Education in the Age of Social Computing

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http://wiki.cse.cuhk.edu.hk/irwin.king/home

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Billionaires’ Shuffle

Facebook in 2004.02

2008

at 23 and $1.5 billion later...

Education in the Age of Social Computing, Irwin King, IWMTE2009, June 26, 2009, Taipei, Taiwan
## Global Internet Traffic

<table>
<thead>
<tr>
<th>Alexa as of May 2009</th>
<th>China</th>
<th>USA</th>
<th>Japan</th>
<th>India</th>
<th>Brazil</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baidu</td>
<td>Google</td>
<td>Yahoo.jp</td>
<td>Google.in</td>
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<td>Google</td>
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<tr>
<td>2</td>
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<td>Yahoo</td>
<td>FC2</td>
<td>Google</td>
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<td>Yahoo</td>
</tr>
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<td>3</td>
<td>Sina</td>
<td>Facebook</td>
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<td>Yahoo</td>
<td>Windows Live</td>
<td>YouTube</td>
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<td>4</td>
<td>Google.cn</td>
<td>YouTube</td>
<td>YouTube</td>
<td>Orkut.in</td>
<td>Universo Online</td>
<td>Facebook</td>
</tr>
<tr>
<td>5</td>
<td>Taobao</td>
<td>Myspace</td>
<td>Rakuten</td>
<td>YouTube</td>
<td>YouTube</td>
<td>Windows Live</td>
</tr>
<tr>
<td>6</td>
<td>163</td>
<td>MSN</td>
<td>Livedoor</td>
<td>Blogger</td>
<td>Globo</td>
<td>MSN</td>
</tr>
<tr>
<td>7</td>
<td>Google</td>
<td>Windows Live</td>
<td>Ameblo.jp</td>
<td>Rediff</td>
<td>MSN</td>
<td>Wikipedia</td>
</tr>
<tr>
<td>8</td>
<td>Sohu</td>
<td>Wikipedia</td>
<td>mixi</td>
<td>Facebook</td>
<td>Google</td>
<td>Blogger</td>
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<tr>
<td>9</td>
<td>Youku</td>
<td>Craigslist</td>
<td>Wikipedia</td>
<td>Wikipedia</td>
<td>Yahoo</td>
<td>Baidu</td>
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<tr>
<td>10</td>
<td>Yahoo</td>
<td>EBay</td>
<td>Google</td>
<td>Windows Live</td>
<td>Terra</td>
<td>Myspace</td>
</tr>
</tbody>
</table>
China’s Great Firewall

The New York Times

The Lede

China’s Great Firewall Blocks Twitter
By ROBERT MACKEY

Recent Posts
June 18
(38 comments)

Latest Updates on Iran’s Disputed Election
To supplement reporting from New York Times correspondents inside Iran on Thursday, The Lede will continue to track the aftermath of Iran's disputed presidential election online.

June 17
(129 comments)

Wednesday: Latest Updates on Iran’s Disputed Election
On Wednesday, The Lede will continue to track the aftermath of Iran's disputed presidential election online, to supplement reporting from New York Times correspondents inside Iran.

June 16
(198 comments)

Tuesday: Latest Updates on Iran’s Disputed Election
To supplement reporting from New York Times correspondents inside Iran, The Lede...
Twitter in Iran’s Revolution

Rallying Iran: Time Tempers a Challenger Forged in Revolution
5:45 PM Jun 17th from web

© 2009 Twitter | About Us | Contact | Blog | Status | Apps | API | Search | Help | Jobs | Terms | Privacy
Road Map

- Social Computing
- Web 2.0 and Social Computing for Education
- Categories of Educational Activities
- Examples of Social Computing for Education
  - Mashup, Twitter, facebook, VeriGuide
- Cast Studies for Education
- M-learning
- Future Research and Challenges
- Conclusions
Web 2.0

- Web as a medium vs. **Web as a platform**
- Read-Only Web vs. **Read-and-Write Web**
- Static vs. **Dynamic**
- Restrictive vs. **Freedom & Empowerment**
- Technology-centric vs. **User-centric**
- Limited vs. **Rich User Experience**
- Individualistic vs. **Group/Collective Behavior**
- Consumer vs. **Producer**
- Transactional vs. **Relational**
- Top-down vs. **Bottom-up**
- People-to-Machine vs. **People-to-People**
- Search & browse vs. **Publish & Subscribe**
- Closed application vs. **Service-oriented Services**
- Functionality vs. **Utility**
- Data vs. **Value**
Web 2.0 Revolution

