Assessment and Evaluation Part I. Matching Feedback and Assessment to Online Activities

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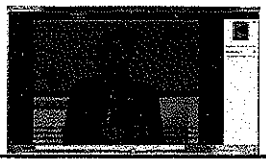


Is this motivating? How would you feel?

- You take an online class.
- You read some Web pages.
- Maybe you watch some videos or hear some audio clips.
- Maybe you ponder some study review questions.
- You take a multiple choice test online.
- You receive an automated score on the test.
- Class is over.

How about this scenario?

- You take an online class.
- You "meet" your fellow students on the d-board.
- You read some materials. You find and share some materials too.
- You participate in some discussions of course concepts.
- You take a multiple choice test.
- You receive automated score on the test.
- Class is over.

Commentary on Scenario 1

- No interaction with peers.
- Students don't feel "missed" if they don't participate.
- Not clear why course is online (except perhaps for media elements).
- Potential for immediate feedback is nice -- but assessment format is limiting.

Commentary on Scenario 2

- Interaction with peers is great. Serves as a motivator.
- Community is likely to develop.
- Students will feel involved and important if they share examples and resources.
- Assessment format may not be well aligned given the activities.
- Class lacks closure in a manner appropriate to the activities.

Assessment and Learning

- Course objectives, activities, and assessments should be in alignment
  - This tends to be an issue in courses regardless of medium.
- Example:
  - In class students conduct a debate
  - Students are tested on their ability to recall facts

Misaligned Online Learning & Assessment

- A not-uncommon scenario
  - Discussion is used as a learning activity
  - Students are required to participate
  - Participation is noted by how many messages were composed by a student
- But does this method measure learning? (No, it encourages fast, sloppy postings, not thoughtful dialogue)

The Feedback Issue

- Students participating in online activities look for feedback to know:
  - The instructor is reading their contributions
  - Their participation is valued
  - Their participation is adequate, in terms of quality and quantity
  - Whole class commentary provided on a regular basis was found to be just as satisfactory from the student point of view (Dennen, 2001)

The Assessment Issue

- Often, online activities go unassessed
  - "Add-on" syndrome: Adding an online activity to a previously designed class because it sounds like a good idea

The Assessment Issue

- Students are more likely to participate when then know there is impact on their grade
  - Direct impact: graded on participation (quality, quantity or both)
  - Indirect impact: participation should bolster performance on other assessments
  - Students quickly become aware if an online activity is not related to assessed learning objectives

Common Online Assessment Complaints

- Student perspective
  - If they're supposed to discuss, why doesn't that count as part of their grade?
  - If they're just supposed to do something, why does quality matter?
  - I just got a number, no feedback.
  - I didn't get participation feedback.

Why Assess Process?

- Provides formative feedback on course
- Clarifies who is doing most work in small group assignments
- Helps prevent cheating
- Puts students on a schedule
- Shows that you care about their learning
- Improves communications and products

Matching Online Assessments to Online Pedagogies: Choices, Challenges, and Concerns

Sample Instructor Concerns

- What can I do?
- There's too much to assess!
- What to assess?
- Who did the work?

Assessment Choices

- Teacher-Led or Student-led *(Self or Peer)*
- Daily/Weekly (formative or Unit-Based (summative)
- Public or Private
- Process or Product

Assessment Choices

- Rubric-based or Wholistic
- Doing or Receiving Knowledge
- Writing-Intensive or Exam-Based
- Portfolio-Based/Cumulative or Task-by-Task

Assessment Choices

- Posted within CMS system
- Negotiated syllabus or Preordained
- Online tests or Paper-based
- Grades for amount of length of postings

- Quantitative or Qualitative measures
- Summative tasks or individual

Assessment Challenges

- Knowing all the options.
- Knowing all the tools.
- Keeping up with students.
- Detecting cheating and plagiarism.
- Too much to assess.
- Students frustrations.

- To show you value each student.

Assessment Concerns

- Fairness: How does this compare to FTF classes?
- Expediency: will it ever end?
- Meaning: Making sense of it all.
- System Downtime: What if system loses work?

Exploring Four Dimensions of Online Instructor Roles: A Program Level Case Study (Liu, Bonk, Magjuka, Lee, & Su, 2005)

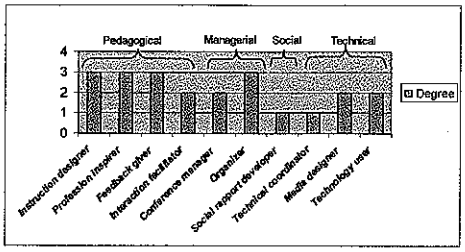


Figure 1. Instructors' preferences for different roles based on interview findings
(High priority=3, Medium=2, Low priority=1)

Pedagogical Strategies Used (KD Program)

Strategies	Courses in use (%)
Group change by each assignment	2 (7%)
Group discussion	23 (85%)
Group-level deliverables	21 (78%)
Internal interaction (critique, feedback, idea sharing)	9 (33%)
Peer evaluation	5 (19%)
Combination of groupwork and individual work	21 (78%)

Pedagogical Strategies Used (KD)

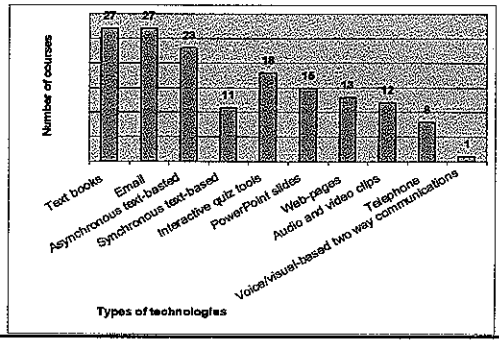
Assessment tasks (methods)	Frequency (*)
1. Asynchronous discussions	11
2. Quizzes and exams	7
3. Case analysis	6
4. Problem analysis (involves calculation)	6
5. Projects	3
6. Simulations	2
7. Essays	1
8. Reflections	1
9. Peer eval. on team contribution	1

Based on 15 sections of 12 courses offered during 2005-06; Liu et al., 2007.

Social Strategies Used (KD Program)

Strategies	Courses in use (%)
Online coffee house	2 (7%)
Online introduction forum	2 (7%)
Personnel profile	27 (100%)
Other social events	5 (19%)

Technological Strategies Used (Bonk et al., 2004-2007)



Instructional activities to promote interactions

Instructional Activities	Course used	Course not used	Percentage of usage
Asking/responding to instructor questions	27	0	100%
Feedback on assignments	27	0	100%
Summary of class key points/concepts	26	1	96%
Instructor participation in discussions	25	2	93%
Team-based learning activities	22	5	81%
Assessing participation in discussions	18	9	67%
Small team discussions	11	16	41%
Peer evaluation	5	22	19%
Inter-team feedback/critique	4	23	15%
Bulletin board to express expectations	4	23	15%
Virtual office hours	3	24	11%
Student online coffee house	2	25	7%
Student introduction forum	2	25	7%

Study 2005-2007, Dr. Shijuan Liu Assessed 5 Master's Programs

- Ed Tech, fully online
- Language Education, fully online
- Adult education, blended (1 course FTF)
- MBA, blended (2 courses FTF)
- Nursing (6 core courses online; rest FTF)

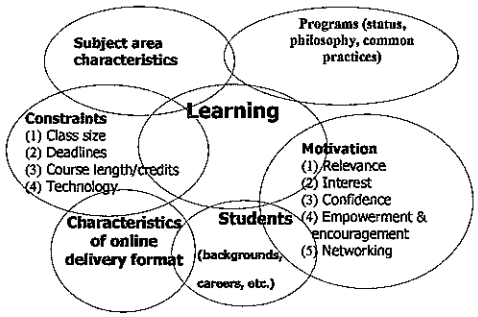
Assessment in Five Online Master's Programs

Assessment tasks	Frequency	Assessment tasks	Frequency
1. Participation in asynchronous discussions	18 instructors (17 courses)	13. Reading and summarizing	2 instructors (3 courses)
2. Critiques	10 instructors	14. Concept mapping	2
3. Essays	9 instructors (11 courses)	15. Learning contracts	2
4. Projects	9 instructors	16. Portfolio	2
5. Field reports	7	17. Participation other than asyn. discussion	2
6. Reflections	7	18. PPT presentation	1
7. Quizzes and exams	5 instructors (6 courses)	19. Critique log	1
8. Students create questions (design activities)	4 instructors (6 courses)	20. Peer editing	1
9. Case analysis	3	21. Other	2
10. Questions and answers	3		
11. Collecting information and sources	3	* 20 instructors, 22 courses (for each task, studying how, why)	
12. Inventory	3		

What are the goals?

