
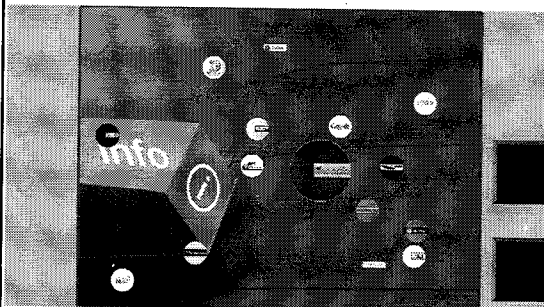


**Oops, Did You Mean to Share that?
OpenSource, Opencourseware, and the
Learning Objects of Tomorrow**

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



<http://ella.slis.indiana.edu/~aenkim/iconping.html>



Phases of Technology in Education


1. Technology to enhance learning/knowledge
2. Technology to extend learning/knowledge
3. Technology to transform learning/knowledge
4. Technology to share learning/knowledge

Knowledge Sharing
(Fuji Xerox, p. 9)

"Knowledge sharing is the way (social) and means (technical) by which an individual, team, organization and/or community connects and communicates, to continually create, innovate, learn and act."

Poll #1: Should e-learning courses and material be shared?

- Yes
- No
- Not sure



Most are Scared to Share!!!

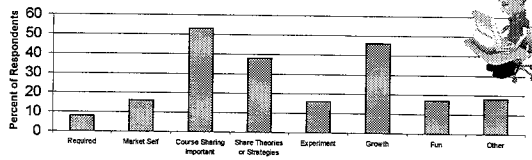


FRIDAY 18TH

Why Share?

Bonk, C. J. (2002, January). *Executive Summary of Online teaching in an online world.* United States Distance Learning Association (USDLA). http://www.usdla.org/html/journal/JAN02_Issue/article02.html.

Figure 11. Reasons Why Respondents Posted to the WLH or MERLOT*



Do You Share?

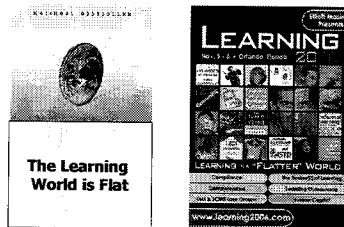
1. Who has shared music in an iPod or MP3?
2. Who has used collab software? (Google Groups, Yahoo Groups, Sharepoint)
3. Who has used online phone services such as Skype or Google Talk?
4. Who has assigned teams online?
5. Who has embedded international exchanges or expert guests?
6. Who has used MERLOT, Connexions, or Jorum?

- Thomas Friedman, author of "The World if Flat":
- Tools for collaboration are changing the world
- <http://mitworld.mit.edu/video/266/>

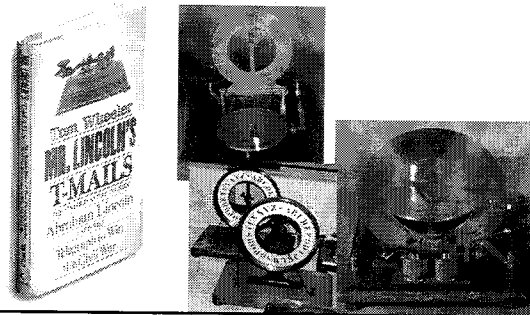
The Ten Forces that Flattened the World

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 organizing collaborative communities; Mosaic, Apache, Wikipedia, Linux, Mozilla/Firefox,)
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 (e.g., wireless, file sharing, VoIP, video camera in phone)

The Learning World has become Flat!



Telegraph: Flattening the world in 1860

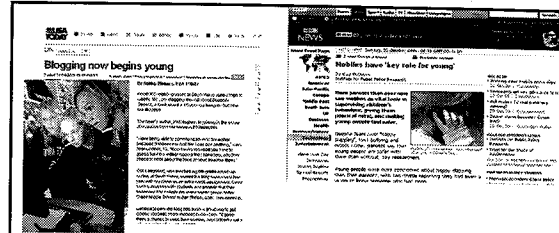


How Lincoln won the Civil War
Mr. Lincoln's T-Mails: The Untold Story of How Abraham Lincoln Used the Telegraph to Win the Civil War

by Tom Wheeler; Collins, 227 pages, \$24.95.
 By Russ Juskalian, Special for USA TODAY
 Updated 11/26/2006 5:29 PM ET

http://www.usatoday.com/money/books/reviews/2006-11-26-lincoln-book_x.htm

- Wheeler argues that the use of the telegraph by Lincoln and his Union generals may have provided the advantage necessary to win the war.
- The telegraph was a killer app for its use along rail lines, enabling more efficient scheduling of trains— which, in turn, increased traffic, and profits.
- With this breakthrough, telegraph lines exploded across the Northern parts of the USA. The Southern states, afraid that industrialization would change their way of life dramatically, moved far more slowly in establishing both railroads and telegraph lines.



