
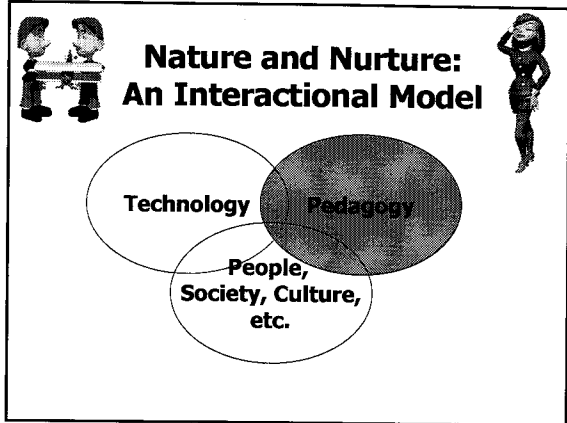




E-Learning: It's Nature (i.e., technology) and Nurture (i.e., Pedagogy) (Part II)


Curtis J. Bonk, Professor, Indiana University
 President, SurveyShare
 cjbonk@indiana.edu
<http://mypage.iu.edu/~cjbonk/>


Part I: 10 Learning Centered Technology Ideas

Experience. The difference.

- 1. Learner-Centered Learning Principles**
 (American Psychological Association, 1993)
- Cognitive and Metacognitive Factors*
1. Nature of the learning process
 2. Goals of the learning process
 3. Construction of knowledge
 4. Strategic thinking
 5. Thinking about thinking
 6. Context of learning
- Developmental and Social Factors*
10. Developmental influences on learning
 11. Social influences on learning
- Individual Differences*
12. Individual differences in learning
 13. Learning and diversity
 14. Standards and assessment
- Motivational and Affective Factors*
7. Motivational and emotional influences
 8. Intrinsic motivation to learn
 9. Effects of motivation on effort
- 

- Learner-Centered on the Web**
 (Bonk & Cummings, 1998)
1. Safe Lrng Community: 6, 11
 2. Foster Engagement: 1- 6, 11.
 3. Give Choice: 8, 9, 12
 4. Facilitate Learning: 2, 9, 11.
 5. Offer Feedback: 3, 6, 8, 11, 13.
 6. Apprentice Learning: 3, 6, 7-9, 11, 13.
 7. Use Recursive Tasks: 1, 3, 8-9, 10, 13.
 8. Use Writing & Reflection: 3, 8, 12-13.
 9. Build On Web Links: 2-4, 8-9, 12-14.
 10. Be Clear & Prompt Help: 2, 9, 11, 14.
 11. Evaluate Dimensionally: 1-5, 14.
 12. Personalize in Future: 6, 8, 10-13.

- 2. Constructivistic Teaching Principles (Brooks, 1990)**
- 
1. Build on student prior knowledge.
 2. Make learning relevant.
 3. Give students choice in learning activity.
 4. Student autonomy & active lrng encouraged
 5. Use of raw data sources & interactive materials
 6. Encourage student dialogue
 7. Seek elaboration on responses and justification
 8. Pose contradictions to original hypothesis
 9. Ask open-ended questions & allow wait time
 10. Encourage reflection on experiences

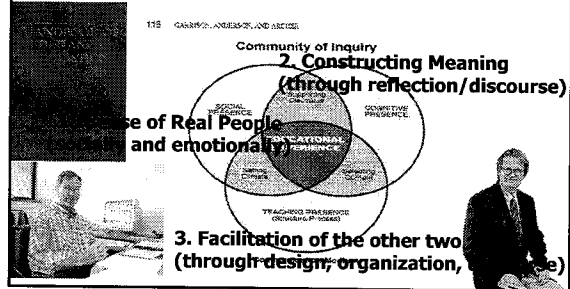
3. Sociocultural Ideas (Bonk & Cunningham, 1998)