- Knowledge and skills?
- Critical thinking?
- Demonstrate understanding?
- Acquire learning experiences?
- Observe expert models?
- Form a learning community?
- Collaboration and team skills?

Figure 1 Visualization of the seven design factors



Opportunities (Liu, 2008)

- Easily tracking student discussion (archived)
- Reusing feedback given to students
- Automatic grading
- Flexibility in time and location
- More depth
- Chance to improve writing
- Help become better thinkers

Challenges (Liu, 2008)

- Less variety in assessment formats
- Not able to assess "in the moment"
- Feedback needs to be very clear
- Hard to grade quality of discussions
- Inflexibility in making changes
- Time consuming

Additional Challenges (Liu, 2008)

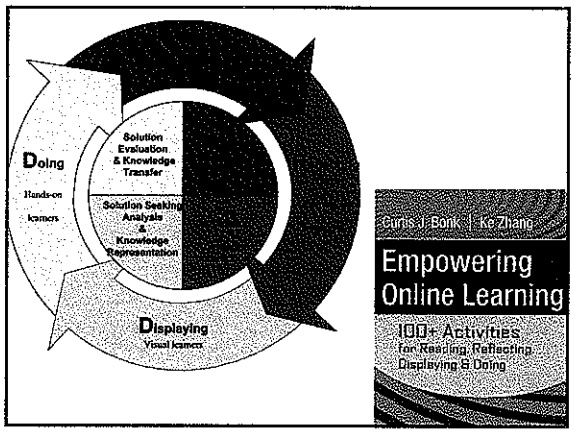
- Pressure to grade "in class" discussion.
- Students can cheat.
- Students skip anything not graded.
- Instructors cannot assess nonverbal.

Instructor Practices (Liu, 2008)

- Assessment practices were continuous, ongoing, clear, real world, and diverse.
- Final products were typically writing (high in cognitive domain, higher-order thinking)
- Much reflective writing
- Flexibility, control, active, self-directed
- Higher order thinking skill emphasis
- Asynchronous discussions
- Quizzes and exams (subject areas)

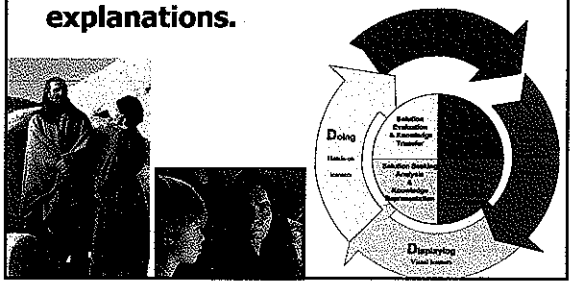
Time to Match Online Pedagogy to Online Assessments

1. Traditional and Self-Test Online Exams
2. Web Lecture Discussions and Reflections
3. Online Video (YouTube) Reflections
4. Online Explorations and Quests
5. Case and Vignette Solutions
6. Blog Reflections
7. Synchronous Chat Reflections
8. Performance in Simulations and Role Play
9. Product Creations: e.g., YouTube, Wikibooks
10. Cross Institutional Collaborations

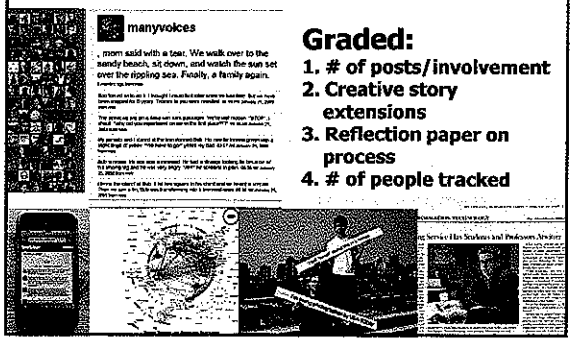


1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.



Read 1a. Creative Story Telling in Twitter (or tracking someone famous)

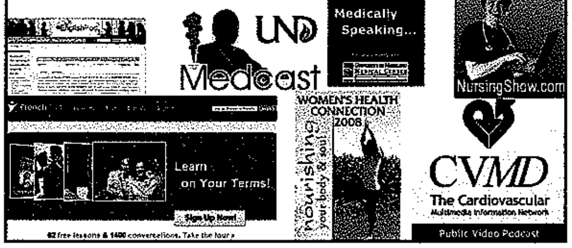


Graded:

1. # of posts/involvement
2. Creative story extensions
3. Reflection paper on process
4. # of people tracked

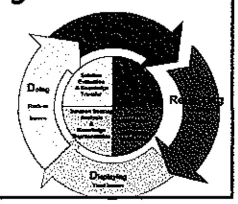
Read 1b. Listening to Podcasts

Graded:
1. Reflection paper
2. Test on concepts
3. Online discussions



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. Online Resource Library (ORL) and Library Day

SiteScape Forum

Tools Menu

P540 Learning and Cognition in Education (Spring 2004)

Student Online Resource Libraries (ORL)

Folders
- Directions for Online Resource Library (OCR)
- Online Resource Library for Amanda Kolb
- ORL for Ben Pierson
- ORL for Benetta Fairley
- ORL for Craig Buckler
- ORL
- ORL
- ORL
- ORL
- ORL

Graded:
1. Coherence,
2. Completeness, effort, and amount of digging,
3. Relevancy and timeliness for this class.

Reflect 2b. Case and Scenario Learning (problems, solutions, etc.)

Graded for:
1. Solution coherence, completeness, relevance, overall quality, etc.,
2. Peer feedback,
3. Number of postings, etc.

Reflect 2c. Paired Weblog Critiques

(Randy Garrison & Norm Vaughn, Univ. of Calgary)

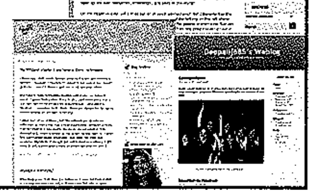
Graded:
1. Critical thinking displayed: sound analysis and evaluation, logical, backs up claims
2. Coherent and Complete: logical flow to the critique or review, unity, well organized, sequence
3. Learning displayed: breadth/depth of thought, knowledge growth, understands theories.

Article	Student Critique	Student Peer Review
Arbaugh, J.B. (2007). *Does the Community of Inquiry Framework Predict Outcomes in Online MBA Courses?*	Stephen Myers	Lorraine Ryan
	Carolyn Pawelko	Karen Leonard
	Lin Yu	Flora Lin
	Alex Brinley	Lori Addison
Meyer, K.A. (2003). Face-to-Face versus Threaded Discussions: The Role of Time and Higher-Order Thinking.	Lorraine Ryan	Paul Anderson
	Heidi Dennis	Yvonne Toney
	Neera Arora	Carolyn Pawelko
	Karen Leonard	Lin Yu
	Emmica Wilkinson	Alex Brinley
Shea, P., Li, C.S. and Pickett, A. (2006). A study of teaching presence and student sense	Heather Barnett	Stefan Rasporich
	David Wilson	Neera Arora

Reflect 2d. Personal & Team Blogs

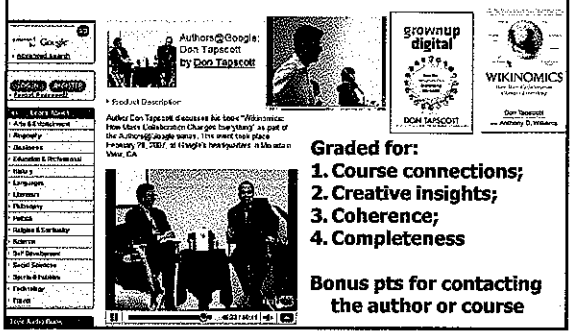
R685: Weekly Reflection Web links
Curt Bonk, Indiana University
Fall, 2008

1. Vanessa Blackmore: http://vblackmore.blogspot.com/
2. Tzu-su (Theresa) Chen: http://explorenewtechnology.blogspot.com/
3. Brent Andrew Ferrantelli: http://bferrant.wordpress.com/ (may include a podcast)
4. Carrie Donovan: http://2point0ify.blogspot.com/
5. Yuichi Kageto: http://yuichi685.blogspot.com/
6. Seolim Kwon: http://drbonkweb2.blogspot.com/



