From R2D2 to the Matrix: A Galaxy of Online Learning Style and Motivational Examples

Dr. Curtis J. Bonk
Professor, Indiana University
President, SurveyShare, Inc.
http://php.indiana.edu/~cjbonk
cjbonk@indiana.edu

Four Storms are Approaching!

1. Emerging Technology
2. Escalating Demands
3. Erased Budgets
4. Enhanced Teaching

Storm 1. Emerging Learning Technologies
1. Assistive Technologies & Talking Computers
2. Blogs and Online Diaries
3. Digital Portfolios
4. Electronic Books
5. Online Communities and Learning Portals
6. Intelligent Agents
7. Online Exams and Homework
8. Online Games and Simulations (Massive Multiplayer Gaming)
9. Online Translation Tools & Language Lmg
10. Course Management Systems
11. Peer-to-Peer Collaboration
12. Reusable Content Objects
13. Videoconferencing, IP
14. Virtual Worlds/Reality
15. Wearable Computing
16. Wireless Tech: Tablet PCs, Handheld Devices

Technologies Expected to Most Impact the Delivery of Online Learning During the Next Five Years

Trend #2: Online Communities
There is Knowplace Like???
(a meeting place for educators)
Trend #3.
Pod Casting Broadcasts (Adam Curry; www.dailysourcecode.com)

(Jimmy Wales, Founder)

Trend #5: Digital Universe

Trend #6: Synchronous Conferencing

Many Innovative Technologies in by people in this audience

On to Storm 2...
Escalating (Learner) Demands
Indiana Univ (8 campuses): Spring 2005
Students: 89,413 loaded; 78,549 logged in (88%)
Faculty: 7,014 loaded; 5,441 logged in (76%)
Courses: 22,419 loaded; 9,286 active (41%)

We’re in the Midst of Storm 3:
Erased Budgets

In the Midst of Budget Cutbacks,
there are Technology Giveaways

On to Storm 4: Enhanced Teaching
(and Excellent Retention)
(a swirling storm)

Michigan Considers Requiring High School Students to Take at Least One Online Course

Today's News

Some Students Displeased by Extensive Special Distance-Education Program Was an Academic Lifesaver

Erasable Budgets

In the Midst of Budget Cutbacks, there are Technology Giveaways

We’re in the Midst of Storm 3:
Erased Budgets

On to Storm 4: Enhanced Teaching
(and Excellent Retention)
(a swirling storm)
Part II.
Mucho Motivation

Intrinsic Motivational Terms
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Feedback: Responsive, Supports, Encouragement
3. Engagement: Effort, Involvement, Excitement
4. Meaningfulness: Interesting, Relevant, Authentic
5. Choice: Flexibility, Opportunities, Autonomy
6. Variety: Novelty, Intrigue, Unknowns
7. Curiosity: Fun, Fantasy, Control
8. Tension: Challenge, Dissonance, Controversy
9. Interactive: Collaborative, Team-Based, Community
10. Goal Driven: Product-Based, Success, Ownership

1. Social Ice Breakers
A. Peer (or Team) Interviews: Have learners interview each other via e-mail and then post introductions for each other.
B. Public Commitments: Have students share how they will fit the coursework into their busy schedules
1. Tone/Climate: Ice Breakers

C. Eight Nouns Activity:
1. Introduce self using 8 nouns
2. Explain why choose each noun
3. Comment on 1-2 peer postings

D. Coffee House Expectations
1. Have everyone post 2-3 course expectations
2. Instructor summarizes and comments on how they might be met

1. Social Ice Breakers

E. Scavenger Hunt
1. Create a 20-30 item online scavenger hunt (e.g., finding information on the Web)
2. Post scores

F. Two Truths, One Lie
1. Tell 2 truths and 1 lie about yourself
2. Class votes on which is the lie

G. Favorite Web Site

2. Feedback:

A. Student Self-Testing
(e.g., Calm Chemistry)

2d. Feedback, Apprenticeship:
Electronic Guests & Mentoring
2. Feedback & Fostering Info Exchange: E. Critical/Constructive Friends, Email Pals...

2. Feedback (Instructor) f. Anonymous Suggestion Box

George Watson, Univ of Delaware, Electricity and Electronics for Engineers:
1. Students send anonymous course feedback (Web forms or email)
2. Submission box is password protected
3. Instructor decides how to respond
4. Then provide response and most or all of suggestion in online forum
5. It defuses difficult issues, airs instructor views, and justified actions publicly.
6. Caution: If you are disturbed by criticism, perhaps do not use.

3. Engagement A. Brainstorming Chat

- Come up with interesting or topic or problem to solve
- Anonymously brainstorm ideas in a chat discussion
- Encourage spin off ideas
- Post list of ideas generated
- Rank or rate ideas and submit to instructor
- Calculate average ratings and distribute to group

3. Engagement B. Questions to Guide Reading

3. Engagement B. Questions to Guide Reading

4. Meaningfulness: A. 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 & background info
- Students work collaboratively to integrate multidisciplinary data & interpret age of site
- Interpret of ancient environments
- Analyze artifacts and fossils from the site

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

Superteching the case method, making it more realistic and engaging
4C. Meaningfulness: Virtual Surgery

5. Choice: A. Multiple Topics
- Generate multiple discussion prompts and ask students to participate in 2 out of 3
- Provide different discussion "tracks" (much like conference tracks) for students with different interests to choose among
- List possible topics and have students vote (students sign up for lead diff weeks)
- Have students list and vote.

