

**Blended Learning Situations, Solutions, and Several Stunning Surprises**

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NEWS & EVENTS

PROGRAMS & MAJORS

VIRTUAL TOUR

**This the talk will cover:**

1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Implications for blended learning

**Part 1. Handbook of Blended Learning (HOBLe)**

- University of Phoenix, Capella University, JIU, National University
- Microsoft, IBM, Sun, Cisco, Macromedia, Oracle, WebCT
- The World Bank, the DOD in USA
- In Canada: York University and the University of Calgary
- Other universities in Japan, Korea, Malaysia, Singapore, China, NZ, South Africa, Israel, Mexico, Australia, Wales, England, USA

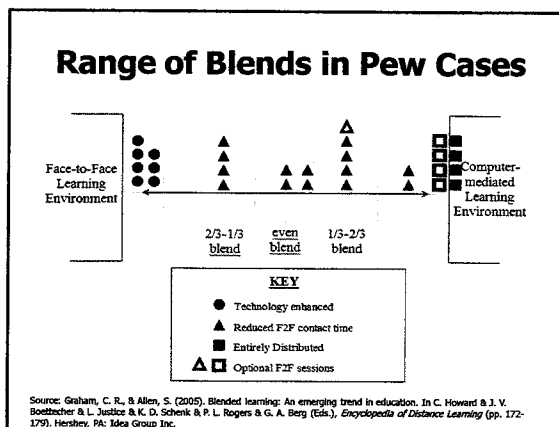
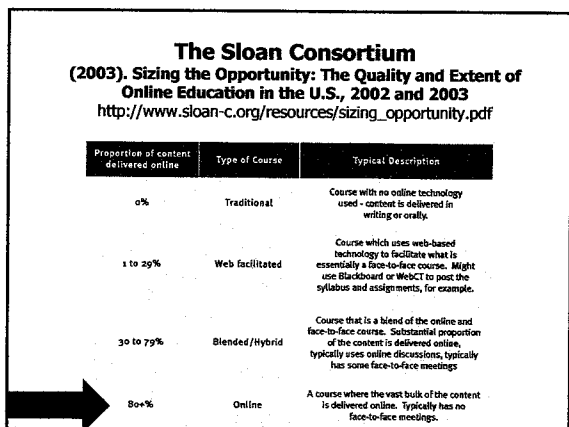
**Poll #1. Have you taught, taken, or designed a blended learning course?**

**A = yes**

**B = no**

**C = not sure, I am here to find out what blended means**

**Blended Learning Defined and Explained**



### Allen, I. E., Seaman, J., & Garrett, R. (2007). Blending in: The extent and promise of blended education in the United States. The Sloan Consortium (Sloan-C). Retrieved July 4, 2007, from [http://www.eduventures.com/PDF/Blending\\_In.pdf](http://www.eduventures.com/PDF/Blending_In.pdf)

Penetration Rates - Fall 2003

	Online	Blended
Business	42.7%	47.9%
Computer and Information Sciences	35.1%	41.5%
Education	24.9%	36.5%
Health Professions and Related Sciences	21.4%	43.5%
Liberal Arts and Sciences, General Studies, Humanities	40.2%	47.8%
Psychology	23.6%	27.1%
Social Sciences and History	28.4%	31.6%
All Other Programs	36.2%	40.1%

Online and Blended Course Penetration Rates - Fall 2004

Course Level	Online	Blended
Undergraduate Level	14.5%	11.9%
Graduate Level	46.7%	35.9%
Continuing Education	74.4%	39.0%

Blended and Online Program Penetration Rates

Program	Blended	Online
Certificate	16.2%	18.2%
Associate	19.7%	18.1%
Bachelor's	24.8%	12.8%
Master's	28.5%	14.8%
Doctoral	43.7%	14.8%
Professional	31.1%	12.8%

## 1. Blending Delivery Media

- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

## 2. Blending Instructional Methods

- "Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology." (Driscoll, 2002, p. 54)

## 3. Blending Online and F2F Instruction

- "Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

### Who is demanding fully online and blended learning?



### Why Blend and Advantages and Disadvantages of BL...



### Why Teaching Fully Online or Blended? Three Key Reasons

1. **Improved Pedagogy**
  - Interactive vs. Transmissive environments
  - Authenticity integration into work
2. **Increased Access/Flexibility**
  - Reduced seat time courses – UCF M courses
3. **Increased Cost Effectiveness**
  - Corporate: ROI – IBM 47:1, Avaya, Microsoft
  - Higher Ed: PEW Grants

### Where is Blended Beneficial?

<http://www.center.rpi.edu/PewGrant/ProjDesc.html>

- Large Classes (spanish, intro psych, algebra, elementary statistics, biology)
- Classes with working students
- Students spread over a distance
- Classes with certification
- Classes with need for standardization
- New requirements for a profession
- Writing intensive classes
- Theory classes



### Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

- Put assessments/reviews online
- Follow-up in community of practice
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring/coaching tool
- Access experts live online
- Use e-mail and instant messaging

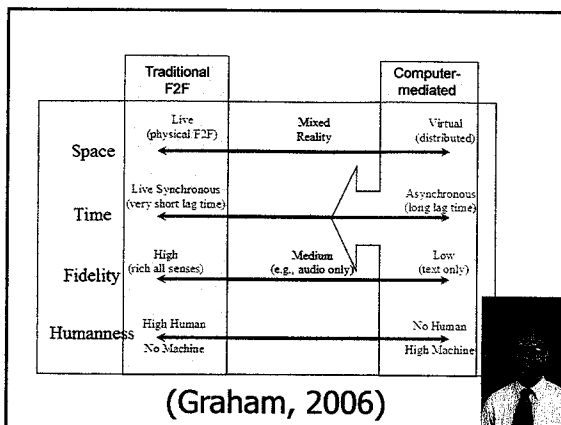
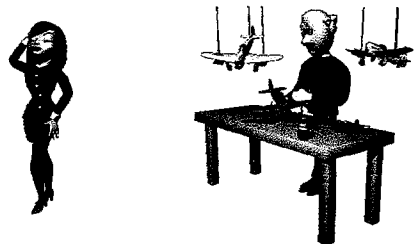


