




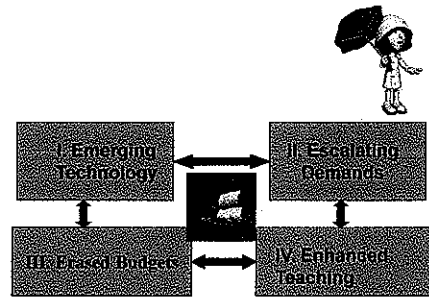
The Perfect E-Storm: Emerging Technology, Enhanced Pedagogy, Enormous Learner Demands, and Erased Budgets

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 President, SurveyShare, Inc.
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cjbond@indiana.edu



Four Storms are Approaching!



Ok, Million Dollar Question: Which technology will impact us the most?



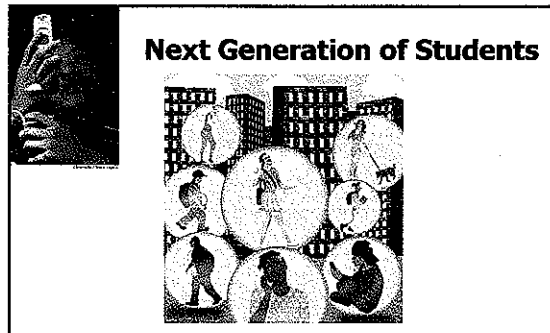
Storm 1. Emerging Learning Technologies

1. Assistive Technologies
2. Blogs and Online Diaries
3. OpenCourseWare and Open Educational Resources
4. Electronic Books
5. Online Communities and Learning Portals
6. Intelligent Agents
7. Wikis and Wikibooks
8. Online Games and Simulations (Massive Multiplayer Gaming)
9. Shared Online Video (YouTube, TeacherTube)
10. Peer-to-Peer Collaboration
11. Reusable Content Objects
12. Videostreaming, IP Videoconferencing
13. Virtual Worlds/Reality
14. Wearable Computing
15. Wireless Tech: Tablet PCs, Handheld Devices
16. Digital Portfolios

21st Century Technology: Podcasts and Wikis and Blogs, Oh My!!!!



Next Generation of Students



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

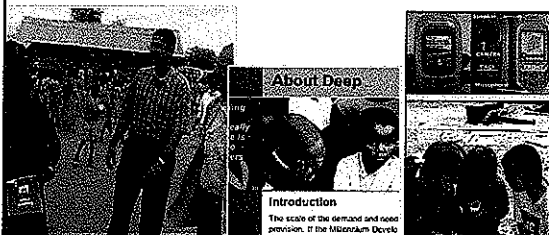


Bonk's Addiction Q'er

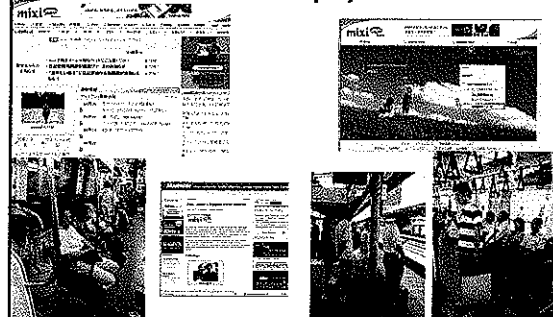
1. Who has 2 or more cell phones with Internet access?
2. Who has 2 or more laptop computers with wireless connections?
3. Who is on email in the morning? At noon? Who does it at night?
4. Who suffers from nervous tension when you cannot get on email?
5. Who is on the Web right now?