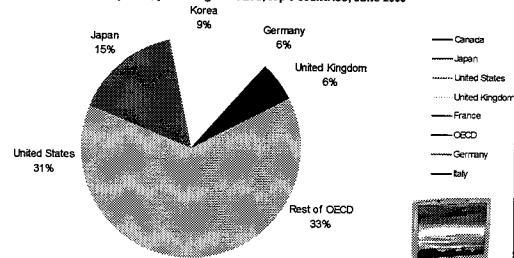
Eighth-grade students Tayler Bernholtz, left, Amy Lostro and Kelsey Cardiff check out a weblog discussion related to the Civil War historical-fiction book 'Guerrilla Season' At South Valley Junior High School in Liberty, Mo. (Blogging now begins young USA Today, By Ashley Bleimes, USA TODAY, November 15, 2006, 12D). http://www.usatoday.com/life/2006-11-14-blogs-education_x.htm

Technologies of the 2000's



Increased Broadband Access

Total broadband subscriptions, percentage of OECD, top 5 countries, June 2005



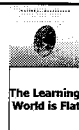
Source : OECD

Singapore and Taipei
 (Intel Press Release, 2006)

- Singapore, the island city-state in Southeast Asia, is about to complete a major new public/private project that will see large chunks of the 270 square mile city provided with Wi-Fi access by the end of 2008. The entire city, indoors and out, is due to be covered by 2015.
- In the coldest capital in Canada, the city residents of Iqaluit (pop. 6,000) enjoy free wireless from one free hotspot (with two more due soon to cover the suburbs), while Taipei, Taiwan (pop. 2.6 million) has a few more—over 4,000 hotspots that provide coverage for 90 percent of the city.

The Ten Forces that Flattened the Learning World

1. Tools for Searching and Finding Information (e.g., Google, Yahoo!)
2. Rise in Demand for Online Learning
3. Open-Sourcing Learning: Sakai, Moodle, eduCommons
4. Collaboration (e.g., SharePoint, Groove, Word, Interwise, Breeze, Google Talk, Skype)
5. Learning Portability (Podcasting, Mobile technology)
6. Learner Empowerment and Individualization of Learning (Blogs, Wikis, etc.)
7. Online Portals of Information
8. Online Learning Object Repositories (MERLOT, Connexions, Careo, Jorum)
9. Open CourseWare (MIT OCW, Utah State, Johns Hopkins, Japan, CORE, OOPS)
10. Knowledge Brokers and Collectors



The Ten Forces that Flattened the World

The Learning World is Flat

1. Tools for Searching and Finding Information: (e.g., Google, Yahoo!)

Google and Other Search Engines (Sergey Brin, Co-Founder)

Google

Web Images Groups News Groups Local Scholar Books

Google Search The Finest Link

Information about this page

Advertising Programs - Business Solutions - About Google

Make Google Your Homepage!

©2002 Google - 1600 Amphitheatre Parkway, Mountain View, CA 94043

Google Print Project

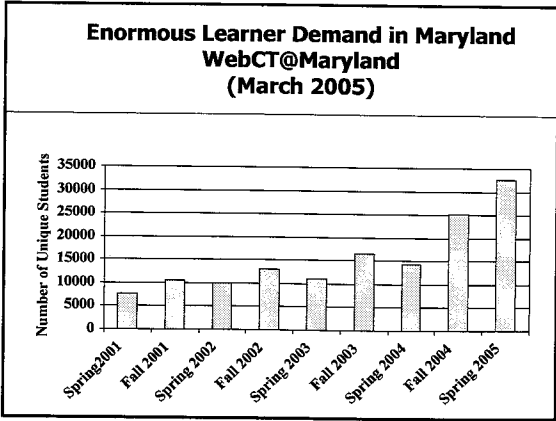
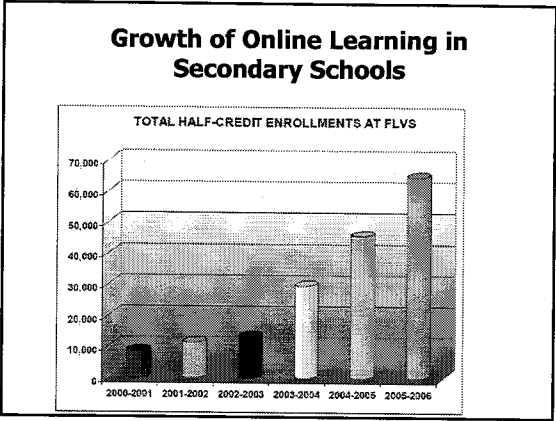
The complete plays of Shakespeare. Now at your fingertips.

In Shakespeare's day, gaining greater access to his plays meant taking it out with the other "groundings" for the best view of the stage. It took centuries for the modern printing press to bring plays like *Hamlet* to people all around the world – and for the Bard to become one of the most quoted writers in history.