### Fully Online and Blended Learning Advantages

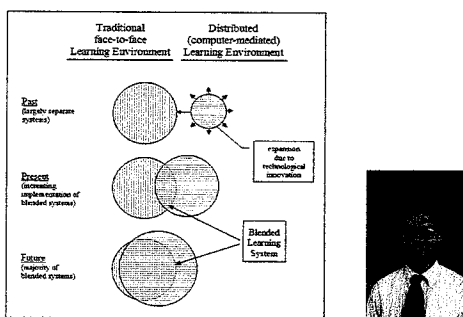
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking
5. Increased opportunities for human interaction, communication, & contact among students
6. Intverts participate more



# Frameworks and Models of Blended Learning...

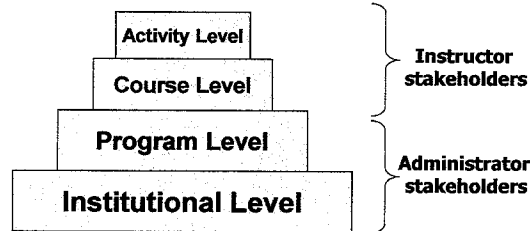


## Historical Emergence of Fully Online and Blended (Graham, 2006)



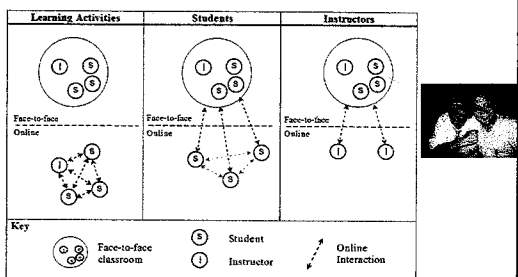
## Models of Blending

Blending occurs at the following four levels:

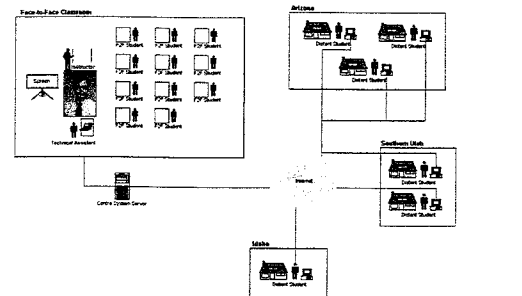


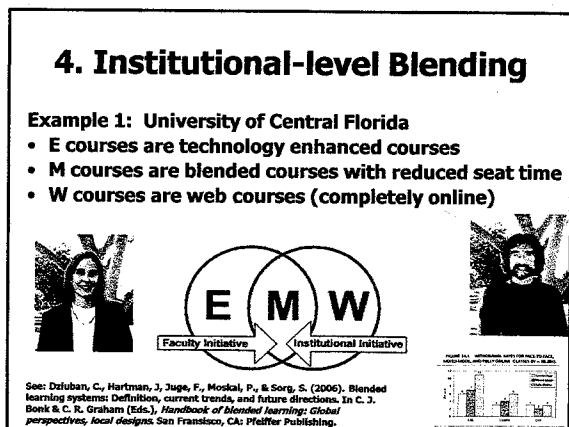
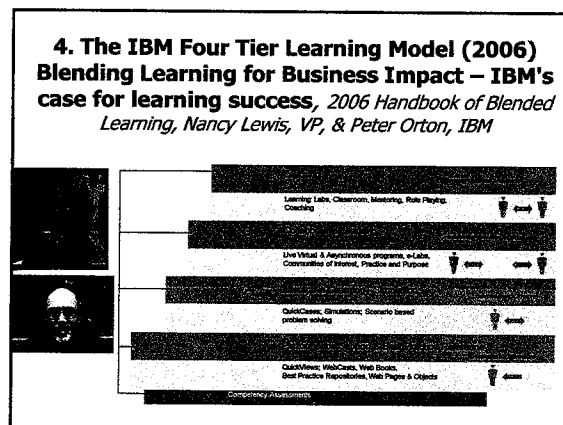
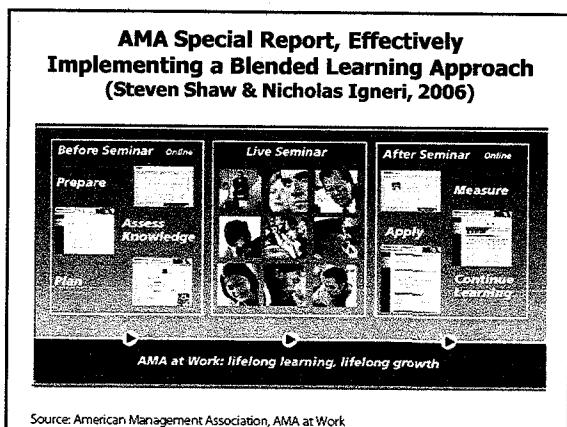
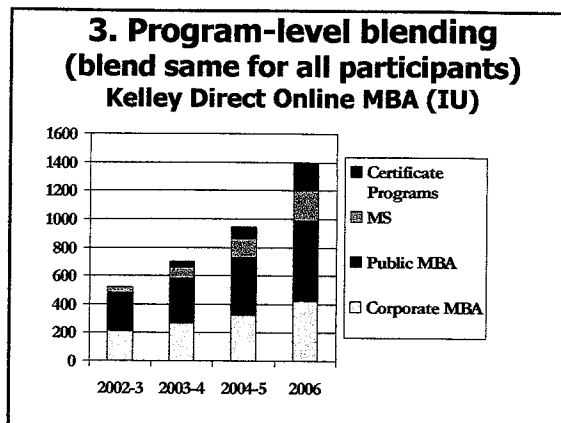
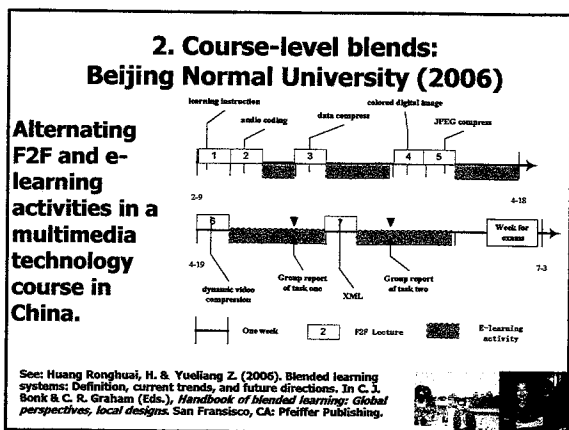
### 1. Activity- and Course-Level Blends

