
Community
Videos
Search
Upload
Subscribe

Oprah A New Earth & Jesus, Spiritual & Religion

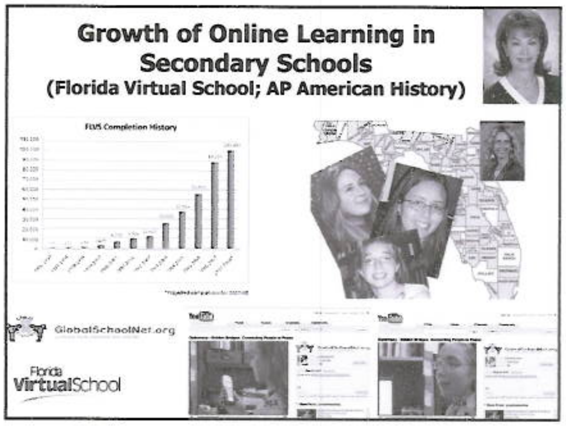
More From: MindTrip888

Related Videos

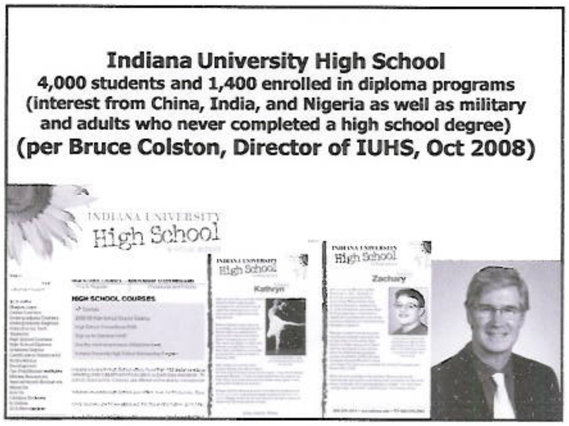
CBN Defends Oprah Winfrey From Anti-Christianity Charge!

Oprah Denies Jesus!

A New Earth - Jim Carrey

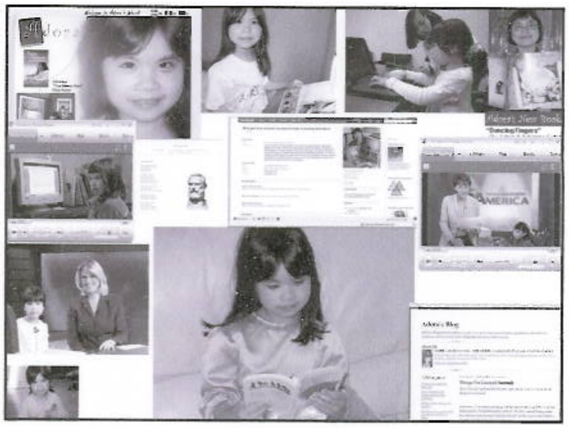


Growth of Online Learning in Secondary Schools
(Florida Virtual School; AP American History)



Indiana University High School
4,000 students and 1,400 enrolled in diploma programs
(interest 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)

INDIANA UNIVERSITY
High School
HIGH SCHOOL COURSES
INDIANA UNIVERSITY
High School
Kathryn
INDIANA UNIVERSITY
High School
Zachary



Total and Online Enrollment in Postsecondary Institutions

Fall 2002 through Fall 2006

(For Degree Granting Institutions)

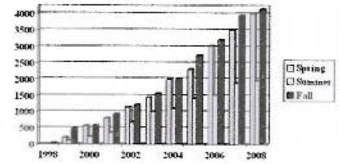
	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Annual Growth Rate Online Enrollment	Online Enrollment as Percent of Total Enrollment
Fall 2002	16,611,710	NA	1,602,970	NA	9.7%
Fall 2003	16,900,479	1.7%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.2%	2,329,733	18.2%	13.5%
Fall 2005	17,428,500	0.9%	3,180,050	36.5%	18.2%
Fall 2006	17,647,720	1.3%	3,488,381	9.7%	19.8%

SOURCE: Online Nation: Five Years of Growth in Online Learning (October 2007)