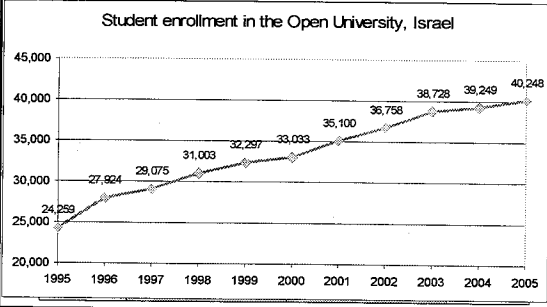
Now Shakespeare's oeuvre is even more accessible. Search within *Hamlet* for "to be or not to be" to read the rest of his famous soliloquy. Find out who called the world his "eggshell" and why. Browse through a familiar play – or follow your curiosity to discover a new one. And if you decide you want to buy a copy, "All editions" will show you every version in [Google Book Search](#), many of which are available for purchase.

The Ten Forces that Flattened the World

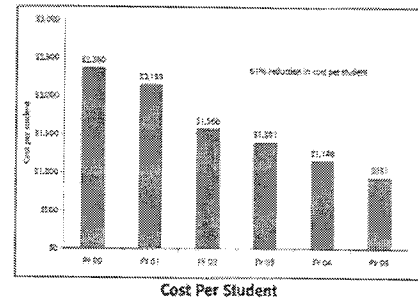
2. Rise in Demand for Online Learning



Open University of Israel (overall enrollment growth)



Defense Acquisition University Shaping a Culture of Career-Long Learning



The Ten Forces that Flattened the World

3. Open-Sourcing Learning: Sakai, Moodle, eduCommons



Free and Open Source Software

Linux Online
http://www.linux.org

Save on Free and Used Products
SHOP NOW AT AMAZON.COM

Register
Login
Forgot Password

July 28, 2006

Applications
Distributions
Downloads
General Info
Book Store

amazon.com
SHOP
HERE!

Steven Weber, Professor of Political Science at UC Berkeley, *The Success of Open Source* (published by Harvard University Press).

"Weber started out asking why a large number of programmers would be motivated to volunteer their time to a goal that does not have a direct individual financial benefit, but found that more pertinent questions should be asked."



The Success of Open Source:
A Subject for UC Berkeley Researcher
By Paula Murphy, TLTC Assoc. Director, Dec 2004
<http://www.uctltc.org/news/2004/12/weber.php>

"If you are going to try to scale production systems to non-friendly, non-kinship groups, you have to have some sort of governance," explains Weber. "For example, I would not put my lecture notes on the web because I feel strangely about people I don't know benefiting from my work without them giving anything in return."



Steven Weber, Professor of Political Science at UC Berkeley and author of The Success of Open Source (published by Harvard University Press).

"The trick for the open source projects is to find a way to create that reverse flow such that if I donate a piece of intellectual product to something that other people are going to use and modify, I want to somehow benefit from what they're learning -- that's the key exchange. The trick, and what people are experimenting with, are different ways to structure that exchange so it works."



1. eduCommons



[View eduCommons in Action](#) | [Download the Source Code](#) | [View the Installation Instructions](#)

eduCommons is an OpenCourseWare Management System designed specifically to support OpenCourseWare projects. It provides the functionality necessary to successfully develop and manage an open access repository, including a workflow process that steps users through uploading materials into a repository, tracking copyright clearance, reassembly of materials into courses, a quality assurance process, and final publication of the materials. While the front end of eduCommons is designed to visually align with other OCW's, the back end architecture is directly closer to proprietary like Blackboard - all resources are stored as individual learning objects in order to facilitate easy reuse/downloads. eduCommons is open source software available from [SourceForge](#).

eduCommons is generously funded by [The William and Flora Hewlett Foundation](#) and the [National Science Foundation](#).

Blackboard Buying and Suing
<http://www.washingtontimes.com/business/20060814-100821-5993r.htm>

The educational software market continues to grow, and so does the bottom line of Blackboard Inc., the D.C. provider of products for schools and universities.

The company last week announced second-quarter revenue of \$43.6 million, a 32 percent jump from last year's \$33 million.

Blackboard, nearly six months after acquiring its largest competitor, WebCT Inc., for \$178 million, reported a net loss of \$6.3 million (23 cents per diluted share) compared with earnings of \$6.1 million (21 cents) a year

Blackboard sees 32 percent growth
 By Kim Rawland
 THE WASHINGTON TIMES
 August 13, 2006

2. Moodle

The screenshot shows the Moodle website interface. It features a 'Moodle sites' section with a line graph showing growth over time. Below the graph is a table with columns for 'Module', 'Users', 'Courses', 'Topics', 'Languages', 'Plugins', 'Themes', and 'Languages'. The table contains numerical data for each category. To the right, there is a 'Latest News' section with a list of recent updates and a 'Moodle Development' section with a list of development tasks.