- **Glocalization**- think globally and act locally!
- **Weblication**- Web is the application!
- **Three C’s**
  - Connectivity
  - Collaboration
  - Communities
Definition of Social Computing

• Any Computer-mediated communication and interaction

• In the weaker sense: supporting any sort of social behavior
  • blogs, email, instant messaging, wiki, social network services, social bookmarking

• In the stronger sense: supporting “computations” that are carried out by a group of people
  • recommender systems, online auctions, prediction markets, reputation systems, tagging, verification games
Social Networking Sites

- Example of Social Networking Sites: FaceBook, MySpace, Blogger, QQ, etc.
Social Search

• Social Search Engine
• Leveraging your social networks for searching
Social Media
Social News/Mash Up
Social Knowledge Sharing

Wikipedia

Knol

Share what you know

Write and post a knol (nōl) — a unit of knowledge.

Search
searchable through popular search engines

Create
easy to write and manage

Control
each knol is owned by you, the author

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Social Gaming

Having Fun = Work
Idea of Human Computation

- Take advantage of people’s desire to be entertained and perform useful tasks as a side effect
Social/Human Computation
Human Computation
Games With A Purpose

- **Matchin**
  - Image search by aesthetic value

- **Babble**
  - Translate foreign language into English

- **InTune**
  - Tags songs with description text

- **Squigl**
  - Image segmentation

- **Verbosity**
  - Database of common knowledge description
The Social Web
Social Network Chart

- Kathy
- Susan
- Donna
- Tanya
- Nancy
- Manuel
- Stuart
- Charles
- Carol
- Fred
- Sharon
- Wynn
- Bob

<table>
<thead>
<tr>
<th>Value</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>Nancy</td>
<td>secretary</td>
</tr>
<tr>
<td>0.66</td>
<td>Donna</td>
<td>supervisor</td>
</tr>
<tr>
<td>0.57</td>
<td>Manuel</td>
<td>manager</td>
</tr>
<tr>
<td>0.19</td>
<td>Stuart</td>
<td>supervisor</td>
</tr>
<tr>
<td>0.17</td>
<td>Charles</td>
<td>supervisor</td>
</tr>
<tr>
<td>0.08</td>
<td>Kathy</td>
<td>secretary</td>
</tr>
<tr>
<td>0.02</td>
<td>Fred</td>
<td>auditor</td>
</tr>
<tr>
<td>0.00</td>
<td>Bob</td>
<td>auditor</td>
</tr>
<tr>
<td></td>
<td>Carol</td>
<td>auditor</td>
</tr>
<tr>
<td></td>
<td>Harold</td>
<td>auditor</td>
</tr>
<tr>
<td></td>
<td>Wynn</td>
<td>auditor</td>
</tr>
<tr>
<td></td>
<td>Susan</td>
<td>secretary</td>
</tr>
</tbody>
</table>
Social Computing for Education

- They can be useful for collaborative learning, self-assessment, constructivist activities, personal expression, and project-based work.

- Example: Web 2.0

  It’s the second generation of Internet-based services that let people **collaborate** and **share** information online in previously unavailable ways.

  “Web 2.0 is an attitude, not a technology” - Ian Davis
Why Social Learning?

Before 1900's

1900's

Many:Many

After 2000

1:1

1:Many

Many:Many
Categories of Educational Activities

- Media sharing
- Media manipulation
- Conversational arenas
- Online games and virtual worlds
- Social networking
- Blogging
- Social bookmarking
- Recommender systems
- Collaborative editing
- Wikis
- Syndication
# Media Sharing

<table>
<thead>
<tr>
<th><strong>General</strong></th>
<th><strong>Educational</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uploading and downloading media files for audience or exchange</td>
<td>Sites have emerged that welcome creative digital material organized by educators</td>
</tr>
</tbody>
</table>

**Zentation**: Share video and PowerPoint  
**NoteCentric**: Share university class notes
# Media Manipulation

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use web-accessible tools to design and edit digital media files</td>
<td>Provide graphical representations education materials</td>
</tr>
</tbody>
</table>