Blended learning systems: Definitions and directions (Osguthorpe & Graham, 2003)



### 2. Course-Level Blend: Using CMS to blend distance and F2F learners (Rogers, Graham, et al., 2003)





### The OUM

(Abtar Kaur, 2008, Ed Media)

- Started August 2001 : approx. 800 students
- Total students (2008): approx. 65,000
- Total full-time academic staff : 73 (less than 30 associate or full professors)
- Total part-time academic staff (tutors) : approx 3,000
- 33 Learning Centres (7 Regional Centres)
- Pedagogical approach : Blended Learning

### 4. Institutional-level Blending

(Brian Linquist, 2006)

**Example 2: University of Phoenix**

- Completely online courses
- Residential F2F courses
- Blended Courses
  - *Local Model* = 5 week courses with first and last week F2F
  - *Distance Model* = 5 week courses with half first and half last week F2F (the last meeting of one course is coordinated to be back-to-back with the first meeting of the next 5 week course)

Updated: June 25, 2005, 8:12 PM ET

## Shaq joins University of Phoenix grad

Associated Press

INGLEWOOD, Calif. -- Shaquille O'Neal returned to the Forum on Saturday, not for an NBA game, but to pick up his MBA.

The man who once called himself the Big Aristotle was the tallest and most famous of the 2,200 University of Phoenix graduates at the arena. But O'Neal said he was simply getting ready for the real world.

Shaquille O'Neal  
Center  
Miami Heat

Profile

2004-2005 SEASON STATISTICS

GM	PPG	RPG	APG	FG%	FT%
73	22.9	10.4	2.7	50.1	48.1

"It's just something to have on my resume [for] when I go back into reality," the 7-foot-1 Miami Heat

### Categories of Blends

<b>A. Enabling Blends</b>	Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.
<b>B. Enhancing Blends</b>	Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.
<b>C. Transforming Blends</b>	Transforming blends are blends that allow for a radical transformation of the pedagogy and learner construction of knowledge.

### A. Enabling Blends

National University  
Department of Teacher Education  
(Reynolds & Greiner, 2006)


- 12,000 Enrolled Students
- Since 2004 More than 50% of Candidates Enrolling as Online rather than On-site
  - They will take a majority of classes online
- Each Candidate Takes 7 Credential Classes
- Each Class Contains 2 Field-based Exp.
- 500 Classes/Yr. & 20 Students/Class =
- 20,000 Field-based Experiences/Year

Year / Students Enrolled in Online Classes	FY 2000		FY 2002		FY 2003		FY 2005		FY 2006	
	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total
In At Least One Online	4,692	18%	8,574	31%	11,033	41%	13,768	53%	15,774	60%
In A Majority Online	763	3%	5,713	21%	7,012	26%	9,107	35%	11,203	43%
In All Online	332	1%	1,747	6%	2,602	10%	4,217	16%	5,645	22%
None	21,661	80%	19,015	59%	16,044	59%	12,225	47%	10,394	40%
Total Active Students	25,436		27,589		27,077		25,993		26,138	

## B. Enhancing Blends (University of Glamorgan in Wales)

Continuum of e-Learning


Basic ICT usage	E-enhanced	E-focused	E-intensive
Ex: Power Point presentations	Access to online resources, use of Bb for announcements, Moodle based student communication	Discussion boards, online assessments, tests, interaction, learning resources	Whole modules taught on-line and integrated with





## C. Transforming Blends (Kirkley & Kirkley; HOBLe, 2006)


- **Corporate/Military Training**
  - Workplace learning (integrating learning into workflow)
  - Mixed-reality environments combining the virtual and real


Reality-Virtuality Training Continuum

Real World  




Augmented Vision  


Augmented Reality  


Augmented Virtuality  




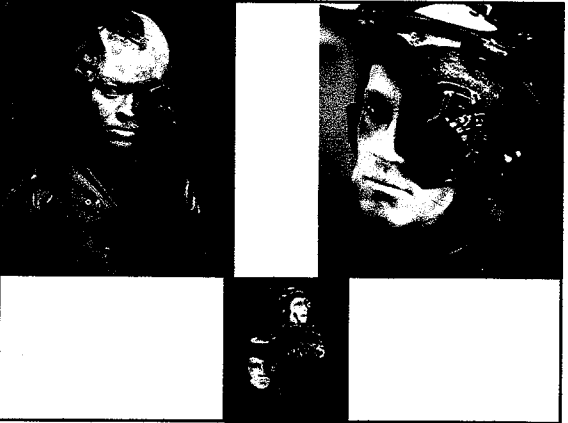
Virtual Reality  


Mixed Reality

**What can we say about blended learning then???**

- **It is everywhere!!!!!!!**
- **Resistance is futile!!!!!!!**

## Part II: 13 Fully Online and Blended Learning Problems and 42 Solutions

### Problem Situation #1: Brief FTF Experiences

- Face-to-face (FTF) experiences are brief, one-week journeys. Need to need to build self-confidence, create social supports, teams, camaraderie, etc.

