

UW EDUCATIONAL
OUTREACH

Tech and the Future and All That Stuff

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 Information School
UNIVERSITY of WASHINGTON

Agenda

1. Setting the Scene
2. Students – Audience – Customers
3. Technology – Infrastructure – Environment
4. Implications
5. Questions & Discussion

Setting the Scene

Setting the Scene

- Technology – is *not* the answer.
- Change.



"Technology is the answer, of course"



"Technology is the answer, of course"



"Now...what was the question?"

Brief Exercise

- ✓ Consider - all the technologies (systems, software, devices) that you currently use on a regular basis (professionally and personally)

Brief Exercise

- ✓ Which would you give up *first* ?
- ✓ Why?

Brief Exercise

- ✓ Which would you give up *last*?
- ✓ Why?

Brief Exercise

DIGITAL IMMIGRANTS

- ✓ _____
- ✓ _____
- ✓ _____

DIGITAL NATIVES

- ✓ _____
- ✓ _____
- ✓ _____

Brief Exercise

DIGITAL IMMIGRANTS

- ✓ _____
- ✓ _____
- ✓ _____

DIGITAL NATIVES

- ✓ Cell Phone
- ✓ TXT
- ✓ Facebook

Change

**Calvin thrives on making other
people change!**

Has education changed?

- **Not much**
- **Not really**



Has the world changed?

- **Much!**
- **Really!**



And looking ahead?



In less than 30 years...

- **1981 – the personal computer**
- **1985 – the Internet**
- **1995 – the Web**
- **1999 – Google**
- **1999 – Wireless**
- **2001 – iPod**
- **2005 – YouTube**
- **2006 – Twitter**
- **2010 – iPad**



Students – Audience – Customers

Changing Students

Digital natives vs. Digital immigrants

- Experiences
- Expectations
- Pace

Experiences

Xbox, Wii, Playstation

Facebook

Computer

Wifi



playlists

txt

mobile

100s of channels

Expectations



Pace

Speed of light

Get in, get out.

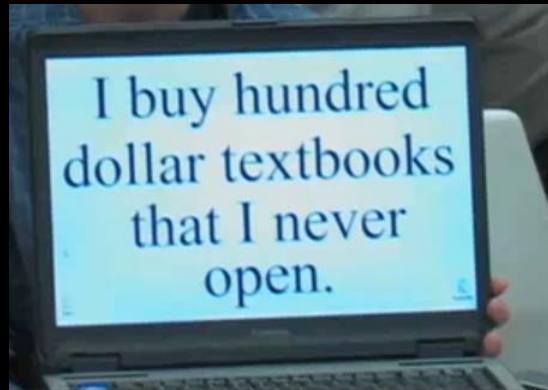
Procrastination

Multiprocessing

Last minute

A Vision of Students Today

- Michael Wesch, Kansas State University
- Cultural Anthropologist
- www.youtube.com/user/mwesch#p/u/7/dGCJ46vyR9o



Project Information Literacy

National, large-scale study in the
University of Washington's iSchool



What is it like to be a student in the Digital Age?