**Thumbstacks**: Allow presentations to be built and played online

**Googlelittrips**: Link literature to places or maps

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# Conversational Arenas

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-to-one or one-to-many conversations</td>
<td>Support educational conversations</td>
</tr>
<tr>
<td>between internet users</td>
<td>by a variety of tools</td>
</tr>
</tbody>
</table>

**Think:** Teachers and students create learning projects, participate in a website competition...

**Chatmaker:** Users can create chat rooms for personal websites, blogs, newsgroups...

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# Online Games and Virtual Worlds

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule-governed games or themed environments that invite live interaction with other users</td>
<td>Develop multi-player online games for educational purpose</td>
</tr>
</tbody>
</table>

**Vue:** Provide a virtual educational and research institute

**Schome:** An education system to support people in learning throughout their lives
Online Games: Second Life

• Second Life: The Second Life Grid platform provides a powerful platform for interactive experiences

• Use it for classes, research, learning and projects

• University have set up virtual campuses where students can meet, attend classes, and create content together
Online Games: Second Life

- Linden Lab statistical feeds for signups and active users on 14 Jan 2009

Total signups from July 2008 to Jan 2009

Concurrent online users in the last 14 days

Over 16 million
# Social Networking

## General

Websites that structure social interaction between members who form subgroups of ‘friends’

## Educational

Typically include education-oriented friendship groups

<table>
<thead>
<tr>
<th>Socialnetglobal: Provides a child-oriented design and security service for cross-site collaboration</th>
<th>Learnhub: Teachers can create learning communities.</th>
</tr>
</thead>
</table>

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Blogging

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>An on-line journal or diary in which a user can post text and digital material while others can view and comment</td>
<td>Blog sites exist especially for students and teachers</td>
</tr>
</tbody>
</table>

**Edublogs**: Blogging for teachers and students

**Nature**: Encourages scientific authors to blog around their findings
Blogs and Risk

• What’s so great about blogs?
  • Tool for personal reflection
  • Citizen journalism
  • Forum for publishing your views or expertise
  • Reader feedback

• Blogging and risk avoidance
  • Services are advertising to high school and younger audiences who are not savvy about personal security: MySpace, AOL, Xanga, Facebook
  • Posting personal info: names, birthdays, towns, dorms, etc.
  • Harassment and bullying via blog postings; libel suits
Blogging and Anonymity

• They only seem anonymous

• Identities of bloggers can be traced

• Police departments now look for blogs, Yahoo group postings, etc. when investigating crimes (recent cases in high schools north of Boston)

• High schools beginning to have blogging policies for students
## Wikis

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web-based services allow users unrestricted access to create, edit and link pages</td>
<td>Sites that allow students and teachers to establish their own wiki with an educational slant</td>
</tr>
</tbody>
</table>

**Pbwiki**: students and teacher can create their own wiki

**Wikiversity**: devoted to learning resources, learning projects, and research for use in all levels, types, and styles of education
Blogs vs. Wikis

• Blogs generally have a topical element and a single author (but not always)

• Wikis are designed to be easy to use collaboration spaces for storage of shared material.

• Blogs are more like journals; Wikis are shared reference sites
# Social Bookmarking

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow users to submit their bookmarked web pages to a central site where they can be tagged and found by others</td>
<td>Bookmarks sharing systems designed for research and education users</td>
</tr>
</tbody>
</table>

| BibSonomy: A system for sharing bookmarks and list of literature | Citeulike: A website for the collecting and sharing research publications |

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Social Bookmarking Enabling...

- **Save and tag** bookmarks and searches
- **Share** resources among peers and colleagues
- **Find** relevant, reliable resources more easily
- **Evaluate** the quality of the resources
- **Update** courses automatically with dynamic content feeds
- **Contribute** to course collections, both students and instructors

```
Netvouz
iDiigo
Segnalo
RawSugar
Shadows
Magnolia
Blue Dot
Tailrank
BlinkList
Suggest a Service
```
### Recommender Systems

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites aggregate and tag user preferences to make novel recommendations</td>
<td>Recommender systems designed for research and education users</td>
</tr>
</tbody>
</table>

**Ratemyteachers**: An (infamous) example of recommendation technology in education involves user evaluation of teachers.
Collaborative Editing

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web tools used collaboratively to design, construct and distribute digital product</td>
<td>Text, spreadsheets and other documents can be stored centrally and permit collaborative editing</td>
</tr>
</tbody>
</table>