### Ok, Million Dollar Question: What can you do in 1 week?



### Ok, Million Dollar Question: What can you do in 1 week?



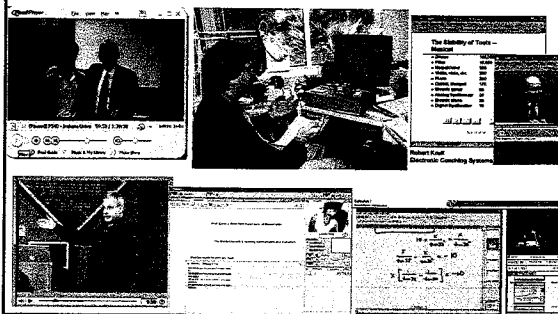
### Blended Solution #1+. Sample Activities for Brief Meetings

1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Ice breakers—paired introductions, corners.
3. Solve case in team competitions with awards.
4. Test technology in a lab.
5. Assign teams and exchange info for small teams using text messaging.
6. Library (digital and physical) scavenger hunt.
7. Do a podcast documenting the meeting.
8. Have everyone create a blog on the experience.
9. Open an e-portfolio for each student
10. Brainstorm how might use technology in program.

### Problem Situation #2: Student Absenteeism

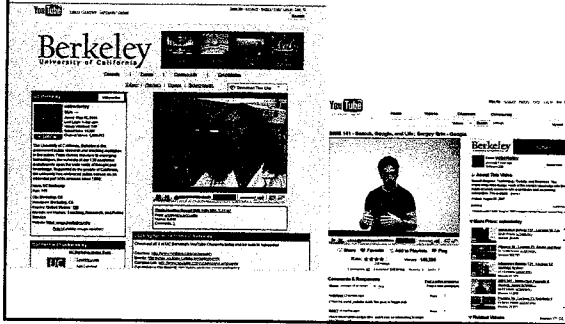
- Students miss class to attend a conference or event or a personal problem arises. Or students asks to watch the class a second time.

### Blended Solution #2. Video Streamed and Webcast Lectures

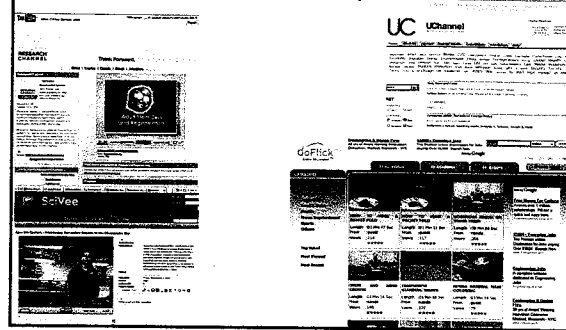




**Blended Solution #3. Post Courses in YouTube and iTunes (e.g., Berkeley)**



**Blended Solution #4. Assign Online Shared Video (SciVee, Research Channel, doFlick. UC)**



**Problem Situation #3: Facilities and Time**

- Limited facilities or rooms for teaching. Or students cannot make it to class every week or are working full time.

**Blended Solution #5.**

Divide Online and Class Experiences: English Classes Online

Graham, Ure, & Allen (2003, July). Blended Learning Environment: A Literature Review and Proposed Research Agenda

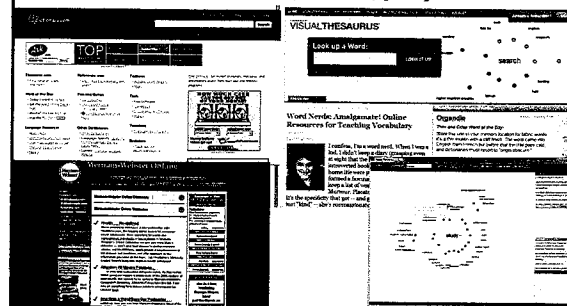
- Freshman English at BYU: Students are required to meet F2F once a week instead of three times a week. Online modules provide writing instruction and teaching assistants use online and F2F contact to provide feedback and guidance on writing (Waddoups et al., 2003).



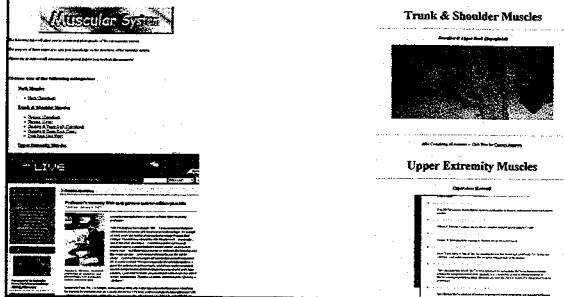
**Problem Situation #4: Web Supplemental Activities**

- Fail to finish class discussion or other activity in time. Or desire to integrate the Web more in your face-to-face instruction or outside of class. Want to provide course resources and activities for students to explore.