Sara Cordell, 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



Online Illinois

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

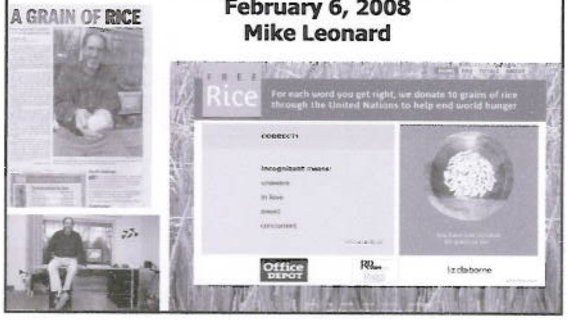
Free and Open Courses

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

Knowing Knowledge
BETA
CONNECTIVISM & CONNECTIVE KNOWLEDGE
LTC
History of Open Content

A Grain of Rice: A Bloomington man's computer vocab game feeding the world

Herald Times, Wednesday
February 6, 2008
Mike Leonard


A GRAIN OF RICE
FREE
Rice
For each word you get right, we donate 10 grains of rice through the United Nations to help end world hunger
CORRECT!
Office DEPOT
liz claiborne

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

The Learning World is Open

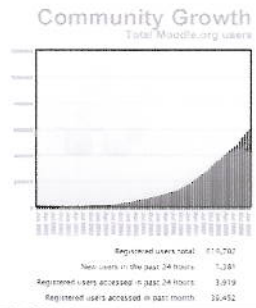
Trend #3. Availability of Open Source and Free Software. What happens then?

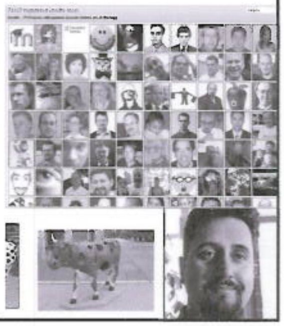
WE

ALL

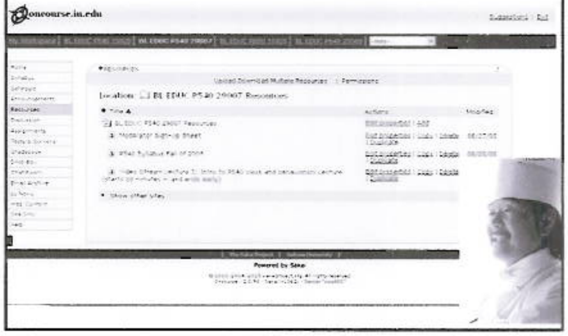
LEARN!!!

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



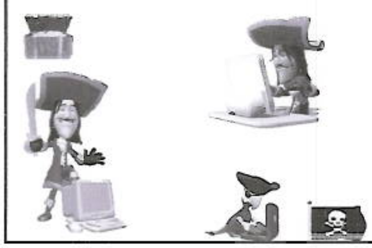


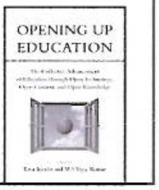
The Sakai Project


oncourse.iu.edu
Powered by Sakai

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

The Learning World is Open




OPENING UP EDUCATION

Wendy Ermold 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 1998.

Cape Town Open Education Declaration
December 2007
http://www.capetowndeclaration.org/

THE CAPE TOWN OPEN EDUCATION DECLARATION
Read the Declaration
MITOPENCOURSEWARE
Declaration, July 4th 1776

"It puts a previously untouchable subject within reach for anyone who is interested."

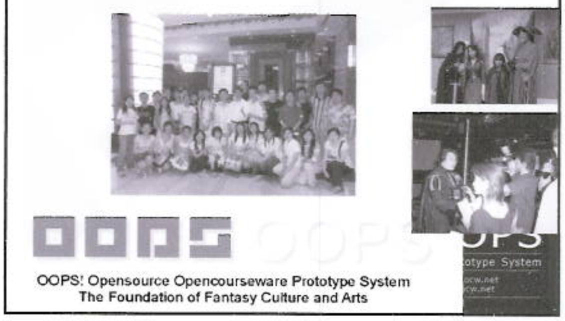
Sample OpenCourseWare Projects

Tufts OpenCourseWare

Indian Institutes of Technology (IIT)

