Collaboratory for Interactive Learning Research (C.I.L.R.)

Dept. of Curriculum & Instruction, COEHS
Southern Illinois University Carbondale
Carbondale, Illinois, U.S.A.
My Expertise in the Area

- From **Gatekeeper** (approve technology use) (ministry)
  - » **Trainer** (ministers, principals)
  - » **Coordinator** (train other teachers)
  - » **Technology Advocate** (teach future leaders)

My expertise will be in analyzing new / emerging technologies for integration into future learning

- Internet » Browser, web design » information » e-Learning
- Personal Digital Assistants (PDA) » iPod » Podcasting » Mobile Learning
- Computer-based training » virtual reality ✶ digital games » Virtual Learning Environments
- Web 1.0 » Web 2.0 » content management & delivery » (online) Learning Management Systems
Technology & Education

- Technology funding to help schools acquire ICT
  - computer lab, projectors, computers in every classroom
  - Upgrade schools in several phases (some new school, some old schools)
- Train the people
  - in-service - to soften resistance
  - pre-service - to prepare future leaders
  - (from teachers to administrator/principals to students)
  - Putting technology in teachers’ hands does not mean they will knowing how to use ICT (Buy-in is necessary)
- How to use technology appropriately & effectively in and for education?
Educational Technology

- Educational Technology => Instructional Technology => Learning Technology (new name)
  - Analyze, Design, Develop, Implement, Evaluate (learning materials/methods/technology)
- Teacher Adoption by changing oneself to modeling:
  - From Technophobia » Comfortable about learning
  - From use » mastery » integrate » innovate
  - Model the (proper) use of technology (teachers/student)
  - Involves changing habits: helping them understand and see the value, and modeling its use
The Impact of Web 2.0 on Education
Early Web: Text Only...

Yahoo

Yahoo! Auctions
coins, cards, stamps, cars Win FREE Rent Free Web
Sign Up Now

Search advanced search

Shop Â Auctions Â Classifieds Â Shopping Â Travel Â Yellow Pgs Â Maps
Media Â News Â Sports Â Stock Quotes Â TV Â Weather
Connect Â Chat Â Clubs Â Games Â GeoCities Â Greetings Â Invites Â
Mail Â Messenger Â Personals Â People Search Â For Kids
Personal Â My Yahoo! Â Addr Book Â Calendar Â Briefcase Â Photos Â
Alerts Â Bookmarks Â Companion Â Bill Pay Â more...

Yahoo! Shopping - Thousands of stores. Millions of products.
Departments Stores Features
Â Apparel
Â Luxury
Â Computers
Â Electronics Â Flowers

(NORMAL LINK) Use right-arrow or <return> to activate.

Arrow keys: Up and Down to move. Right to follow a link; Left to go back.
Colored Text & Graphics...
Web 1.0

- From text » graphics » multimedia:
  - “Web as Information Source”
  - users are not in control of the content
    - Not very interactive
    - Flash was added as an interaction “catalyst”
    - The furthest it can go is Flash as contents
  - Governed by business model: Pushed or Pulled contents
    - Good analogy: books » comics » Film/TV
    - It is presentation (let me show you my “product”)
A Web 2.0 beta site is:

- “Web as Participation”
- Contents are controlled (even contributed) by users
- Interactivity from the users’ point of view – users interact with one another
- Collaborative – users can change the content
- Instead of TV watching, it is Wii Fit (or Monopoly night) – have fun together with family and friends
- It’s forever “beta”! – we are testing a new and innovative idea, try it! (it’s not perfect yet, we are experimenting)
Living with the Internet
Web 2.0 IS NOT Internet2!

