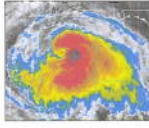


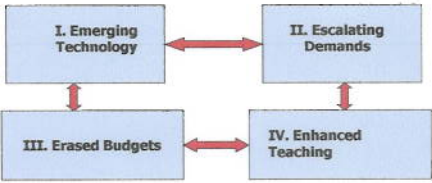


The Perfect E-Storm: Emerging Technologies, Enormous Demand, and Erased Budgets




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Four Storms Are Approaching!




Storm 1. Emerging ("Hot") Learning Technologies (Volcanos)



Will we become increasingly mobile learners?



Of course, there will always be smaller and cheaper devices...



1. New interfaces are coming!



2. Social Networking Gaming (e.g., Farmville and gaming addictions)



3. Internet Enabled Devices (e.g., Oregon Scientific Smartglobe)



4. Shared Online Video (e.g., Link TV: Global Link of World Educators (GLOWE))



More Shared Online Video (e.g., Edutopia, TED Conference Videos)



5. Individual Produced Videos (e.g., African School Dream in Current TV)



6. Continual Live Streaming (e.g., Zoo Animals on Demand)



7. Simulations

(e.g., Virtual Astronaut from WisdomTools)

VIRTUAL ASTRONAUT
STEM LEARNING

8. e-Book Readers

Are Textbooks History? Digital Textbook in Korea

dictionary, email and forums, games, simulations, hyperlinks, multimedia, authoring, data search, study aids, evaluation, etc. (112 schools as of 2009; free for all schools by 2013)

9. OpenCourseWare (e.g., MIT OCW Highlights for High School)

10. Open Educational Resources (e.g., Curriki, free K-12 curriculum resources)

Connexions: Dec 2009, 1.6m unique users, 4 million page views, 72 million hits, More than 1m users, 200 countries
National Repository of Online Courses (NROC)

11. Online Referenceware

12. Online Reading Programs (See free-Reading.net)

The image shows a screenshot of the free-reading.net website on the left, featuring a navigation menu and a list of reading materials. On the right, a video player displays a classroom scene with a teacher and students. Below the video, the text reads: "Letter Sound and Letter Combination Accuracy, Sound Search Game".

13. Class Web Sites (e.g., Microsoft Office Live, Google Sites, Pageflakes)

This block contains three screenshots of web creation tools. The top left shows the Google Sites interface with the heading "Thinking of creating a website?". The top right shows the Microsoft Office Live website creation wizard. The bottom right shows the Pageflakes website creation interface.

14. Mobile Learning (e.g., Smartphones)

A collage of various mobile devices, including several smartphones (like the iPhone and various Android models) and feature phones. A small portrait of Barack Obama is also included in the collage.

Text Messaging

A collage of images illustrating text messaging. It includes a person using a laptop and phone, a person sitting at a desk with a laptop, a person using a feature phone, and a group of people in a classroom setting.

This block features a collage of mobile devices and text. At the top left, it says "June 9, 2010" and "Force is with new GPS units". Below this, there are images of a PULSE device and a hand holding a smartphone. At the bottom, it says "TwitterPeek: Restricted to Twitter." and "WikiReader: Updating can be a pain."

A world map titled "Mobile Internet" with the source "(source: Dr. Paul Kim, Stanford)". The map uses a color key: red for "IN SERVICE" and yellow for "COMMITTED". The map shows that most of North America, Europe, and parts of Asia and Africa are in service, while many countries in Africa and South America are committed.

"A" is for App, Anya Kamenetz, Fast Company, April 2010

Seeds of Empowerment, India, Paul Kim, Stanford

15. Inexpensive Laptops and Tablet Computers

16. Google Sky

<http://earth.google.com/sky/index.html>

Poll: Bonk's Web Addiction Questionnaire

1. Who has 2 or more mobile 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?

On to Storm 2... A Blizzard of Escalating Learner Demands

Letter from Bill Gates about online learning (January, 2010)



A Grain of Rice: A Bloomington man's computer vocab game feeding the world (John Breen)



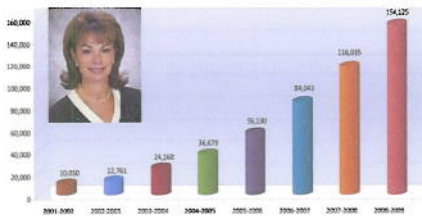
Adora Svitak, age 12, World's Youngest Teacher



Indiana University High School (4,000 students and 1,400 enrolled in diploma programs)



Florida Virtual School, 71,000 unique students
 This is half credit completions, which means all included have successfully completed a half credit enrollment (per Julie Young, June 2, 2010)



Michigan Virtual School



We're in the Midst of Storm 3: Erased Budgets (Tsunamis and Floods)

PROBLEM

STATE BUDGETS GOING DOWN
BAD ECONOMY
STUDENT NEEDS
SCHOOL CLOSINGS

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

Addressing Diverse Learners with R2D2

The R2D2 Model

Curis 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)


Why Address Learning Styles?

- Promotes reflection on teaching
- Move from just one mode of delivery
- View from different viewpoints
- Offer variety in the class
- Might lower drop-out rates
- Fosters experimentation



1. Auditory or Verbal Learners

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



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?



Read 1a. Kids Podcasts



Read 1b. Art and History Exhibits



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

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



Read 1d. Course Announcements (e.g., Teaching with Twitter)

The slide features the Twitter logo in blue. Below it are several images: a smartphone displaying a Twitter feed, a person's hands typing on a laptop keyboard, a screenshot of a Twitter post, and a collage of small profile pictures from a Twitter feed.