1. Wireless in Africa and Pocket School in Latin America

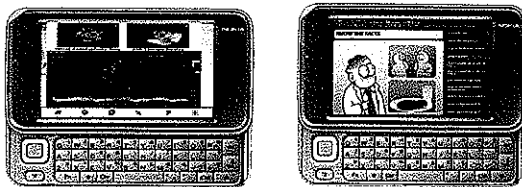
<http://www.receiver.vodafone.com/mobile-learning-in-developing-countries>
 Traxler, John (in press). Mobile learning in "developing" countries—not to different. *Vodafone Receiver*. See <http://www.receiver.vodafone.com/>



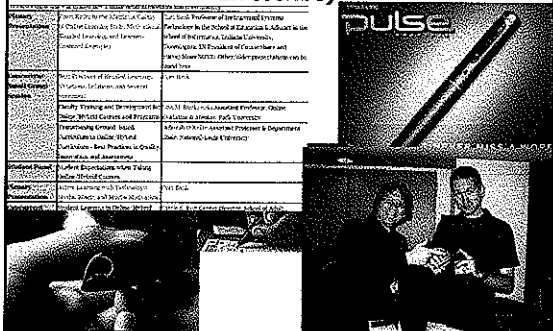
2. Mobile Learning and Social Networking (e.g., Mixi, Yayoi Anzai, Professor Japan)



3. Mobile Health and Medical Education (Courtesy of Paul Kim, Stanford University)



4. Magic Pens! (The Pulse from Livescribe)



5. \$10 Laptops

**Jerry Kronenberg Monday, August 4, 2008
Boston Herald
Designers on quest to build \$12 computer**

The screenshot shows a news article on the Herald.com website. The main headline is "Designers on quest to build \$12 computer". There is a sub-headline "India says it is developing a \$10 laptop" and a small image of a laptop. The article text is partially visible, mentioning "The specifications...".

6. Online Language Learning

(Mixer, Livemocha, Friends Abroad)

A collage of several screenshots from different online language learning websites. The sites shown include Mixer, Livemocha, and Friends Abroad. The screenshots display various interface elements like user profiles, lesson plans, and chat windows.

7. Shared Online Video

(e.g., YouTube)

A screenshot of a YouTube channel page. It shows a grid of video thumbnails, channel statistics, and a list of videos. The interface is typical of YouTube from around 2008.

TeacherTube

A screenshot of the TeacherTube website. It features a search bar, navigation links, and a list of educational videos. The site is designed for teachers to share and find instructional content.

Student Produced Video

In the year since its invention, the Flip has taken 13 percent of the camcorder market, according to its maker, Pure Digital. Its size and simplicity mean it can go where most camcorders can't.

An advertisement for Flip camcorders. It displays several models: Flip Ultra, Flip Video, Flip Mini, and Flip. The text highlights the product's portability and market success.

8. Anchored Instruction (find anchoring event)

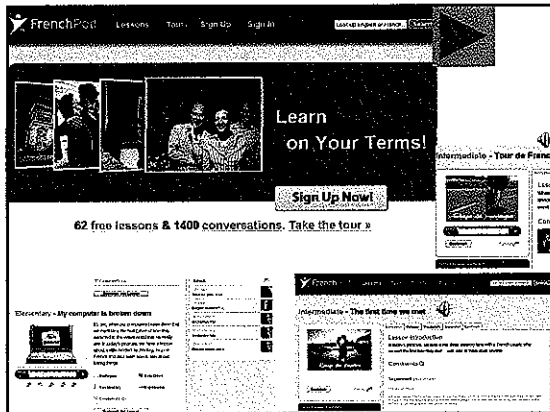
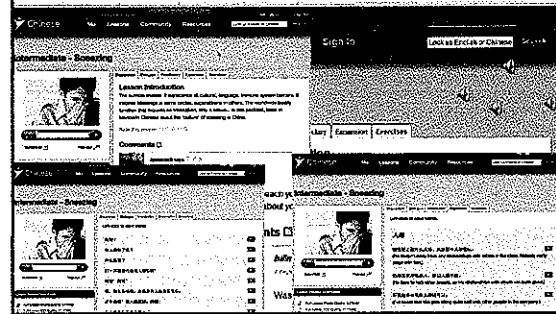
(YouTube, CNN, BBC, TeacherTube, CurrentTV)

A screenshot of a YouTube video player. The video is titled "3D Human Anatomy" and shows a 3D model of a human skeleton with various parts highlighted. The interface includes the YouTube logo, search bar, and video controls.

