




DESIGNING AND BUILDING ONLINE LEARNING ENVIRONMENTS

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<http://coe.winthrop.edu/jonesmg/te/WBI07/default.htm>


TEACHING & LEARNING

- "You can't learn anybody anything."
Michael Allen
- Teaching is external
- Learning is an internal process
- Progress is measured by external manifestations
 - Papers, tests, projects



A BRIEF & SKETCHY HISTORY OF EDUCATIONAL TECHNOLOGY RESEARCH

- Media Comparison
 - Video vs. Teacher
 - Teacher vs. Slide Tape
 - Slide Tape vs. Video
 - Teacher vs. Computer
- Media is like a truck?
- John Henry Effect
- Hawthorne Effect
- Novelty Effect
- Face-to-face vs. Online Learning?



GOOD INSTRUCTION IS
GOOD INSTRUCTION



http://www.brad.ac.uk/acad/archsci/depart/graduation/grad2000/grad0700_staff.jpg



MY FAVORITE QUOTE

- "If teaching was telling we'd all be so smart we wouldn't know what to do."
 - Robert Mager



THE TELLING PART

- One of Nine distinct elements associated with instruction



THE EVENTS OF INSTRUCTION

- Robert Gagne
- 9 things that have to happen in successful instruction
 - Sometimes explicitly, sometimes implicitly
 - Don't have to follow this order



THE EVENTS OF INSTRUCTION

1. **gaining attention**
(reception) - To ensure reception of coming instruction we give the learner a stimulus
2. **informing learners of the objective**
(expectancy) - Tell the learner what they will be able to do because of the instruction
3. **stimulating recall of prior learning**
(retrieval) - Ask for recall of existing relevant knowledge
4. **PRESENTING STIMULUS**
(selective perception) - Display the content
5. **providing learning guidance**
(semantic encoding) - helping the learner move through the content
6. **eliciting performance**
(responding) - Ask the learner to respond, demonstrating learning
7. **providing feedback**
(reinforcement) - Give informative feedback on the learner's performance
8. **assessing performance**
(retrieval) - Require more learner performance, and give feedback, to reinforce learning
9. **enhancing retention and transfer**
(generalization) - Provide varied practice to generalize the capability

Robert Gagne, *The Conditions of Learning*.

AN EXAMPLE: THIS SESSION

1. Gain attention – Not much for you
2. Identify objective – In the title, done in the emails from Suzanne
3. Recall prior learning – Ask what you know about teaching fzf
4. **Present stimulus – PowerPoint, lectures, demos**
5. Guide learning – Discussions, examples
6. Elicit performance – Worksheets on class content
7. Provide feedback – Check examples, answer questions
8. Assess performance- I won't do this, really
9. Enhance retention/transfer – Offer to be available after the workshop

INSTRUCTIONAL DEVELOPMENT MADE EASY:
ADDIE

Analysis – who, what, where, why

Design – blueprint for instruction

Development – creating & selecting

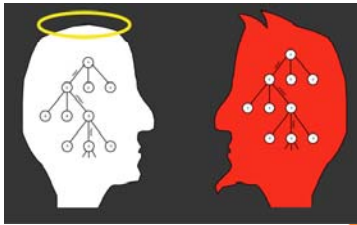
Implementation – using it with learners

Evaluation – formative & summative



ANALYSIS: AFFORDANCES OF ONLINE LEARNING

- Strengths & Weaknesses
- Advantages & Disadvantages
- Worksheet One



<http://vismod.media.mit.edu/facilitator/model-game-theory.html>

DESIGN: THE FIRST WEEK

- Worksheet 2
 - What do you do in a face-to-face class?
- Worksheet 3
 - Does this change in an online class?
 - Should it?
 - What tools/skills do you need to have to make the changes?



DEVELOPMENT: SELECTING MATERIALS

- Course packs from publishers
- Google
- <http://merlot.org>
 - <http://www.merlot.org/merlot/viewMaterial.htm?id=90081> (DNA from the beginning)
- <http://youtube.com> (yes, youtube)
 - <http://youtube.com/watch?v=NxZYwcoBPhA> (how the Iowa Caucus works)
- Wikihow
 - <http://www.wikihow.com/Main-Page>
 - <http://www.wikihow.com/Get-a-Professor-to-Change-Your-Grade>

DEVELOPMENT: CREATING YOUR OWN MATERIALS

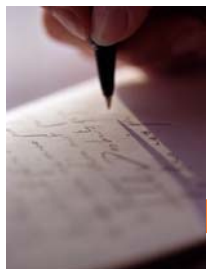
- Actually, my materials...
- Reusable Learning Objects
 - <http://coe.winthrop.edu/educ275>



http://www.digitalworldtokyo.com/index.php/digital_tokyo/articles/box_360_maker_to_take_over_production_of_leop/

DEVELOPMENT: CREATING YOUR OWN MATERIALS

- PowerPoints with the notes page option
- Papers
- Audacity
- iMovie
- Windows Movie Maker



IMPLEMENTATION: ISSUES

- The course goes constantly
 - Constant/instant access changes expectations
- Solutions
 - Establish expectations up front
 - Create safe days
 - Rethink the weekly format



http://www1.istockphoto.com/file_thumbview_approve/2697522/2/istockphoto_2697522_around_the_world_non_stop.jpg

IMPLEMENTATION: ISSUES

- So many students; so little time
 - Communicating in text is difficult and time consuming
- Solutions
 - Save answers to common questions
 - Feedback templates
 - Use groups
 - Talk more; type less



http://www2.davidson.edu/news/news_archives/archives01/01.08orientation/P1011767.JPG

IMPLEMENTATION: ISSUES

- Students feel isolated
 - With out weekly f2f, students drop out
- Solutions
 - Groups
 - Skype
 - Online office hours
 - Telephone



<http://www.fotosearch.com/ARP109/Isolated/>

IMPLEMENTATION: ISSUES

- Technical problems
 - My (insert whatever) doesn't work
- Solution
 - Technical issues forum
 - Know tech support numbers
 - Not your problem



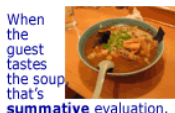
EVALUATION: FORMATIVE

- Monitoring for problems
- A bulletin board forum
- Formal informal evaluations
- Changing as needed



EVALUATION: SUMMATIVE

- Course evaluation forms
 - F2f or Online?
- Did they like the soup?
- Can they tell if the soup is good?



<http://www.mycen.com/hrd/learn/evaluate/04.htm>

Robert Stake

EVALUATION ISSUES

- Examine current forms
 - Can you use them?
 - Should you use them?
- What questions should be asked?
 - Not a rhetorical question, you tell me



FINAL THOUGHTS

- When we get here I'll see if I have any



<http://www.aperfectworld.org/emotions.htm>