Meet Christopher

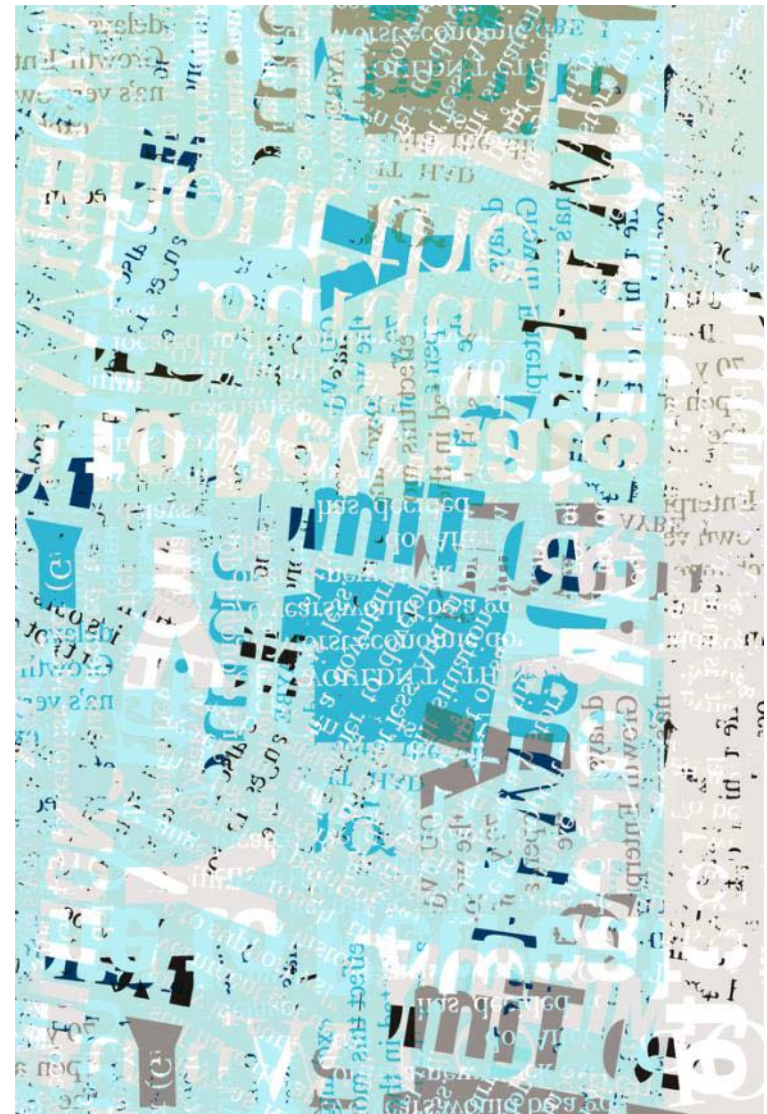
- ✓ **Curious and engaged—in the beginning.**
- ✓ **Looking for that “perfect source.”**
- ✓ **Need a summary more than anything else.**
- ✓ **Need something to get me started.**
- ✓ **I can do this on my own—self-taught.**



“Want it just in time, find it just in the right place.”

Christopher's Expectations

- ✓ It exists somewhere, just have to find it.
- ✓ On first page of results? Awesome.
- ✓ Up-to-date and current, absolutely essential.
- ✓ Findable, free, and full text = “good stuff”
- ✓ *Wikipedia* = just fine.



“Leveraging my functional anxiety.”

- Harvard Student, 2008 Discussion Sessions

Wikipedia

- **Wikipedia** - www.youtube.com/user/ProjInfoLit#p/u/2/9nOe26xY1zM

Seven out of 10 college students interviewed went to Wikipedia first for course-related research.

Students ignored faculty's warnings about using Wikipedia all together

...and just did not cite Wikipedia as a source in their papers.

Findings that keep us talking at PIL

- ✓ #1 source = Google 96%
- ✓ Student strategy = **efficiency** vs. a librarian strategy based on **thoroughness**.
- ✓ Pedagogical goals of deep learning appear at risk - students' research is highly contextual with the goal of **passing classes**.
- ✓ Procrastination ~80%



