

Blended Learning: Situations, Solutions, and Several Stunning Surprises

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What I will discuss...

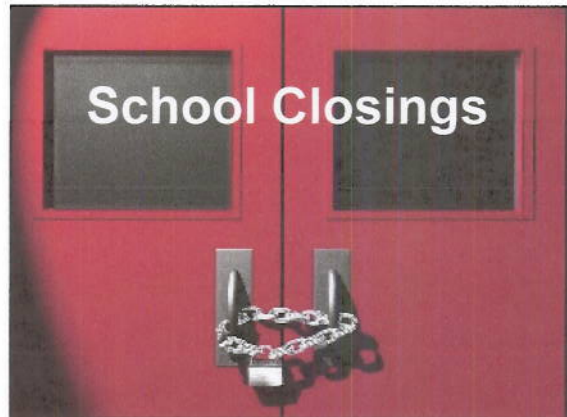
1. Reasons for Blended Learning
2. Definitions of blended learning
3. Advantages and disadvantages
4. Examples of blended learning
5. Implications for blended learning



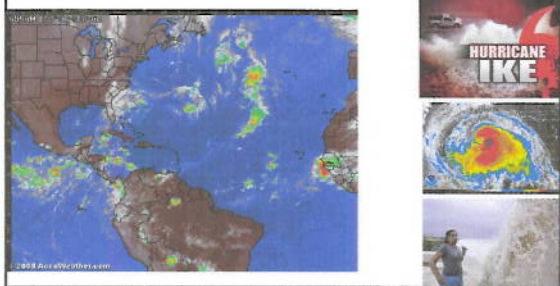
Who is demanding blended learning?



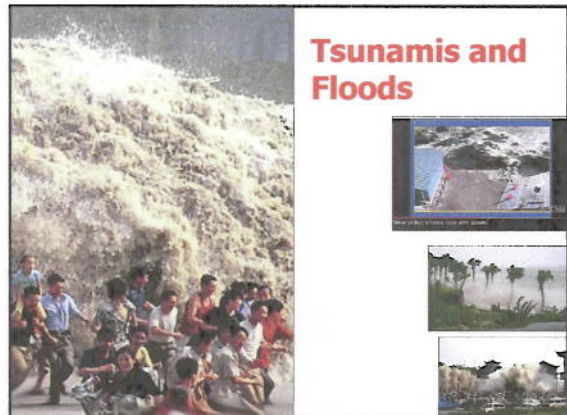
School Closings



Hurricanes!



Tsunamis and Floods



Earthquakes



Volcanos



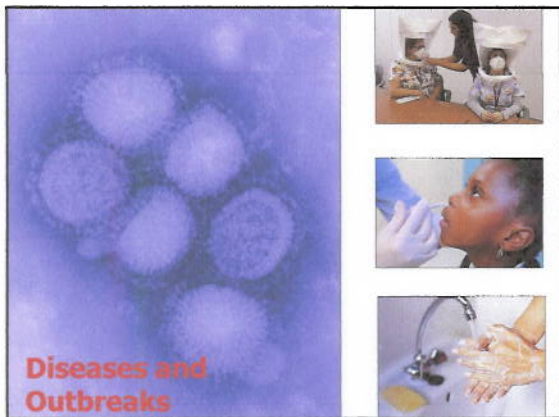
Blizzards and Ice Storms



Snowmageddon, DC winter of 2010



Diseases and Outbreaks



SARS in Hong Kong



CDC's H1N1 (Swine Flu) Toll: 4,000 Dead by Nov. 13, 2009



Reflection: Which of these have you experienced?

1. SARS
2. Earthquake
3. Tsunami
4. Winter Blizzard or Ice Storm
5. Major Flood
6. Hurricane, Typhoon, or Serious Tropical Storm
7. Swine Flu, Asian Flu, or Similar
8. Tornado
9. Near death weather-related situation
10. Other (not listed above)

How Schools and Parents Can Prepare for events like the Swine Flu?

**Answer:
Blended Learning and Continuous Learning**



Steps to Prepare for Outbreaks and Disasters

- Work on a crisis plan
- Use online resources
- Evaluate the telecommunications infrastructure
- Make sure teachers are prepared

What can you do?

