
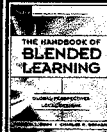




Blended Learning Situations, Solutions, and Several Stunning Surprises

**Curt Bonk, Professor, Indiana University
President, SurveyShare, Inc.**
 cjbonk@indiana.edu
<http://mypage.iu.edu/~cjbonk/>
<http://SurveyShare.com>

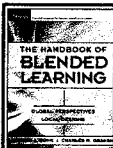
This the talk will cover:

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?

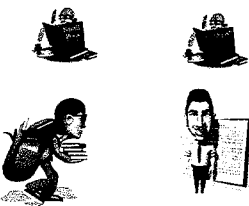
A = yes

B = no

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



Blended Learning Defined and Explained



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

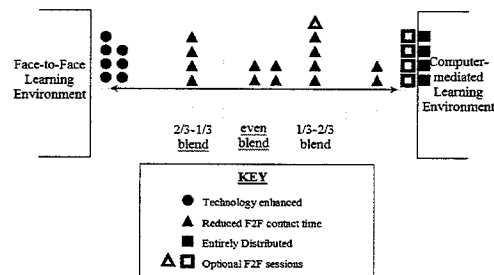
- "Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)



The Sloan Consortium (2003). Sizing the Opportunity: The Quality and Extent of Online Education in the U.S., 2002 and 2003
http://www.sloan-c.org/resources/sizing_opportunity.pdf

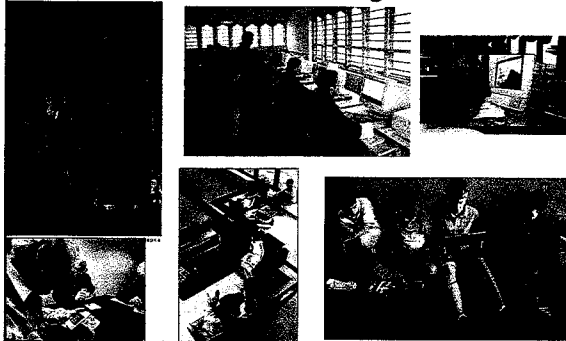
Proportion of content delivered online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings.
80+	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.

Range of Blends in Pew Cases



Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettcher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

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

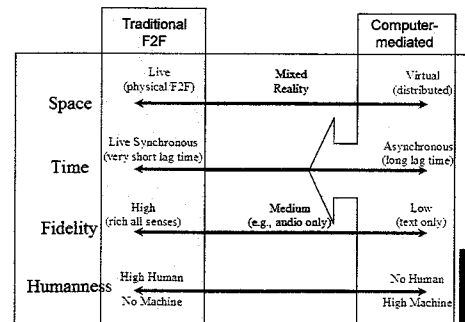
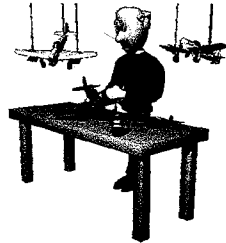


Fully Online and Blended Learning Advantages

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. **Introverts participate more**