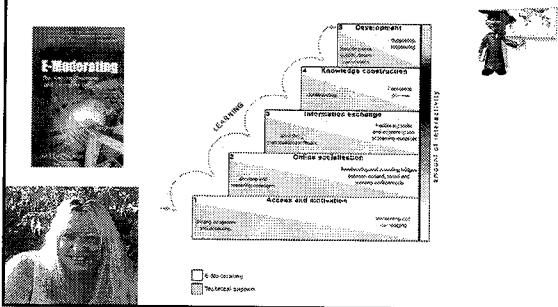
1. Shared Space and Build Intersubjectivity
2. Social Dialogue on Authentic Problems (mind is in social interactions and extends beyond skin)
3. Mentoring and Teleapprenticeships
4. Scaffolding and Electronic Assistance in ZPD
5. Group Processing and Reflection
6. Collaboration and Negotiation in ZPD
7. Choice and Challenge
8. Community of Learning with Experts & Peers
9. Portfolio Assessment and Feedback
10. Assisted Learning (e.g., task structuring)
11. Reciprocal Teaching & Peer Collaboration

4. Frameworks: A Theory of Critical Inquiry in Online Distance Educ

Randy Garrison, Terry Anderson, & Walter Archer
2003, Handbook of Distance Education, Moore & Anderson (Eds.)
garrison@ucalgary.ca; terrya@athabascau.ca

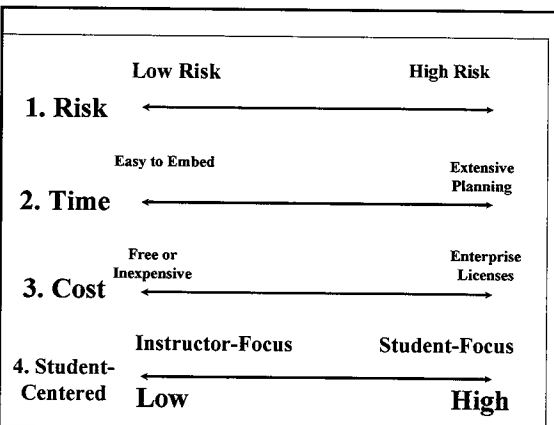


5. Model of Teaching and Learning Through CMC (Gilly Salmon, 2000)



Task

- Ideas definitely Can Use (Circle or write down)
- Ideas you might use (check off or write down in a separate column)
- Ideas you cannot use (cross off or put at the bottom)



1. One minute papers or muddiest point papers (L = Cost, M = Risk, M = Time)

- Have students write for 3-5 minutes what was the most difficult concept from a class, presentation, or chapter. What could the instructor clarify better.
- Send to the instructor via email or online forum.
- Optional: Share with a peer before sharing with instructor or a class.



2. Cool Resource Provider
(Bonk, 2004) (L = Cost, M = Risk, M = Time)

Cool Stuff

- Have students sign up to be a cool resource provider once during the semester.
- Have them find additional paper, people, electronic resources, etc.
- Share and explain what found with class via synchronous meeting or asynchronous discussion post.



3. Library Day
(L = Cost, M = Risk, M/H = Time)
(Bonk, 1999)

- Have students spend a day in the library or online finding and summarizing a set number of articles.
- Have them bring to class or post abstracts to an online forum.
- Share in small groups interested in similar topics.
- Perhaps give each student 1-2 minutes to describe what found in a chat.



4. Jigsaw

(L = Cost, M = Risk, H = Time)



- Form home or base groups of 4-6 students.
- Student move to expert groups—discussion ideas in a chat.
- Share knowledge in expert groups and help each other master the material in an online forum.
- Come back to base group to share or teach teammates.
- Students present in group what learned.

5. 99 Second Quotes

(L = Cost, M = Risk, M = Time)

99

- Everyone brings in a quote that they like from the readings
- You get 99 seconds to share it and explain why you choose it in a sync chat or videoconference
- Options
 - Discussion wrapped around each quote
 - Small group linkages—force small groups to link quotes and present them
 - Debate value of each quote in an online forum

6. Structured Controversy and Instructor (or student) Generated Virtual Debates

(L = Cost, M = Risk, M = Time)

1. Select controversial topic (with input from class)
2. Divide class into subtopic pairs: one critic and one defender.
3. Assign each pair a perspective or subtopic
4. Critics and defenders post initial position statements in an online thread
5. Rebut person in one's pair
6. Reply to 2+ positions with comments or q's
7. Formulate and post personal positions.



7. Scavenger Hunt

(L = Cost, L = Risk, M = Time)

1. Create a 20-30 item scavenger hunt



2. Post scores



8. Pruning the Tree (i.e., 20 questions)



- During a synchronous chat or videoconference, have a recently learned concept or answer in your head.
- Students can only ask yes/no types of questions.
- If guess and wrong they are out and can no longer guess.
- The winner guesses correctly.