MITOPENCOURSEWARE
MIT OpenCourseWare:
Highlights for
High School

Opensource Opencourseware Prototype System (OOPS) funded by, the Foundation of Fantasy, Lucifer Chu, Chairman and Janitor of OOPS, Taipei)



OOPS! Opensource Opencourseware Prototype System
The Foundation of Fantasy Culture and Arts

National Repository for Online Courses (NROC) Commons

COMMONS
Welcome to a worldwide learning network
art
civil society
globalization
psychology

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

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

The Learning World is Open

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 BRONNER, The New York Times

United Nations Opens World Digital Library, April 21, 2009 Chronicle of Higher Ed, http://www.wdl.org/en/

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*.

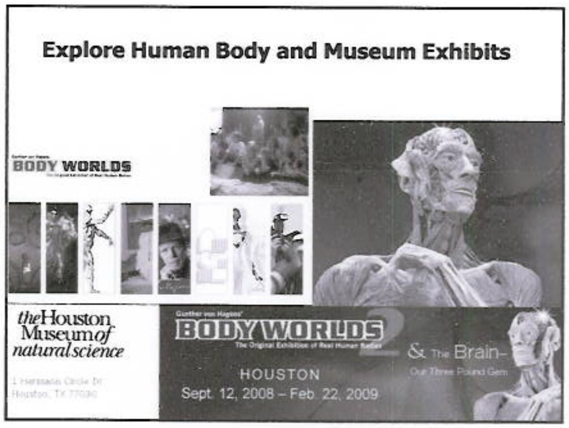
The Complete Works of Charles Darwin and Shakespeare

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?

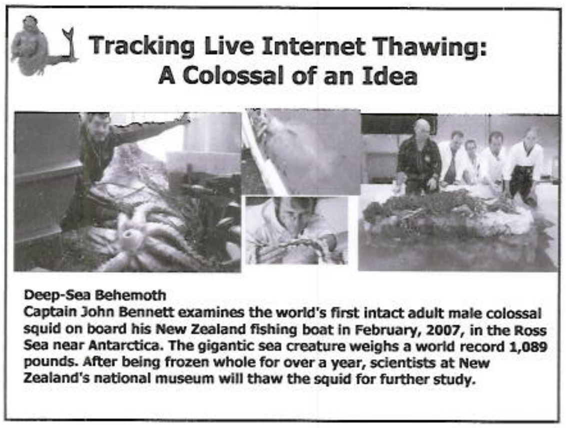
NASA's Hubble Space: Google Sky) USA Today, August 22, 2007

http://earth.google.com/sky/index.html



Explore Human Body and Museum Exhibits

BODY WORLDS
the Houston Museum of natural science
1 Hermann Circle Dr
Houston, TX 77030
Gunther von Hagens'
BODY WORLDS 2
The Original Exhibition of Real Human Bodies
& The Brain–
Our Three Pound Gem
HOUSTON
Sept. 12, 2008 – Feb. 22, 2009



Tracking Live Internet Thawing: A Colossal of an Idea

Deep-Sea Behemoth
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.

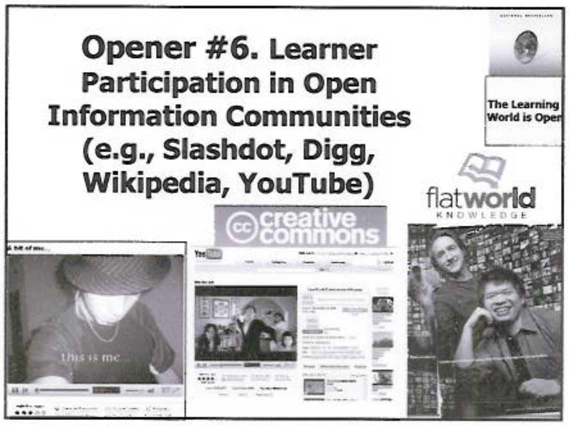
Referatory: MERLOT.org

(67,000 members, 21,000 learning materials, 2/10/2009)