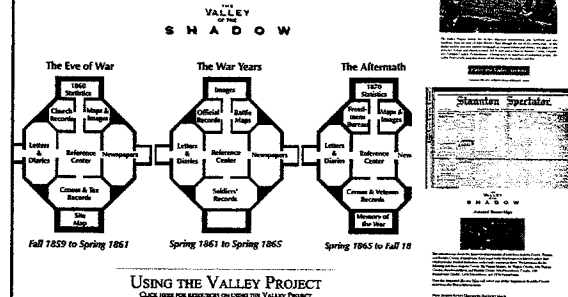
**Blended Solution #6. Online Referenceware (e.g., Websters, Visual Thesaurus)**  
<http://www.visualthesaurus.com/>  
 (\$2.95/month; \$19.95/year)



**Blended Solution #7. Online Testing Center: e.g., self study in anatomy**



**Blended Solution #8. Online Course Portal: e.g., courses on the Civil War**



**Problem Situation #5: Student Learning Control**

- Want to give students more control and ownership over their own learning. Want to foster student generative learning or being authors of their own knowledge.

**Blended Solution #9: Student Podcast (in schools—kids have power!)**

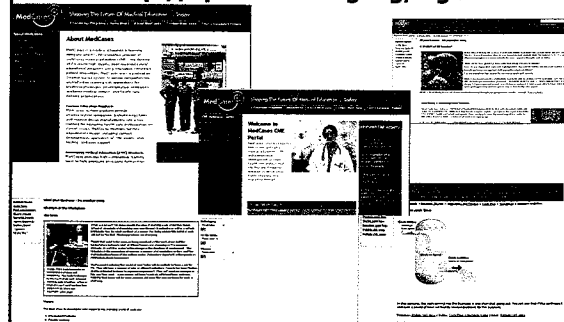
"Just the word 'podcast' scares a lot of teachers away," Ms. Schrock said. "There are a lot of misconceptions."  
 "All you need is a computer, access to the Internet and a microphone that you can buy at Toys 'R' Us," Mr. Warlick said. "I listen to podcasts on my computer." (NY Times, Jan 25, 2006)



**Problem Situation #6: Preparedness for the Profession**

- Students are not prepared for their professions when they graduate. Or want to better apprentice students into their chosen profession. What to provide opportunities to work with practitioners, experts, mentors, and coaches in authentic learning environment.

**Blended Solution #10. Community of Learners: Medical and Business Cases Online (cases community)**  
<http://optionstraining.org/login>



### Blended Solution #11. Real World Problems (PBL online): Real-time Cases

### Blended Solution #12. Video Scenario Learning (Option 6, Bloomington, IN)

### Blended Solution #13. Educational Simulations (Intel IT Manager Game)

### Problem Situation #7: Collaborative Skill Deficit

- Students need collaboration and teamwork skills. Want to build virtual teaming skills in class activities or work with learners in other locales or situations.

### Blended Solution #14. Collaborative Searching

### Blended Solution #15. Sharing in Virtual Teams (e.g., Collanos, Groove, SharePoint)

## Blended Solution #16. Wikibooks (Web 2.0 and Emerging Learning Technologies (The WELT))

Web 2.0 and Emerging Learning Technologies  
From Wikibooks, the open-content textbooks collection

The screenshot shows the Wikibooks page for 'Web 2.0 and Emerging Learning Technologies'. It features a 'Table of Contents' section with various parts and chapters, and a 'Contents (first)' section at the bottom. A logo for 'Web 2.0 and Emerging Learning Technologies' is prominently displayed on the left side of the page.

## Fall 2007: Web 2.0 and Emerging Learning Technologies (The WELT)

[http://en.wikibooks.org/wiki/Web\\_2.0\\_and\\_Emerging\\_Learning\\_Technologies](http://en.wikibooks.org/wiki/Web_2.0_and_Emerging_Learning_Technologies)

Web 2.0 and Emerging Learning Technologies/Digital Divide  
From Wikibooks, the open-content textbook collection

The screenshot shows the Wikibooks page for 'Web 2.0 and Emerging Learning Technologies/Digital Divide'. It features a 'Contents (first)' section with various chapters and a 'Web 2.0 and Emerging Learning Technologies' logo on the right side of the page.

## Blended Solution #17. Cross-Class Collab (Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)

The screenshot shows a web page with a 'news bureau' section on the left and a list of articles on the right. The articles are organized in a table-like format with columns for titles, dates, and authors.

## Blended Solution #18. Language Lessons, Team Meetings, etc., in Skype

The screenshot shows a Skype interface with a video call in progress. The interface includes various controls and a list of contacts on the left side.

## Problem Situation #8: Student Reflections and Connections

- Students are not connecting content. They are just turning pages and going through the motions. Minimal student reflection is seen.

## Blended Solution #19. Reflection on Online Contents: The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys, John Evelyn

The screenshot shows a website with various sections for historical content, including 'The Carlyle Letters' and 'The Diary of Samuel Pepys, John Evelyn'. The website features a mix of text, images, and navigation elements.

### Blended Solution #20. The Complete Works of Charles Darwin

The Complete Works of Charles Darwin Online  
 Contributors  
 Table of Contents

### Blended Solution #21. Learner-Self Interactions and Reflections

Review Questions - Encapsulation  
 Congratulations! You have completed the module.  
 Selfcheck  
 Question: What is inheritance?  
 Answer: Inheritance is an object-oriented mechanism that derives a new class from an existing class.