3. Sakai Project

The screenshot shows the Sakai Project website. It features a large world map in the center, surrounded by navigation links and a list of project partners. The website has a clean, professional layout with a dark header and a light background.

4. Learn from MIT

The screenshot shows the Learn from MIT website. It features a list of courses and resources, including 'Introduction to Computer Science', 'Introduction to Physics', and 'Introduction to Chemistry'. The website has a clean, professional layout with a dark header and a light background.

The Ten Forces that Flattened the World

The Learning World is Flat

4. Collaboration (e.g., SharePoint, Groove, Word, Interwise, Breeze)

Sharing in Virtual Teams (e.g., Groove, SharePoint)

Ray Ozzie
Founder, Office Networks

Online Groups...

Yahoo! My Yahoo! Mail News Yahoo! Search

YAHOO! GROUPS

Sign In New Group

Yahoo! Groups
The easiest way for groups of people to communicate on the internet

- Play or touch with friends, family and colleagues
- Discuss sports, health, news, and more
- Connect with people who share your interests

Find a Group

Search: _____

Business & Finance Computers & Internet
 Culture & Community Entertainment & Arts
 Family & Home Games
 Transportation & Vehicles Health & Wellness
 Hobbies & Crafts Music
 Relationships & Dating Religion

To view My Groups you need a Yahoo! ID.
 Don't have a Yahoo! ID?
 Signing up is easy
[Sign up for Yahoo!](#)

Already have a Yahoo! ID?
 Sign in:
 Yahoo! ID: _____
 Password: _____
 Remember my ID on this computer
[Sign In](#)

Skype

The Ten Forces that Flattened the World

The Learning World is Flat

5. Learning Portability (Podcasting, Mobile technology)

Audacity

The Free, Cross-Platform Sound Editor

Download Audacity 1.2.2 for Mac OS X

\$100 Laptop

The project aims to build peer-to-peer communications

SE-TECH

A revolution in a laptop by Greg Norman

Since 17 August 2005, SE-TECH has...

After an incubation time of 15 years, SE-TECH's new laptop, the Se-TECH, is now available for sale at \$100, making it the most affordable laptop in the world.

A quarter of a century, the legacy of the PC is ubiquitous.

Can this device save the developing world?

Negropte says the new laptop is designed to be kid-friendly

OLPC aims to turn the tide of urban poverty

The CM1: Taking technology to the developing world
 A revolution in a laptop
 By Greg Norman
 Sunday 13 August 2006, 18:49
 Makka Time, 15:49 GMT

Wireless Technology


MOST (UN)WIRED SCHOOLS?

Always online -- and always talking
When three days without a word is an eternity




Creating the look-free Enterprise






DePauw University




Hot Trend: Mobile Technology

Work away from work gets easier with technology



Vodcast for Medical Training

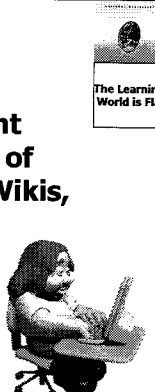
(e.g., "SonoSite on the small screen: The Bothell-based company uses podcasts for its ultrasound scanner training,"
By Eric Fetters, Herald Writer, Everett, WA, Sept 25, 2006)



Dan Bates / The Herald, Sept 25, 2006
David Levesque, vice president of global learning at SonoSite in Bothell, demonstrates the company's new podcast training for ultrasound technicians.

The Ten Forces that Flattened the World

6. Learner Empowerment and Individualization of Learning (Podcasts, Wikis, and Blogs, etc.)



Social Networking Software

- Classmates: <http://www.classmates.com/>
- Facebook: <http://www.facebook.com/>
- Friendster: <http://www.friendster.com/>
- Friendzy: <http://www.friendzy.com/>
- MySpace: <http://www.myspace.com/>
- Orkut: <https://www.orkut.com/>
- Tribes: <http://www.tribe.net/>
- YouTube: <http://www.youtube.com/>

Social Networking Software (Web 2.0)

The image shows a screenshot of a MySpace profile page. At the top, there are navigation tabs for 'Home', 'Profile', 'Friends', 'Groups', 'Music', 'Videos', and 'Blog'. Below this, there's a 'mySpace' logo and a 'Log Out' button. The main content area includes a 'MySpace Music' section with a featured album 'The Walkmen' and a 'MySpace Videos' section with a video titled 'the blur stops here'. There are also sections for 'MySpace Friends' and 'MySpace Groups'.

Video Blogging

The image shows a screenshot of a video blog post. The title is 'Si Se Puede! Marching for Immigrant Rights'. Below the title is a video player showing a group of people marching. To the right of the video player is a text description: 'Videos from the May 2 immigrant rights march in Cambridge and Boston, Massachusetts. The video below is a group of 1,000 protesters from the rally at Harvard and along their route march to Boston Common. I had the duty for today's edition of Si Se Puede!'. At the bottom, there is a date 'April 27, 2006'.

