





## How the Learning World Became Flat: Ten Knowledge Sharing and Technology Trends Equalizing Access to Learning

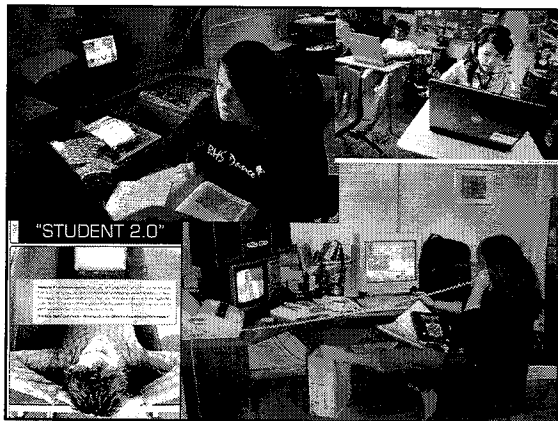
**Curtis J. Bonk, Professor, Indiana University**  
President, SurveyShare  
cjbonk@indiana.edu  
<http://php.indiana.edu/~cjbonk>

## Next Generation of Students



Tech Creates Bubble for Kids  
Alejandro Gonzalez, USA TODAY, Updated 6/20/2006 10:34 AM ET

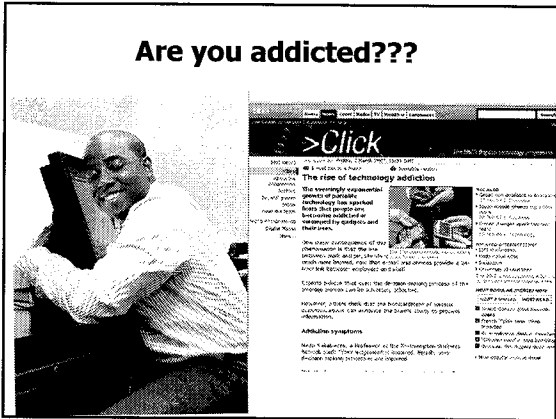


**Yahoo News**  
Love me, love my blog," as Netorati couple-surf  
BY SARA LEDWITH Thu Aug 3, 8:30 AM ET

- Nick Currie and his girlfriend Shizu Yuasa (R) surf the internet over breakfast in Tokyo in this handout photo. As the Internet evolves -- with its webcams, iPods, Instant Messaging, broadband, wi-fi and weblogs -- its image as a relationship-wrecker is changing. Now a sociable habit is emerging among the Netorati: couple-surfing. (Nick Currie/Handout/Reuters)
- "For my birthday, he upgraded my RAM and I thought it was incredibly romantic," writes Jess.



## Are you addicted???



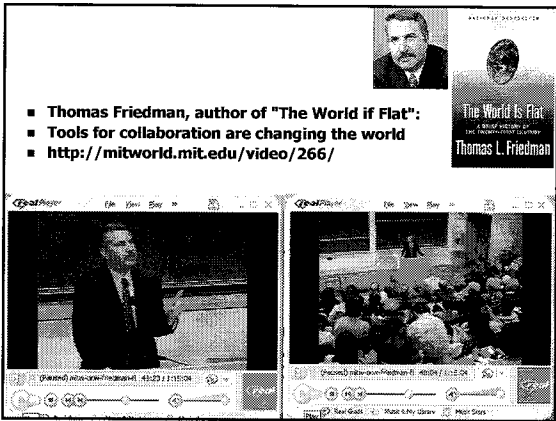
The screenshot shows a news article titled ">Click" with the sub-headline "The rise of technology addiction". The article discusses how technology has become an integral part of our lives, leading to addiction. It mentions that the average person spends about 10 hours a day on the Internet, and that this time is spent on various activities like checking email, browsing the web, and using social media. The article also notes that technology addiction can lead to social isolation and decreased productivity.

### Effects of interactive multimedia in distance learning

Giti Javidi and Ehsan Sheybani, 2004, In Proceedings of the IASTED International Conference WEB-BASED EDUCATION

**"The advancement in technology is shaping every aspect of our life, including education. One decade ago, the Internet was not critical to education. However, now, it has become an integral part of learning process. Internet technology is having a dramatic effect on colleges and universities, producing what may be the most challenging period in the history of higher education."**

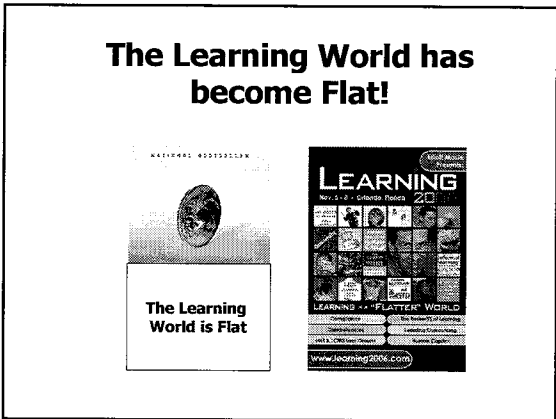
- Thomas Friedman, author of "The World is Flat":
- Tools for collaboration are changing the world
- <http://mitworld.mit.edu/video/266/>



The video player shows Thomas L. Friedman speaking at a podium. He is wearing a dark suit and a white shirt. The video player interface includes a play button, a progress bar, and a volume control icon.