Grade:
1. Relevancy to class
2. Interesting/Insightful
3. Completeness
4. Depth
5. Diversity of Ideas
6. Reflective

Reflect 2e. Reuse Blog, Chat Transcripts, Interviews, Presentations



Graded for:
1. Course connections;
2. Creative insights;
3. Coherence;
4. Completeness

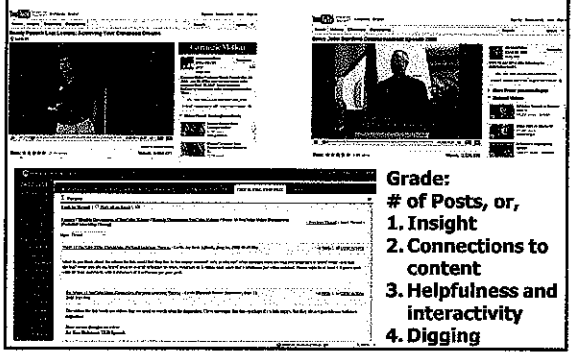
Bonus pts for contacting the author or course

Reflect 2f. Workplace and Field Reflections (asynchronous discussions)

Graded for:
1. Coherence;
2. Completeness/Weekly Participation
3. Course connections;
4. Creative insights;
5. Interaction with peers;

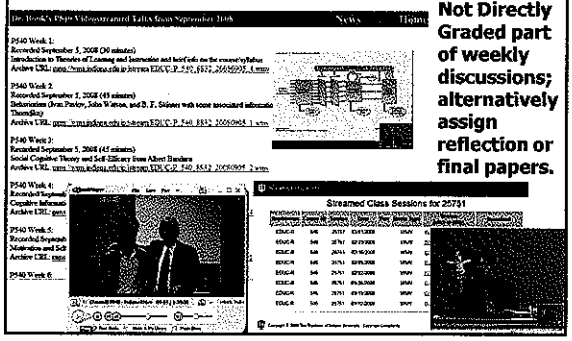
Note: In addition, might assign an end of semester reflection paper

Read 2g. YouTube Video Discussions



Grade:
# of Posts, or,
1. Insight
2. Connections to content
3. Helpfulness and interactivity
4. Digging

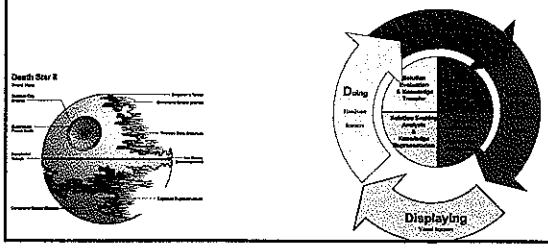
Reflect 2h. Instructor Webstreamed Lectures



Not Directly Graded part of weekly discussions; alternatively assign reflection or final papers.

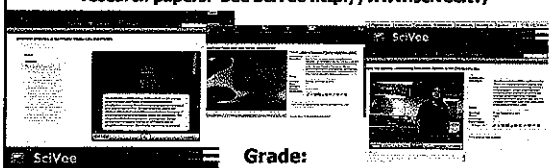
3. Visual Learners

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



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

NSF, the Public Library of Science, and the San Diego Supercomputing Center created a YouTube for scientists to help demystify important research papers. See SciVee http://www.scivee.tv/



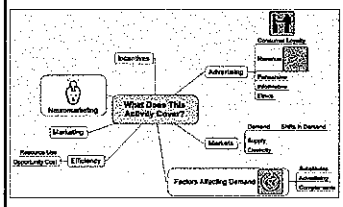
Grade:
1. Reflection papers
2. Pts for certain number watched
3. Online discussions

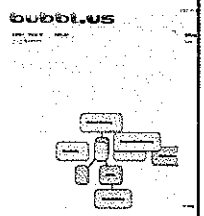
Bonus pts for contacting the researcher

Display 3b. Anchored Instruction
(find anchoring event in YouTube, CNN, BBC, TeacherTube, CurrentTV)

Grade:
1. Reflection papers
2. Pts for certain # watched
3. Online discussion and connections

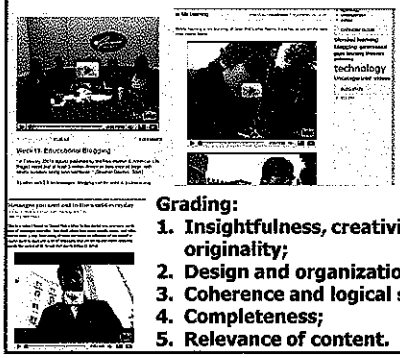
Display 3c. Concept Mapping Tools
(VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)





Graded for: Connections, causal relationships, depth, breadth, descriptions, logic, creativity, etc.

Display 3d. Vlogging (Video Blogging)



Grading:
1. Insightfulness, creativity, and originality;
2. Design and organization;
3. Coherence and logical sequence;
4. Completeness;
5. Relevance of content.

Display 3e. Student YouTube Videos

http://www.youtube.com/watch?v=FivFpj6tqjw

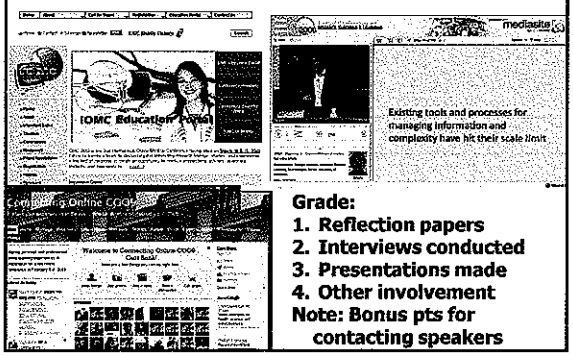
Cool YouTube Video Creation: Reflection Paper

Brent Forrantelli, December 2008

For my final project, I wanted to do something much experience. I had originally intended to creat SecondLife, and was excited to create an avatar (v

1. Insightfulness, creativity, and originality;
2. Design and visual effects;
3. Coherence and logical sequence;
4. Completeness;
5. Relevance of content.

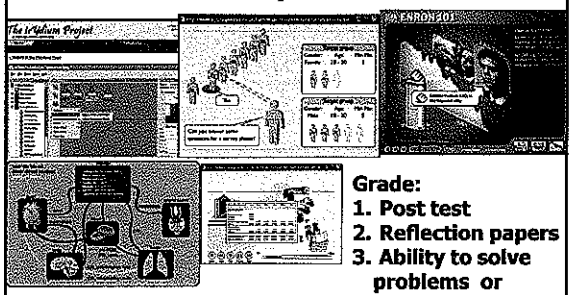
Display 3f. Videostreamed Conference Presentations



Grade:
1. Reflection papers
2. Interviews conducted
3. Presentations made
4. Other involvement

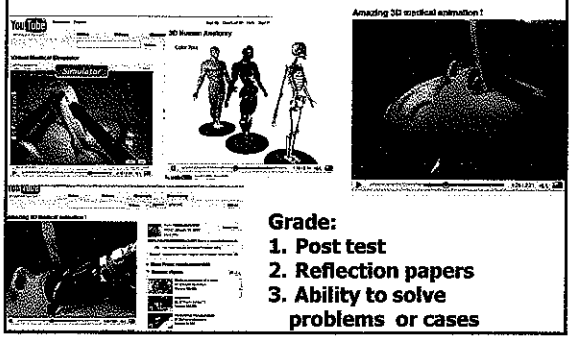
Note: Bonus pts for contacting speakers

Display 3g. Flash, 3-D Visualization, & Laboratory Software



Grade:
1. Post test
2. Reflection papers
3. Ability to solve problems or cases

Display 3h. Animations in YouTube



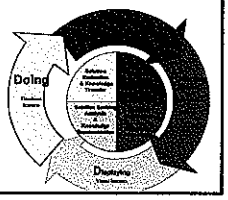
Grade:
1. Post test
2. Reflection papers
3. Ability to solve problems or cases

Display 3i. Human Embryology Animations
(Valerie O'Loughlin, Indiana University)

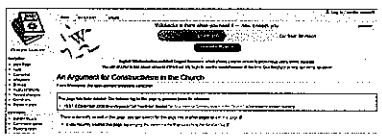
Grade:
1. Post test
2. Reflection papers
3. Ability to solve problems or cases