Podcasting

The quality of some of the podcasts I have listened to is certainly as good as many supposedly professional radio stations

The image shows a screenshot of a Smithsonian podcast page. At the top, there is a video player showing a woman speaking. Below the video player is a text description of the podcast. The page also features a 'Download' button and a 'Share' button. The Smithsonian logo is visible at the top right.

Sharing Encyclopedias (Wikipedia; Jimmy Wales, Founder)

The image shows a screenshot of the Wikipedia homepage. At the top, there is a logo for 'WIKIPEDIA The Free Encyclopedia'. Below the logo is a list of languages and the number of articles in each: English (The Free Encyclopedia, 1,011,000 articles), Deutsch (Die freie Enzyklopädie, 282,000 Artikel), 日本語 (フリー百科事典『ウィキペディア』, 15,000 - 200), Svenska (Den fria encyklopedin, 98,000 artiklar), Polski (Wolny Encyklopedia, 51,000 haseł), Portugals (A enciclopédia líber, 62,000 artigos), and Español (La enciclopedia libre, 81,000 artículos). There is also a search bar at the bottom.

Belatedly, Britains lambastes Wikipedia findings

The image shows a screenshot of a news article from Entrepreneur.com. The title is 'Belatedly, Britains lambastes Wikipedia findings'. The article discusses the findings of a report by the House of Commons Select Committee on the Internet. The report found that Wikipedia is a 'credible source of information' and that it is 'one of the most popular websites in the world'. The article also mentions that the report was published in a report titled 'The Internet: A Report for the House of Commons'.



The Ten Forces that Flattened the World

7. Online Portals of Information

The image shows an illustration of a man with glasses looking at a computer monitor. The man is wearing a suit and has a thoughtful expression. The monitor is a large, vintage-style CRT monitor. The text 'The Learning World is Flat' is visible in the top right corner.

The Ten Forces that Flattened the World

8. Online Learning Object Repositories (MERLOT, Connexions, CAREO, Jorum) and ADL's SCORM Project






The Learning World is Flat

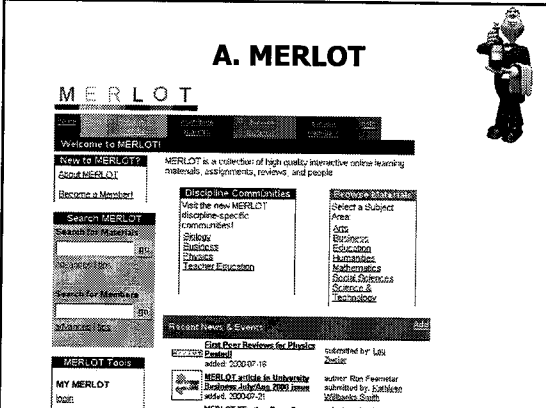
Reusable Content Objects

- "Learning Objects are small or large resources that can be used to provide a learning experience. These assets can be lessons, video clips, images, or even people. The Learning Objects can represent tiny "chunks" of knowledge, or they can be whole courses."

Claude Ostyn, Click2Learn

A. MERLOT



WELCOME TO MERLOT

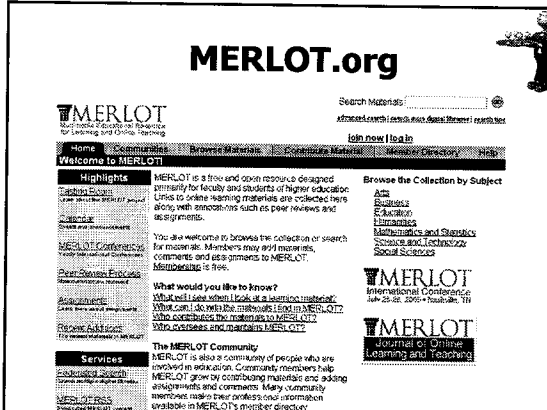
NEW TO MERLOT

DISCIPLINE COMMUNITIES

RECORD NEWS & EVENTS

MY MERLOT

MERLOT.org



WELCOME TO MERLOT

HIGHLIGHTS

BROWSE THE COLLECTION BY SUBJECT

SERVICES

MERLOT People Metrics (Gerald Hanley, October, 2005)

| MEMBERS | Birthyear 2001 | Last Year 2004 | This Year 2005 |
|---------------------------|----------------|--------------------------------|--------------------------------|
| Students | 706 | 3,652 | 5,010 |
| Faculty | 2,864 | 11,563 | 14,754 |
| Staff | 736 | 2,522 | 3,122 |
| Administrators | - | 280 | 746 |
| Librarians | - | 146 | 280 |
| Other | 421 | 1,867 | 2,341 |
| TOTAL # of Members | 4,727 | 20,030 453 per month | 26,253 712 per month |