- http://www.internet2.edu/
- I2 operates on optical network
  - Superfast speed Internet2 (about 100x faster than current Internet) – for bandwidth intensive research (100Gb/s)
  - Launched in 1996, Internet2 is the foremost U.S. advanced networking consortium
- Led by the research and education community
  - More than 200 U.S. universities
  - 70 leading corporations
  - over 50 international partner organizations
  - 45 government agencies, laboratories and other institutions of higher learning
Web 2.0 sites should have the following characteristics:

- Information Sharing
- Inter-operable
- User-centered Design
- Collaboration
Examples of Web 2.0 Services

SERVICES
- Blogs
- Wikis
- Hosted services
- Web applications
- Social-networking sites
- Video-sharing sites
- Content Management
- Online chat/game

EXAMPLES
- WordPress, Blogspot
- Mediawiki, Tikiwiki
- Slideshare, Twitter
- TinyMCE
- Facebook, LinkedIn
- YouTube, Vimeo
- Drupal.org [Drupal]
- SecondLife, Runescape
Blogs & Wikis

- Blogs, wikis and RSS are often held up as exemplary manifestations of Web 2.0
- Blogs provide their users with tools to add comments
  - 76% of bloggers write for personal satisfaction (ranting)
  - List your blog at the Blog Directory@Technorati
  - E.g. Blogspot, Wordpress
- Wikis provided their users with tools to edit (each other’s) contents
  - E.g. Tikiwiki, Mediawiki
Blog (weblog)
Wiki

- Biggest, most updated encyclopedia in the world. If you find an inaccuracy, you can fix it!
Keeping in touch with old friends and making new ones...
LinkedIn (professionals)

Professional networking group
Teenage girl finding a voice and many (12 million) followers on YouTube!
Multimedia (blogging/wiki) learning
Skype/Google Talk (Chat)

- Also available on your Cellphone & PSP
CI 560 (summer Course)

CI 560: Content Management Systems & Delivery

Using CMS to manage your content

CMS used: Drupal, Wordpress, Wiki, etc.
Games and Virtual Worlds are drawing interests and attention of educators and researchers.

Video games revenues beat Hollywood Corporations are looking to train/sell and reach out to their customer base.

**Second Life** for business, for education, for training.

ISTE and AECT both have SL islands.

Next: Online games for education/training?

- Obstacles: digital divide, performance assessment, entertainment vs. education.
Many colleges are considering SL for educational use, some have even added SL to their programs.

Companies like IBM, Microsoft, Xerox are creating virtual buildings in SL and holding virtual meetings.

Entire cities exist in SL (e.g. Prague).

Universities who want to use SL must purchase private islands in SL to build on. This additional cost can pose a problem for universities.

SL is a new tool and is still being researched by higher education and business sectors.

Use “SLURLs” to access the location (SL-URL).
Web 1.0 / Web 2.0 example

Foreign Language Learning
Example:

Learning a new language
Collaboration with the largest Internet provider in China

Not Free (but low price)

Skype (web cam) [demo]

1 to 1 interaction

Help English speakers to learn Chinese

Adoptive parents

Single expat workers (Dating)
FEATURES:

Interactive (Video) Learning
Track Learning Progress
Flashcards
User contributed contents
Dictionary / Translation (Google)
User Community
Chat rooms
“Expert” Panel

http://www.spanishdict.com/learn
Rosetta Stone TOTALe

http://www.rosettastone.com/organizations/totale

Rosetta Courses (CDROMs)
- Started off as a CBT Course

STUDIO:
Online sessions with native speakers

Rosetta World:
- Games & Chat online with other learners and native speakers in the Rosetta community
- Community = $$ + Login/PW

Introducing Rosetta Stone TOTALe™

With 12 months of access to TOTALe, your users will learn, practice and play their way to a new language. A powerful, engaging way to learn, TOTALe is a powerful, easy-to-administer training solution—it is all online. Your users will:

- Learn naturally and speak immediately with our award-winning Dynamic Immersion® method.
- Practice conversation with live native-speaking Studio Coaches.
- Connect and play with fellow learners, including native speakers of your new language.
- Get live guidance and support from our dedicated Customer Success Team.

TOTALe combines our revolutionary learning program and live interaction to deliver the world’s ultimate, online language-learning program.