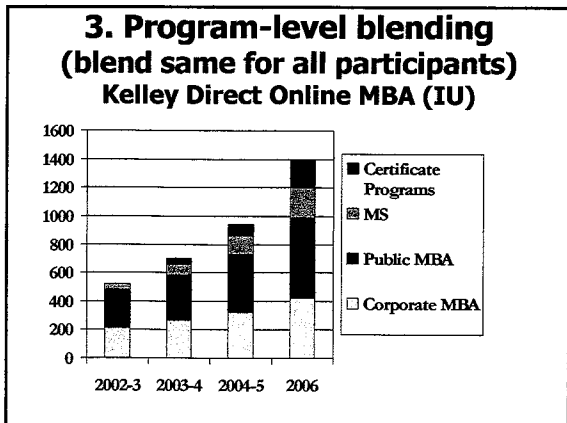
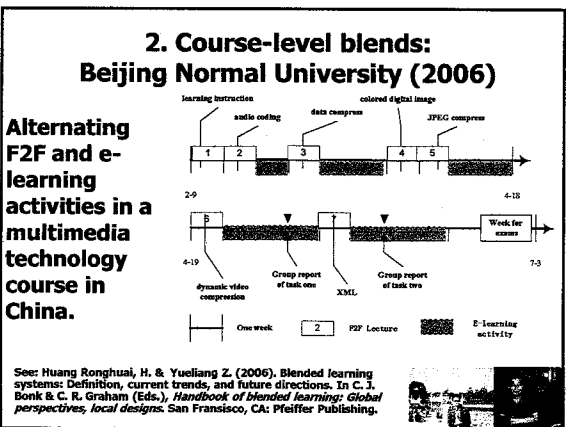
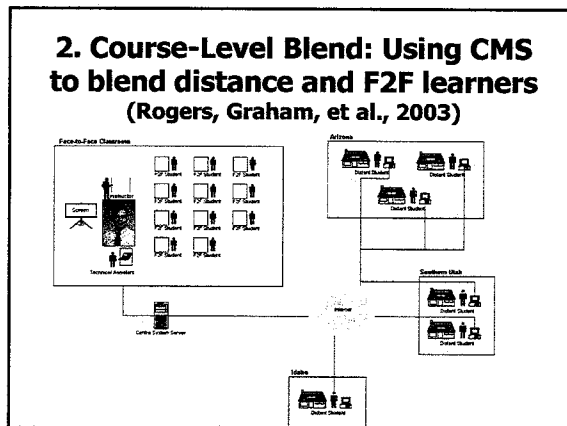
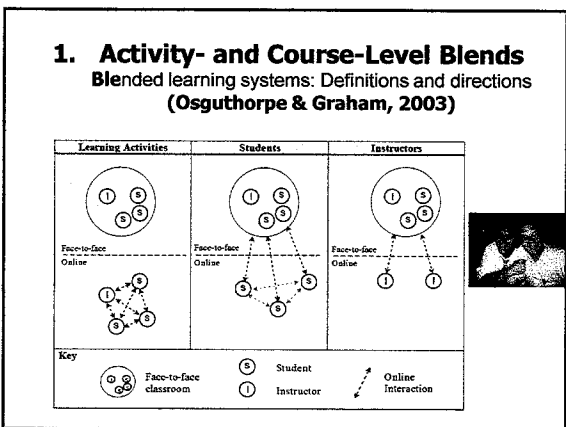
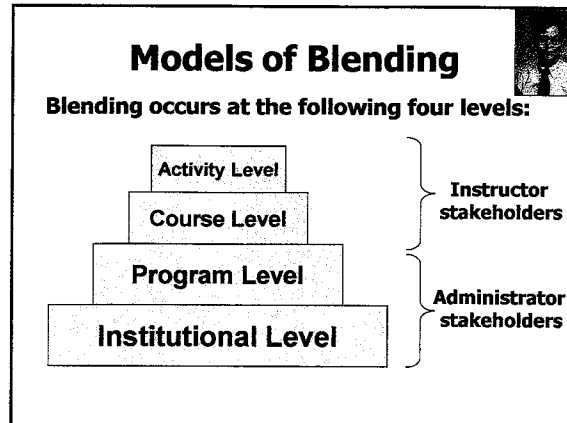
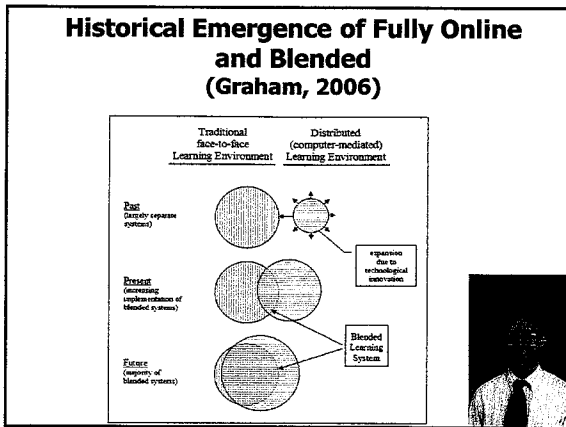


Frameworks and Models of Blended Learning...