**Thinknature**: Websites incorporate more visual tools for collaborative pages

**Bubbl.us**: Some emphasizing mind-maps for brainstorming
## Syndication

<table>
<thead>
<tr>
<th>General</th>
<th>Educational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users can ‘subscribe’ to RSS feed enable websites so that they are automatically notified of any changes or updates in content via aggregator</td>
<td>Websites from which students can take advantage of syndicated content</td>
</tr>
</tbody>
</table>

### General

- Podcastschool: A website contains podcasts for school students

### Educational

- Stanford: A website contains syndicated material sponsored by Stanford
Mashup

• A **mashup** is a Web application that combines data or functionality from two or more sources into a single integrated application

• **Prominent mashup genres**
  - Mapping mashups
  - Video and photo mashups
  - Search and shopping mashups
  - News mashups
Mapping Mashups

Google map: the floodgate
Mapping Mashups

ChicagoCrime.org

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Mapping Mashups

Microsoft Virtual Earth

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Video and Photo Mashups

Flickr Maps: exploring photos and videos by places
Search and Shopping Mashups

Amazon Shopping Mashup

Description
Amazon shopping mashup built using amazon eCommerce widgets.

APIs
Amazon EC2 + Amazon eCommerce + Google AdSense + Google Custom Search

Tags
search, shopping, widgets

Added
21 Nov 2007

Who
top54u [Profile]

URL
http://shopping.top54u.com/
News Mashups

**New** Canonical Demos Early Stage Android-On-Ubuntu

source: slashdot

An anonymous reader notes Ars Technica’s report from the Ubuntu Developer Summit in Barcelona, where Canonical has unveiled a prototype Android execution environment that will allow Android applications to run on Ubuntu and "potentially other conventional Linux distributions." "Android uses the Linux kernel, but it isn't really a Linux platform. It offers its own totally unique environment that is built on Google's custom Java runtime. There is no glide path for porting conventional desktop Linux applications to Android. Similarly, Java applications that are written for Android can't run in regular Java virtual machine implementations or in standard Java ME environments. This makes Android a somewhat insular platform. Canonical is creating a specialized Android execution environment that could make it possible for Android applications to run on Ubuntu desktops in Xorg alongside regular Linux applications. The execution environment would function like a simulator, providing the infrastructure that is needed to make the applications run. Some technical details about the Android execution environment were presented by Canonical developer Michael Casadevall... They successfully compiled it against Ubuntu's libc instead of Android's custom libc and they are running it on a regular Ubuntu kernel."

Read more of this story at Slashdot.
Mashups for Higher Education
Mashups for Higher Education

- **Research & Collaboration**
  - Enterprise Mashups can allow individuals to quickly research, define and share ideas across different networks.

- **Budgets and Forecasting**
  - Enterprise Mashups can provide university administrators with real-time data to make faster more cost-effective decisions.

- **Social Mashups**
  - Enterprise Mashups can bring dynamic personalized information to university students offering an improved campus and academic experiences.
Twitter

Twitter is a service for friends, family, and co-workers to communicate and stay connected through the exchange of quick, frequent answers to one simple question: **What are you doing?**

Get Started—Join!
Twitter as Learning Tool

- Collect immediate feedback on courses
- Support relationship among learners
- Post tips, questions, assignments
- Build professional networks (other “like minded” people)
- Broadcast messages
- Offer collaborative file sharing
- Offer mind mapping
Facebook Learning

A terrific parody of what Abraham Lincoln’s Facebook page might look like

Includes popular, and lesser-known facts, about Lincoln
Facebook Learning

A friend of Lincoln

Lincoln’s unwillingness to emancipate the slaves

Lincoln’s depression
Facebook Classroom

• **For students**
  - Books iRead, DoResearch4me, Flashcards, Wikiseek Search, SkoolPool, Rate My Professors, JSTOR Search, Notely, Study Groups, Get Homework Help, SwapRoll, Notecentric, Class Notes

• **For teachers and administrators**
  - BookTag, Webinaria Screencast Recorder, Mathematical Formulas, SlideShare

• **For Everyone**
  - Calendar, To-Do List, Zoho Online Office, Courses, Files, WorldCat, HeyMATH!, CourseFeed
Case Studies for Education

- Manage the information space
- Write to the information space
- Computer enhanced project-oriented learning
- Personal learning environments
- Integrated authoring and management of activities
- Microlearning
- … more
Manage the Information Space

- Bookmarks
- References
- Feeds
- Aggregations
- Mashups

Organize own/other’s productions
Share all that

- Teachers
- Students
- Others
- ... ...