9. Videostreamed Lectures (Professor Marian Diamond, Biology)



10. Podcast for Language Learning (ChinesePod—learn Mandarin)



Podcast Questions

1. Who has listened to a podcast?
2. Who listens to a certain podcast on a regular basis?
3. Who has created a podcast?
4. Who has created a vodcast?
5. Who thinks podcasting is simply more talking heads?

11. Learner Portals The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys, John Evelyn



Tracking Live Internet Events (e.g., Thawing: A Colossal of an Idea) (caught Feb. 2007; thawed April 30, 2008)



12. Adventure Blogging

15 Below
2003 North Pole Diving Expedition

mares
JUST ADD WATER

Real Explorer or Teacher Interaction Jean Pennycook (Geographical Blogging)

Real Explorer or Teacher Interaction
Jean Pennycook (Geographical Blogging)

15 Below 2003 North Pole Diving Expedition

Adventure Blogging: North Pole Marathon

Adventure Blogging:
North Pole Marathon

Blogging Questions

1. Who has a blog? Any for a specific class?
2. Who regularly reads other people's blogs?
3. Who assigns blogging tasks?
4. Who has created a video blog?
5. Who thinks it is an utter waste of time to blog?

13. Wikibook Creation

- Ask students to create a Wikibook.
- Give feedback to peers.

Web 2.0 and Emerging Learning Technologies/D Models

Educational Impact of Emerging Technologies: Drawing Media, Mobile Learning

Wikibook and Wikipedia Editing

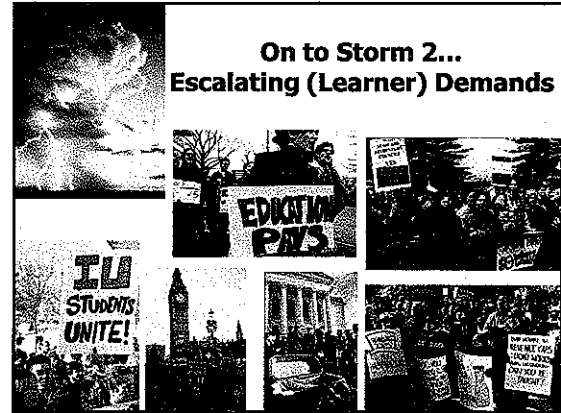
- Ask students to edit a page from Wikipedia or a chapter in a wikibook.
- The write a reflection paper on it.

Web 2.0 and Emerging Learning Technologies/D Models

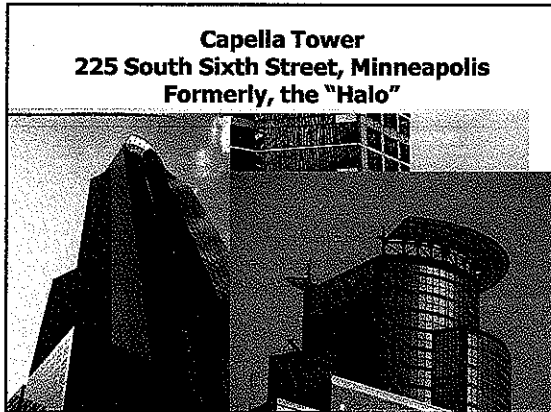
Educational Impact of Emerging Technologies: Drawing Media, Mobile Learning

Wiki Questions

1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?