(Graham, 2006)





AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Ignéri, 2006)

Source: American Management Association, AMA at Work

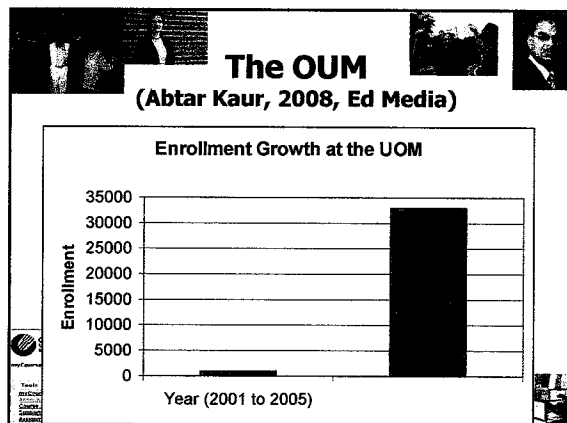
4. The IBM Four Tier Learning Model (2006) Blending Learning for Business Impact – IBM's case for learning success, 2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM

4. Institutional-level Blending

Example 1: University of Central Florida

- E courses are technology enhanced courses
- M courses are blended courses with reduced seat time
- W courses are web courses (completely online)

See: Dzurban, C., Hartman, J., Juge, F., Moskal, P., & Sorg, S. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.



4. Institutional-level Blending (Brian Linqvist, 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)

Categories of Blends

A. Enabling Blends	Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.
B. Enhancing Blends	Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.
C. Transforming Blends	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		25,982		26,138	

B. Enhancing Blends
(University of Glamorgan in Wales)

Continuum of e-Learning

Basic ICT usage	E-enhanced	E-focused	E-intensive
Eg PowerPoint presentations	Access to online resources, use of e-mail announcements, lecturer-student communication	Distance education, online assessment tools, interactive learning materials	Web 2.0, mobile devices, delivered and mediated online

C. Transforming Blends
(Kirkley & Kirkley; HOBL, 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 39 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?**



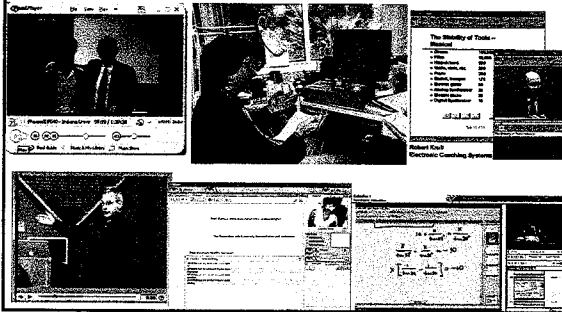
**Blended Solution #1+.
Sample Activities for Brief Meetings**

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.

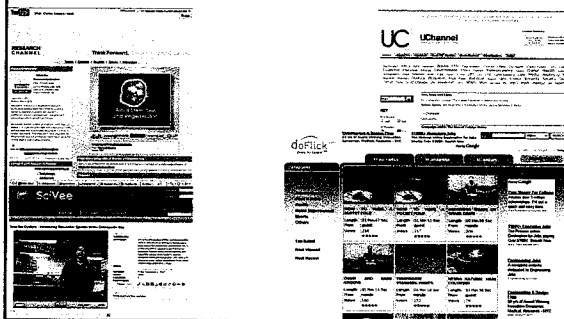
Blended Solution #2. Video Streamed and Webcast Lectures



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 Environn
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)**

The image shows two screenshots of online reference tools. The left screenshot displays the Visual Thesaurus website with a search bar and a list of related words. The right screenshot shows the 'Word Needs' website, which provides online resources for teaching vocabulary, including a list of words and their meanings.

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

The image shows two screenshots of an online testing center for anatomy. The left screenshot displays a 'Muscular System' section with a diagram of a muscle and a list of test questions. The right screenshot shows a 'Trunk & Shoulder Muscles' section with a diagram of the muscles and a list of test questions.

Blended Solution #8. The Complete Works of Charles Darwin

The image shows a screenshot of the 'The Complete Works of Charles Darwin Online' website. The page features a portrait of Charles Darwin and a list of contributors, including names like 'Charles Darwin' and 'The Darwin Project'.