4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

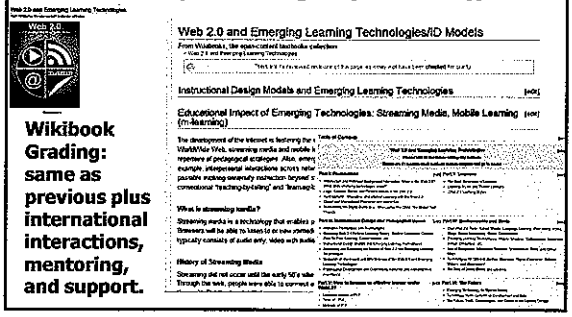


Do 4a. Wikibook Extensions
(The Practice of Learning Theories (The POLT))



Wikibook Grading (50 Total Points or 10 pts each):
1. Chapter relevance
2. Chapter creativity
3. Chapter coherence
4. Chapter completeness
5. Helpfulness on other chapters

Do 4a. Wikibooks: International Collaboration (Web 2.0 and Emerging Learning Technologies (The WELT))

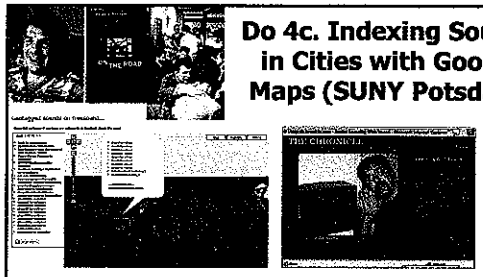


Wikibook Grading: same as previous plus international interactions, mentoring, and support.

Do 4b. Educational Simulations
(Medical Traumas from TD Magazine, August 2006)

Grading
1.Completed task
2.Solutions offered
3.Time required
(reflection papers possible)

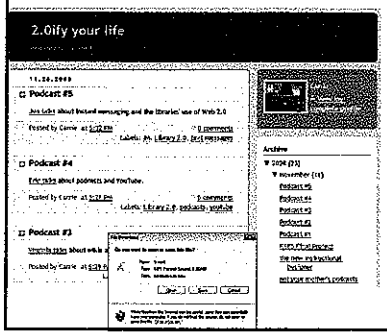
Do 4c. Indexing Sounds in Cities with Google Maps (SUNY Potsdam)



Grading:
1. Recorded required # of sounds
2. Reflection paper on task
3. Creative or original

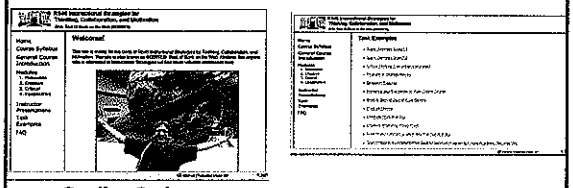
(Bonus pts: most sounds indexed or finding a sound no one else did)

Do 4d. Student-Generated Podcasts



Grading:
1. Insightfulness, creativity, and originality;
2. Design and visual effects;
3. Coherence and logical sequence;
4. Completeness;
5. Relevance of content.

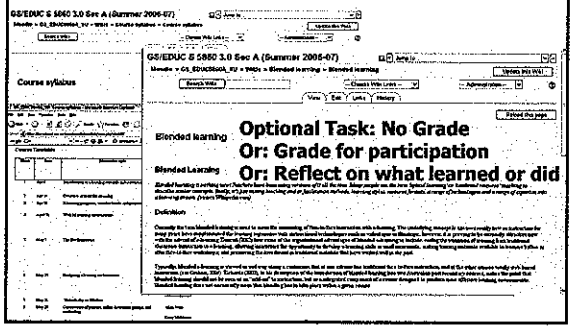
Do 4e. Class Website Overhauls



Grading Scale:
1. Organization of the Web Materials or Web Site
2. Currency and Relevancy of the Materials
3. Originality and Creativity
4. Scope and Depth of Web Materials
5. Effort
6. Overall Activity and Design

Do 4f. Syllabus, Glossary, etc. in wiki: Students sign up for tasks

(Ron Owston, York University)



Optional Task: No Grade
Or: Grade for participation
Or: Reflect on what learned or did

Do 4g. Cool Resource Provider

P540 Cool Resource Provider and Moderator Sign Up Sheet

If multiple people are working with this form simultaneously it is possible to overwrite someone else's entry that is/will while you are typing in your name. Make sure you are working with the latest version of this sign up sheet by refreshing your browser window before you enter your name and click the Update button.

Instructions:

Please put your name in the box for the ONE week that you want to be the moderator. Only complete one box (either for K-12 or Adult Learning, NOT both).

When complete, please click the green Update button before exiting the system. Update

Week	K-12 Education/Learning	Adult Education/Learning
1. Introduction to the Study of Learning		
2. Behaviorism		
3. Social Learning Theory		
4. Cognitive Information Processing		
5. Motivation and Self-Regulated Learning		
6. Meaningful Learning & Schema Learning		
7. Cognitivism and Piaget		

This is a mastery assignment—you get full credit if done well.

TEC-VARIETY Model for Online Motivation and Retention

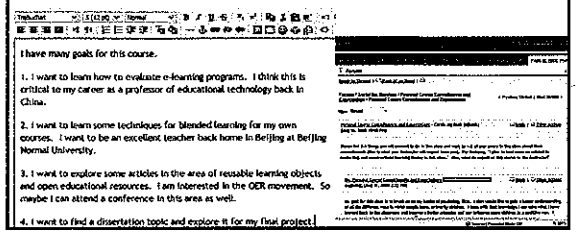
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Supports
3. Curiosity: Fun, Fantasy, Control

...

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: A. Coffee House Expectations; B. Public Commitments; C. Eight Nouns; D. Favorite Websites

Not Directly Graded: Part of General Participation Points



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

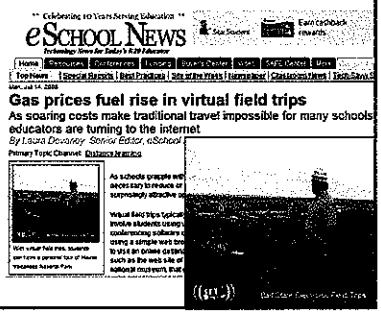
Graded:
1. Attendance at a set number
2. Participation
3. Reflection papers

Bonus Pts: for soliciting guest speakers.

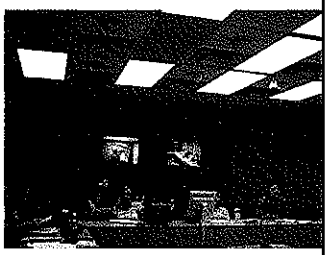
3. Curiosity, Fun: A. Virtual Field Trips

Graded:
1. Participation
2. Reflection papers: linkage to course concepts

With virtual field trips, students can have a personal tour of Hawaii Volcanoes National Park.

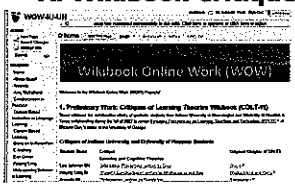


4. Variety, Novelty: A. Video Streamed Lectures & Expert Commenting



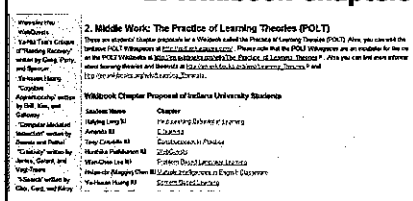
Not Directly Graded: Part of General Participation Points (could assign reflection papers)

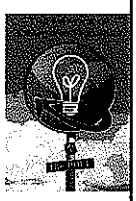
5. Autonomy, Choice: A. Wikibook Critiques



Critique Grading (50 Total Points or 10 pts each):
1. Critical thinking displayed
2. Insightful/Original
3. Coherent and logical flow
4. Complete and thorough review
5. Learning displayed

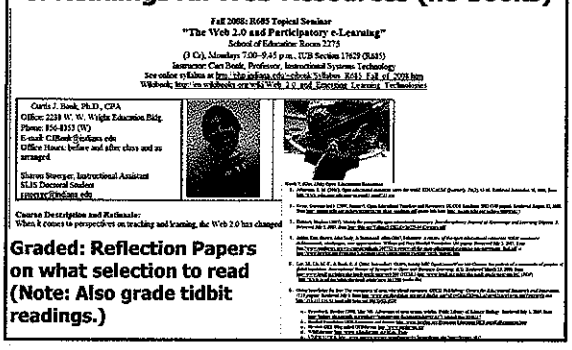
5. Autonomy, Choice: B. Wikibook Chapters