<table>
<thead>
<tr>
<th>Rosetta Course</th>
<th>Rosetta Studio</th>
<th>Rosetta World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn to speak, read, listen and write in our award-winning program.</td>
<td>Practice in our live online sessions with a native-speaking Studio Coach.</td>
<td>Play games and practice speaking with other learners and native speakers in our online community.</td>
</tr>
</tbody>
</table>
Using Commercial Off-The-Shelf (COTS) Games for Educational Purposes
Impact for Education

- Contents everywhere
  - The latest thing! Super exciting! Talk of the town!
  - **FREE** & EASY! Everyone can do it!
  - Creative/Education Commons (e.g. access to MIT courseware)
  - Self-directed learning, Self discovery learning

- Touted as “the way to learn for the future”
  - Everybody has a voice, democracy(?)
  - Diversity, Access to Big Names (experts?)
  - Everybody can learn, so long as you have a computer and fast access to the Internet
Impact for Education

- Online communication tools
  - Web cam, Skype, Google Chat
  - Can see and hear the other person
  - Excellent for online learning and social connections
  - Solved: Lack of face2face in e-learning

- Is library becoming obsolete?
  - Google scholar, Google book
  - Students can read, write, research, synthesize... without leaving home
I wish this is the whole story, but...

What they do not tell you about Web 2.0\textsubscript{beta}
Web 2.0 Criticisms

- Critics claim that Web 2.0 does not represent a new version of the WWW at all.
- Web 2.0 is only an extension (more use) of the so-called Web 1.0 technologies and concepts.
- Self-publishing and comments existed on Amazon since 1995.
Tim Berners-Lee: “A piece of jargon”

- Nobody really knows what it means...
- If Web 2.0 for you is blogs and wikis, then that is ‘people to people’.
- But that was what the Web was supposed to be all along.
The Web was going to be the great educator, but the cult of the amateur is now devaluing knowledge.

from The Cult of the Amateur by Andrew Keen

The core assumption of Web 2.0 (that all opinions and user-generated content are equally valuable and relevant) is misguided.
Web 2.0 undermines the notion of expertise
- Anybody, anywhere is allowed to share and place undue value upon his/her own opinions about any subject and any kind of content, regardless.

Web 2.0 creates “an endless digital forest of mediocrity”
- uninformed political commentary, unseemly home videos, embarrassingly amateurish music, unreadable poems, essays and novels”
Wikipedia vs Encyclopedia Britannica

- Wikipedia is the 17th most trafficked site on the net
  - Based on the works of millions of amateur editors and unreliable content
- Britannica.com, a subscription-based service with 100 Nobel prize-winning contributors and more than 4,000 other experts
  - ranked 5,128 on the net
- As a result, Britannica is cutting staffs and editors
  - If Britannica and publications like it should disappear, we will be left with unreliable information created by people who often don’t even reveal their identity
It’s Forever Beta

- We are testing a new and innovative idea, try it!
- It’s not perfect yet, we are experimenting.
- Try at your own risk
- We don’t know what side-effects it may have, we won’t ask you to pay, so you can’t sue us
- Oh, btw, that doesn’t mean we can’t sue you
- We may take your information and sell it to pay for operating cost... but you don’t have to know that
- We are not liable if predators should find your information (or steal your identity) because we are testing our product, at least not before we can fix it
- Lesson: Google “Open Source” Apps: Gmail, Android, etc.
What’s Web 2.0, Really?

- It’s based on an ideology
- It “gives power” to the people (and take power from the authority) for a yet-to-be determined purpose
- It’s not created with education in mind
- You can’t make something out of nothing
- It still has an economy, it’s still driven by major corporations
More importantly, impacts in Education comes from:

- **PEOPLE** – teachers, trainers, instructional designers, subject matter experts
- **Planning** – execute the reform in phases, provide sufficient funding, provide training, concurrent (pre/in service), evangelize its purpose
- **Policy** – Training, Experts, rewards, motivation
- **Design** – instructional design, learning method, assessment, evaluation (Educational/ Instructional/ Learning Technology)
  
  - Finally, add ICT Technology (Web 2.0, Content Management, PDA, Tablet PC, etc)
The Impact of People, Planning, Policy & Design on Education
Can you see the important part, the EDUCATION?

Too Much Distraction!!
Put Web 2.0 (Technology) in its rightful place, and you will see

A Much Clearer Picture
The Impact of People, Planning, Policy & Design on EDUCATION + Web 2.0 Technology
Thank you!

Collaboratory for Interactive Learning Research (C.I.L.R.)

Christian Sebastian Loh, Ph.D.
Southern Illinois University Carbondale
Carbondale, Illinois, U.S.A.
csloh@siu.edu