MERLOT
Communities
DISCIPLINE COMMUNITIES
WORKFORCE DEVELOPMENT COMMUNITIES
PARTNER COMMUNITIES
Biology
Fire Safety
Cal State Univ - Business

Connections Growth, January 2009

Connexions
Get started

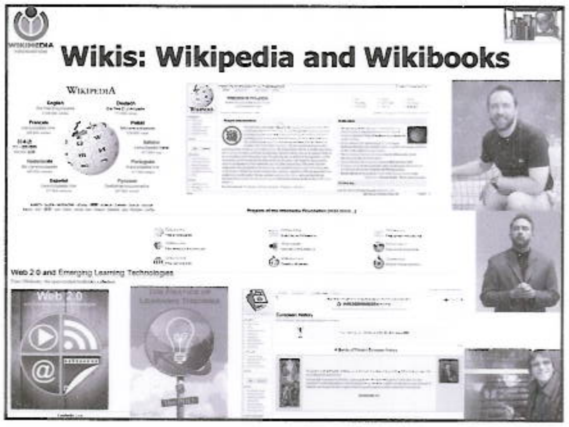


Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

The Learning World is Open
flatworld KNOWLEDGE
creative commons
this is me
YouTube

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

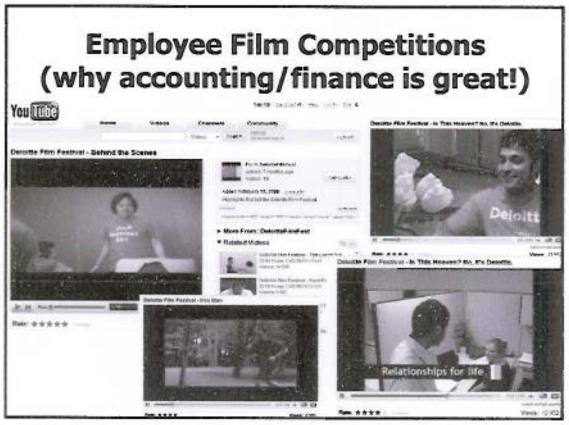
USTREAM
LIVE, INTERACTIVE BROADCASTING
Innovative Health Solutions
Live



Wikis: Wikipedia and Wikibooks

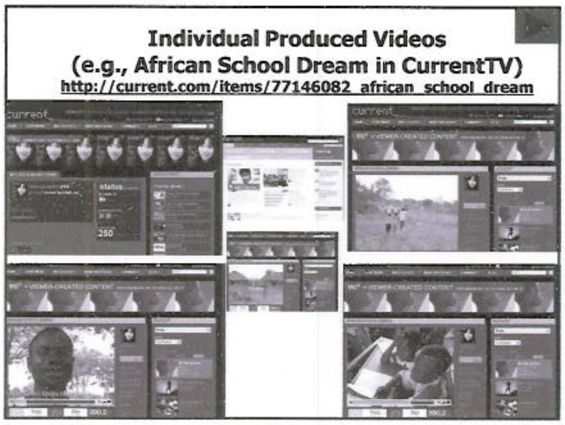
WIKIPEDIA
Web 2.0 and Emerging Learning Technologies
Web 2.0

YouTube
The Queen visits Google London



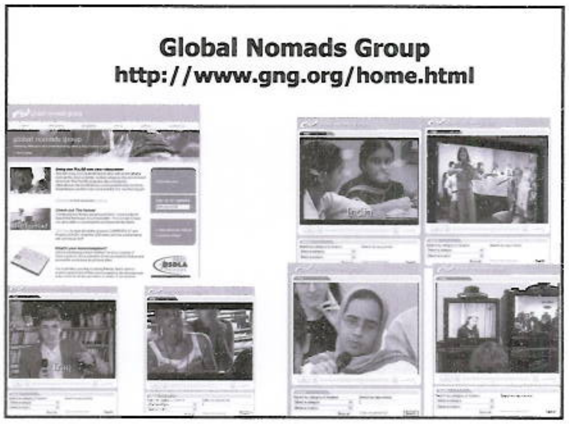
Employee Film Competitions (why accounting/finance is great!)

YouTube
Deloitte Film Festival - Behind the Scenes
Deloitte Film Festival - Is This Heaven? No, it's Deloitte.
Relationships for life.