E.g. blog portfolio
factories like ELGG
Write to the Information Space

• Digital story telling
  • “Be there” with (multimedia) stories
  • Connect them to other stories, to resources, ..
  • Kids to it all the time, some teachers do it too
    • MySpace, YouTube, Blogs, ..

• Contribute to expertise
  • Add articles to wikis, post podcasts to YouTube, upload slides to Furl, …
  • Fix / comment productions
  • Link ideas, remix productions
Project-Oriented Learning

- Organizing and augmenting the information space does not guarantee formal learning …

- Teachers have to engage in storyboarding:
  - Orchestrate
  - Monitor
  - Scaffold (Tutor)

- Levels of cooperation between learners:
  - Individual, group
  - Class, school (social environments!)
  - Virtual community, world (social environments!)
Learners do have an environment, and school is part of it
But they **organize** it ...
Status of Learning

- The evolution in education and training at a distance can be characterized as move from distance learning (d-Learning) to electronic learning (e-Learning) to mobile learning (m-Learning).

![d-Learning (paper-based)](image1) → ![e-Learning](image2) → ![m-Learning](image3)
Categories of Learning

- Contact learning (face-to-face)
- Distance learning
- Paper-based distance learning
- E-Learning
  - Online learning
  - Mobile learning
- Flexible learning
e-Learning

• A subset of technology-based training and encompasses all learning activities conducted on the internet

• Can be “live” (also known as “synchronous”) learning, meaning students communicate with peers and instructors in real-time, or it can be completely self-paced, which is known as “asynchronous” learning

• Covers a set of applications and processes, including
  • Computer-based training
  • Web-based learning
  • Virtual classroom
  • Digital collaboration
UNIVERSITIES.COM: The most extensive collection of distance learning
What is m-Learning?

<table>
<thead>
<tr>
<th>New Learning Paradigms</th>
<th>Mobile Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual/Learner centered</td>
<td>Personalized Services</td>
</tr>
<tr>
<td>Collaborative learning</td>
<td>Networked/Wireless</td>
</tr>
<tr>
<td>Situated learning</td>
<td>Mobile awareness</td>
</tr>
<tr>
<td>Contextual learning</td>
<td>Context awareness</td>
</tr>
<tr>
<td>Ubiquitous learning</td>
<td>Ubiquitous</td>
</tr>
<tr>
<td>Life long</td>
<td>Durable</td>
</tr>
</tbody>
</table>
What is m-Learning?

- Refers to the use of mobile and handheld devices, such as PDAs, mobile phones, smart phones, laptops, and tablet PCs, in teaching and learning
- Learn “on the go”!
Why m-Learning?

- Enhance learner success
- Real world skills
- Access your learning materials from anywhere
- Just-in-time learning / reference tool for quick access to data in the field
- Interact with others
- Collaborate learning
m-Learning Devices

- PDAs
- Tablet PCs
- Mobile phones
- Wearable computers
- Laptop computers
- E-book readers
- Hybrid devices
Limitation of m-Learning Devices

- Small screen size and limited storage capabilities
- Batteries require regular charging
- Lack of common platform
- More easily lost or stolen
- Much less robust than desktops
- Out of date very quickly
- Security issues
- Bandwidth problems
- More difficult to upgrade
The Horizon Project

- iPhone in Medicine
- Mobile MAAP
- Mobile Initiatives at Seton Hall University
- MIT Mobile Project
iPhone in Medicine

Medical resources developed for the iPhone can be used by students and practitioners.

http://jeffreyleow.wordpress.com/2008/06/10/iphone-in-medical-education/

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Mobile MAAP

Mapping the African American Past (MAAP) illustrates places and moments that have shaped the long history of African Americans in New York City.

http://maap.columbia.edu/m/index.html
Mobile Initiatives at Seton Hall University

- Seton Hall University is committed to providing a unique and advanced technological environment for students, faculty, administrators and other community members.