9. Numbered Heads Together

- Assign a task and divide into groups (perhaps 4-6/group).
- Perhaps assign group names across class or perhaps some competition between them.
- Count off from 1 to 4.
- Discuss problem or issue assigned.
- Instructor calls on groups & numbers.
 - e.g., in a research methods class, one person reads intro, another the method, another the findings, discussion, implications, etc.



10. Human Graphs



- In a videoconference or synchronous session, have students line up on a scale (e.g., 1 is low and 5 is high) on camera according to how they feel about something (e.g., topic, the book, class).
- Debrief



Part II: 24 Blended Learning Solutions



Ok, Million Dollar Question: How can you blend learning?

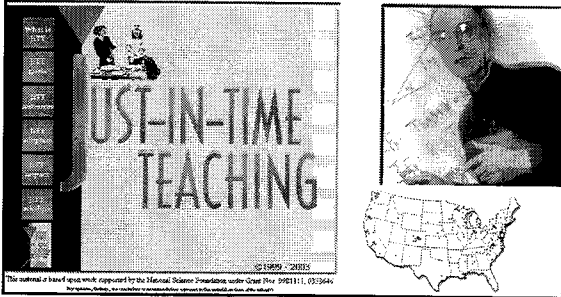


Blended Solution #1. Video Streamed Lectures and Expert Commenting

Streamed Class Sessions for 546

Department	Course ID	Section	Date	Part	Media Type	Stream (click to play)	Download
EDUC-F	546	00600	01/22/2005		Real	Real Player	Download (641.01M)
EDUC-F	546	00600	01/15/2005		Real	Real Player	Download (694.24M)

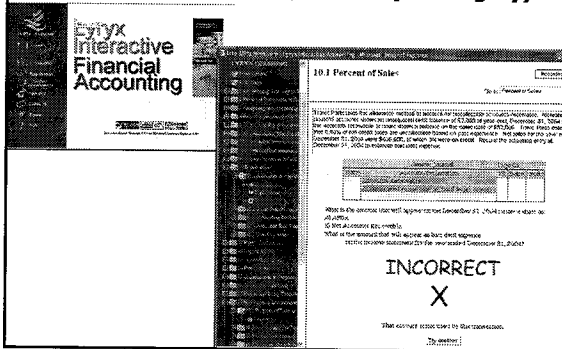
**Blended Solution #2: Warm-ups Online
Just-In-Time-Teaching (JiTT)**
<http://webphysics.iupui.edu/jitt/jitt.html>



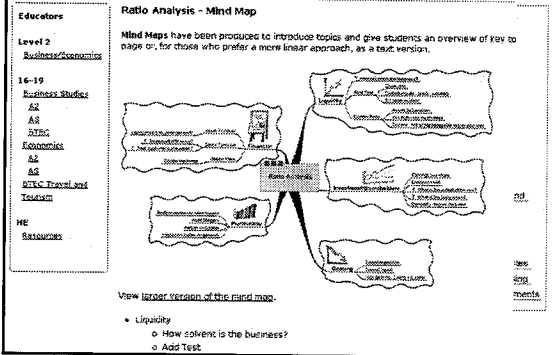
**Blended Solution #3: Apprenticeship:
Electronic Guests & Mentoring**
(Simon Fraser University)
<http://www.sfu.ca/medlprts/news/2001/54>



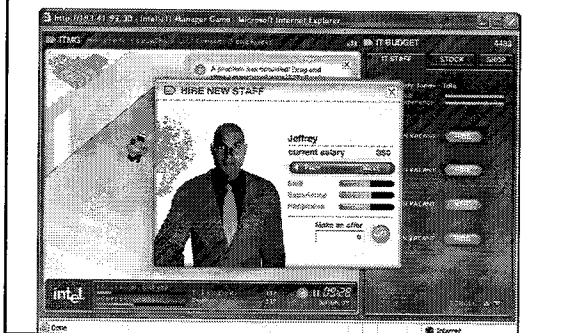
**Blended Solution #4: Online Simulation:
Financial Accounting; (University of Calgary)**