On to Storm 2...
Escalating (Learner) Demands



Capella Tower
225 South Sixth Street, Minneapolis
Formerly, the "Halo"

Total and Online Enrollment in Postsecondary Institutions

Fall 2002 through Fall 2006

(For Degree-Granting Institutions)

	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Annual Growth Rate Total Online Enrollment	Online Enrollment as Percent of Total Enrollment
Fall 2002	16,611,710	NA	1,602,070	NA	9.7%
Fall 2003	16,900,479	1.7%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.2%	2,329,743	18.2%	13.5%
Fall 2005	17,428,500	0.9%	3,180,050	36.5%	18.2%
Fall 2006	17,647,720	1.3%	3,488,381	9.7%	19.8%

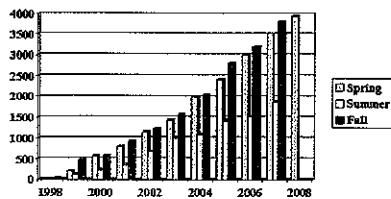
SOURCE: Online Nation: Five Years of Growth in Online Learning (October 2007)

Sara Cordell, professor of English at the University of Illinois-Springfield, says she feels online students become better writers because they get so much practice. NPR Special, Nov 29, 2007, Larry Abramson. (67% of US Colleges and universities offer online courses; 35% offer fully online programs.)

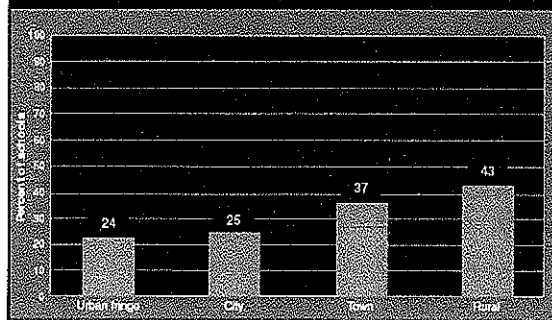


University of Illinois at Springfield Online course enrollments

UIS Online Enrollment



ONLINE COURSE OFFERINGS



Education Week, March 27, 2007

ABROAD

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Study Arabic in the Middle East and Northern Africa Language Schools

Learn Arabic in the Middle East and Northern Africa. Study Arabic in the Middle East and Northern Africa. Study Arabic in the Middle East and Northern Africa.

Online Language Learning
(Mixer, Livemocha, Friends Abroad)

Highly Motivational

My Profile | My Courses | My Friends | My Activity

Back to High e-Motiv. Together and save \$240 on average.

E-Learning Conferences in the Middle East

Under the patronage of... **Keynote Speakers**

e-Learning 'Industry Leaders and International Experts' to meet in Abu Dhabi Nov 19-21

Another major educational coup for the Higher Colleges of Technology takes place November 19-21 in Abu Dhabi at the fourth annual e-Merging e-Learning Conference.

Under the patronage of HE Sheikh Mubarak bin Mubarak Al Nahyan, Minister of Education and Chancellor of the Higher Colleges of Technology, the conference features an impressive array of high-powered speakers and panels with diverse range of business and educational experience in the world of business and education technology.

Declarations of e-Learning

TQM

Dubai e-Learning Declaration

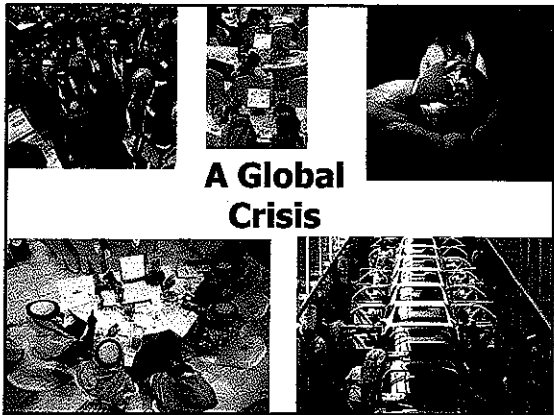
1. Having passionate leadership for the development and adoption of e-learning in all aspects of a K-based modern society
2. Creating learning opportunities for all, through availability, accessibility,

Download full text of the Declaration

We're in the Midst of Storm 3: Erased Budgets

Ministry of Education

Legislator



A Global Crisis



Online News Stories

China slowdown fuels Budget deficit talk

Posted on Oct 24, 2008 10:30 AM by ABC News

Beijing - China's economic slowdown has fueled speculation that the government will have to raise taxes to cover the deficit. Analysts say that the government will have to raise taxes to cover the deficit.