### Blended Solution #22. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)

Psychiatric Interviews  
 E-Reading First Ohio  
 Reflect, share, and compare

### Blended Solution #23. Blogs with Critical Friends (e.g., <http://traveledman.blogspot.com/>)

TraveledMan  
 Blog posts with critical reflections

### Blended Solution #24. Workplace and Field Reflections

1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts

### Blended Solution #25. Online Simulation: Financial Accounting; (University of Calgary)

Lyrux Interactive Financial Accounting  
 INCORRECT X

### Problem Situation #9: Learning Community

- There is a preference for creating an online learning community in order to increase student learning and retention in the program. Such a community might be in a single class or across a series of classes.

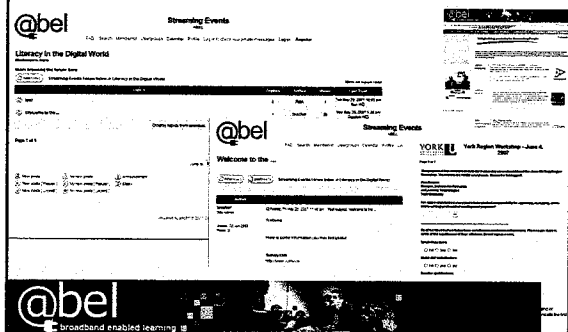
### Blended Solution #26: Teacher Professional Development in Technology Integration (the TICKIT Program)

(Bonk, Ehman, & Yamagata-Lynch, in press, AACE Journal)  
<http://www.iub.edu/~tickit>



TICKIT: Teacher Institute for Curriculum Knowledge about Integration of Technology

### Blended Solution #27. Asynchronous Discussion of Weekly Topics

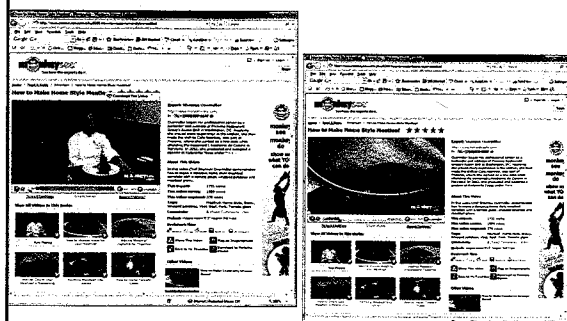


### Problem Situation #10: Need to Visualize Content

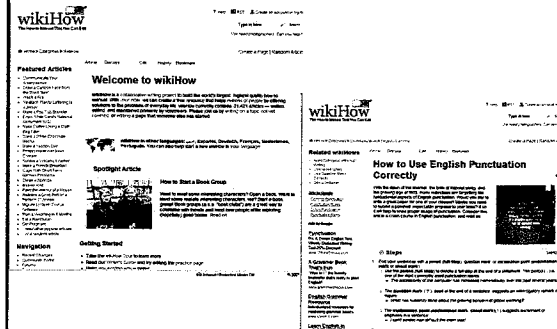
- Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.



### Blended Solution #28: Shared Online Video Demonstrations (e.g., Monkey See)



### Blended Solution #29: Wikihow <http://www.wikihow.com/>



### Blended Solution #30: ECPod

The image shows a complex software interface for ECPod. It features several windows and panels, including a central display area and side navigation menus. The interface is designed for educational use, with various icons and text elements.

### Blended Solution #31. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus <http://www.visualthesaurus.com/>; [http://www.visual-literacy.org/periodic\\_table/periodic\\_table.html](http://www.visual-literacy.org/periodic_table/periodic_table.html))

#### A PERIODIC TABLE OF VISUALIZATION METHODS

This image displays a periodic table of visualization methods. The table is organized into rows and columns, with each cell containing a small icon representing a different visualization technique. A legend at the top left explains the categories: Data Visualization, Primary Visualization, Secondary Visualization, and Conceptual Visualization. The table is titled 'A PERIODIC TABLE OF VISUALIZATION METHODS' and 'A PERIODIC TABLE OF VISUALIZATION ME'.

### Blended Solution #32. Flash, 3-D Visualization, & Laboratory Software

The image is a collage of six panels. The top row shows a 3-D model of a centrosome, a flowchart diagram, and a 3-D model of a plasma membrane. The bottom row shows a 3-D model of a cell, a laboratory software interface, and a 3-D model of a cell. The text 'Centrosome' and 'Plasma membrane' are visible in the top-left and bottom-right panels respectively.

### Blended Solution #33. Flowcharts, Diagrams, Maps, etc.

The image is a collage of four panels. The top-left panel shows a flowchart of the respiratory system. The top-right panel shows a map of the human body. The bottom-left panel shows a flowchart of the control of oxygenation in the human body. The bottom-right panel shows a diagram of the human body. The text 'Elements in the system for control of oxygenation in the human body (e.g., the Kidney): From: Next-Generation Educational Software Why We Need It and a Research Agenda for Getting It. Van Dam, Becker, & Simpson, *Educause Review*, March/April 2005' is visible at the bottom.


### Blended Solution #34. Anchored Instruction: Assign a YouTube Videos to Watch and Reflect on

The image shows a screenshot of a YouTube video player. The video is titled 'California Governor Arnold Schwarzenegger Speaks at CSULB'. The player shows the video content, a progress bar, and various controls. The video is from the channel 'Ch88use '08'.

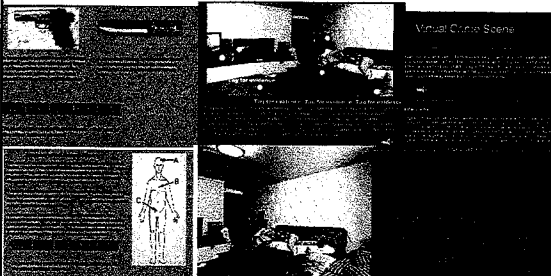
### Problem Situation #11: Need for Hands-On Learning

- To learn the material requires that students try it out in a lab or real-world situation. Or students prefer hands-on learning activities.