- Post syllabus and content online
- E-books and other resources
- Fully online courses



(EdWeek.org)

What can you do?

- Phone conferencing (e.g., Skype, Google Talk, VOIP)
- Web conferencing
- Learning management systems to track progress



(EdWeek.org)

What can you do?

- Videotape master teachers
- Learning packets to be sent home
- Check out laptops to younger students
- Phone hotline for homework



(EdWeek.org)

What can you do?

- Interactive study guides online
- Online grading and assignment-posting programs
- Online resources, textbooks, instructional websites, online databases, and Google Docs



(EdWeek.org)

What can you do?

- Post assignments
- Develop plan for file or assignment uploading and downloading as well as a system for feedback



(EdWeek.org)

What can you do?

- Develop plan for hard copies of assignments for students lacking computer access



(EdWeek.org)

What Can You Do?

- **Middle School:** add Twitter for district messages.

(EdWeek.org)



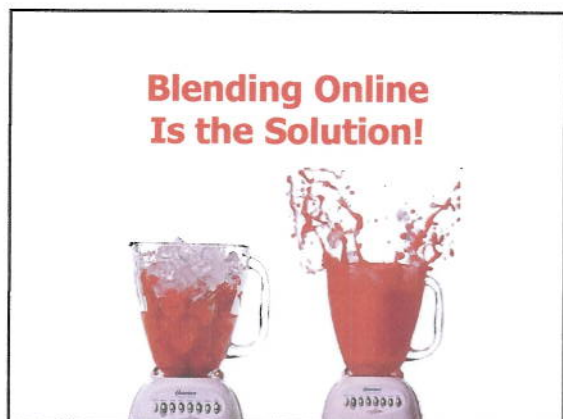
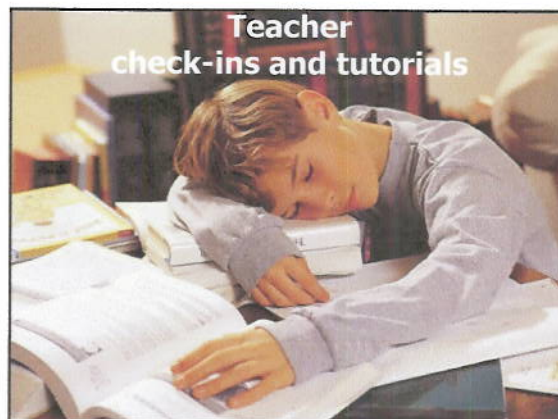
What Can You Do?

- **High School:** add laptops to take home, Blackboard to teach online.

(EdWeek.org)



Blackboard



Blended Learning: Two Parts

1. Models and Frameworks
2. Problems and Solutions (i.e., examples)

Part I. Blended Learning Defined and Explained

The Sloan Consortium Definition of Blended

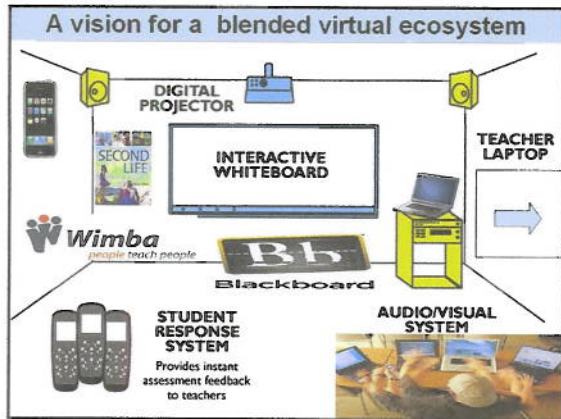
Proportion of content delivered online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use 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.