**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)

The image contains three small photographs. The first shows a group of students sitting around a table, possibly in a classroom or library. The second shows a student sitting at a desk with a computer monitor. The third shows a student sitting at a desk with a microphone in front of them, likely recording a podcast.

**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

REALTIME case study

Supercharging the case method, making it more realistic and engaging

Professor James Thomas
Dana Professor of Entrepreneurship,
University of Massachusetts, Amherst

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

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 #13. Sharing in Virtual Teams (e.g., Collanos, Groove, SharePoint)

Blended Solution #14. Wikibooks (Web 2.0 and Emerging Learning Technologies (The WELT))

Web 2.0 and Emerging Learning Technologies

From Wikibooks, the open-content textbooks collection

Table of Contents

Web 2.0 and Emerging Learning Technologies

Please list all the books in this collection.

Often an IP address will be shown.

Part I: Foundations

- Introduction and Related Background Information: What is Web 2.0?
- What does emerging technologies mean?
- Local, Global, Social, and Collaborative: The Web 2.0
- Traditional, Alternative, and Hybrid Learning with the Web 2.0
- Global and Personalized Education and Innovation
- Assessing the Digital Divide in 3: One Laptop Per Child: The Global Task Force?

Part II: Foundations

- The New Educational Contexts
- Learning Style and Content Learning
- Web 2.0 Learning Styles

Part III: Instructional Design and Pedagogical Issues

- Business Pedagogy with Technology
- Emerging Issues in Personal Learning: Beyond Connected Content
- Personalized Learning: Connected, etc.
- Instructional Design Models and Emerging Learning Technologies
- Research and Learning in the World of Web 2.0 and Emerging Learning Technologies
- Planning for the Future and Challenges of the Web 2.0 and Emerging Learning Technologies
- Professional Development and Continuing Education and Informal Education

Part IV: Foundations

- Emerging Technology in Special Needs
- Technology Tools Curated in Openness and Web 2.0
- The Future: Tools, Technologies, and Issues in the Learning Design

Blended Solution #15. Cross-Class Collab
 (Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)

Blended Solution #16.
 Language Lessons, Team Meetings, etc., in Skype

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

Blended Solution #18. Vlogging (Video Blogging)
 e.g., Andy Calvin's Waste of Bandwidth
 Michael L. Wesch, Kansas State, The Machine is Using Us

Blended Solution #19. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)

Blended Solution #20. Blogs with Critical Friends
(e.g., <http://travelinedman.blogspot.com/>)

Blended Solution #21. 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

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 #22: Teacher Professional Development in Technology Integration (the TICKIT Program)
(Bonk, Ehman, & Yamagata-Lynch, in press, AACE Journal)
<http://www.iub.edu/~tickit>

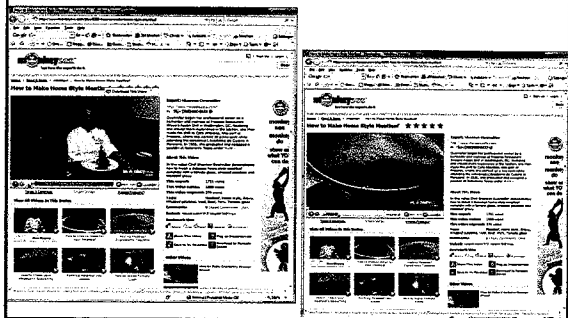
TICKIT: Teacher Institute for Curriculum Knowledge about Integration of Technology

Blended Solution #23. Asynchronous Discussion of Weekly Topics

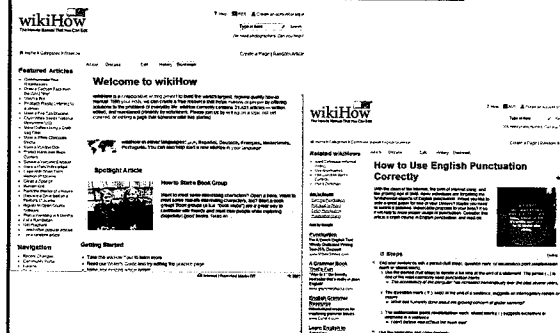
Problem Situation #10: Need to Visualize Content