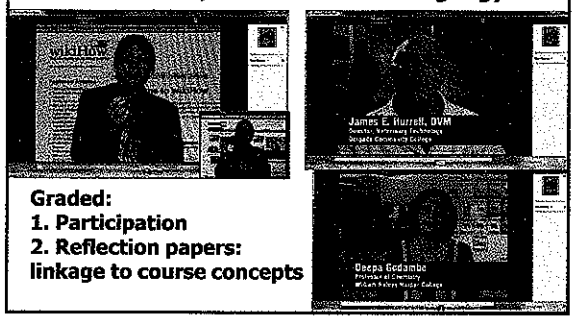
Reflection Paper Grading (50 Total Pts/10 pts each):
1. Insightful points and original thinking
2. Coherent and logical flow
3. Complete and thorough review
4. Learning
5. Critical/Reflective

5. Autonomy, Choice:
C. Readings All Web Resources (no books)


Fall 2008: I6685 Topical Seminar
"The Web 2.0 and Participatory e-Learning"
School of Education: Room 2275
(3 Cr), Mondays 7:00-9:45 p.m., IUB Session 17629 (I6685)
Instructor: Curt Bonk, Professor, Instructional Systems Technology
See online syllabus at http://php.indiana.edu/~cjbonk/Syllabus_I6685_Fall_of_2008.htm
Wikibook: http://en.wikibooks.org/wiki/Web_2.0_and_Emerging_Learning_Technologies
Curtis J. Bonk, Ph.D., CPA
Office: 2220 W. W. Wright Education Bldg.
Phone: 856-8353 (W)
E-mail: CJBonk@indiana.edu
Office Hours: before and after class and as arranged
Sharon Sweyer, Instructional Assistant
SLIS Doctoral Student
Course Description and Rationale:
When it comes to perspectives on teaching and learning, the Web 2.0 has changed

Graded: Reflection Papers on what selection to read (Note: Also grade tidbit readings.)

6. Relevance, Meaningfulness:
A. Online Professional Development (e.g., STARLINK, *www.starlinktraining.org*)



Graded:
1. Participation
2. Reflection papers: linkage to course concepts

7. Interactive, Collaborative:
A. Discussion: Starter-Wrapper (Hara, Bonk, & Angeli, 2000)

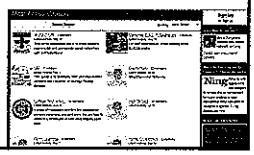
Starter reads ahead and starts discussion and others participate and wrapper summarizes what was discussed. (could add debate roles: optimist, pessimist, devil's advocate).

Graded for: Promptness, Depth, Interactivity, Uniqueness

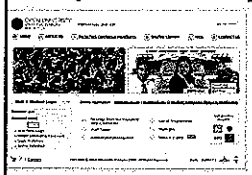
Or: Task Completion

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

Graded (many options):
1. Participation
2. Interviews with other members
3. Contribution to group
4. Reflection of group
5. Group reports

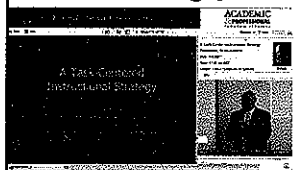


7. Interactive, Collaborative:
D. Cross-Class Collab
(Indiana University and Open U of Malaysia)



Graded:
1. Sound and Original Solution
2. Quantity of Posts
3. Interactive
4. Feedback to Other Groups
5. Timeliness

8. Engagement, Effort: A. Synchronous Conferencing (Breeze/Adobe Connect Pro)



Graded:
1. Participation in discussion
2. Reflection papers: linkage to course concepts

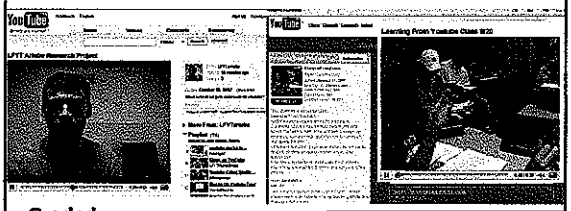
Bonus pts: extra readings
Bonus pts: contacting guest

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

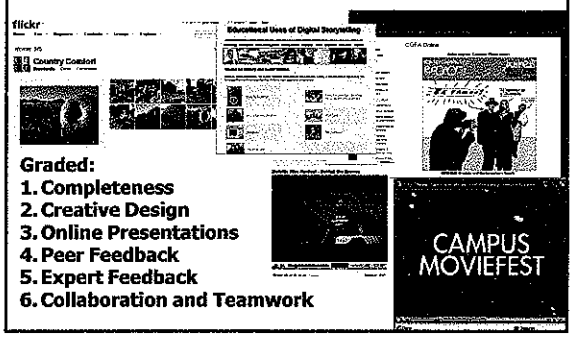
Graded:
1. Participation in role play
2. Reflection papers: linkage to course concepts
3. # of posts

10. Yields Products, Goals:
A. Entire Class in YouTube



Graded:
1. Creativity and original
2. Integration of course content
3. Critical reflection
4. Complete and on time

10. Yields Products, Goals:
B. Online Portfolios, Film Festivals, or Art Galleries (Flickr, Omnium)



Graded:
1. Completeness
2. Creative Design
3. Online Presentations
4. Peer Feedback
5. Expert Feedback
6. Collaboration and Teamwork

25 Time-Saving Tips

1. Ask yourself "can I reasonably assess it?"
2. Rely on peers for providing some feedback (critical friends, email pals, Web buddies)
3. Let students know what to expect up front and when.
4. Get advice on tools (e.g., use editing & commenting tools).
5. Use rubrics! (can design grading template in Word and highlight problems or successes for each student).

25 Time-Saving Tips

6. Set aside days or times in calendar for online class.
7. Paste examples & comments from previous semester.
8. Have students update your course Web site as an independent or optional course project.
9. Bring in experts or practitioners for feedback.
10. If more than 25 or 30 students, ask for help grading.

25 Time-Saving Tips

11. Use summary comment emails.
12. Grade some discussions quantitatively.
13. Have students brainstorm assessments with you.
14. Put tentative syllabus in a wiki.
15. READ! (books, articles, etc.)

25 Time-Saving Tips

16. Bring back former students for testimonials about assessments.
17. Be flexible for turning in assignments (drop boxes, fax, email, mail, etc.)
18. PDF assignment feedback.
19. Post or share anonymous examples of prior student work.
20. Sample student work!

25 Time-Saving Tips

21. Use detailed syllabus!
22. Have something due early (test system).
23. Use groups for some assignments.
24. Impose personal time deadlines for each paper.
25. Ask Dr. Shijuan Liu for her dissertation; sliu10@calstatela.edu, shijuanliu@hotmail.com

    "Use of Assessment Tasks in Online Graduate Courses: Instructors' Practices, Reflections, and Perceptions"

Some Book Resources

- Comeaux, P. (Ed.). (2005). *Assessing online learning.* Boston, MA: Anker Publishing Company Inc.
- Morgan, C., & O'Reilly, M. (1999). *Assessing open and distance learners.* London, UK: Kogan Page Limited.
- Oosterhof, A., Conrad, R., & Ely, D. (2007). *Assessing learners online.* Upper Saddle River, NJ: Prentice Hall.

Part 2. Online Plagiarism and Cheating

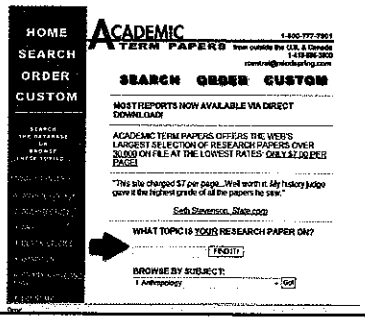
Increasing Cheating Online

($7-$30/page, http://www.syllabus.com/ January, 2002, Phillip Long, Plagiarism: IT-Enabled Tools for Deceit?)

- http://www.academictermpapers.com/
- http://www.termpapers-on-file.com/
- http://www.nocheaters.com/
- http://www.cheathouse.com
- http://www.realpapers.com/
- http://www.pinkmonkey.com/

("you'll never buy Cliffnotes again")

Sample Paper Assistance (i.e., Cheating) Sites



Plagiarizing Plagiarism

(June 8, 2003; Dartmouth Review)

- "Michael Heberling—an author at the Chronicle and president of Baker College for Graduate Studies—read an article written in Syllabus magazine that looked remarkably like his own piece. The subject of the plagiarist's piece: plagiarism."
- the offending author, a graduate student, apologized for any passages accidentally cut-and-pasted into her own article. Her excuse: 'deadline pressure.'