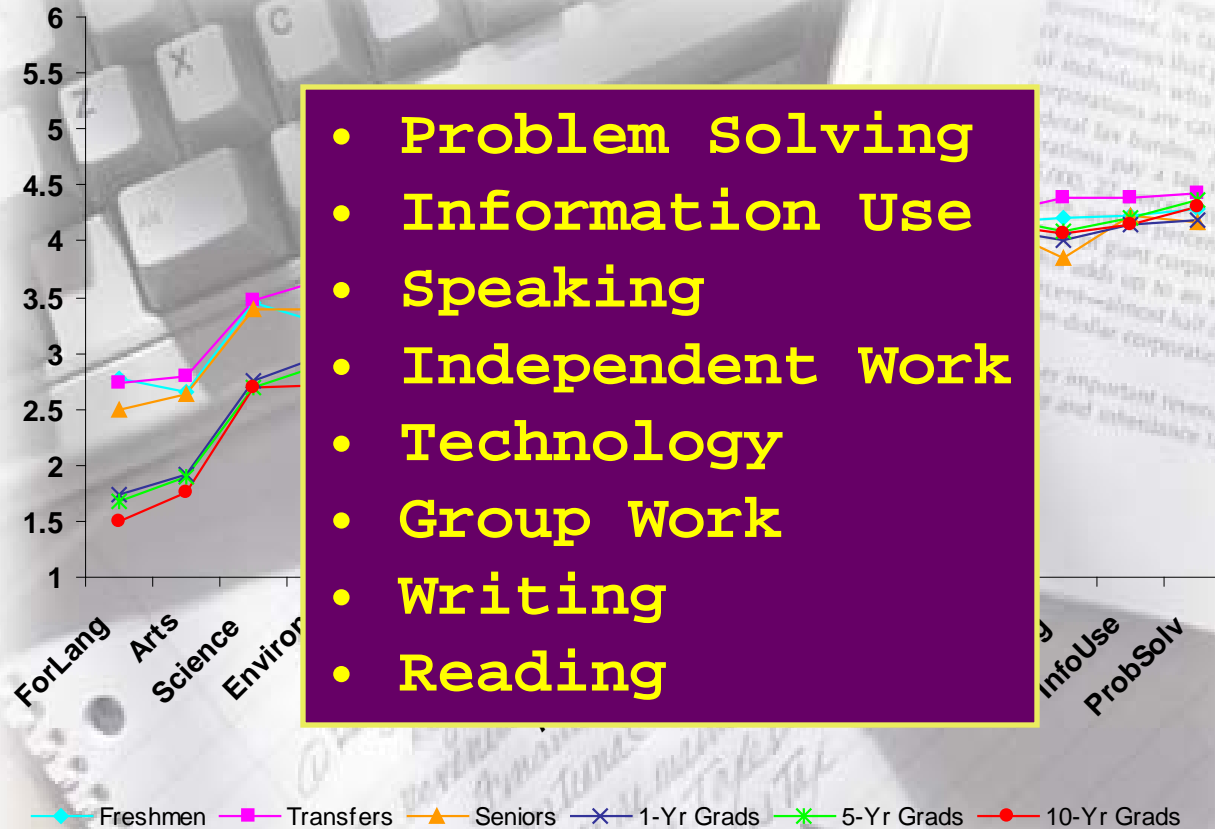
Time

- Procrastination –
- <http://www.youtube.com/user/ProjInfoLit#p/u/3/OBMVUqnPank>





Survey of Valued Skills



Students – Audience – Customers Summary

- Wide range: from immigrants to natives
- Overloaded
- Goals-oriented
- Use Google and Wikipedia
- Value problem-solving, critical thinking

Technology – Infrastructure – Environment

Computers today are one million times more powerful than those 20 years ago.



**In 20 years computers will be
one million times more
powerful than today!**



UW Learning Systems

- **Catalyst**
- **Adobe Connect**
- **DocuTek Eres**
- **Blackboard**
- **Moodle**
- **Facebook**
- **Wordpress**
- **PB Wiki**
- **Second Life**
- **And more...**

UW Learning Systems

- Catalyst
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Example

On Campus Class

INFO 200

**Intellectual Foundations of
Informatics**

<https://courses.washington.edu/info200e/>

Mike Eisenberg

Example **Online Class**

IMT 525

**Information Management & Technology in
Sports**

<https://courses.washington.edu/isports>

Mike Eisenberg



Cutting Edge and Emerging Technologies

Wesch

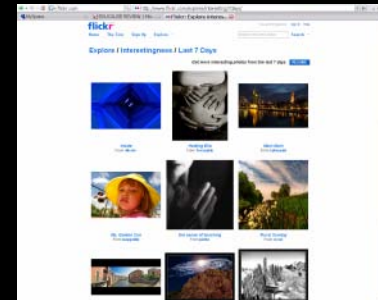
Web 2.0 ... The Machine is Us/ing Us

http://www.youtube.com/watch?v=NLIGopyXT_g

Personal Publishing

Personal Publishing

- Blogs
- Flickr
- YouTube
- Ustream.tv – live video streaming
- Twitter – live, short blogging



<http://econsultancy.com/blog/5324-20+-mind-blowing-social-media-statistics-revisited>



- Wikipedia **currently** has in excess of 14m articles
contributors have written nearly a million new

- 70% of bloggers are organic
- 38% of bloggers

YouTube

- If YouTube were a country, it would be the **third** most-populated place in the world.
- 20 hours-worth of video is **uploaded** to the site every single minute.
- comScore recently **announced** that the site had surpassed 100m viewers in the USA alone. They also reported that this US audience consumed over 6bn videos at the beginning of this year.
- According to Youtube **themselves**, over half of users visit the site at least once a week

