Part I of this 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

Poll #1: Bonk's Web Addiction Questionnaire
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?

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

<table>
<thead>
<tr>
<th>Comprehension of online education access</th>
<th>Sign of Success</th>
<th>Method of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>Traditional</td>
<td>Course with web-based tutorials and online activities.</td>
</tr>
<tr>
<td>10% to 25%</td>
<td>Web-based</td>
<td>Course which uses web-based resources and online activities.</td>
</tr>
<tr>
<td>25% to 50%</td>
<td>Hybrid</td>
<td>Course which combines online and face-to-face instruction.</td>
</tr>
<tr>
<td>50%</td>
<td>Online</td>
<td>Course which is offered online, but students have to participate in blended meetings.</td>
</tr>
</tbody>
</table>
Range of Blends in Pew Cases

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)

Where is Blended Beneficial?

http://www.certar.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

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

Models of Blending

Blending occurs at the following four levels:

- Activity Level
- Course Level
- Program Level
- Institutional Level

Instructor stakeholders

Administrator stakeholders

1. Activity- and Course-Level Blends

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

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.

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.

Implications and Challenges for Blended Learning
1. Faculty and students are more mobile.
2. Students more choices.
3. Student expectations rise.
6. Courses increasingly modular.
7. Less predefined schedules.
8. When teaching less clear; when learning less clear.
Part II: Some Online Motivational Ideas

Behavioristic Interactivity

Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?

Motivation Research Highlights (Brophy)
1. Supportive, appropriate challenge, meaningful, moderation/optimal.
2. Teach goal setting and self-reinforcement.
4. Novelty, variety, choice, adaptable to interests.
5. Game-like, fun, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, interact with peers.
7. Allow to create finished products.
8. Provide immediate feedback, advance organizers.
9. Show intensity, enthusiasm, interest, minimize anxiety.
10. Make content personal, concrete, familiar.

I even reflected on this for a moment...
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: Social Ice Breakers

A. Public Commitments: Have students share how they will fit the coursework into their busy schedules

B. Favorite Websites
1. Everyone posts 1-2 of their favorite Websites and explain why.
2. Peers comment on or rate them.

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

2. Encouragement, Feedback, etc.: A. Online Self-Testing (e.g., self study in anatomy or chemistry, virtual autopsy, dissection, etc.)

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

2. Encouragement, Feedback, etc.: C. Online Simulation: Financial Accounting; (University of Calgary)
3. Curiosity, Fun: Exploration and Demonstration: Virtual Tours and Timelines (HyperHistory)
http://simile.mit.edu/timeline/

4. Variety, Novelty: A. Supplementing Course with Health Resources (portals, referatories, & repositories)

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.)

5. Autonomy, Choice: B. Clickers: Innovation is but one click away...

5. Autonomy, Choice: C. Online Portal Explorations

6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch
6. Relevance, Meaningfulness: 
   B. Authentic Data Analysis

Jeanne Sept, IU, Archaeology of Human Origins; Components: From CD to Web
- A set of research q's and problems that archaeologists have posed about the site
- A complete set of data from site
- Students work collab to interpret age of site
- Interpret of ancient environments
- Analyze artifacts/fossils from site

7. Interactive, Collaborative: 
   A. Online Language Learning
      (Mixxer, Livemoch, Friends Abroad)

Ning in Education

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

College Instructors

7. Interactive, Collaborative: 
   C. Flash, 3-D Visualization, & Laboratory Software

8. Engagement, Effort: 
   A. Just-In-Time Syllabus
      (Knew, Blended, & Success http://knew.mcmaster.ca/in.html
      http://knew.mcmaster.ca/itn.html)

Syllabus is created as a "shell" which is 
thematically organized and contains print, 
video, and web references as well as 
assignments. (Goals = critical thinking, 
collab, develop interests)
- e.g., To teach or expand the discussion of 
supply or elasticity, an instructor might add 
new links in the Just-in-Time Syllabus to 
breaking news about rising gasoline prices.

8. Engagement, Effort: 
   B. Breeze + Video + Forum + Online Papers
9. Tension, Challenge, etc.: A. Online Role Play of Famous People, Mock Trial, Debates, etc.
- Enroll famous people in your course
- Students assume voice of that person for one or more sessions

9. Tension, Challenge, etc.: C. Ethical Medical Debates
Students to protest human body exhibit

10. Yields Products, Goals: A. Movie Festivals, Concept Maps, Video Papers, Virtual Timelines, Digital Movies


99 seconds: What have you learned so far?
- Solid and Fuzzy in groups of two to four
Part III. Addressing Learning Styles

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. Publishing in Open Access Journals (e.g., PLOS)

Read 1b. Course Announcements (e.g., Teaching with Twitter)
Read 1c. University Podcast Shows
(School of Dentistry, Univ of Michigan) Educause Quarterly, 29(3), 2006

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. Blogs Uses
(eespecially 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 explore 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

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

Reflect 2c. Watch or Listen to Online Conferences
(2nd Int'l Online Medical Conference, March 14-15, 2009)

Reflect 2d. Community of Learners: Business and Medical Cases Online (problems, solutions, etc.)
3. Visual Learners

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

Display 3a. Podcasts! (videos of scientific papers and science)

Display 3b. Online Historical Document (e.g., Turning The Pages, British Library)

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

Display 3d. Animations, Video Clips, Audio, Pictures, Web Resources, etc. (e.g., DNA from the Beginning)
Display 3e. 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 3f. Medical Animations and Videos (find anchoring event (YouTube, CNN, BBC, TeacherTube, CurrentTV))

Display 3g. Online Timelines
(US Presidents)

Display 3h. Concept Mapping and Timeline Tools (VUE, Bubble.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

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

Display 3j. Flash, 3-D Visualization, & Laboratory Software
Display 3k. Video Streamed and Webcast Lectures

Display 3l. Videos of the Periodic Table

Display 3m. Adventure Blogging (Ben Saunders, Mark Rennell, Andrew Revkin)

Display 3n. Explore Virtual Worlds and Online Representations (UCLas CVRLab, Univ of Virginia, June 11, 2007)

Display 3o. Online History Portals and Resources (Civil Rights Digital Library and Amistad)

4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process by 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))

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

Do 4c. Online Warm-ups Activities
Just-In-Time-Teaching (JiTT)
http://webphysics.lupul.edu/jitt/jiitt.html

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)

Do 4e. Syllabus, Glossary, etc. in wiki:
Students sign up for tasks
(Ron Owston, York University)

Do 4f. Educational Simulations
(Medical Traumas from TD Mag, August 2006, Cells Alive)
Do 4g. Cross-Class Collab
(Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)

Do 4h. Real World Problems (PBL online):
Real-time Cases

Do 4i. Video Scenario Learning
(Option 6, Bloomington, IN)

Do 4j. Wiki: Romantic Poetry Project
(Professor Mike Phillipson, English at Bowdoin College)

Next up: The MATRIX!!!!!!!!!!!
- Mobile
- Auditory
- Thought-stimulating
- Reflective/Real-World
- Visually Interactive
- Extremely Hands-on

Try the R2D2 Method!!!
Try TEC-VARIETY!!!
Sample papers at: http://www.publicationshare.com/
Archived talks at: http://www.trainingshare.com/