Ways to Reduce Cheating Online

(How to Proctor from a distance, Dan Carnevale, Chronicle of Higher Ed, Dec., 12, 1999; http://www.syllabus.com/ January, 2002, Phillip Long, Plagiarism: IT-Enabled Tools for Deceit?)

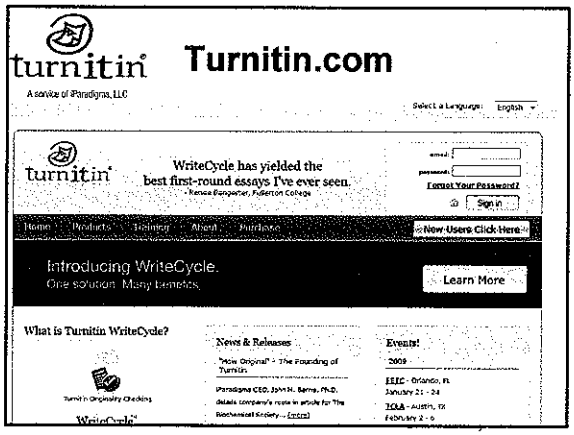
1. Are they relevant, challenging, and tasks you can build on?
2. Use proctored exams
3. Require cameras during discussions & tests
4. Get to know your students better through discussions and chats
5. Give random quizzes using chat tool
6. Write a long essay at start of semester to serve as an index of writing style
7. When in doubt, place document into a search engine (Eve2 or Turnitin.com)

Resources for Reducing Cheating Online

($7-$30/page, http://www.syllabus.com/ January, 2002, Phillip Long, Plagiarism: IT-Enabled Tools for Deceit?)

- http://www.turnitin.com/ (software, $100, free 30 day demo/trial)
- http://www.copycatch.freeserve.co.uk/ (free in UK)
- http://www.canexus.com/ (Eve2 software; essay verification engine, $19.95)
- http://www.plagiarism.org/ (resource)
- http://www.academicintegrity.org/ (assoc.)
- http://sja.ucdavis.edu/avoid.htm (guide)

Turnitin.com



More Ways to Reduce Cheating Online (How to Proctor from a distance, Dan Carnevale, Chronicle of Higher Ed, Dec., 12, 1999)

8. Vary items in exam
9. Have timed exams
10. Make course too hard to cheat
11. Random selection of items for item pool
12. Use mastery learning for some tasks
13. Assign collaborative tasks

Still More Ways to Reduce Cheating Online

14. Use test passwords, keycodes, pins, picture ID, email list checks
15. Iris scanning, Palm Print, fingerprint, voice recognition, iris scanning, facial scanning, handwriting recognition
16. Rely on computer IP# screening
17. Set expectations (e.g., scholarly integrity, syllabus procedures)
18. Emphasize consequences (e.g., stories of past offenders)
19. Have students make a vow of no cheating (e.g., Univ of Virginia)

More Ideas: (Promoting Academic Integrity)
(June 16, 2003, TLTL, IU Anti-Plagiarism Strats)

19. Help students recognize citation probs
    - Examples, cases, Web sites, 1 credit course
20. Help Faculty and TAs recognize problems
    - Examples, cases, practice grading , discuss
21. Provide practice in citing properly
    - Interactive workshops, discussions
22. Design assignments to minimize dishonesty and poor citation
    - Provide frameworks, well designed prompt
23. Hold students accountable
24. Plan for special situations
25. Use available support

Give a Plagiarism Test
(Ted Frick, Indiana University)

What is Plagiarism at Indiana University?

A Short Concept Lesson by Ted Frick

In the *Code of Student Rights, Responsibilities, and Conduct*, the Indiana University Faculty Council indicates that students may be disciplined for several different kinds of academic misconduct, which include cheating, fabrication, plagiarism, interference, and violation of course rules.

In particular, the Faculty Council states the following (1990):

> "2. Plagiarism.
>
> A student must not adopt or reproduce ideas, words, or statements of another person without appropriate acknowledgment. A student must give credit to the originality of others and acknowledge an indebtedness whenever he or she does any of the following:
>
> a. Quotes another person's actual words, either oral or written;
>
> b. Paraphrases another person's words, either oral or written;
>
> c. Uses another person's idea, opinion, or theory; or
>
> d. Borrows facts, statistics, or other illustrative material, unless the information is common knowledge."

(quoted from *Code of Student Rights, Responsibilities, and Conduct*, Part III, Student Misconduct, As it now Reads. By action of the University Faculty Council (April 24, 1990) and the Trustees of Indiana University (May 4, 1990). Amended by the University Faculty Council (April 12, 1993, May 12, 1993, and October 8, 1996) and the Trustees of Indiana University (December 4, 1992, June 3, 1993, and December 13, 1996).)

Let's see if you understand!

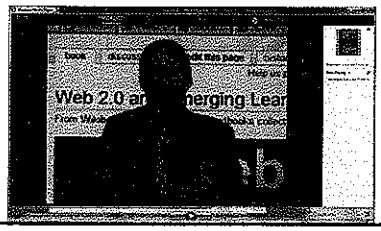
Still More Ways to Reduce Cheating Online
(McMurty (2001) E-Cheating: Combating a 21st Century Challenge, Tech Horizons in Ed, 29(4), 36-41.

26. Require prewriting steps such as an outline and rough draft
27. Require electronic paper submission
28. Design writing assignments with high specificity, not open-ended (harder to find a match in a pool)
29. Use Google to search for phrases that do not appear to be from a particular student
30. Peruse "paper help" (i.e., cheat) sites

Tips on Authentification

31. Check e-mail access against list
32. Use password access
33. Provide keycode, PIN, or ID #
34. Futuristic Other: Palm Print, fingerprint, voice recognition, iris scanning, facial scanning, handwriting recognition, picture ID

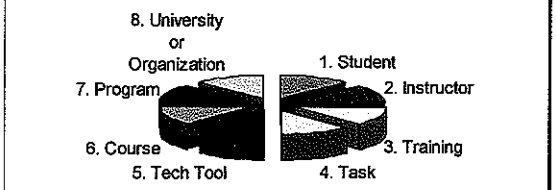
Part 3: Bonk's E-Learning Evaluation Model



What to Evaluate?

1. Learner—attitudes, learning, jobs.
2. Instructor—popularity, course enrollments.
3. Training—internal and external.
4. Task--relevance, interactivity, collaborative.
5. Tool--usable, learner-centered, friendly, supportive.
6. Course—interactivity, completion rates.
7. Program—growth, long-range plans.
8. Organization or University—cost-benefit, policies, vision.

Bonk et al.'s (2007) Online Learning Assessment and Evaluation Model



Bonk, C. J., Wisher, R. A. & Champagne, M. V. (in press).
Toward a comprehensive model of e-learning evaluation: The Components.

1. Measures of Student Success

(Focus groups, interviews, observations, surveys, exams, records)

- Positive Feedback, Recommendations
- Increased Comprehension, Achievement
- High Retention in Program
- Completion Rates or Course Attrition
- Jobs Obtained, Internships
- Enrollment Trends for Next Semester

1. Student Basic Quantitative

- Grades, Achievement
- Number of Posts
- Participation
- Computer Log Activity—peak usage, messages/day, time of task or in system
- Attitude Surveys

Measures of Student Success

(Focus groups, interviews, observations, surveys, exams, records)

- Increased Comprehension & Achievement
- High Student Attitudes
- High Retention, Completion Rates in Program
- Jobs Obtained, Internships
- Enrollment Trends for Next Semester
- Grades, Achievement, Certifications
- Computer Log Activity; e.g., Number of Posts, Participation, Messages/day, Time in System

1. Student High-End Success

- Message complexity, depth, interactivity, q'ing
- Collaboration skills
- Problem finding/solving and critical thinking
- Challenging and debating others
- Case-based reasoning, critical thinking measures
- Portfolios, performances, PBL activities

2. Instructor Success

- High student evals; more signing up
- High student completion rates
- Utilize Web to share teaching
- Course recognized in tenure decisions
- Varies online feedback and assistance techniques

3. Training Outside Support

- Training (FacultyTraining.net)
- Courses & Certificates (JIU, Wisconsin)
- Reports, Newsletters, & Pubs
- Aggregators of Info (Merlot, Connexions)
- Global Forums (SCoPE)
- Resources, Guides/Tips, Link Collections, Online Journals, Library Resources

3. Training Inside Support...

- Instructional Consulting
- Mentoring (strategic planning $)
- Small Pots of Funding
- Facilities
- Summer and Year Round Workshops
- Office of Distributed Learning
- Colloquiums, Tech Showcases, Guest Speakers
  - Newsletters, guides, active learning grants, annual reports, faculty development, brown bags

RIDIC^5-ULO^{3}US Model of Technology Use

4. Tasks (RIDIC):

- Relevance
- Individualization
- Depth of Discussion
- Interactivity
- Collaboration-Control-Choice-Constructivistic-Community

RIDIC^5-ULO^{3}US Model of Technology Use

5. Tech Tools (ULOUS):

- Utility/Usable
- Learner-Centeredness
- Opportunities with Outsiders Online
- Ultra Friendly
- Supportive

6. Course Success

- Few technological glitches/bugs
- Adequate online support
- Increasing enrollment trends
- Course quality (interactivity rating)
- Monies paid
- Accepted by other programs

7. Online Program or Course Budget

(i.e., how pay, how large is course, tech fees charged, # of courses, tuition rate, etc.)