Individual Produced Videos (e.g., African School Dream in CurrentTV)

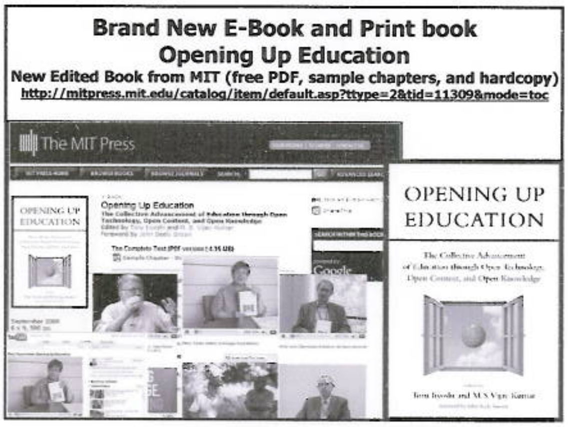
http://current.com/items/77146082_african_school_dream



Global Nomads Group

http://www.gng.org/home.html

SUB
BETA
Twitter in Plain English
What are you doing?
A short explanation of the micro-blogging service, Twitter
commoncraft
Our product is explanation.



Brand New E-Book and Print book
Opening Up Education

New Edited Book from MIT (free PDF, sample chapters, and hardcopy)
http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11309&mode=toc

The MIT Press
Opening Up Education
OPENING UP EDUCATION
The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge
Toru Iiyoshi and M.S. Vijay Kumar

THE FUTURE OF THE INTERNET AND HOW TO STOP IT
JONATHAN ZITTRAIN
flatworld
Open College Textbooks
YOCHAI BENKLER
The Wealth of Networks
Think Outside the Book

Posting Documents on Web
Scribd: http://www.scribd.com/; 21 million unique visitors per month, May 2008

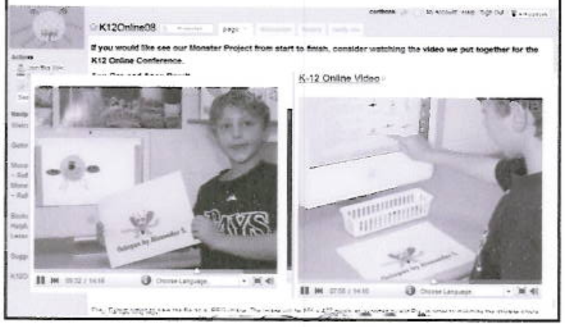
Scribd
Publish Yourself Online
Upload Documents
Share with the World
Explore Our Library
Hottest Documents
The Republic
by Plato

LibraryThing: The World's Largest Online Book Club (you can be a "*thingamabrarian;*" 500,000 users and 35 million books on member bookshelves*)*

Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

The Learning World is Open
Passionate about something?
Nobody to share your interests with?
Got a nagging question?
Speak to your world. Listen to real people.
DIE
Tener ganas de
Presente Perfecto de subjuntivo

Monster Writing (describe monster in writing to partner and must draw it); monsterproject.wikispaces.com



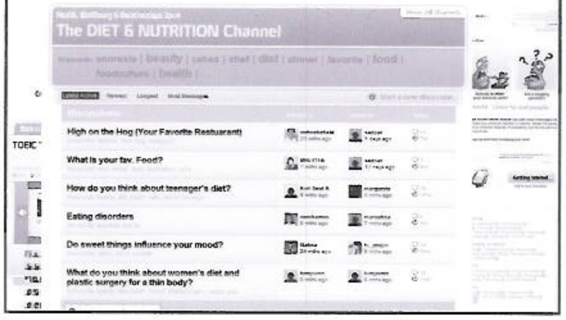
K12Online08

If you would like see our Monster Project from start to finish, consider watching the video we put together for the K12 Online Conference.

K-12 Online Video
Choose Language

Your Presenter...
Curt Bonk
Indiana University
Spaces of Interaction
AACE

Chinswing (audio threaded conversations)



The DIET & NUTRITION Channel

- High on the Hog (Your Favorite Restuarant)
- What is your fav. Food?
- How do you think about teenager's diet?
- Eating disorders
- Do sweet things influence your mood?
- What do you think about women's diet and plastic surgery for a thin body?