- **SHUmobile Blogs**

- **SHUmobile Forum**

- **SHUmobile Wiki**

  [http://tltc.shu.edu/mobile/](http://tltc.shu.edu/mobile/)
MIT Mobile Project

People Directory
Campus Map
Shuttle Schedule
Events Calendar

Stellar
Emergency Information
3DOWN

http://mobi.mit.edu/

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Tensions and Areas for Further Research

- Teaching vs. learning
- Walled garden vs. open arena
- Private learning vs. collaborative learning
- Digital native vs. digital immigrant
- Social networking vs. anti-social networking
- Rip-mix-burn vs. cut-tweak-paste
- Transitory marks vs. persistent marks
- Print literacy vs. digital literacy
- Serial processing vs. parallel processing
### Which tools does your institution currently use, and which do you think will be used within five years?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Use now</th>
<th>Within five years</th>
<th>Don’t know/Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blogs</td>
<td>44</td>
<td>32</td>
<td>24</td>
</tr>
<tr>
<td>Wikis</td>
<td>41</td>
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<tr>
<td>Mashups</td>
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<td>25</td>
<td>66</td>
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<tr>
<td>Video podcasts</td>
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<td>✔️</td>
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<tr>
<td>Social networks</td>
<td>✔️</td>
<td>56</td>
<td>27</td>
</tr>
<tr>
<td>Text messaging/notifications</td>
<td>✔️</td>
<td>66</td>
<td>20</td>
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Education in the Age of Social Computing, Irwin King, IWMTE2009, June 26, 2009, Taipei, Taiwan
New Challenges

- Quality and reliability of information and resources
- Responsibility and awareness of security and privacy issues
- Ethical questions, e.g. http://www.ratemyprofessors.com/, and cyberbullying
- Need for new skills (danger of new digital divides) -- both for learners and teachers
Summary

• New availability of resources for learning
  • Easy access to free and a variety of information resources
  • Education providers pressured to open up their resources to show their quality

• New learner empowerment and networks
  • New empowerment in choosing the learning provider
  • New means to express and show one’s skills

• New participation in learning processes
  • Digital natives expect to use participative approaches
Acknowledgments

- Prof. Michael R. Lyu
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- Zhenjiang Lin (Ph.D.)
- Hao Ma (Ph.D.)
- Haiqin Yang (Ph.D.)
- Xin Xin (Ph.D.)
- Chao Zhou (Ph.D.)
Welcome to the workshop on Social Computing in Education (SCE2009). The workshop is held in conjunction with the SocialComp-09, Vancouver, Canada from August 29-31, 2009.

With the advent of Web 2.0 and related technologies, Social Computing has become a new paradigm in ways we communicate, learn, and educate. Social platforms such as wikis, blogs, twitters, forums, groups, podcasts, mashups, virtual worlds, and sites for social networking, recommender systems, social bookmarking, social news, knowledge sharing, etc. are generating novel ways we acquire, access, manipulate, process, retrieve, present, and visualize information in the teaching and learning space. The social media for education has become dynamic, ubiquitous, distributed, real-time, collaborative, bottom-up, many-to-many, value-based, and personalized. This workshop solicits contributions on using Social Computing and related technologies for education, the emerging applications of Web 2.0 as an educational platform, as well as privacy, risk, security, and policy issues associated in Social Computing for Education 2.0.
Weaving Services and People on the World Wide Web

Ever since its inception, the Web has changed the landscape of human experiences on how we interact with one another and data through service infrastructures via various computing devices. This interweaving environment is now becoming ever more embedded into devices and systems that integrate seamlessly on how we live, both in our working or leisure time.

For this volume, King and Baeza-Yates selected some pioneering and cutting-edge research work that is pointing to the future of the Web. Based on the Workshop Track of the 17th International World Wide Web Conference (WWW2008) in Beijing, they selected the top contributions and asked the authors to resubmit their work with a minimum of one third of additional material from their original workshop manuscripts to be considered for this volume. After a second round of reviews and selection, 16 contributions were finally accepted.

The work within this volume represents the tip of an iceberg of the many exciting advancements on the WWW. It covers topics like semantic web services, location-based and mobile applications, personalized and context-dependent user interfaces, social networks, and folksonomies. The presentations aim at researchers in academia and industry by showcasing latest research findings. Overall they deliver an excellent picture of the current state-of-the-art, and will also serve as the basis for ongoing research discussions and point to new directions.
In what ways do new technologies pose the greatest challenges and risks to colleges and universities? Select up to three.

(% of respondents)

Potential increase in student plagiarism

- 51

Potential increase in student plagiarism
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