-year, the average number of tweets per day was over

Immersive Virtual Worlds

FROM THE DIRECTOR OF TERMINATOR 2 AND TITANIC



JAMES CAMERON'S
AVATAR

EXPERIENCE IT IN IMAX 3D

The Big and Mooted Standards

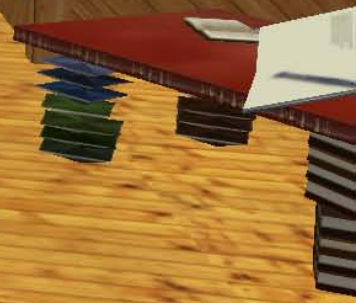
Building Collaborative For Kids

Publics Workshop

Miss Standards

11:00	Workshop	Miss Standards
11:15	Workshop	Miss Standards
11:30	Break	
11:45	Workshop	Miss Standards
12:00	Lunch	
12:15	Workshop	Miss Standards
12:30	Workshop	Miss Standards
12:45	Break	
1:00	Workshop	Miss Standards
1:15	Workshop	Miss Standards

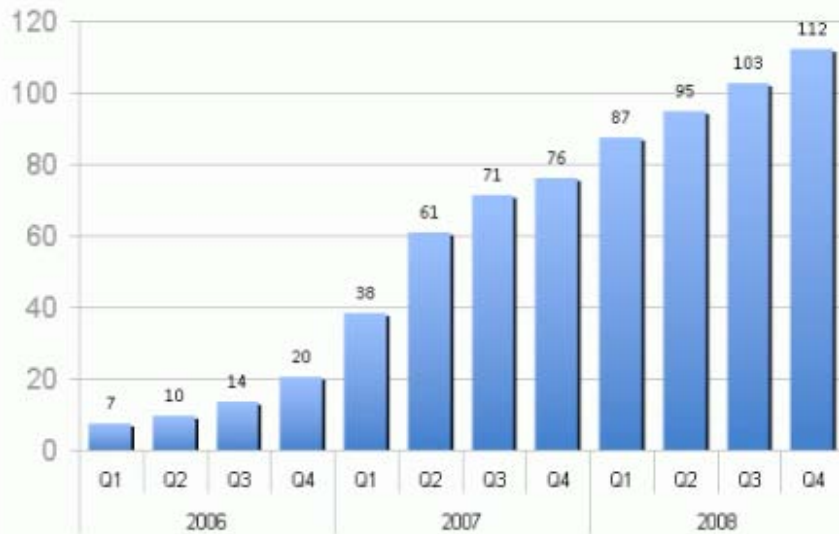
Portland, ME 2008



Stand Up

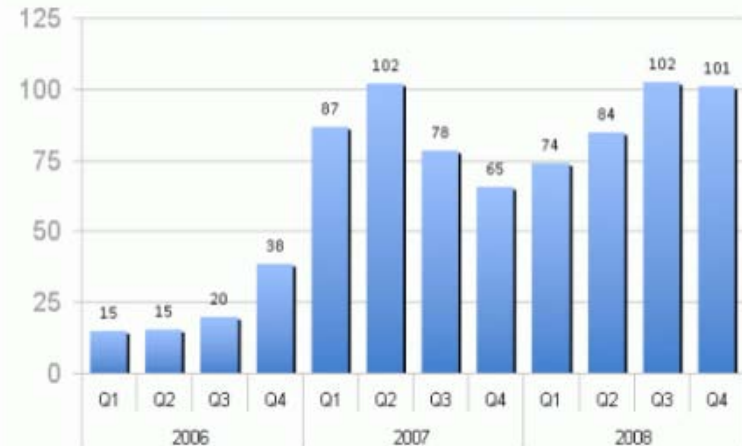
locate Fly Snapshot Search Build Map of the world. (Ctrl-M) IMap Mini-Map

User Hours per Quarter (Millions)



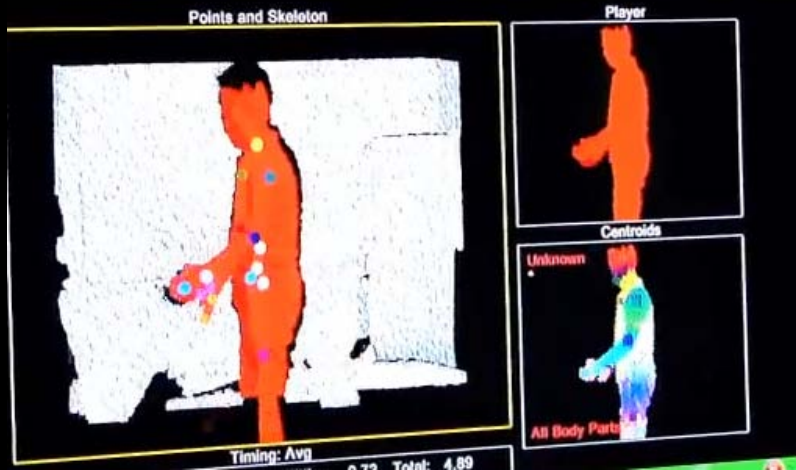
In Q4, Residents spent more than \$100 million USD on virtual goods and services in Second Life.