China says that its growth will slow slightly to 7.5% per year next year but says it will be a shock above 7.5% per year.

The news that could push America's budget into deficit.

By Professor Tom ABC that will be the first time since 1980 that the U.S. has had a budget deficit.

Online Photos and News

Photo from Reuters Pictures

10/24/08 10:30 AM

Photo from Reuters Pictures

10/24/08 10:30 AM

Photo from Reuters Pictures

Online Consumer-Generated Television

EU countries may use economic crisis to ditch climate change commitments

High-level EU officials are expected to...

Keep browsing

- EU may ban plastic TVs
- The Green (EU) (Inaugural)
- AMAZON like what you see
- Ancient Persians passed
- That cold snap gets panache

Personal Blogs

The eDiscovery Paradigm Shift

THE RAPID INCREASE IN THE VOLUME OF ELECTRONICALLY STORED INFORMATION (ESI) HAS PROBABLY CHANGED THE PARADIGM OF THE LITIGATION INDUSTRY AND CAUSED A SIGNIFICANT PARADIGM SHIFT IN HOW TO HANDLE ESI. THE PARADIGM SHIFT IS TO MOVE FROM A PAPER-BASED PARADIGM TO AN ELECTRONIC PARADIGM. THE PARADIGM SHIFT IS TO MOVE FROM A PAPER-BASED PARADIGM TO AN ELECTRONIC PARADIGM.

WEDNESDAY, SEPTEMBER 10, 2008

The Global Financial Crisis of 2008 Will Provide a Windfall to eDiscovery Market

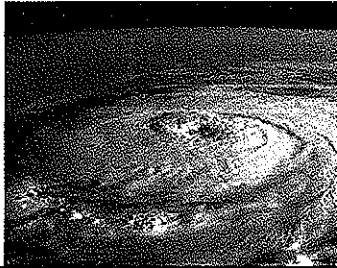
With the global financial crisis of 2008 to full swing, I predict that eDiscovery providers will see a windfall for years to come. The very nature of the financial industry will provide billions of pages of paper and multiples of electronically stored information (ESI) stored all over the world for eDiscovery professionals to mine to extract, process, analyze and preserve for potential courtroom, trial and the inevitable stage of appeal. With most law firms ill-equipped to deal with the new world of eDiscovery, they will have to rely on the new breed of eDiscovery consultants, technology vendors and electronic data discovery processing professionals to even get an initial understanding of the data involved in any of these matters.

In the Midst of Budget Cutbacks, there are Technology Giveaways

In the Midst of Budget Cutbacks, there are Technology Giveaways

As budget cuts loom, many companies are offering technology giveaways to their employees. This includes everything from laptops to cell phones. Some companies are even offering to pay for the cost of a new computer or tablet. This is a great way for companies to show their appreciation for their employees and to help them stay productive during these difficult times.

On to Storm 4: Enhanced Teaching (and Excellent Retention) (a swirling storm)



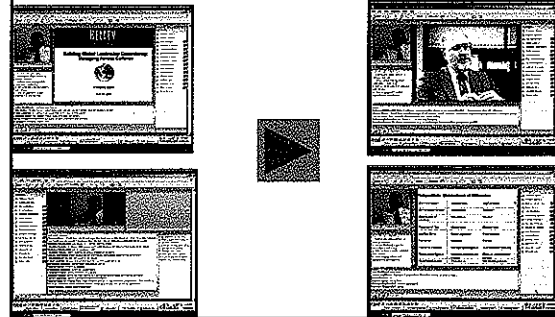
TEC-VARIETY Model for Online Motivation and Retention