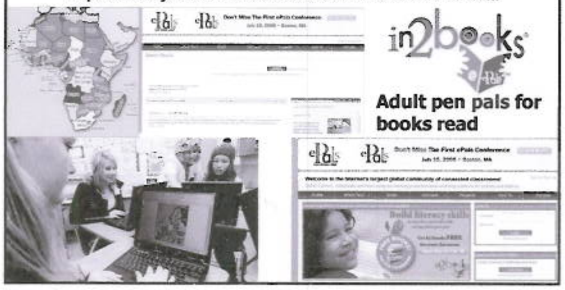
World Business

Hello, India? I Need Help With My Math

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 Pauchnick, standing, uses its tools in her class.
By STEVE LOHR
Published: February 24, 2008
New York Times
http://www.nytimes.com/2008/02/24/business/24social.html



in2books
Don't Miss The First ePals Conference
Build literacy skills

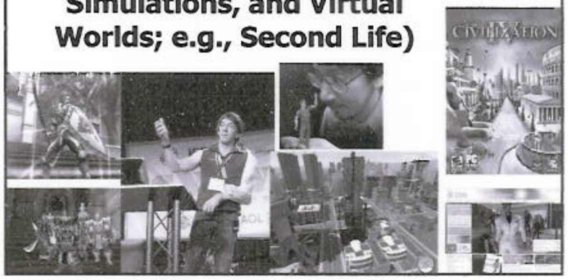
Adult pen pals for books read

Synoptic
Antarctic
Shelf
Slope
Interactions

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)

The Learning World is Ope


CIVILIZATION

Second Life 3-D Accounting Model

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

The Learning World is Ope

Totally wireless on campus

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

Mobile Learning
(April 21, 2009, USA Today)

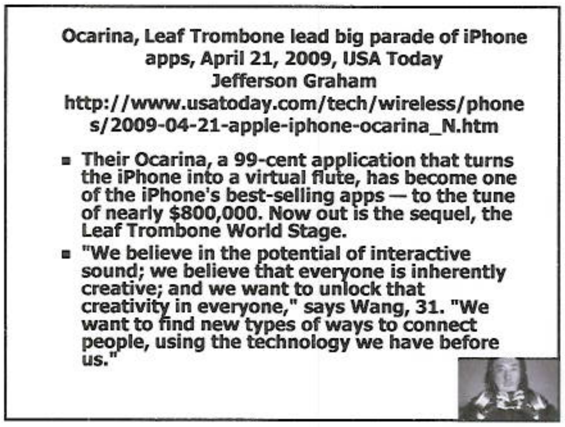
Technology

Talking Tech:

Leading a big parade of iPhone apps

Ocarina, Leaf Trombone whistle a happy tune for Smule

Cover story

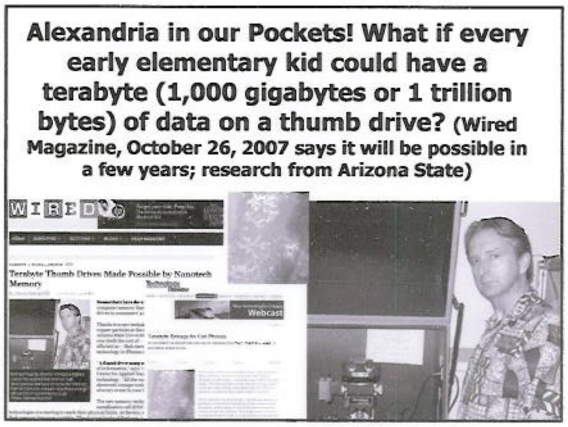


Ocarina, Leaf Trombone lead big parade of iPhone apps, April 21, 2009, USA Today

Jefferson Graham

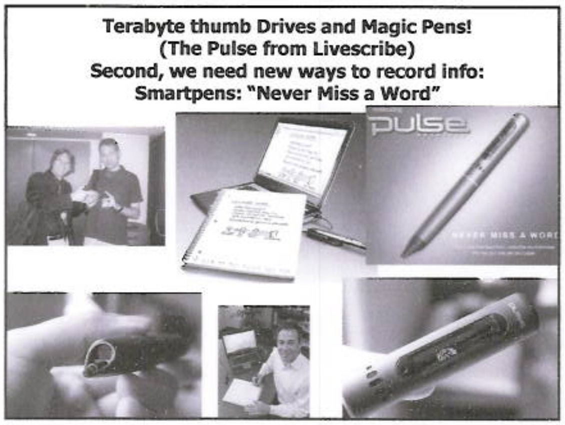
http://www.usatoday.com/tech/wireless/phones/2009-04-21-apple-iphone-ocarina_N.htm

- 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 $800,000. 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)

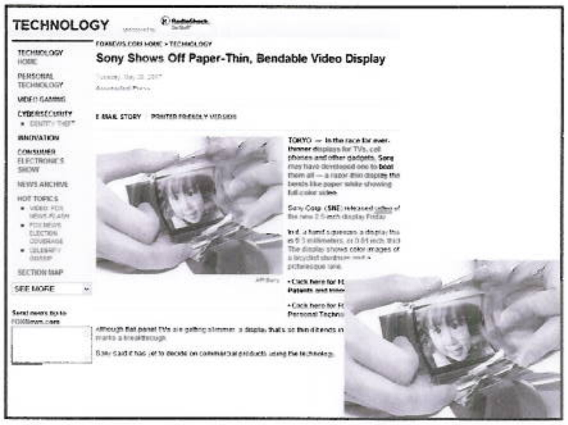
WIRED
Terabyte Thumb Drives Made Possible by Nanotech Memory
Webcast



Terabyte thumb Drives and Magic Pens! (The Pulse from Livescribe)

Second, we need new ways to record info: Smartpens: "Never Miss a Word"

pulse
NEVER MISS A WORD



TECHNOLOGY

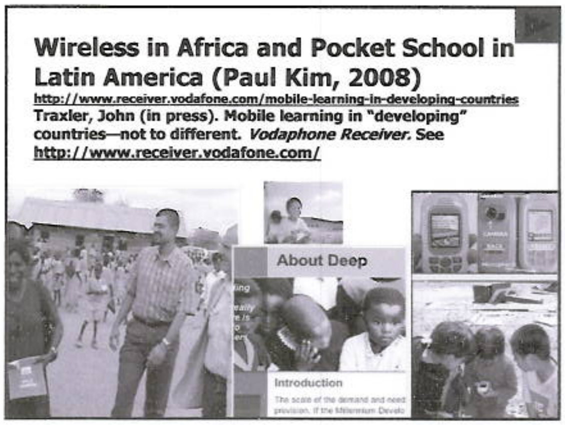
FOXNEWS.COM HOME > TECHNOLOGY

Sony Shows Off Paper-Thin, Bendable Video Display

E-MAIL STORY | PRINTER FRIENDLY VERSION

TOKYO — In the race for ever-thinner displays for TVs, cell phones and other gadgets, Sony may have developed one to beat them all — a razor-thin display that bends like paper while showing full-color video.

TECHNOLOGY HOME
PERSONAL TECHNOLOGY
VIDEO GAMING
CYBERSECURITY
INNOVATION
CONSUMER ELECTRONICS SHOW
NEWS ARCHIVE
HOT TOPICS
SECTION MAP
SEE MORE

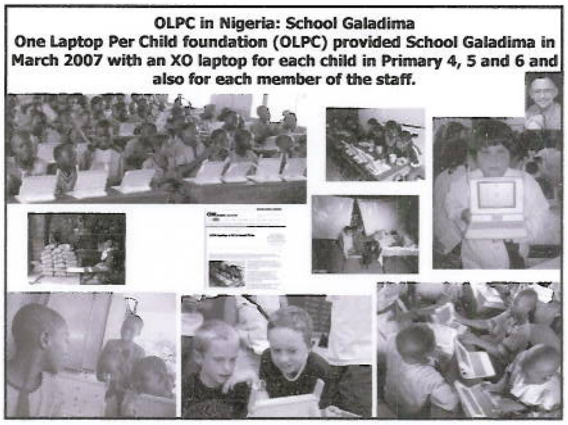


Wireless in Africa and Pocket School in Latin America (Paul Kim, 2008)

http://www.receiver.vodafone.com/mobile-learning-in-developing-countries

Traxler, John (in press). Mobile learning in "developing" countries—not to different. *Vodaphone Receiver.* See http://www.receiver.vodafone.com/