Value of Total User-to-User Transactions (Millions of \$US)



<http://blog.secondlife.com/category/economy/> 2/20/2009

Natal



www.youtube.com/xboxprojectnatal#p/u/0/nhQtbdmno7I

www.youtube.com/xboxprojectnatal#p/u/1/-_UzcnTYqc4

Social Networks

http://www.myspace.com/

myspace.com
a place for friends

Home | Browse | Search | Invite | Film | Mail | Blog | Favorites | Forum | Groups | Events | Videos | Music | Comedy | Classifieds

Cool New Videos

49,859 uploaded today!

Sex Ed with Ron Jeremy
Sacrilege Street

Street Screenings
Cancer Treatments

Snake Eats Hippo
Sean

They Will Surf Again
Life Rolls On

Member Login

E-Mail:
Password:

Remember Me

LOGIN SIGN UP!

Forgot your password?

Cool New People

Nate Paige aaron

Videos

Fierce Blue Ascot - Under the Moon

In Westbury and Fierce Blue Ascot's video for "Under the Moon"

Watch It Now!

Funeral For A Friend
Wales, UK

A towering behemoth of soaring guitars, epic widescreen ambition and grand sweeping anthems, Funeral For A Friend release their eagerly anticipated new album *Zales Don't Tell / I Am Alive* on May 15th. Listen to it before it hits shelves, exclusively here on Myspace!

Listen here!

EXCLUSIVE

MySpace Music

Downloads
Events
Fimmakers
Games
Groups

Horoscopes
Impact
Jobs
Movies
Music

Music Videos
MySpaceIM
Schools
TV On Demand
Videos

MySpace Specials

SLAMDANCE: CALL FOR ENTRIES!

Hey MySpacers, are you the next Ben Affleck or Matt Damon? SLAMDANCE wants to read your screenplay and make it the next big thing! SLAMDANCE accepts screenplays in every genre, both features and shorts, on ANY topic from new writers living in every country around the world! [Click here for more information!](#)

Create Your Profile!

Tell us about yourself, upload your pictures, and start adding friends to your network.

Browse Through Profiles!

Read through millions of profiles on MySpace! See pics, read blogs, and more!

Invite Your Friends!

Invite your friends, and as they invite their friends, your network will grow even larger!

Learn More

Start Now

Browse Now

Invite Friends Now

©2003-2007 MySpace.com. All Rights Reserved.

FAQ | Terms | Privacy | Safety Tips | Contact MySpace | Promote! | Advertise | MySpace International

http://www.linkedin.com/home

Account & Settings | Help | Sign Out

Advanced Search People

Welcome to Gmail Bank of America | Home | Accounts | iSchool/UW | Stuff | Big | Twitter: What are you ...

LinkedIn Jobs - Answers - Companies

Click here to search LinkedIn for jobs in your field.

Build your network (Why?)

Find contacts who are already on LinkedIn

Web email contacts

Check your address book to find contacts who are on LinkedIn

Other

People you may know

Chance Hunt
Asst. Director, Public Services at The Seattle Public Library

Art Wolinsky
Independent Education Management

Kara Fox
Librarian

Verizon Wireless

Home | Profile

Search

Home | Groups | Profile | Contacts | Inboxes (4)

Group.php?gid=223329650661

Brian | Entertain | News & Info | Teaching | MISC-TOOLS | Research | Scenery | Google Maps | Crisis | IMT 525 - Winter 2009

facebook

Search

Home | Profile

iSports - Winter 2010

Wall | Info | Discussions | Photos | Video | Events

Write something...

Attach:

Share

Fisher Qua "Examining the role of new media and technology in shaping the future of education" - seems apropos to this term's subject matter.

TEDxIYED: Independently organized TED event
tedxmyed.com
TEDxIYED

11 hours ago · Comment · Like · Share · Report

RECENT ACTIVITY

Else Le Brun discussed Week 3 - Summary Posting for All Groups on the Sports - Winter 2010 discussion board.

Mary Whipple discussed Week 10 Discussion - Cutting/Bleeding Edge Technology on the Sports - Winter 2010 discussion board.