**Blended Solution #35. Educational Simulations**  
(Medical Traumas from TD Magazine, August 2006)



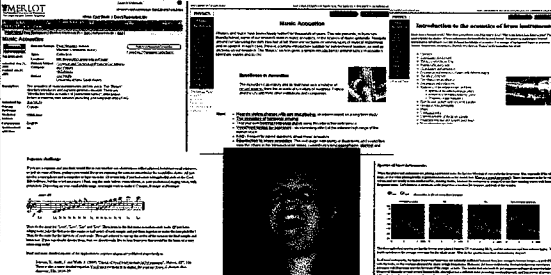
**Blended Solution #36.**  
**Cascaded Scenario, Virtual Crime Scene**  
Arjuna Multimedia, Bloomington, IN)



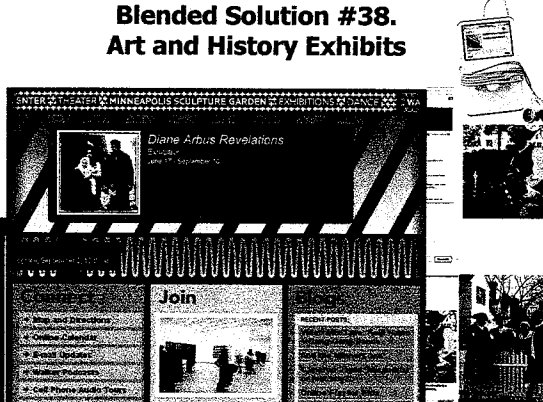
**Problem Situation #12:**  
**Preference for Auditory Learning**

- The content is heavily verbal or words. Or students have a preference to listen to a lecture or hear an instructor deliver a lecture.

**Blended Solution #37.**  
**Basic Acoustics of Musical Instruments**  
2005 MERLOT Classics Award



**Blended Solution #38.**  
**Art and History Exhibits**



**Problem Situation #13:**  
**Lack of Instructor Presence**

- Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.



### Blended Solution #39: Teaching with Twitter

The image shows two screenshots of news articles. The top one is titled "Traveling With Twitter" and features a photo of a person. The bottom one is titled "Forget E-Mail: New Messaging Service Has Students and Professors Awitner" and is categorized under "INFORMATION TECHNOLOGY".

### Blended Solution #40. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)

The image displays four screenshots of different online presentation and conferencing software interfaces, including Breeze, Elluminate, and WebEx, arranged around a central black triangle pointing to the right.

### Blende Solution #41. Peer Critique in Breeze (Table of Benefits of Peer Critique; Park & Bonk, in review)

The image shows several screenshots of the Breeze software interface, illustrating its features for peer critique. One screenshot includes a "creativeclub" logo and another shows a "Society of Research Education" page.

### Blended Solution #42. Video Course Intros (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

The image shows a screenshot of a video player interface displaying a course introduction video. The video shows a person in a classroom setting.

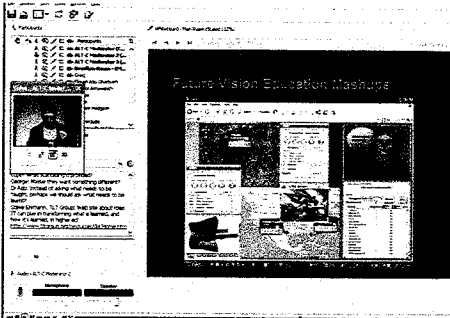
**Time for Convergence!!!**

**Combining Web 2.0 and Other Online Technology Trends (Ten Examples)**

### 1. Flat Schools and Flat Classroom Projects!!!

The image displays several screenshots of websites related to Flat Classroom projects. One prominent screenshot is titled "FLAT CLASSROOM" and lists project details. Other screenshots show social media profiles and project photos.

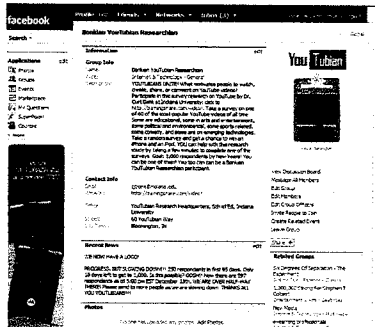
### 2. Michelle Selinger, ALT-C Keynote, September 2007, Univ of Nottingham



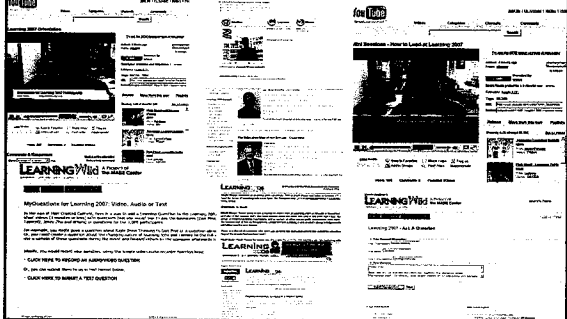
### 3. Breeze in Higher Education



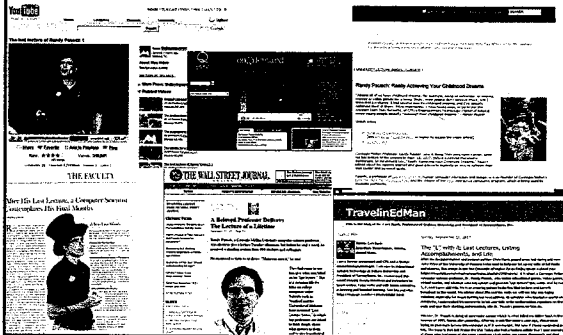
### 4. YouTube Research Group in Facebook