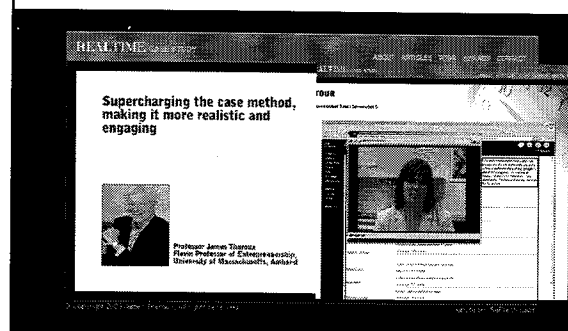
Blended Solution #5: Concept Mapping Tools



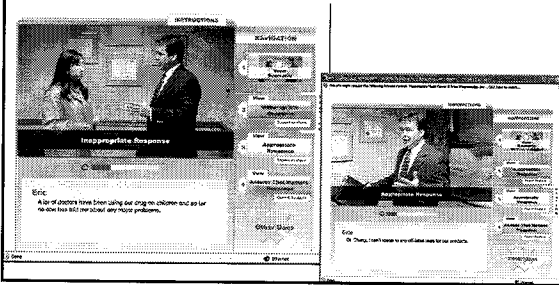
**Blended Solution #6: Educational
Simulations, Scenarios, and Manipulations**



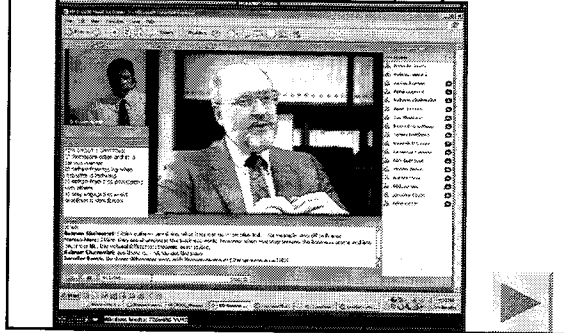
**Blended Solution #7: Real World
Problems (PBL online): Real-time Cases**



Blended Solution #8. Video Scenario Learning (Option 6, Arjuna Multimedia, Bloomington, IN)



Blended Solution #9. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)



Blended Solution #10. Video Observations (e.g., Virtual Psychiatric Interview, Trinity College, Dublin)

showcases

12

Department: **Psychiatry**

Academics: Prof. Michael O'G, Dr. Brian Fitzmaurice, Kate Amstrong



This is a Virtual Interview project that has been developed by CLT and the Department of Psychiatry. The first iteration was launched in March, 2004 for students. In this project students are given the opportunity to carry out a clinical interview with a patient. The student decides what questions are asked and with the aid of video clips can listen and watch the patient responses.

Solution #11. Instructor | e.g., self study in anat

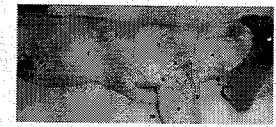


The following table will allow you to access the photographs of the cat muscle system.
The purpose of these pages is to get your knowledge on the structure of the muscular system.
Please try to answer all structures are given before you look at the answers.

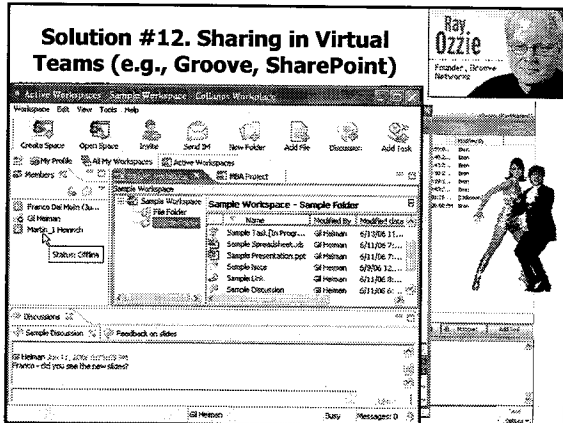
Trunk & Shoulder Muscles

Choose one of the following categories:

- Neck Muscles
- Trunk & Shoulder Muscles
- Upper Extremity Muscles



Solution #12. Sharing in Virtual Teams (e.g., Groove, SharePoint)



Solution #13. Online Synchronous Cases and Teams; Simulated Boardroom Chat; College Wales, Univ. of Glamorgan