3 more similar stories

Mike Eisenberg You probably don't follow these kinds of things, but this is a major development:

Cisco - New networking equipment for major backbone that will enable transfer speeds up to 12x faster than today's tech. Up to 322 terabit data transfer speeds.

http://www.pcworld.com/businesscenter/article/191090/cisco_unveils_next_internet_core_router.html
Yesterday at 10:35am · Comment · Like · Report

Fisher Qua This relates to the "data center" piece of a network infrastructure, correct? The router would receive and then re-transmit data coming to it over an ISP's network or from other sources? If this is the case, I can understand its value in increasing the overall capacity of the infrastructure, but how does it address the matter of expanding bandwidth...

See More
10 hours ago · Delete

Write a comment...

RECENT ACTIVITY

Fisher Qua and Joyce Ardies discussed Week 10 Discussion - Cutting/Bleeding Edge Technology on the Sports - Winter 2010 discussion board.

Message All Members

Edit Group Settings

Edit Members

Invite People to Join

Create Group Event

Leave Group

Write something about iSports - Winter 2010.

Information

Category: Student Groups - Classes & Departments

Description: Facebook group for IMT 525: Information Management and Technology in Sports.

Privacy Type: Closed: Limited public content. Members can see all content.

Admins

- Mike Eisenberg (creator)

Members

6 of 33 members See All

Gretchen Kris Pufford Mary

Get the latest deals by becoming a fan today.

Edutopia

Be a fan of Edutopia: Teacher Resour Classroom Tips, Learning, Stud Engagement St more!

Laura Eisenberg Rob Darrow an are fans.

Cities I've V

Pin your travel off cities you've Create your ma

Like
Jin Kim likes this

More Ads

<http://www.facebook.com/press/info.php?statistics>

Facebook

According to Facebook's [internal](#) statistics:

Average User Figures

Average user has 130 friends on the site

Average user sends 8 friend requests per month

Average user spends more than 55 minutes per day on Facebook

Average user clicks the Like button on 9 pieces of content each month

Average user writes 25 comments on Facebook content each month

Average user becomes a fan of 4 Pages each month

Average user is invited to 3 events per month

Average user is a member of 13 groups

<http://www.facebook.com/press/info.php?statistics>

... 50% of active users log into the site each day. This would
... 24 hours... A considerable increase from

MySpace

- Although now overtaken by Facebook, MySpace is the second largest social network, [experiencing](#) in excess of 60m unique users each month.
- MySpace [apparently](#) reaches 30% of UK adults aged 15-24 - it's been [suggested](#) that its as common to have a MySpace account in the UK as it is to own a dog.
- According to [Knol](#), MySpace has more than 115m active monthly users globally with, on average, 300,000 new people signing up to the site every day.

... Facebook through mobile devices. In six months, this is over
... (only 50m). As before, it's no secret that users who
those who don't. ... are almost 50% more active than