- ### 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!





The image shows the cover of the book "The Learning World is Flat" by Thomas L. Friedman. The cover features a globe and the title in large, bold letters. Below the title, it says "LEARNING \* FLATTENED WORLD". The author's name, Thomas L. Friedman, is at the bottom.

- ### WE-ALL-LEARN:
- #### Ten Forces that Opened the Learning World
- Web Searching in the World of e-Books (i.e., Darwin)
  - Enormous E-Learning and Blended Learning
  - Availability of Open Source and Free Software (e.g., Moodle)
  - Leveraged Resources and OpenCourseWare (e.g., MIT)
  - Learning Object Repositories and Portals (i.e., shared content)
  - Learner Participation in Open Info Communities (YouTube)
  - Electronic Collaboration and Interaction (sync and async)
  - Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
  - Real-Time Mobility and Portability (e.g., iPhone)
  - Networks of Personalized Learning (Blogs, RSS)

## Three Larger Trends of WE-ALL-LEARN

- The availability of tools and infrastructure for learning.
- The availability of free educational content and resources (OER—Open Educational Resources).
- A move towards a culture of open access to information, international collaboration, and global sharing.

## The Ten Forces that Flattened the World

1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)



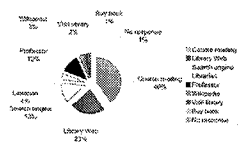

## The Search is on!



### Beyond Google: How do students conduct academic research? by Alison J. Head

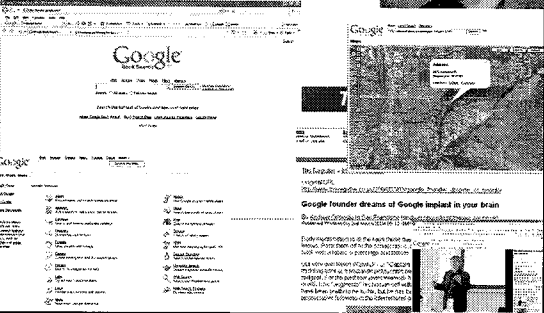

Head  
*First Monday*, volume 12, number 8 (August 2007),  
 URL:  
[http://firstmonday.org/issues/issue12\\_8/head/index.html](http://firstmonday.org/issues/issue12_8/head/index.html)

- The study, which surveyed only students majoring in the humanities and social sciences, found that 63 percent of students began their research with the library Web site or course readings, while only 16 percent began with Wikipedia or a search engine.

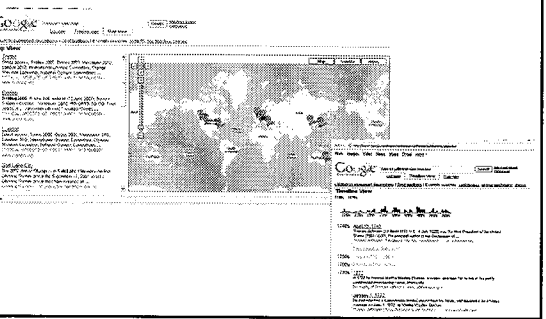


Source	Percentage
Library Web	22%
Course reading	19%
Professor	17%
Search engine	12%
Wikipedia	11%
No response	10%
Other	10%

## Google and Other Search Engines (Sergey Brin, Co-Founder) Google to Impact Chip in

## Google Working on Timeline and Map Views





### The Carlyle Letters Online: Exploring Victorian World Through Letters

### New Forms of Digital Literacy (new tests from ETS)

### The Ten Forces that Flattened the World

#### 2. Enormous E-Learning and Blended Learning

**EDUCATION with Student News**  
Students prefer online courses

Classes popular with on-campus students

From: *Los Angeles Times*, 10/10/05, [http://www.latimes.com](#)

UP — Andy Steele lives just a few blocks from the campus of Black Hills State University in Spearfish, South Dakota, so commuting to class isn't the problem. But he doesn't like lectures, and wants more control over his schedule and pace.

Dr. Steele, a 34-year-old computer science major, has been taking a number of online courses at Black Hills State. He says he's been taking more than 100 online courses.

### FLORIDA'S ONLINE BOOM

Year	Enrollment
1997	77
1998	277
1999	650
2000	2,677
2001	6,765
2002	9,928
2003	12,623
2004	25,616
2005	37,914
2006	55,983

### University of Central Florida

#### Access, Quality, and Efficiency through Online Learning

#### Academic Year 2006-2007

##### Fully Online (W) Registrations

Academic Year (summer-fall-spring)	Registrations
96-97	645
97-98	1538
98-99	3096
99-00	5668
00-01	9710
01-02	12778
02-03	16628
03-04	21950
04-05	29187
05-06	38148
06-07	42398

### The Open Univ Malaysia

(Abtar Kaur, 2005, Ed Media)

- Started August 2001 : approx. 800 students
- Total students (2005): approx. 33,000
- Total full-time academic staff : 60
- Total part-time academic staff (tutors) : approx 3,000
- 33 Learning Centres (7 Regional Centres)
- Pedagogical approach : Blended Learning

##### Enrollment Growth at the UOM

Year (2001 to 2005)	Enrollment
2001	800
2002	~1500
2003	~2500
2004	~3000
2005	33000