- **Indirect Costs:** learner disk space, phone, accreditation, integration with existing technology, library resources, on site orientation & tech training, faculty training, office space
- **Direct Costs:** courseware, LMS or CMS, instructor, help desk, books, seat time, bandwidth and data communications, server, server back-up, course developers, postage

8. Institutional Success

- E-Enrollments from
  - new students, alumni, existing students
- Additional grants
- Press, publication, partners, attention
- Orientations, training, support materials
- Faculty attitudes
- Acceptable policies (ADA compliant)

Other E-Learning Evaluation Models

Quality on the Line:

Benchmarks for Success in Internet-Based Distance Ed
(Blackboard & NEA, 2000)

Teaching/Learning Process

- Student interaction with faculty is facilitated through a variety of ways.
- Feedback to student assignments and questions is provided in a timely manner.
- Each module requires students to engage themselves in analysis, synthesis, and evaluation as part of their course assignments.
- Course materials promote collaboration among students.
  - http://www.ihep.com/Pubs/PDF/Quality.pdf

Quality on the Line: Benchmarks for Success in Internet-Based Distance Ed

(Blackboard & NEA, 2000)

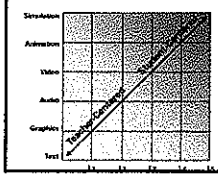
Other Benchmark Categories:

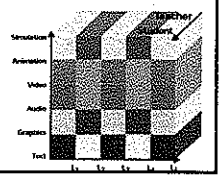
- Institutional Support: incentive, rewards, plans
- Course Development: processes, guidelines, teams, structures, standards, learning styles
- Course Structure: expectations, resources
- Student Support: training, assistance, info
- Faculty Support: mentoring, tech support
- Evaluation and Assessment: review process, multiple methods, specific standards

The Sharp Edge of the Cube: Pedagogically Driven Instructional Design for Online Education

Syllabus Magazine, Dec, 2001, Nishikant Sonwalkar

- **five functional learning styles—apprenticeship, incidental, inductive, deductive, discovery.**
- http://www.syllabus.com/syllabusmagazine/article.asp?id=5858





New Methodology for Evaluation: The Pedagogical Rating of Online Courses

Syllabus Magazine, Jan, 2002, Nishikant Sonwalkar

The Pedagogical Effectiveness Index:

(1) Learning Styles: (see previous page)
(2) Media Elements: text, graphics, audio, video, animation, simulation
(3) Interaction Elements: feedback, revision, e-mail, discussion, bulletin

http://www.syllabus.com/syllabusmagazine/article.asp?id=5914

For more info, e-mail: Nish@mit.edu

New Methodology for Evaluation: The Pedagogical Rating of Online Courses
Syllabus Magazine, Jan, 2002, Nishikant Sonwalkar

Summative evaluation instrument for rating online courses:

(1) Content Factors: quality, media, authentic
(2) Learning Factors: interactivity, testing & feedback, collaboration, ped styles
(3) Delivery Support Factors: accessible, reporting, user management, content
(4) Usability Factors: clarity, chunk size, layout
(5) Technological Factors: bandwidth, database connectivity, server capacity,browser

Report Locations

1. **Quality on the Line: Benchmarks for Success in Internet-Based Distance Ed (e.g., the teaching/learning process)** (Blackboard & NEA, 2000)
   - http://www.ihep.com/Pubs/PDF/Quality.pdf
2. **The Pedagogical Rating of Online Courses Syllabus Magazine, Jan, 2002, Nishikant Sonwalkar**

Sevilla & Wells (July, 2001), e-learning Magazine

We could be very productive by ignoring assessment altogether and assume competence if the learner simply gets through the course.

Why Evaluate?

- **Cost-savings**
  - **Becoming less important reason to evaluate as more people recognize that the initial expense is balanced by long-term financial benefits**
- **Performance improvement**
  - **A clear place to see impact of online learning**
- **Competency advancement**

Readiness Checklist

1. ___ **Is your organization undergoing significant change, in part related to e-learning?**
2. ___ **Is there pressure from administrators to measure the results of e-learning?**
3. ___ **Has your university one or more training/learning disasters in the past?**
4. ___ **Is the image of the training/learning function lower than you want?**

What is Evaluation???

"Simply put, an evaluation is concerned with judging the worth of a program and is essentially conducted to aid in the making of decisions by stakeholders." (e.g., does it work as effectively as the standard instructional approach).
(Champagne & Wisher, 2007)

Evaluation Purposes

- Determine learner progress
  - What did they learn?
- Document learning impact
  - How well do learners use what they learned?
  - How much do learners use what they learn?

Evaluation Purposes

- Efficiency
  - Was online learning more effective than another medium?
  - Was online learning more cost-effective than another medium/what was the return on investment (ROI)?
- Improvement
  - How do we do this better?

Evaluation Purposes

"An evaluation plan can evaluate the delivery of e-learning, identify ways to improve the online delivery of it, and justify the investment in the online training package, program, or initiative." (Champagne & Wisher, in press)

Steps to Developing an OL Evaluation Program

- Select a purpose and framework
- Develop benchmarks
- Develop online survey instruments
  - For learner reactions
  - For learner post-training performance
  - For manager post-training reactions
- Develop data analysis and management plan

How and what do you evaluate? Who are your stakeholders?

15 Evaluation Methods

1. Formative Evaluation
2. Summative Evaluation
3. CIPP Model Evaluation
4. Objectives-Oriented Evaluation
5. Marshall & Shriver's 5 Levels of Evaluation
6. Consumer-Oriented Evaluation
7. Kirkpatrick's 4 Levels
8. Return on Investment (ROI)
9. K-Level 6 budget and stability of e-learning team.
10. K-Level 7 whether e-learning champion(s) are promoted
11. Cost/Benefit Analysis (CBA)
12. Time to Competency
13. Time to Market
14. Return on Expectation
15. AEIOU: Accountability, Effectiveness, Impact, Organizational Context, U = Unintended Consequences

Formative Evaluation

- Formative evaluations focus on improving the online learning experience.
- A formative focus will try to find out what worked or did not work.
- Formative evaluation is particularly useful for examining instructional design and instructor performance.

Formative Questions

- -How can we improve our e-learning program?
- -How can we make our e-learning program more efficient?
- -More effective?
- -More accessible?

Summative Evaluation

- Summative evaluations focus on the overall success of the e-learning experience (should it be continued?).
- A summative focus will look at whether or not objectives are met, the course or program is cost-effective, etc.

What Can E-Learning Evaluation Measure?

- Categories of Evaluation Info (Woodley and Kirkwood, 1986)
  - Measures of activity
  - Measures of efficiency
  - Measures of outcomes
  - Measures of program aims
  - Measures of policy
  - Measures of organizations

Typical Evaluation Frameworks for OL

- Commonly used frameworks include:
  - CIPP Model
  - Objectives-oriented
  - Marshall & Shriver's 5 levels
  - Kirkpatrick's 4 levels (Plus a 5th level)
  - AEIOU
  - Consumer-oriented

CIPP Model Evaluation

- CIPP is a management-oriented model
  - C = context
  - I = input
  - P = process
  - P = product
- Examines the OL within its larger system/context

CIPP & OL: Context

- Context: Addresses the environment in which OL takes place.
- How does the real environment compare to the ideal?
- Uncovers systemic problems that may dampen OL success.
  - Technology breakdowns
  - Inadequate computer systems

CIPP & OL: Input

- Input: Examines what resources are put into OL.
- Is the content right?
- Have we used the right combination of media?
- Uncovers instructional design issues.