1. **Tone/Climate:** Psych Safety, Comfort, Belonging
2. **Encouragement, Feedback:** Responsive, Supports
3. **Curiosity:** Fun, Fantasy, Control
- ...
4. **Variety:** Novelty, Intrigue, Unknowns
5. **Autonomy:** Choice: Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interesting
7. **Interactive:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Excitement
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yields Products:** Goal Driven, Products, Success, Ownership

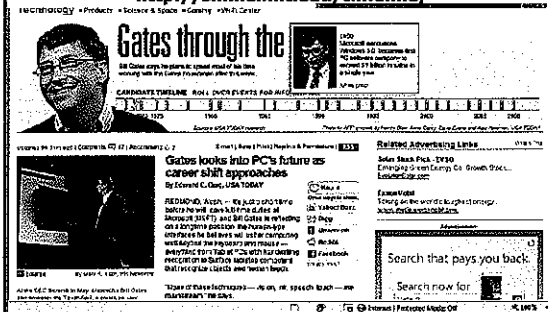
1. Tone/Climate: A. Video Course Intros (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)



2. Encouragement, Feedback, etc.: A. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)




3. Curiosity, Fun: A. Exploration and Demonstration: Virtual Tours and Timelines (HyperHistory) <http://simile.mit.edu/timeline/>



4. Variety, Novelty: A. Video Streamed Lectures & Expert Commenting



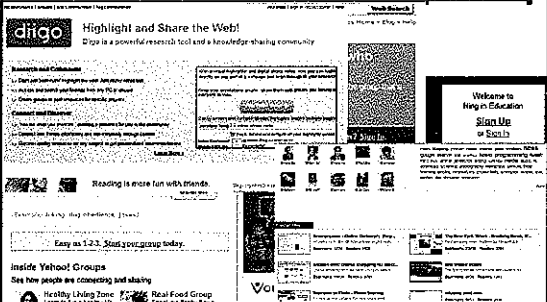
5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)
The Electronic Literati, in Search of a Voice, June 1, 2007, Chronicle of Higher Education, Jeffrey Young
 (links to text, soundtracks, video clips, etc.)




6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch
 Connected (Part 1/2) from Abilene Christian Univ:
<http://www.youtube.com/watch?v=7p8fEgn0rhU>




7. Interactive, Collaborative: A. Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups, Diigo, etc.



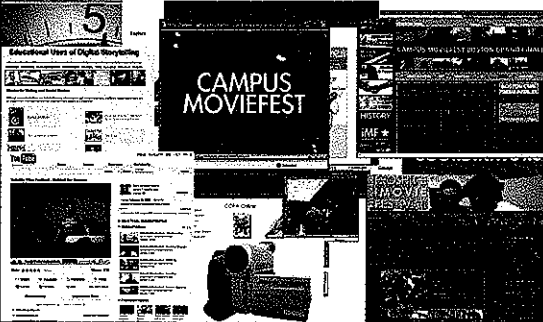
8. Engagement, Effort: A. Mobile Literacy (courtesy of Paul Kim, Stanford, Pocket School)



9. Tension, Challenge, etc.: A. Electronic Guests & Mentoring (Simon Fraser University News: <http://www.sfu.ca/medlapr/news/2001/Sept6/hightech.html>)



10. Yields Products, Goals: A. Online Portfolios or Galleries (Flickr, Omnium)



3 99 Seconds Stop and Share: Top Three Things Learned so Far!

R2D2 Model. Addressing Learning Styles

Curtis J. Bonk | Ke Zhang

Empowering Online Learning

100+ Activities for Reading, Reflecting, Displaying & Doing

The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.

Read 1a. Wiki Steps on How to do Something: Wikihow

<http://www.wikihow.com/>



2. Reflective and Observational Learners

- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives

Reflect 2a. ORL or Library Day (L = Cost, M = Risk, M/H = Time) (Bonk, 1999)

20. Leadership That Sparks Learning

Teacher Query
Posted on 04/27/04 07:43 AM

Mohrley, Eric, Mason, Robert, & Wiers, J. Timothy (2000). Leadership that sparks learning. Educational Leadership, 41, 48-51.