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

The slide includes a circular diagram with four colored quadrants: Reflecting (red), Observing (blue), Viewing (green), and Watching (yellow). Arrows connect the quadrants in a clockwise cycle. Below the diagram are three small photographs of people.

Blogging Questions

1. Who has a blog?
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?

The slide features a list of five questions. On the left and right sides, there are small video thumbnails showing a man speaking into a microphone.

Reflect 2a. Kids Blogs

The slide shows several screenshots of children's blogs. One prominent one is 'DogEared' with a yellow header. Another is 'KIDS' with a blue header. There are also smaller thumbnails of other blogs.

Reflect 2b. Ask students to relisten and reflect on particular podcast shows (e.g., iPad April 2010)

The slide displays two screenshots of a podcast player interface. The left one shows a list of episodes, and the right one shows a specific episode titled 'TO THE POINT' with a 'DONATE NOW' button.

Reflect 2c. Teacher Classroom Blogs

The slide shows a screenshot of a teacher's classroom blog titled 'Mrs. Huff's English Classes'. It features a navigation menu with 'FRONT PAGE', 'ARCHIVES', 'ABOUT', 'NOBS', 'HANDOUTS', 'SUMMER READING', and 'SUBSCRIBE'. The main content area includes a 'CONTACT' section and a 'Weeily Diggs' section.

Reflect 2d. Reuse Blog Posts, Chat Transcripts, Interviews, Conferences, Online Presentations

Reflect 2e. Videos on Book Websites (e.g., Brain Rules, John Medina)

Reflect 2f. Expert and Domain Specific Blogs (Health Blogs)

Reflect 3g. Big Think (short topical videos from famous people)

Now for the big questions...!!!
99 Second Reflection!!! Jot down 3 things you learned so far.

3. Visual Learners

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

Display 3a. Find Open Source Photography (e.g., Flickr)

Display 3b. Everystockphoto.com

(courses on the Winter Olympics, photography, motivation, geography, Canadian culture, meteorology, physics, etc.)
<http://everystockphoto.com/>

Display 3c. Flash, 3-D Visualization, & Laboratory Software

Display 3d. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus)

A PERIODIC TABLE OF VISUALIZATION METHODS

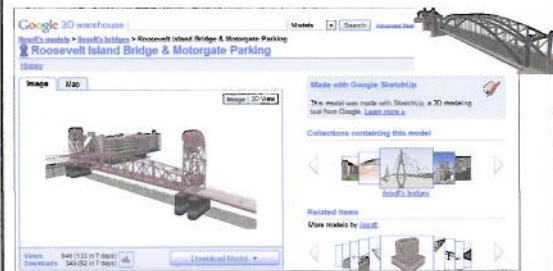
Display 3e. Online Timelines (US Presidents)

Display 3f. World Trends and Indices (e.g. Worldmapper)

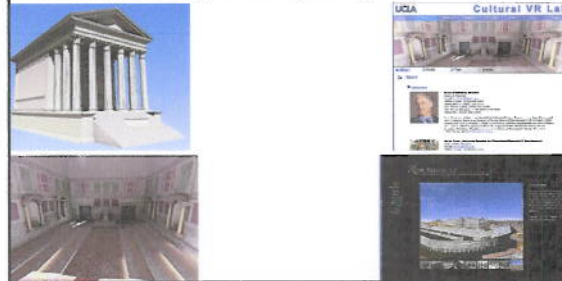
WORLDMAPPER The world as you've never seen it

Home | Map Categories | Thumbnail Index | A-Z Map Index
 < Previous Map | **Science Growth** | Map No. 256

Display 3g. Download and Use Online 3D Sketches (e.g., Google SketchUp)



Display 3h. Explore Virtual Worlds and Online Representations (e.g., Rome Reborn 1.0, University of Virginia, UCLA)



Display 3i. Shared Online Video (TeacherTube and WatchKnow)



Display 3j. Shared Online Video (e.g., eduTube, Howcast, WonderHowTo, Clip, Chef, Link TV, Monkeysee, Fora TV, etc.)



Display 3k. Video iPod Vocabulary Training







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.




Wiki Questions

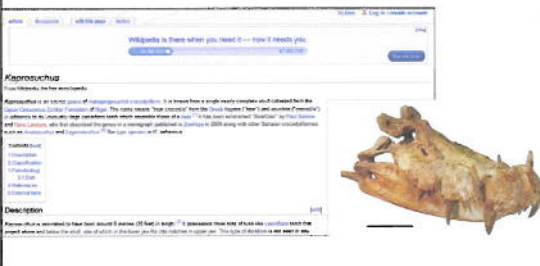
1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?

Do 4a. Student Work in a Wiki (e.g., Wet Paint, a free wiki tool for online collaboration; e.g., medical education)




Do 4b. Wikibook and Wikipedia Editing



4c. Student Blogging



Do 4d. Student Podcasting (in schools—kids have power!)



Do 4e. Hands-On Frog Dissection (Net Frog, Univ. of Virginia)



Do 4f. Online Performances Virtual Worlds and Podcasts (e.g., Shakespeare plays reenacted)

Do 4g. Student Video Anchor Creators

Students create their own
YouTube videos to illustrate
course concepts.

Recap of the Perfect E-Storm....

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

Poll: How many ideas did you get from the second talk?

- a. None—you are an idiot.
- b. 1 (and it is a lonely #).
- c. 2 (it can be as bad as one).
- d. 3-5
- e. 6-10
- f. Higher than I can count!

Stand and Share Ideas

- Will Work: _____
- Might Work: _____
- No Way: _____

Try the R2D2 Method! Try TEC-VARIETY!

Sample papers :
<http://www.publicationshare.com/>
Archived talks:
<http://www.trainingshare.com/>