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

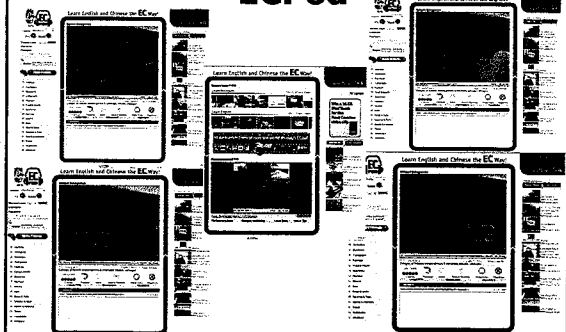
Blended Solution #24: Shared Online Video Demonstrations (e.g., Monkey See)



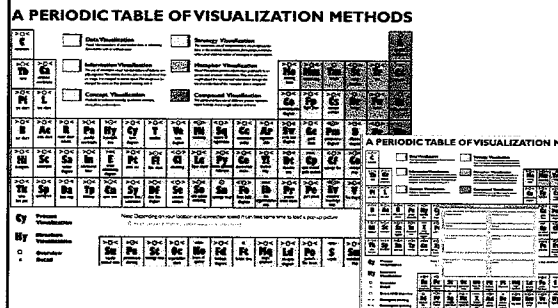
Blended Solution #25: WikiHow
<http://www.wikihow.com/>



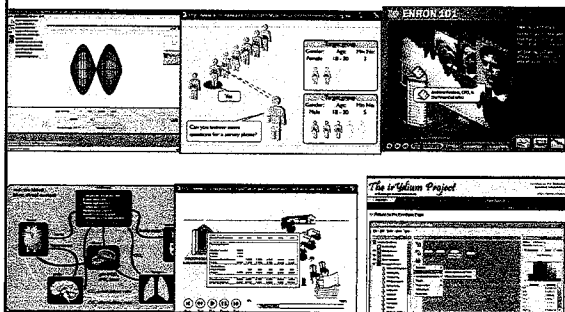
Blended Solution #26: ECPod



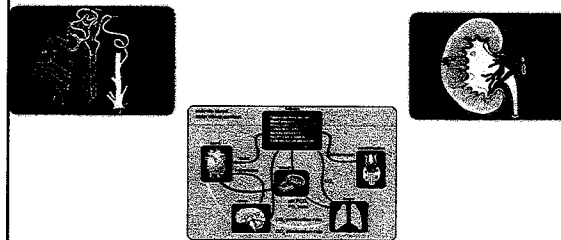
Blended Solution #27. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus)
<http://www.visualthesaurus.com/>; http://www.visual-literacy.org/periodic_table/periodic_table.html



Blended Solution #28. Flash, 3-D Visualization, & Laboratory Software



Blended Solution #29. Flowcharts, Diagrams, Maps, etc.



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

Blended Solution #30. Anchored Instruction: Assign a YouTube Videos to Watch and Reflect on

**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 #31. Educational Simulations
(Medical Traumas from TD Magazine, August 2006)**

**Blended Solution #32.
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 #33.
Basic Acoustics of Musical Instruments
2005 MERLOT Classics Award**

Blended Solution #34. Art and History Exhibits

Blended Solution #35. Language Learning (ChinesePod—learn Mandarin)

Jenny Zhu

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 #36: Teaching with Twitter

Blended Solution #37. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)

Blende Solution #38. Peer Critique in Breeze (Table of Benefits of Peer Critique; Park & Bonk, in review)

Blended Solution #39. Video Course Intros
 (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

10 Predictions for Blended Learning

- From: Bonk, C. J., & Kim, K. J. (in press). **Future directions of blended learning in higher education and workplace learning settings.** To appear 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

~~Blended Learning~~

Experience. The difference.

It's Over...

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

A. Yes
 B. No
 C. Not sure

It is the End!!!

BONK!

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