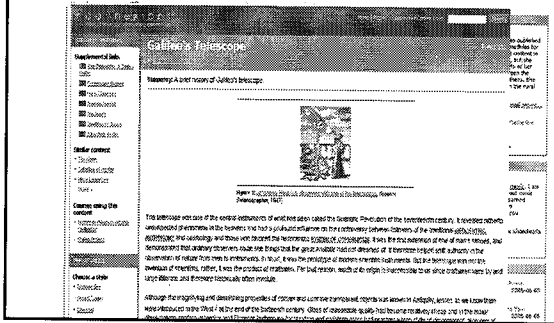
MERLOT Collection Metrics (Gerald Hanley, October, 2005)

| Materials-Related Metrics | CSU 1999 | Birthyear 2001 | Last Year 2004 | This Year 2005 |
|--|----------|----------------|----------------|----------------|
| # of Materials (# deleted per year) | 2,732* | 5,421 | 9,806 (266) | 12,274 (226) |
| "Persistence" of Materials | N/A | N/A | 97.3% | 98.2% |
| # of People who contributed materials | N/A | 408* (7.5%) | 1,423 (7.1%) | 1,831 (7.0%) |
| Average # of materials added per contributor | N/A | 9.3* | 6.9 | 6.6 |

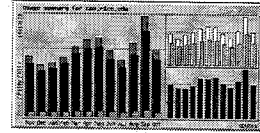
* = estimates

B. Connexions (Rice University)

<http://cnx.rice.edu/>



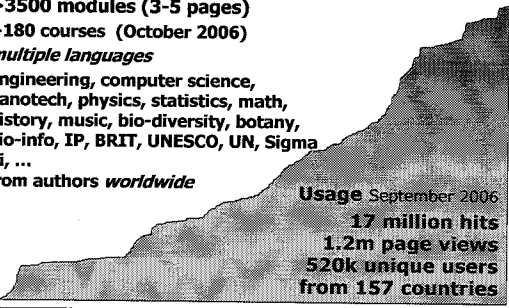
<http://cnx.rice.edu:8080/stats>
 Sept 2005 had "14.4 million hits representing about 1 million page views by about 430,000 folks from 157 countries." growing at a rate of about 1 million hits per month.



| Month | Hits | Page Views | Unique Users |
|-------|------------|------------|--------------|
| 09/05 | 14,400,000 | 1,000,000 | 430,000 |
| 10/05 | 15,000,000 | 1,100,000 | 450,000 |
| 11/05 | 16,000,000 | 1,200,000 | 470,000 |
| 12/05 | 17,000,000 | 1,300,000 | 490,000 |
| 01/06 | 18,000,000 | 1,400,000 | 510,000 |
| 02/06 | 19,000,000 | 1,500,000 | 530,000 |
| 03/06 | 20,000,000 | 1,600,000 | 550,000 |
| 04/06 | 21,000,000 | 1,700,000 | 570,000 |
| 05/06 | 22,000,000 | 1,800,000 | 590,000 |
| 06/06 | 23,000,000 | 1,900,000 | 610,000 |
| 07/06 | 24,000,000 | 2,000,000 | 630,000 |
| 08/06 | 25,000,000 | 2,100,000 | 650,000 |

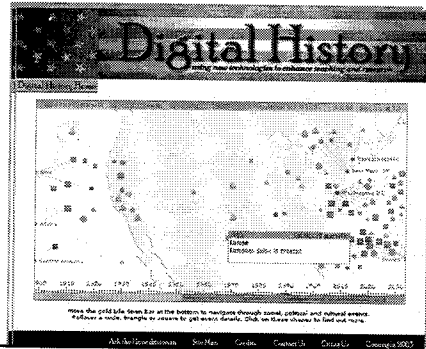
Connections Growth

>3500 modules (3-5 pages)
 >180 courses (October 2006)
 multiple languages
 engineering, computer science,
 nanotech, physics, statistics, math,
 history, music, bio-diversity, botany,
 bio-info, IP, BRIT, UNESCO, UN, Sigma
 Xi, ...
 from authors worldwide

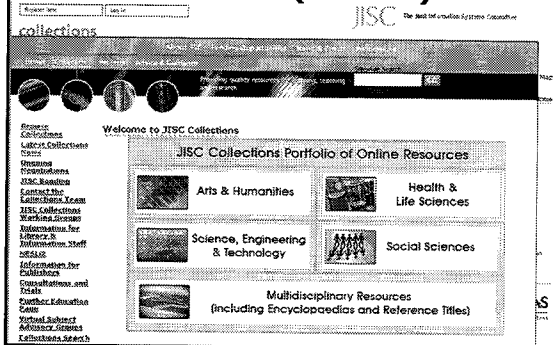


Usage September 2006
 17 million hits
 1.2m page views
 520k unique users
 from 157 countries

C. Textbook Revolution



D. JORUM (from UK)



JORUM Overview

- "JORUM is a JISC-funded collaborative venture in UK Higher and Further Education to collect and share learning and teaching materials, allowing their reuse and repurposing, and standing as a national statement of the importance of creating interoperable, sustainable materials."

