Workshop Part 1.
Addressing Diverse Online Learner Needs
with the Read, Reflect, Display, and Do
(R2D2) Model

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Part I. 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?)

Poll #1: How many ideas did you write down?
a. None—my brain malfunctioned.
b. 1 (and it is a lonely #).
c. 2 (it can be as bad as one).
d. 3–5
e. 6–10
f. Higher than I can count!

Yahoo News
Love me, love my blog,” as Netorati couple-surf
BY SARA LEDWITH Thu Aug 3, 8:30 AM ET

- Nick Currie and his girlfriend Shizu Yuasa (R) surf the internet over breakfast in Tokyo in this handout photo. As the Internet evolves -- with its webcams, iPods, Instant Messaging, broadband, Wi-Fi and weblogs -- its image as a relationship-wrecker is changing. Now a sociable habit is emerging among the Netorati: couple-surfing. (Nick Currie/Handout/Reuters)
- "For my birthday, he upgraded my RAM and I thought it was incredibly romantic," writes Jess.
Bonk’s Addiction Q’er

1. Who has 2 or more cell phones with Internet access?
2. Who has 2 or more laptop computers with wireless connections?
3. Who is on email in the morning? At noon? Who does it at night?
4. Who suffers from nervous tension when you cannot get on email?
5. Who is on the Web right now?

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

Poll 1: Which learning style do you prefer?

- Read (Auditory and Verbal Learners)
- Reflect (Reflective Learners)
- Display (Visual Learners)
- Do (Tactile, Kinesthetic, Exploratory Learners)

VARK learning styles (Fleming & Mills 1992a, 1992b). Four types of learners and learning styles

1. Visual learners prefer diagrams, flowcharts, graphics (they do not mention video, film, Webcasts, or PowerPoint presentations).
2. Auditory learners prefer to hearing directions, lectures, or verbal information.
3. Reading and writing learners prefer text passages, words, and written explanations.
4. Tactile or kinesthetic learners learn best by connecting to reality through examples, practices, or simulations.
The Blending of Learning Styles

Dean of IU School of Education

The R2D2 Method
1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

R2D2 Book Project

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. Podcast for Language Learning (ChinesePod—learn Mandarin)

Read 1c. Educational Applications of Podcasting (Essex, 2006, Leftwich, 2007)
1. Recordings of lectures (Coursecasting)
2. Supplemental textbook or entire book
3. Student projects
4. Interviews
5. Language lessons
6. Oral reports
7. K-12 classroom interactions
8. Downloadable library of resources
9. Recordings of performances
Read 1d. Wiki Steps on How to do Something: Wikihow
http://www.wikihow.com/

Read 1e. Indexing Sounds in Cities with Google Maps

Read 1f. Podcasts for Peace
(Jeff Lebow, World Bridges and EdTechTalk)

Read 1g. Referenceware and Terminology
Exercises Online (e.g., Websters, Visual Thesaurus)
http://www.visualthesaurus.com/
($2.95/month; $19.95/year)

Read 1h. Online Tutorials, Help, Announcements, Q&A, and FAQs

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)

Reflect 2b. Paired Weblog Critiques

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<td>Reflect 2c</td>
<td>Reflect 2d</td>
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<tr>
<td>Reflect 2e</td>
<td>Reflect 2f</td>
<td>Early warning Early warning</td>
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Reflect 2c. Partner & Team Blogs (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 improve 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

Reflect 2d. Reuse Blog, Chat Transcripts, Presentations

3. Visual Learners
   - Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
Display 3a. Podcasts! (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/

Display 3b. OpenCourseWare Video Browser (New Ways to Find Lectures)

Display 3c. 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 3d. Map Mash-ups
Google Earth Environment Guide: The Free Software From Google Gives Scientists A New World View

Display 3e. Online Timelines (US Presidents)

Display 3f. Concept Mapping Tools (VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)
Display 3g. 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 3h. Vlogging (Video Blogging)
e.g., Andy Calvin’s Waste of Bandwidth
Michael L. Wesch, Kansas State, The Machine is Using Us

Display 3i. Online Research Channels
(Research Channel, UChannel)

Display 3j. World Trends and Indices (e.g. Worldmapper)