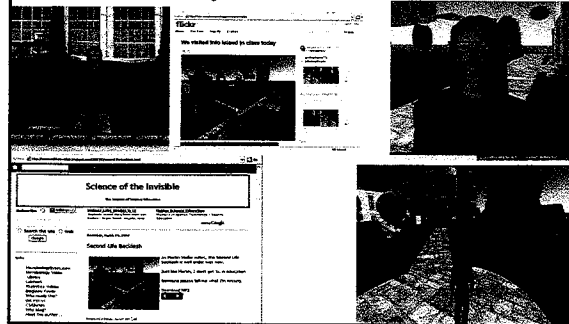
### 5. Elliott Masie, Podcast + Video + Transcript Learning TRENDS by Elliott Masie



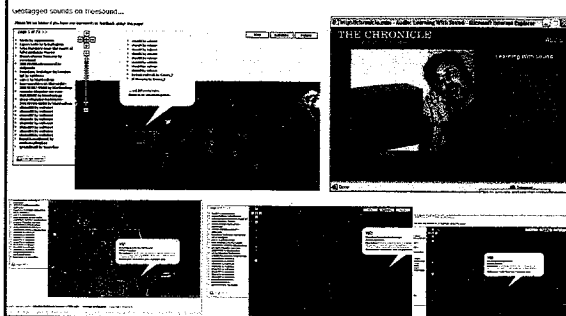
### 6. Archive Last Lectures (Randy Pausch, Carnegie Mellon University)



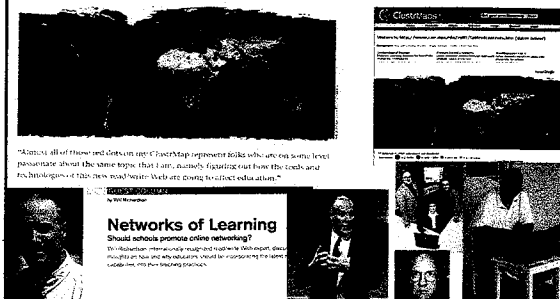
### 7. Combining The Web 2.0 (e.g., Second Life, Blogging, and Photo Posting) Stephen Mandelbrot



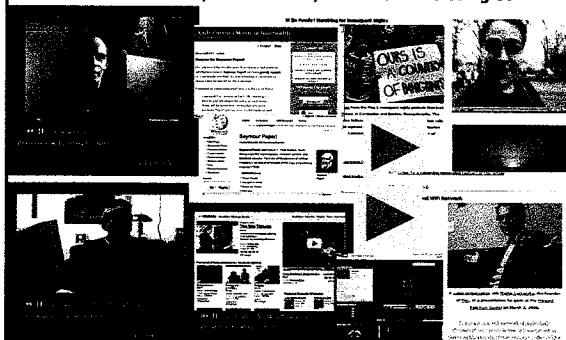
### 8. Indexing Sounds in Cities with Google Maps



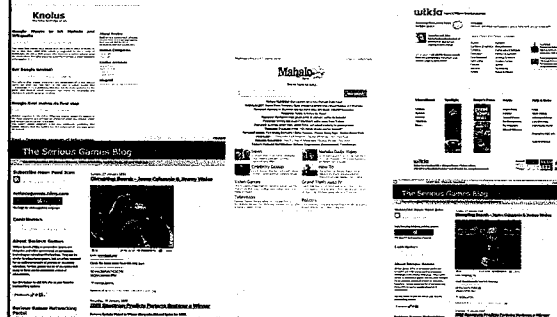
### 9. Cluster Maps (who is reading your blog or using your product); Blog of Will Richardson, famous K-12 blogger (left) and Learning Theories Book of Michael Orey, Univ of Georgia (right)



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



### 11. Serious Games Blog with video of Wikipedia and Mahalo Founders and Google scanning people in background



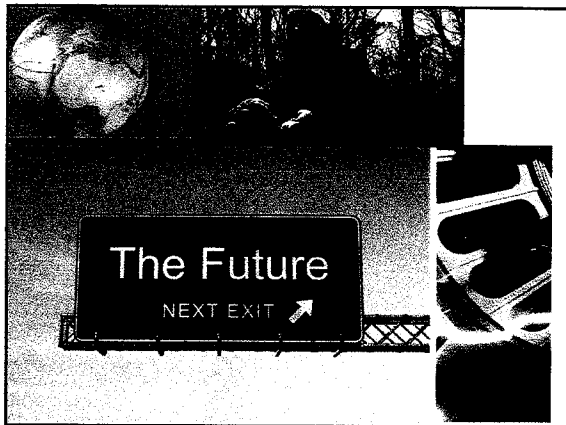
### 12. You Ustreamed my Ustream: Now that's a Twitter of an Idea



### Predictions for Blended Learning

- From: Bonk, C. J., & Kim, K. J. (2006). **Future directions of blended learning in higher education and workplace learning settings.** In C. J. Bonk & C. R. Graham (Eds.). *Handbook of blended learning: Global Perspectives, local designs.* San Francisco, CA: Pfeiffer Publishing.





### Implications and Challenges for Blended Learning

1. Faculty and students are more mobile.
2. Students more choices.
3. Student expectations rise.
4. Greater self-determined learning.
5. More corporate university partnerships.
6. Courses increasingly modular.
7. Less predefined schedules.
8. When teaching less clear; when learning less clear.

**The End...Remember**

Experience. The difference.

**It's Over...**

Poll: Ok, then, who wants more???

A. Yes

B. No

C. Not sure

**It is the End!!!**

Your skeletal muscles' maximum turn rate is double that of your brain. Think about it.