Per David Wiley, Utah State University
(October 2005)

"This is a message that should probably get out, also - not only is this movement worldwide and gaining momentum every day, it is also becoming a key part of international strategy to achieve equitable access to education for people everywhere."

Johns Hopkins OpenCourseWare Project

The screenshot shows the Johns Hopkins OpenCourseWare interface. At the top, it says 'JHSPH COURSEWARE'. Below that, there's a search bar and a navigation menu with options like Home, Syllabus, Schedule, Readings, Lecture Notes, and Other Resources. The main content area displays the course title '22.6+9.01 International Nutrition' and a photograph of a person. To the right, there's a 'Staff' section listing instructors and a 'Feedback' section.

Tufts OpenCourseWare Project

The screenshot shows the Tufts OpenCourseWare website. The header reads 'Tufts OpenCourseWare'. A search bar is visible. The main content area features the course title 'IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005' and a photograph of a mosquito. To the right, there's a list of course faculty members including Scott Hensler, Michael Stone, Sherwood Gorbun, Lorenz Huz, Liana Kogelman, Debra D. Proulx, John Fink, David Friedman, Charlotte Therpe, Matt Trivette, and Corinne Langille.

University of Notre Dame

The screenshot shows the University of Notre Dame OpenCourseWare website. The header reads 'UNIVERSITY OF NOTRE DAME OPENCOURSEWARE'. The main content area displays the course title 'AFAS 20567 - Islamic Societies of the Middle East and North Africa: Religion, History and Culture' and a photograph of a mosque interior.

Japan OCW Alliance

The screenshot shows the Keio University OpenCourseWare website. The header reads 'Keio University KEIO OPENCOURSEWARE'. The main content area features the course title 'OIC-002' and a photograph of a person. There are sections for 'Course Guide' and 'Syllabus'.

Vietnam Fulbright Economics OCW

The screenshot shows the Vietnam Fulbright Economics OCW website. The header reads 'Chương trình Giảng dạy Kinh tế Fulbright' and 'FULBRIGHT'. Below that, there's a section titled 'Nhân viên giảng dạy FETP' and a list of faculty members with their names and photos.

USU OpenCourseWare Project

The screenshot shows the USU OpenCourseWare website interface. At the top, it says "USU OpenCourseWare Project". Below that, there's a navigation bar with "Home", "About", "Courses", "Help", and "Contact". The main content area is titled "Biochemical Engineering" and features a large image of a microscopic view of cells. Below the image, there's a section for "APPLICABLE COURSES" and "COURSE DESCRIPTION".

John Dehlin Utah State University

"If you think about the tangible, practical, human value some of these courses could have in the world, particularly the 3rd world...it can get quite exciting (to me at least)."

Shelley Henson, Center for Open and Sustainable Learning (COSL), Utah State University

The collage consists of several posters and documents. One prominent poster features a woman in a white lab coat, likely Shelley Henson, and the COSL logo. Other documents show various educational materials and project descriptions.

CORE (China Open Resources for Education), OCW Mirror Site, China

The screenshot shows the CORE website interface. It features a header with the CORE logo and a navigation bar. The main content area includes a large image of a mountain landscape and several text blocks in Chinese, providing information about the project and its goals.

The Biggest OCW Localization Volunteer Group in the World

The group photo shows a large number of people, mostly young adults, standing together in a room. They are dressed in a variety of styles, and the overall atmosphere is one of a large, active community.

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

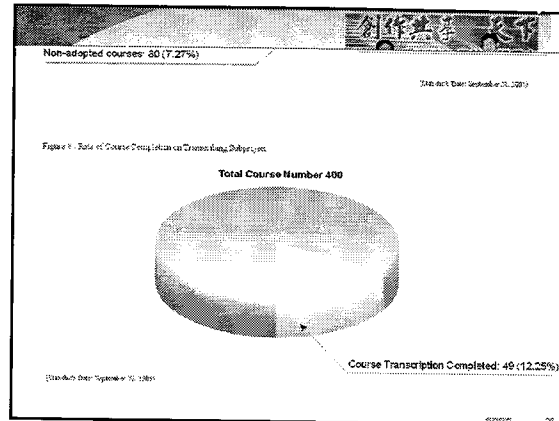
電子工程與資訊科學 (Electrical Engineering and Computer Science)

The screenshot shows a course catalog for Electrical Engineering and Computer Science. It lists various courses with their respective course numbers and titles. The courses are organized into a grid-like structure, with some courses highlighted in red.