Blending Online Defined

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



Trying to Define it is a Trap!!! A Rebel From Another Galaxy, March 14, 2010 By Andrea Fuller



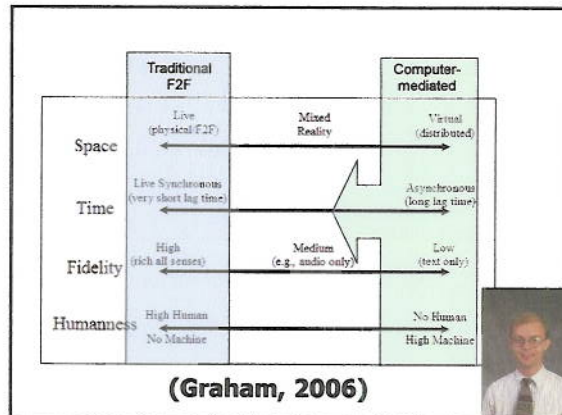
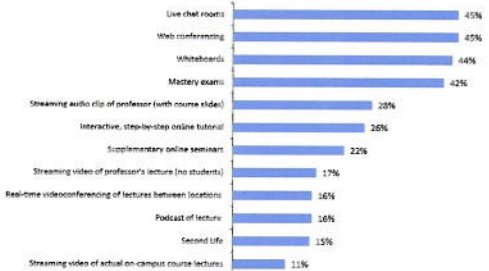
Trends in Instructional Tool Usage in Online Education Programs, Research Brief, Eduventures, February 2010 (study of 96 universities)

Figure 3. Most Frequently Used Instructional Media and Approaches in SOEs' Online Courses



Trends in Instructional Tool Usage in Online Education Programs, Research Brief, Eduventures, February 2010 (study of 96 universities)

Figure 5. Less Frequently Used Instructional Media and Approaches in SOEs' Online Courses



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

There is no one model of blended.
AMA Special Report, Effectively Implementing a Blended Learning Approach
 (Steven Shaw & Nicholas Igneri, 2006)

Source: American Management Association, AMA at Work

Where is Blended Beneficial?

- During catastrophic events.
- Rural areas, students spread over a distance.
- Pregnant, bullied, gifted, sick, etc.
- Course areas lacking certified teachers.
- Students with extracurricular activities.
- Large size classes (spanish, psych, algebra, elementary statistics, biology).
- Classes with a work related experience.
- Classes with need for standardization.
- Writing intensive and theory classes.

Examples of Blended Learning, Margaret Driscoll, e-Learning

- 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

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?



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 an event or a personal problem arises. Or students asks to watch the class a second time.



Blended Solution #2. Public TV

e.g., Mongolia teachers addressing H1N1
(Otgo Okhidoi, Nov 10, 2009)




Blended Solution #3. Webinars

(Elluminate, Dimdim, WebEx, Adobe Connect Pro)



Problem Situation #3: Facilities and Time


- Limited facilities or rooms for teaching. Or students cannot make it to class every day due to physical problems or work.



Blended Solution #4. Class Site (e.g., Microsoft Office Live, Google Sites)


Thinking of creating a website?
Google Sites is a free and easy way to create and share messages. [Learn more](#)

Create web pages easily
Collect all your info in one place
Control who can view and edit

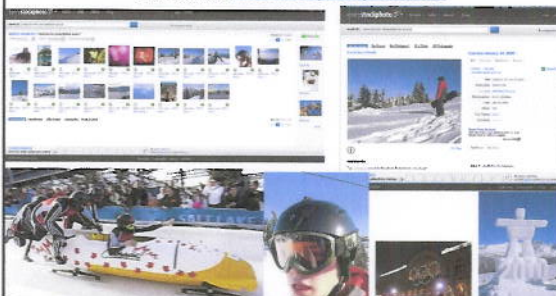


Problem Situation #4: Web Supplemental Activities

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




Blended Solution #6. Department of Education free lesson plans

<http://www.free.ed.gov/>



Blended Solution #7. Free Lessons from Smithsonian Education

<http://www.smithsonianeducation.org/educators/>



Blended Solution #8.
Khan Academy (videos on math, bio, trig, chemistry, money and banking, economics, statistics, etc.; <http://www.khanacademy.org/>)

Blended Solution #9.
Online Portal Explorations

Blended Solution #10. Tour a Museum (e.g., British Museum, Smithsonian, Louvre)

Blended Solution #11. Tour the U.S. Capital

Historic Events in the Old Senate Chamber

- Missouri Compromise Debate, 1820
- Webster-Knox Debate, 1850
- The Senate Chooses a President, 1851 and 1857
- The Compromise of 1850
- The Cases of Senator Charles Sumner, 1856