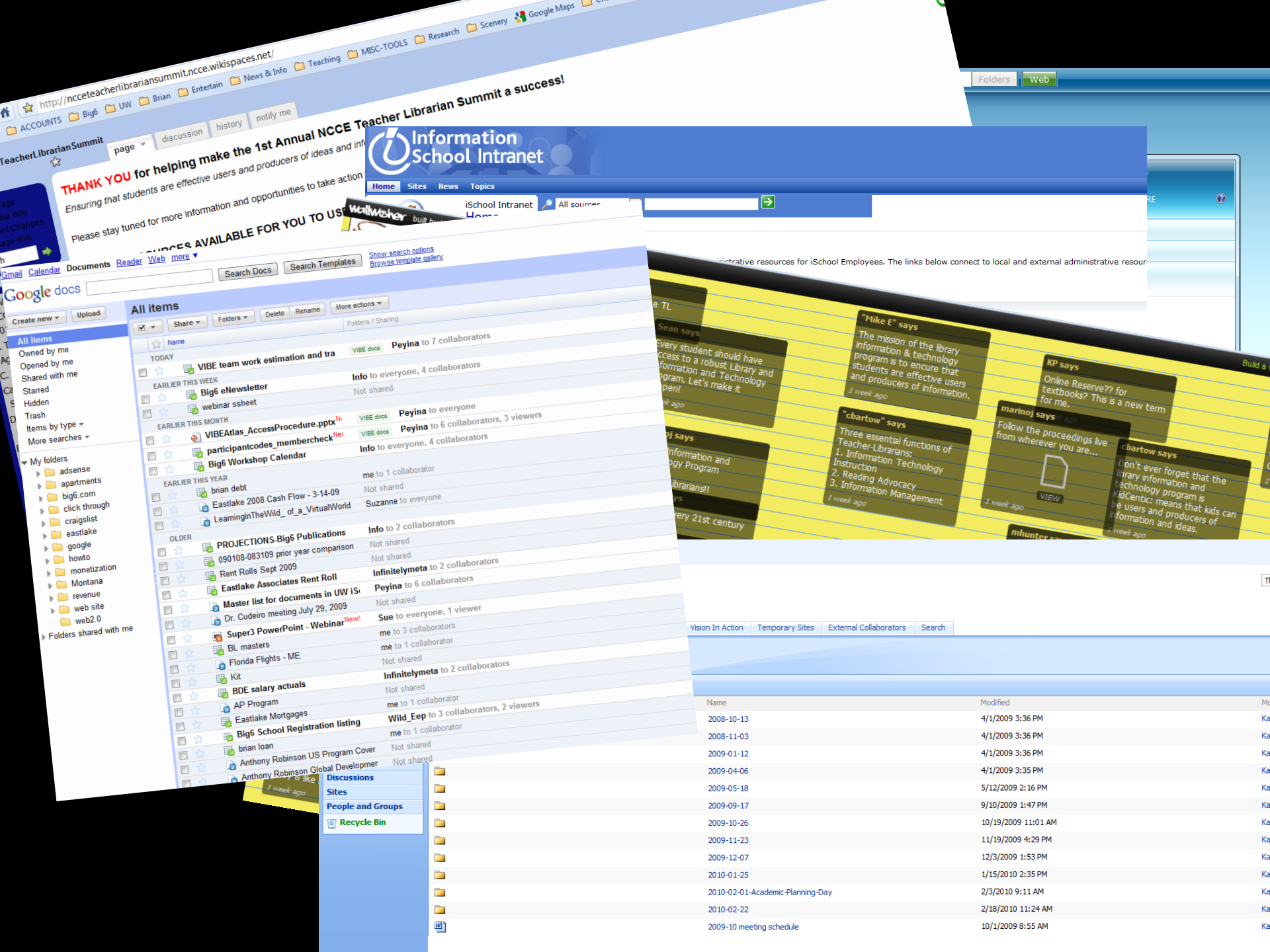


<http://econsultancy.com/blog/4327-20-+-mind-blowing-social-media-statistics>

Collaborative Spaces

Collaborative Spaces

- **Googledocs**
- **Wiki**
- **Ning**
- **Wallwisher**
- **MS Live**
- **SharePoint**



http://ncceteacherlibrariansummit.ncce.wikispaces.net/

THANK YOU for helping make the 1st Annual NCE Teacher Librarian Summit a success!
Ensuring that students are effective users and producers of ideas and information.
Please stay tuned for more information and opportunities to take action.

Information School Intranet

Home Sites News Topics

Folders Web

Google docs

All items

- TODAY**
 - VIBE team work estimation and tra VIBE docs Peyina to 7 collaborators
- EARLIER THIS WEEK**
 - Big6 eNewsletter Info to everyone, 4 collaborators
 - webinar ssheet Not shared
- EARLIER THIS MONTH**
 - VIBEAtlas_AccessProcedure.pptx VIBE docs Peyina to everyone
 - participantcodes_membercheck VIBE docs Peyina to 6 collaborators, 3 viewers
 - Big6 Workshop Calendar Info to everyone, 4 collaborators
- EARLIER THIS YEAR**
 - brian debt me to 1 collaborator
 - Eastlake 2008 Cash Flow - 3-14-09 Not shared
 - LeamingInTheWild_of_a_VirtualWorld Suzanne to everyone
- OLDER**
 - PROJECTIONS.Big6 Publications Info to 2 collaborators
 - 090108-083109 prior year comparison Not shared
 - Rent Rolls Sept 2009 Infinitelymeta to 2 collaborators
 - Eastlake Associates Rent Roll Peyina to 6 collaborators
 - Master list for documents in UW IS Not shared
 - Dr. Cudeiro meeting July 29, 2009 Sue to everyone, 1 viewer
 - Super3 PowerPoint - Webinar me to 3 collaborators
 - BL masters me to 1 collaborator
 - Florida Flights - ME Not shared
 - Kit Infinitelymeta to 2 collaborators
 - BDE salary actuals Not shared
 - AP Program me to 1 collaborator
 - Eastlake Mortgages Wild_Eep to 3 collaborators, 2 viewers
 - Big6 School Registration listing me to 1 collaborator
 - brian loan Not shared
 - Anthony Robinson US Program Cover Not shared
 - Anthony Robinson Global Developer Not shared
 - Anthony Robinson Global Developer Not shared

Administrative resources for iSchool Employees. The links below connect to local and external administrative resources.