CIPP & OL: Process

- Process: Examines how well the implementation works.
- Did the course run smoothly?
- Were there technology problems?
- Was the facilitation and participation as planned?
- Uncovers implementation issues.

CIPP & OL: Product

- Product: Addresses outcomes of the learning.
- Did the learners learn? How do you know?
- Does the online training have an effect on workflow or productivity?
- Uncovers systemic problems.

Objectives-Oriented Evaluation

- Examines OL training objectives as compared to training results
- Helps determine if objectives are being met
- Helps determine if objectives, as formally stated, are appropriate
- Objectives can be used as a comparative benchmark between online and other training methods

Marshall & Shriver's 5 Levels

- Level I: Self (instructor)
- Level II: Course Materials
- Level II: Course Curriculum
- Level IV: Course Modules
- Level V: Learning Transfer

Consumer-Oriented Evaluation

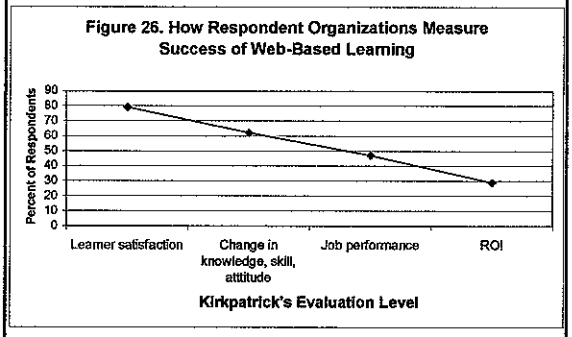
- Uses a consumer point-of-view
  - Can be a part of vendor selection process
  - Can be a learner-satisfaction issue
  - Measures assess consumer concerns with respect to various factors (e.g., in a hospital, what attitudes, processes, and services need to be in place?)
  - Conduct usability testing
- Often relies on benchmarks for comparison of different products or different learning media

Kirkpatrick's 4 Levels

- A common training framework.
- Examines training on 4 levels.
- Not all 4 levels have to be included in a given evaluation.

The 4 Levels

- Reaction
- Learning
- Behavior
- Results



Of the 41% the had formal evaluation of e-learning.

Return on Investment (ROI): A 5th Level

- Return on Investment is a 5th level
- It is related to results, but is more clearly stated as a financial calculation
- How to calculate ROI is the big issue here

Is ROI the answer?

- Elise Olding of CLK Strategies suggests that we shift from looking at ROI to looking at time to competency.
- ROI may be easier to calculate since concrete dollars are involved, but time to competency may be more meaningful in terms of actual impact.

ROI Alternative: Cost/Benefit Analysis (CBA)

- ROI may be ill-advised since not all impacts hit bottom line, and those that do take time.
- Shifts the attention from more long-term results and quantifying impacts with numeric values, such as:
  - increased revenue streams,
  - increased employee retention, or
  - reduction in calls to a support center.
    - Reddy, A. (2002, January). E-learning ROI calculations: Is a cost/benefit analysis a better approach? *e-learning. 3*(1), 30-32.

Cost/Benefit Analysis (CBA)

- To both qualitative and quantitative measures:
  - job satisfaction ratings,
  - new uses of technology,
  - reduction in processing errors,
  - quicker reactions to customer requests,
  - reduction in customer call rerouting,
  - increased customer satisfaction,
  - enhanced employee perceptions of training,
  - global post-test availability.
    - Reddy, A. (2002, January). E-learning ROI calculations: Is a cost/benefit analysis a better approach? *e-learning. 3*(1), 30-32.

Cost/Benefit Analysis (CBA)

- In effect, CBA asks how does the sum of the benefits compare to the sum of the costs.
- Yet, it often leads to or supports ROI and other more quantitatively-oriented calculations.
  - Reddy, A. (2002, January). E-learning ROI calculations: Is a cost/benefit analysis a better approach? *e-learning. 3*(1), 30-32.

Other ROI Alternatives

Time to competency (need benchmarks)

- online databases of frequently asked questions can help employees in call centers learn skills more quickly and without requiring temporary leaves from their position for such training

Time to market

- might be measured by how e-learning speeds up the training of sales and technical support personnel, thereby expediting the delivery of a software product to the market

Raths, D. (2001, May). Measure of success. *Online Learning, 5*(5), 20-22, & 24.

Why Use Kirkpatrick's 4 Levels?

- They are familiar and understood
- Highly referenced in the training literature
- Can be used with 2 delivery media for comparative results

Conducting 4-Level Evaluation

- You need not use every level
  - Choose the level that is most appropriate to your need and budget
- Higher levels will be more costly and difficult to evaluate
- Higher levels will yield more

Kirkpatrick Level 1: Reaction

- Typically involves "Smile sheets" or end-of-training evaluation forms.
- Easy to collect, but not always very useful.
- Reaction-level data on online courses has been found to correlate with ability to apply learning to the job.
- Survey ideally should be Web-based, keeping the medium the same as the course.

Kirkpatrick Level I: Reaction

- Types of questions:
  - Enjoyable?
  - Easy to use?
  - How was the instructor?
  - How was the technology?
  - Was it fast or slow enough?

Kirkpatrick Level 2: Learning

- Higher-order thinking skills (problem solving, analysis, synthesis)
- Basic skills (articulate ideas in writing)
- Company perspectives and values (teamwork, commitment to quality, etc.)
- Personal development

Kirkpatrick Level 2: Learning

- Might include:
  - Essay tests.
  - Problem solving exercises.
  - Interviews.
  - Written or verbal tests to assess cognitive skills.

Shepard, C. (1999b, July). Evaluating online learning. TACTIX from Fastrak Consulting. Retrieved February 10, 2002, from: http://fastrak-consulting.co.uk/tactix/Features/evaluate/eval01.htm.

Kirkpatrick Level 3: Behavior

- More difficult to evaluate than Levels 1 & 2
- Looks at whether learners can apply what they learned (does the training change their behavior?)
- Requires post-training follow-up to determine
- Less common than levels 1 & 2 in practice

Kirkpatrick Level 3: Behavior

- Might include:
  - Direct observation by supervisors or coaches (Wisher, Curnow, & Drenth, 2001).
  - Questionnaires completed by peers, supervisors, and subordinates related to work performance.
  - On the job behaviors, automatically logged performances, or self-report data.

Shepard, C. (1999b, July). Evaluating online learning. TACTIX from Fastrak Consulting. Retrieved February 10, 2002, from: http://fastrak-consulting.co.uk/tactix/Features/evaluate/eval01.htm.

Kirkpatrick Level 4: Results

- Often compared to return on investment (ROI)
- In e-learning, it is believed that the increased cost of course development ultimately is offset by the lesser cost of training implementation
- A new way of training may require a new way of measuring impact

Forms of Evaluation

- Interviews and Focus Groups
- Self-Analysis
- Instructor Ratings
- Surveys and Questionnaires
- ROI
- Document Analysis
- Data Mining (Changes in pre and post-training; e.g., sales, productivity)

How Collect Data?

- Direct Observation in Work Setting
  - By supervisor, co-workers, subordinates, clients
- Collect Data By Surveys, Interviews, Focus Groups
  - Supervisors, Co-workers, Subordinates, Clients
- Self-Report by learners or teams
- Email and Chat

Learner Data

- Online surveys are the most effective way to collect online learner reactions
- Learner performance data can be collected via online tests
  - Pre and post-tests can be used to measure learning gains
- Learner post-course performance data can be used for Level 3 evaluation
  - May look at on-the-job performance
  - May require data collection from managers

Learning System Data

- Many statistics are available, but which are useful?
  - Number of course accesses
  - Log-in times/days
  - Time spent accessing course components
  - Frequency of access for particular components
  - Quizzes completed and quiz scores
  - Learner contributions to discussion (if applicable)

At the End of the Day...

- Are all training results quantifiable?
- NO! Putting a price tag on some costs and benefits can be very difficult
- NO! Some data may not have much meaning at face value
  - What if more courses are offered and annual student training hours drop simultaneously? Is this bad?

Ziegler, April 2002, e-Learning

"...the key is not to measure every possible angle, but rather to focus on metrics that are pragmatic and relevant to both human and business performance at the same time."

Some Final Advice...

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Sample papers at: http://www.publicationshare.com/
Archived talks at: http://www.trainingshare.com/