The authors look at 25 years of research that was done by the IAEA centers Research for Education & Learning. This study asked one question: Do the focus and quality of leadership have a significant relationship to student achievement? What specific leadership responsibilities and practices have the greatest impact? The authors of the article present a direct correlation between leadership and student achievement.

They found that "Leadership matters." It was especially effective during leadership, and it drove leaders not only to do, but how, when, and why to do it. The article continues to go deeper to explore each one of these variables.

I believe this article would be beneficial for anyone who works in a school leader.

Replies

201 8/2/10 **Teacher Query** 04/27/04 07:35 AM

CONGRATULATIONS! You have your article back! Great work! I am very pleased!

I think that the need for this resource has a great impact on leadership! Each of the different theorists has been an important leader in the area of educational psychology.

You have done a great job summarizing all of the articles! Good luck with your GEL primary project!

202 8/2/10 **Teacher Query** 04/27/04 07:59 AM

Thank you so much for your support and encouragement through this resource. You have made this assignment more interesting and fun.

ORL for Eric Vogt

ORL for Fred Unsicker

Reflect 2b. Paired Weblog Critiques

Reflect 2c. Partner & Team Blogs (especially English writing class)

1. Instructor or Tutor blog: resources, information, space to chat
2. Learner blog: reflections, sharing links and pics, fosters ownership of learning
3. Partner blog: work on team projects or activities
4. Class blog: international exchanges, projects, PBL
5. Revision: review and explode sentences from previous posts, add details
6. Nutshell: summarize themes or comments across blogs
7. Blog on blog: reflections on feelings, confusions, and experiences with blogs

3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Display 3a. Pubcasts! (videos of scientific papers and science)
 NSF, the Public Library of Science, and the San Diego Supercomputing Center created a YouTube for scientists to help demystify important research papers. See SciVee <http://www.scivee.tv/>

Display 3b. Concept Mapping Tools (VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

Display 3c. Anchored Instruction (find anchoring event (YouTube, CNN, BBC, TeacherTube, CurrentTV))

- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.

Display 3d. Vlogging (Video Blogging) e.g., Andy Calvin's Waste of Bandwidth Michael L. Wesch, Kansas State, The Machine is Using Us

Display 3e. Shared Online Video Demonstrations (e.g., Monkey See, doFlick)

Display 3f. Human Embryology Animations (Valerie O'Loughlin, Indiana University)

Display 3g. Broadcast Surgeries

Evaluating an In-Vivo Surgical Training Demonstration over Broadband Internet

DIANEK SIMMONS
CSIRO ICT Centre &
Department of Computer Science, Australian National University
GPO Box 551 Canberra, Australia, 2601
dianek.simmons@csiro.au

4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

Do 4a. Wikibooks: International Collaboration (Web 2.0 and Emerging Learning Technologies (The WELT))


ing Technologies

Do 4b. Survey Research and Market Analysis (e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)

Do 4c. Online Portfolios or Galleries (Flickr, Omnium)

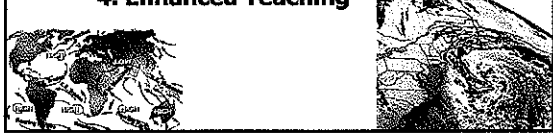

Do 4d. Virtual Worlds/Virtual Reality/MMOG

Wednesday, August 30, 2006
Harvard Law School (Charles & Rebecca Nesson)
Chronicle of Higher Ed (open to the public)
<http://chronicle.com/daily/2006/08/2006083001t.htm>



Recap of the Perfect E-Storm....

- 1. Emerging Technology**
- 2. Escalating (Learner) Demands**
- 3. Erased Budgets**
- 4. Enhanced Teaching**

Any questions, comments, or concerns?