Old Senate Chamber Artwork

- United States Senate Chamber by Thomas Dewey

Blended Solution #12. Virtual Archaeology (e.g., ARCHAVE from Brown University)

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 #13. Student Developed Wikibooks (Wikibooks Junior)

Problem Situation #6: Preparedness for the Real World

- **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 #14. Edutopia (PBL lessons)

Blended Solution #15. Students Produce YouTube Videos

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 #16. Wiki Collaboration Site (e.g., Wikispaces)

Blended Solution #17. Working In Virtual Teams (e.g., Yahoo Groups, Collanos, SharePoint, Google Docs)

Blended Solution #18. Paired Article Critiques in a Blog

Article	Student Critique	Student Peer Review
Ashcraft, J.B. (2007). <i>Does the Community of Inquiry Framework Predict Outcomes in Online MBA Courses?</i>	Stephen Moses Carolin Pennington Lin Ya Alex Bostley	Lorraine Ryan Karen Leonard Flora Liu Lori Adkins
Meyer, K.A. (2003). <i>Face-to-Face versus Threaded Discussion: The Role of Time and Higher-Order Thinking</i>	Lorraine Ryan Herb David Nirma Aizen Karen Leonard Francis Wilkison	Paul Anderson Yvonne Tracy Carolin Pennington Lin Ya Alex Bostley
Shen, P., Li, C.S. and Pickett, A. (2006). <i>A study of teaching presence and student course</i>	Heather Barrett David Wilson	Sofia Rasputich Nirma Aizen

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. Student Blogging


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 #20. Create an Online Community in Ning, Google Groups, or Yahoo Groups.

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 #21. TeacherTube



Blended Solution #22. Shared Online Video (WatchKnow)



Blended Solution #23. Explore Series (Annenberg)



Blended Solution #24. Shared Online Video (Monkeysee)



Blended Solution #25. Visual Resources

(e.g., Periodic Table of Visualization; Visual Thesaurus)

A PERIODIC TABLE OF VISUALIZATION METHODS

Basic Visualization		Complex Visualization	
1. Text	2. Images	3. Diagrams	4. Animations
5. Audio	6. Video	7. Interactive	8. Virtual Reality
9. Simulations	10. Data Visualization	11. Mind Maps	12. Concept Maps
13. Flowcharts	14. Hierarchical Diagrams	15. Network Diagrams	16. Process Diagrams
17. Gantt Charts	18. PERT Charts	19. PERT Networks	20. PERT Diagrams
21. PERT Charts	22. PERT Networks	23. PERT Diagrams	24. PERT Diagrams
25. PERT Diagrams	26. PERT Diagrams	27. PERT Diagrams	28. PERT Diagrams
29. PERT Diagrams	30. PERT Diagrams	31. PERT Diagrams	32. PERT Diagrams
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49. PERT Diagrams	50. PERT Diagrams	51. PERT Diagrams	52. PERT Diagrams
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57. PERT Diagrams	58. PERT Diagrams	59. PERT Diagrams	60. PERT Diagrams
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85. PERT Diagrams	86. PERT Diagrams	87. PERT Diagrams	88. PERT Diagrams
89. PERT Diagrams	90. PERT Diagrams	91. PERT Diagrams	92. PERT Diagrams
93. PERT Diagrams	94. PERT Diagrams	95. PERT Diagrams	96. PERT Diagrams
97. PERT Diagrams	98. PERT Diagrams	99. PERT Diagrams	100. PERT Diagrams

Blended Solution #26. World Trends and Indices (e.g. Worldmapper)

The screenshot shows the WorldMapper interface with a search bar, navigation tabs for 'Home', 'Map Categories', 'Thumbnail Index', and 'A-Z Map Index'. Below the navigation is a world map where countries are colored based on 'Science Growth'.

Blended Solution #27. Explore Virtual Worlds and Online Representations (UCLAs CVRLab, University of Virginia)

This block contains three images: a photograph of a classical building facade with columns, a 3D virtual reconstruction of a building's interior, and a screenshot of a virtual world interface with a user profile and a 3D model of a building.