- Sean says: Every student should have access to a robust Library and Information and Technology Program. Let's make it happen!
- "Mike E" says: The mission of the library information & technology program is to ensure that students are effective users and producers of information.
- KP says: Online Reserve?? for textbooks? This is a new term for me.
- marinoj says: Follow the proceedings live from wherever you are...
- "cbartow" says: Three essential functions of Teacher-Librarians:
 1. Information Technology Instruction
 2. Reading Advocacy
 3. Information Management
- cbartow says: Don't ever forget that the library information and technology program is KidCentric: means that kids can be users and producers of information and ideas.

Vision In Action Temporary Sites External Collaborators Search

Name	Modified	Owner
2008-10-13	4/1/2009 3:36 PM	Ka
2008-11-03	4/1/2009 3:36 PM	Ka
2009-01-12	4/1/2009 3:36 PM	Ka
2009-04-06	4/1/2009 3:35 PM	Ka
2009-05-18	5/12/2009 2:16 PM	Ka
2009-09-17	9/10/2009 1:47 PM	Ka
2009-10-26	10/19/2009 11:01 AM	Ka
2009-11-23	11/19/2009 4:29 PM	Ka
2009-12-07	12/3/2009 1:53 PM	Ka
2010-01-25	1/15/2010 2:35 PM	Ka
2010-02-01-Academic-Planning-Day	2/3/2010 9:11 AM	Ka
2010-02-22	2/18/2010 11:24 AM	Ka
2009-10 meeting schedule	10/1/2009 8:55 AM	Ka

- Discussions
- Sites
- People and Groups
- Recycle Bin

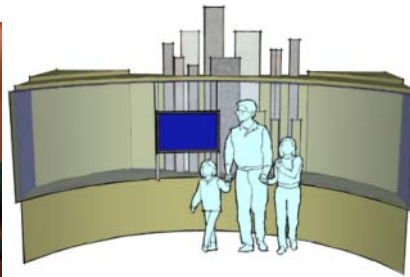
Personal Mobile Digital Devices



And beyond...

Intelligent Surfaces/Walls/Windows

- MS Surface
- iPad



Open innovation around intelligent walls, ceiling & floors in consumer homes!

Implications

Implications - Publishing

- Students are **producers** not just users of information and knowledge.
- Key skills - beyond writing to **presenting** in all forms.
- New challenges in terms of credibility, authority, trust, intellectual property.

Implications – Virtual Worlds

- **Immersive interaction**
- **Sense of “place”**
- **Well beyond webinar, video-, audio-conferencing**
- **No mouse or keyboard!**

Implications - Social Networks

- **This is where they are.**
- **For younger students, much more important than e-mail.**
- **Community.**
- **Information.**
- **Communication.**

Implications – Mobile Devices

- Any place.
- Always connected.
- Cyborgs?

and more generally...

A large, curling ocean wave with white foam, set against a blue sky. The wave is the central focus, with its crest curling over. The water is a deep blue-green color, and the foam is bright white. The sky is a clear, light blue.

**one million times more
powerful than today!**

Life in the 21st Century

- Anyone
- Anywhere
- Anytime
- Any Form

- Anyone
- Anywhere
- Anytime
- Any Form

A Parallel Information Universe

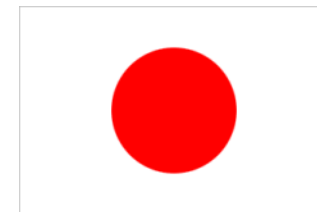
Implications

- **From factory to individual**
- **Physical and virtual**
- **On demand**
- **At point of sale/use**
- **Flexible – customized - individualized**
- **Long tail products and services**
- **From teaching to learning**
 - **Content**
 - **Methods**
 - **Resources**
 - **Assessments**

Implications - Institutionally

- **Open marketplace**
- **Global competition**
- **Courses – programs – degrees**
- **Accreditation?**
- **Reputation/review systems**
- **Brand matters!**

Brand





To Stay on Top

- Focus on customers – users in context
- Collaborate
- Be *willing* to change
- Be *able* to change
- Embrace the entrepreneurial spirit
- Keep looking ahead
- View problems are opportunities



Calvin and Hobbes by Bill Watterson

Thanks
for
listening!



Questions Discussion Comments