1. Starter reads ahead and starts discussion and others participate and wrapper summarizes what was discussed.
2. Start-Wrapper with roles—same as #1 but include roles for debate (optimist, pessimist, devil's advocate).
C. Alternative: Facilitator-Wrapper (Alexander, 2001)
Instead of starting discussion, student acts as moderator or questioner to push student thinking and give feedback.


6B. Variety: Thinking About the Readings (TARS)
TARS; Claude Cookman, IU, Photography Class

7. Curiosity: A. Games
Online Jeopardy Game
www.lm-solutions.biz/cza/quiz.zip
Games2Train; The Challenge; Thiagi.com
7. Curiosity:
B. Electronic Seance
- Students read books from famous dead people
- Convene when dark (sync or asynchronous).
- Present present day problem for them to solve
- Participate from within those characters (e.g.,
  read direct quotes from books or articles)
- Invite expert guests from other campuses
- Keep chat open for set time period
- Debrief

8. Tension: A. Online Role Play of Scholars,
   Personalities, or Famous People
   - Enroll famous people in your course
   - Students assume voice of that person for one

9. Interactive:
A. Panels of Experts: Be an
   Expert/Ask an Expert: Have each
   learner choose an area in which to
   become expert and moderate a forum for
   the class. Require participation in
   a certain number of forums (choice)
B. Press Conference: Have a series of
   press conferences at the end of small
   group projects; one for each group
C. Symposia of Experts

d. Wikibooks

9. Team Collaboration:
e. Court Room Forum (Bus Law)
10. Product-Based: A. Video Papers, Grounded Research and Production, Video

Welcome to VideoPaper Builder 3

Why Address Learning Styles?
- Promotes reflection on teaching
- Move from just one mode of delivery
- View from different viewpoints
- Offer variety in the class
- Might lower drop-out rates
- Fosters experimentation

10b. Cross Cultural Exchanges and Goal Driven and Product Based: PBL: Tourism Mock Tours

Dynamics of Tourism: students from IU and South Korea use online resources to plan tours and create mock tour packages.

Part IV. Addressing Learning Styles

Kolb (1984)
- According to Kolb, effective learning involves four phases:
  - from getting involved (Concrete Experience) to
  - listening/observing (Reflective Observation) to
  - creating an idea (Abstract Conceptualization) to
  - making decisions (Active Experimentation).
- A person may become better at some of these learning skills than others; as a result, a learning style develops.
Active Experimentation vs. Reflective Observation

- (AE) - I often produce off-the-cuff ideas.
- (RO) - I am thorough and methodical.
- (AE) - I am flexible and open minded.
- (RO) - I am careful and cautious.
- (AE) - I am loud and outgoing.
- (RO) - I am quite and somewhat shy.

Abstract Conceptualization vs. Concrete Experiences

- (AC) - I am rational and logical.
- (CE) - I am practical and down to earth.
- (AC) - I plan events to the last detail.
- (CE) - I like realistic, but flexible plans.
- (AC) - I am difficult to get to know.
- (CE) - I am easy to get to know.

The Blending of Learning Styles

The Index of Learning Styles Questionnaire
Barbara A. Soloman, North Carolina State Univ
http://www.engr.ncsu.edu/learningstyles/ilsweb.html

6. I would rather teach a course
   ○ (a) that deals with facts and real-life situations.
   ○ (b) that deals with ideas and theories.

7. I prefer to get new information in
   ○ (a) pictures, diagrams, graphs, or maps.
   ○ (b) written directions or verbal information.

The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

Survey Question: Which type are you???
1. Auditory or Verbal Learners

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

1b. Weblogs in Higher Education (especially 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 explode 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

1c. Announcements, Q&A, or FAQ

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
2a. Post Model Answers

Employment Law and Ethics Project

Question 1
Would the change for less coercion and bludgeoning of Liberal Express, being specific about the legal doctrine that would apply?

Answer 1
Despite what the text of the 1964 Civil Rights Act and amendments states, African Americans should be excluded on the basis of race or color, and LGB, in particular, is a basis that is relevant in the case of Kapito Enterprises, Inc. We are not addressing issues of gender identity or sexual orientation.

For the purposes of this case, we are not concerned with an issue of whether or not a corporation has the right to discriminate on the basis of race, color, or any other characteristic.

This is important to remember because, in some cases, involving sex, sexual orientation, and issues of gender identity or sexual orientation will play a role in the decision of the court.

The text of the employment discrimination law, Title VII, includes protections against discrimination based on race, color, religion, sex, and national origin.

2b. Practitioner Feedback:
Asynchronous Threaded Discussion plus Sync Expert Chat (e.g., Starter-Wrapper + Sync Guest Chat)

2c. Reuse Chat Transcripts

2d. Preclass Exam and Short Quizzes Practice

3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
3b. Flash Visuals and Animations (e.g., Statistics, Cash Flow, etc.)
eCollege Wales, Univ. of Glamorgan

3c. Current Events: Interactive Online New Stories & Cases

3d. Exploration and Demonstration: Virtual Fieldtrip

3e. Video Library of Concepts, Cases, or Experts

3f. Online Modeling: Watch Expert Performances (Music, Cyber Fashion Shows, etc.)
4a. Educational Simulations, Scenarios, and Manipulations

4b. Online Simulations: Financial Accounting

4c: Student-Designed Web Sites (Human Intelligence Homepage, Jonathan Plucker, IU)

4d. Podcasts
- Practice foreign language dialects
- Record scripts for theater classes
- Analyze music in engineering labs
- Digitally record own radio shows
- Tape writing center tutoring sessions
- Access portal of university info
- Record lectures

What have you mastered?
- Will Work: ____________
- Might Work: ____________
- No Way: ____________

Try the R2D2 Method!!!