Workshop Part 2. Diverse Online Learner Needs with the Read, Reflect, Display, and Do (R2D2) and TEC-VARIETY Models

Dr. Curtis J. Bonk
Professor, Indiana University
President, SurveyShare, Inc.
http://mypage.iu.edu/~cjb276/cjbbonk@indiana.edu

Technology
Let’s Think Outside the Box!
(For 99 Seconds—what technologies that you might not think about using for learning, might students today prefer to use?)

Innovate or die trying
Thinking outside the box is maybe the way of their computers now.

Jerry Kronenberg Monday, August 4, 2008
Boston Herald
Designers on quest to build $12 computer

Top 5 “In” Things on Campus
June 7, 2006, USA Today

Digital and Dumber?
This Generation: Always Connected

Part I: 10 Blended Learning Ideas
(Bonk & Graham, Handbook of Blended Learning: Global Perspectives, Local Designs, 2006)

Blended #1. Online Portals & Resources
(Civil Rights Digital Library and Amistad, history, science, literature, etc.)

Blended #2. Teacher Training
(The TICKIT Model (Ehman, Bonk, & Yamagata, 2005))

Blended #3. High School Student Self-Testing
(e.g., Calm Chemistry)
Blended #4. Art and History Exhibits

Blended #5. Online Self-Testing (e.g., self study in anatomy or chemistry, virtual autopsy, dissection, etc.)

Blended #6: Student Podcast (in schools—kids have power!)

"Just the word 'podcast' scares a lot of teachers away," Ms. Schrock said. "There are a lot of misconceptions."

"All you need is a computer, access to the Internet and a microphone that you can buy at Toys 'R' Us," Mr. Warlick said. "I listen to podcasts on my computer." (NY Times, Jan 25, 2006)

Blended Solution #7. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus http://www.visualthesaurus.com/; http://www.visual-library.org/periodic_table/periodic_table.html)

A PERIODIC TABLE OF VISUALIZATION METHODS

Blended Solution #8. Electronic Cameras and Maps (e.g., Google Earth/Maps)

Blended Solution #9. Using Online Video (e.g., YouTube) to Memorize Sonnets and Poems
Blended Solution #10. Read Text (e.g., Turning The Pages, British Library)

99 seconds: What have you learned so far?
- Write down 1-2 solid ideas and 1-2 fuzzy ones.
- Share with partner.
- Share with group.

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. Addressing Learning Styles

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

Empowering Online Learning
100+ Activities for Reading, Reflecting, Exploring & Doing
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. Course Announcements (e.g., Teaching with Twitter)

Read 1b. Kids Podcasts

Read 1c. Wiki Steps on How to do Something: Wikihow
http://www.wikihow.com/

Read 1d. Indexing Sounds in Cities with Google Maps
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. ORL or 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.

Reflect 2b. Paired Weblog Critiques

Reflect 2c. Partner & Team Blogs
(especially English writing class)

Reflect 2d. Reuse Blog, Chat Transcripts, Presentations

3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
Display 3a. 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 3b. Online Timelines
(US Presidents)

Display 3c. Historical Documents
discoverbabylon.org
- In its final form, the multiplayer game will let you march through three-dimensional recreations of the first city-states, around 3000 B.C., the first empires, around 2300 B.C., and finally the famous Iron Age empire of Assyria...offers three-dimensional walkthroughs of sites in the Valley of the Kings.

Display 3d. Animations, Video Clips, Audio, Pictures, Web Resources, etc.
(e.g., DNA from the Beginning)

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

Do 4b. Hands-On Frog Dissection (Net Frog, Univ. of Virginia)

Do 4c. Cool Resource Provider (Bonk, 2004) Capture and Videostream Lectures (e.g., Apreso CourseCaster)

- 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.

Ok, Million Dollar Question: How do you motivate learner with technology?

I even reflected on this for a moment...I thought about the people I met
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

Intrinsic Motivation

"...intrinsic propensity to engage one's interests and exercise one's capabilities, and, in doing so, to seek out and master optimal challenges (i.e., it emerges from needs, inner strivings, and personal curiosity for growth)


1. Tone/Climate: (open, inviting)
   A. Create a Class Wiki (Wikispaces)

2. Encouragement, Feedback, etc.:
   A. Clickers; Innovation is but one click away...
      ![Clicker Image]

3. Curiosity, Fun:
   A. Games e.g., Online Jeopardy Game
      Games2Train: The Challenge; Thiagi.com
   B. Virtual Field Trips
      ![Virtual Field Trip Image]

3. Curiosity, Fun:
   B. Virtual Field Trips
      Gas prices fuel rise in virtual field trips
      With virtual field trips, students can have a personal tour of Hawaii Volcanoes National Park.

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.)

6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch
Connected (Part 1/2) from Alleno Christian Under: http://www.youtube.com/watch?v=ifaI8Xppw1I

6. Relevance, Meaningfulness: B. Real Explorer or Teacher Interaction
Jean Pennycook (Geographical blogging)

7. Interactive, Collaborative: A. Online Language Learning (Mixer, Livemoche, Friends Abroad)

7. Interactive, Collaborative: B. Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups, Dlugo, etc.
7. Interactive, Collaborative: C. International Children’s Digital Library (ICDL) project (Univ. of Maryland, Black Beauty, Aesop’s Fables, Little Red Riding Hood, Grimm’s Fairy Tales, Robinson Crusoe, and Mother Goose.

8. Engagement, Effort: A. Adventure Blogging (Ben Saunders, Mark Fennell, Andrew Revkin)

9. Tension, Challenge, etc.: A. Flat Classroom Projects!!! (combine blogs, videoconferencing, chat, async discussion, etc.)

10. Yields Products, Goals: A. Film Festivals and Competitions

Try the R2D2 Method!!! Try TEC-VARIETY!!!

Stand and Share Ideas
- Will Work: ____________
- Might Work: ____________
- No Way: ____________