About Deep
Introduction



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

Herald.com
BUSINESS TODAY
The Wired Campus
COMPUTERWORLD

Designers on quest to build $12 computer

India says it is developing a $10 laptop

No specs available, it would be used for educational purposes

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

The Learning World is Open

Ipod saves Soldier's Life

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

facebook
Home
Profile
Friends
Inbox

dentistry is better than medicine and the medics know it!

Basic Info

Contact Info

Photos

Related Groups

Video

Learning Towns are Popping up!

Ning
LEARNINGTOWN!
Jenny Zhu

Twitter (Micro-blogging)

OLD MAN STEWART
twitter
THE DAILY SHOW
Opportunity to save more.
High Yield CD
Unlimited local & long distance calling
$9.95

SpanishPod
ItalianPod
Listen
Review
Practice
Reinforce
due passi

Learn Spanish on Your Terms!

Sign Up Now!

243 free lessons & 7387 conversations. Take the tour »

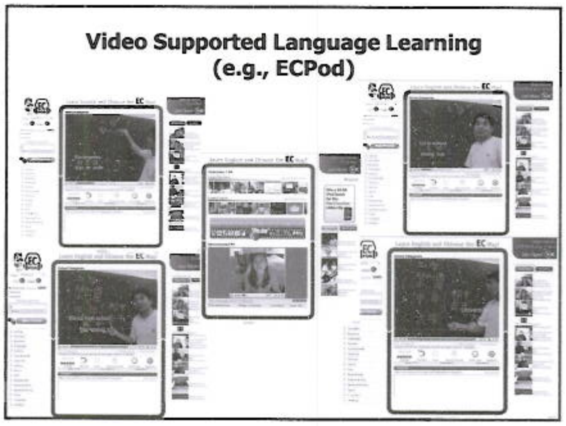
Learn Italian on Your Terms!

Sign Up Now!

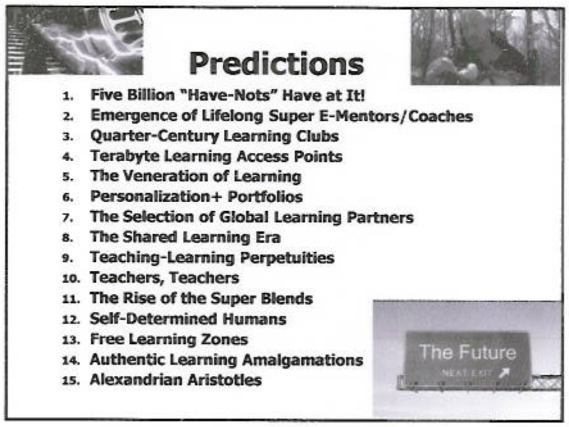
30 free lessons & 476 conversations. Take the tour »

Battle of Wine

Amor Sin Destino, Episode VI



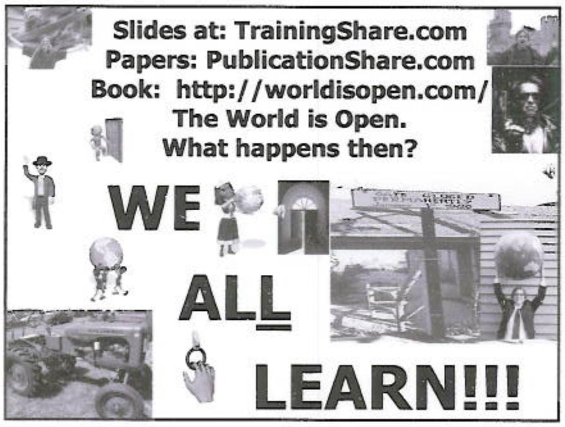
Video Supported Language Learning (e.g., ECPod)



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

The Future
NEXT EXIT



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

WE ALL LEARN!!!