Blended Solution #28. Timeline Tools (e.g., SMILILE from MIT, Learning Tools from UBC)

The diagram is a horizontal timeline with various icons and text boxes. It includes icons for a person, a smartphone, a laptop, and a document, along with text boxes containing names and dates.

Blended Solution #29. Flash, 3-D Visualization, & Laboratory Software

This block contains three screenshots of educational software. The first shows a 3D molecular model with blue and red atoms. The second shows a diagram of a cell with various organelles. The third shows a laboratory software interface with a person's face and various data points.

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.

A small photograph of a young child with curly hair, wearing a white shirt, holding a small green frog in their hands.

Blended Solution #30. Wikibook and Wikipedia Editing

The screenshot shows a Wikipedia page for 'Kaprosochus'. The article text is partially visible, and there is a classification tree on the right side of the page.

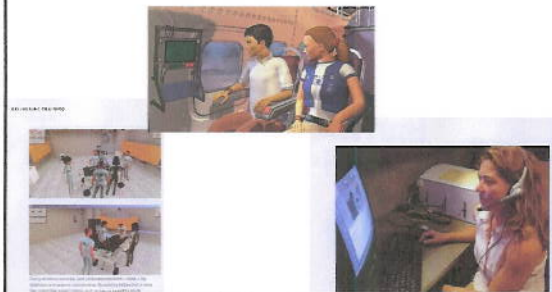
Blended Solution #31. Using Online Video (e.g., YouTube) to Memorize Sonnets and Poems



Blended Solution #32. Self-Paced Language Programs: Listen (JapanesePod, SpanishPod, Arabic online) Online Language Learning: Practice (ECpod, Mixxer, Livemocha, KanTalk,)



Blended Solution #33. Educational Simulations (Medical Traumas from TD Magazine, August 2006)



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 #34. Basic Acoustics of Musical Instruments 2005 MERLOT Classics Award



Blended Solution #35: Free Podcast Shows; Language Learning (ChinesePod—learn Mandarin)



Blended Solution #36. Indexing Sounds in Cities with Google Maps

The image shows a Google Maps interface with several red location markers and information pop-ups. A video player in the top right corner shows a man speaking, with the title 'THE CHRONICLE' visible above it.

Blended Solution #37. Podcasts of Famous Literature (e.g., Shakespeare)

The image shows the website 'SHAKESPEARECAST.COM'. It features a large image of a forest scene, a 'Feed on' button, and a list of audio files including 'RSC Act 3 Scene 1', 'Romeo and Juliet - Act 2', 'Hamlet Act 3 Scene 1', 'RSC Act 2 Scene 5', 'RSC Act 2 Scene 4', 'RSC Act 2 Scene 3', 'RSC Act 2 Scene 2', and 'RSC Act 2 Scene 1'. A 'Play' button is visible for the first file.

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 #38. Archive Synchronous Session

The image shows a video player interface. The main video area displays a presentation slide titled 'Free and Open Source and Open Access Fundamentals' by 'Charles J. Buck, Professor, Indiana University'. The slide also lists 'Open Access' and 'Open Access Fundamentals'.

Blended Solution #39. Teaching with Twitter

Sugata Chakravarty, a professor of consumer sciences and retailing at Purdue University, has welcomed Twitter into the lecture hall, even though the service lets students engage in back-channel discussions. The questions submitted via hashtag for the professor and guest speakers are projected for all the students to see.

The image is a collage showing various elements related to teaching with Twitter: a Twitter profile page for 'Teaching with Twitter', a smartphone displaying a Twitter message, a laptop, and a classroom scene with a professor and students.

Trends, Implications, and Challenges for Blended Learning

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

Again, this talk covered...

1. Reasons for blended
2. Definitions of blended learning
3. Advantages and disadvantages
4. Examples of blended learning
5. Predictions for blended learning
6. Challenges for blended learning



How many ideas did you get from this talk?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.



Questions and Comments

Note: Book papers and talks at:
<http://www.publicationshare.com/>
<http://www.trainingshare.com/>