| 課程名稱 | 課程編號 |
|------------------|--------|
| 2002年秋學期：線性電路 | EE-202 |
| 2002年秋學期：數字電路 | EE-203 |
| 2002年秋學期：電路與系統 | EE-204 |
| 2002年秋學期：電子設備與系統 | EE-205 |
| 2002年秋學期：電路與系統 | EE-206 |
| 2002年秋學期：電路與系統 | EE-207 |
| 2002年秋學期：電路與系統 | EE-208 |
| 2002年秋學期：電路與系統 | EE-209 |
| 2002年秋學期：電路與系統 | EE-210 |
| 2002年秋學期：電路與系統 | EE-211 |
| 2002年秋學期：電路與系統 | EE-212 |
| 2002年秋學期：電路與系統 | EE-213 |
| 2002年秋學期：電路與系統 | EE-214 |
| 2002年秋學期：電路與系統 | EE-215 |
| 2002年秋學期：電路與系統 | EE-216 |
| 2002年秋學期：電路與系統 | EE-217 |
| 2002年秋學期：電路與系統 | EE-218 |
| 2002年秋學期：電路與系統 | EE-219 |
| 2002年秋學期：電路與系統 | EE-220 |
| 2002年秋學期：電路與系統 | EE-221 |
| 2002年秋學期：電路與系統 | EE-222 |
| 2002年秋學期：電路與系統 | EE-223 |
| 2002年秋學期：電路與系統 | EE-224 |
| 2002年秋學期：電路與系統 | EE-225 |
| 2002年秋學期：電路與系統 | EE-226 |
| 2002年秋學期：電路與系統 | EE-227 |
| 2002年秋學期：電路與系統 | EE-228 |
| 2002年秋學期：電路與系統 | EE-229 |
| 2002年秋學期：電路與系統 | EE-230 |

What's their Beliefs? (Chu, May 28, 2006)

- Collective Minds is better than a single genius translator.
- Perfect Translation doesn't exist.
- 863 Volunteer translators
1,037 courses adopted
490 courses near completion
(up 170 since Nov)
- 80 courses already finished (up 20 since Nov)



Lucifer Chu, Chairman and Janitor of OOPS, Taiwan



The Ten Forces that Flattened the World

10. Knowledge Brokers



Consortia, Networks, and Brokers of Knowledge (and Collections, David Wiley)



WORK PACKAGE:
 1. Develop a Consortium
 2. Develop a Network
 3. Develop a Brokerage
 4. Develop a Collection
 5. Develop a Platform
 6. Develop a Service
 7. Develop a Community
 8. Develop a Culture
 9. Develop a Policy
 10. Develop a Practice

Keynote Content Development
 The key to this package is to develop a critical mass of content to test the capabilities of the network.
 TEACHING.ME has a proven capability of creating a reliable repository and they are also pioneering the concept of a learning object market place through their work on TEACHING.ME 2005.

CONSORTIUM:

Digital Rights Management

What can you do in a flat learning world?

- Consider Copyright Options
- Publish in Open Source Journals
- Attend Open Source Conferences

Creative Commons

Licenses: Theory to the License, Discoveries, Video Downloading, Copyright

Terry Anderson, Athabasca University (October 2005)

"Our Creative Commons licensed book Theory and Practice of Online Learning has been downloaded over 55,000 times (full text) and more by individual chapters. Parts have been translated into 6 languages and we are nearly sold out the 500 copies we printed at \$50 a pop. So it is quite a success story."

■ Anderson, Terry & Fathi Elloumi (Eds). (2004). Theory and practice of online learning. Canada: Athabasca University. http://cde.athabasca.ca/online_book/

Open Source Journal

The International Journal of Open Source in Education

Conference at Utah State, Sept 2005 Summit in Arizona, December, 2004

OSCON 2005: Opening Innovation

In the decade since the first O'Reilly Open Source Convention, OSCON has been a place for the open source community to gather together and open themselves to a new horizon in their professional software careers as well as their personal lives. This year, we're introducing a new level of open innovation and sharing beyond the boundaries of open source with open innovation. We're going to have a keynote by the author of the book 'The Open Source Way' and a keynote by the author of the book 'The Open Source Way'.

Have an OSCON 2005? We're looking for speakers, exhibitors, and sponsors. We'll have a special number of attendees at OSCON 2005. We'll have a special number of attendees at OSCON 2005. We'll have a special number of attendees at OSCON 2005.

Featured Speakers Include:

- Linus Torvalds
- Markus Kuhn
- John Koenig
- Richard Stallman

Comparison of Sharing Sites: MERLOT, Connexions, CAREO, OCW, CORE, OOPS Grace Lin, Univ of Houston, 2005

- **Goals:** Link people, share knowledge, access resources, searchable database
- **Funding:** fully, partial, none
- **Audience:** higher education, students, teachers
- **Content contributors:** faculty, volunteers

Comparison of Sharing Sites: MERLOT, Connexions, CAREO, OCW, CORE, OOPS Grace Lin, Univ of Houston, 2005

- **Role in knowledge sharing:** producers, consumers
- **Distinguishing features:** creativity, structure, faculty community, rigorous review process
- **(Different Affiliations, accomplishments, license, language(s), mission, etc.)**