Display 3k. Cluster Maps (who is reading your blog or using your product); Blog of Will Richardson, famous K-12 blogger (left) and Learning Theories Book of Michael Grey, Univ of Georgia (right)

Display 3l. You Ustreamed my Ustream: Now that’s a Twitter of an Idea
Display 3M. Shared Online Video Demonstrations (e.g., Monkey See, doFlick)

Display 3N. Tracking Live Internet Events (e.g., Thawing: A Colossal of an Idea) (caught Feb. 2007; thawed April 30, 2008)

Deep-Sea Requiem
Captain John Bennett examines the world's first intact adult male colossal squid on board his New Zealand fishing boat in February 2007, in the Ross Sea near Antarctica. The gigantic sea creature weights a world record 1,089 pounds. After being frozen whole for over a year, scientists at New Zealand's national museum will thaw the squid for further study.

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. Wiki: Romantic Poetry Project (Professor Mike Phillipson, English at Bowdoin College)

Do 4c. Survey Research and Market Analysis (e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)
Do 4d. Virtual Worlds/Virtual Reality/MMOG
Wednesday, August 30, 2006
Harvard Law School (Charles & Rebecca Rosson)
Chronicle of Higher Ed (open to the public)
http://chronicle.com/daily/2006/08/2006083001t.htm

Do 4e. Mobile Learning and Social Networking (e.g., Mixi, Yayoi Anzai, Professor Japan)

Do 4f. Online Warm-ups Activities
Just-In-Time-Teaching (JITT)
http://webphysics.iupui.edu/jitt/jitt.html

Do 4g. Syllabus, Glossary, etc. in wiki:
Students sign up for tasks
(Ron Owston, York University)

Do 4h. 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.

Do 4h. Multi-Technology Tasks (e.g., Second Life, Blogging, and Photo Posting) Stephen Mandelbrot
Do 4I. Virtual Crime Scene:
Explore Murder Evidence
(Arjuna Multimedia, Bloomington, IN)

Do 4J. Student Produced Video
In the year since its invention, the Flip has taken 13 percent of the camcorder market, according to its maker, Pure Digital. Its size and simplicity mean it can go where most camcorders can't.

99 Seconds Stop and
Share:
Top Three Things
Learned so Far!

Workshop Part 2.
Adding Some TEC-VARIETY: A New Model for Hundreds of Online Motivation and Retention Activities

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Most ID Models in the
1980s Prescriptive

- gaining attention
- informing learners of the objective
- stimulating recall of prior learning
- presenting the stimulus
- providing learning guidance
- eliciting performances
- providing feedback
- assessing performance
- enhancing retention and transfer
Three Most Vital Skills
The Online Teacher, TAFE, Guy Kemshal-Bell (April, 2001)

- Ability to engage the learner (30)
- Ability to motivate online learners (23)
- Ability to build relationships (19)
- Technical ability (18)
- Having a positive attitude (14)
- Adapt to individual needs (12)
- Innovation or creativity (11)

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

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@zha.bascau.ca

Factors in Creating any Community (Rick Schwier)

(1) membership/identity
(2) influence
(3) fulfill of indiv needs/rewards
(4) shared events & emotional connections
(McMillan & Chavis, 1986).

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

- History, stories, expression, identity, participation, respect, autonomy, celebration, team building, shape group, Rick Schwier, 1998; University of Saskatchewan, richard.schwier@usask.ca)
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
"...innate 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: C. Video Course Intros
(examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

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

3. Curiosity, Fun:
A. Exploration and Demonstration: Virtual Tours and Timelines (HyperHistory)
http://simile.mit.edu/timeline/
3. Curiosity, Fun:
B. Virtual Field Trips

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

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

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.)

5. Autonomy, Choice: B. Volunteer Technology Demos (Bork, 1996)
- Take students to a computer lab.
- Have students conduct a technology demonstration that relates to something from the class (replaces an assignment).
- Include handout
- Debrief

5. Autonomy, Choice: C. Clickers; Innovation is but one click away...

5. Autonomy, Choice: D. Multiple Topic Forums or Task Options
- 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 off weeks)
- Have students list and vote.
6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch

6. Relevance, Meaningfulness: B. 99 Second Quotes
(L = Cost, M = Risk, M = Time)
- 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. Relevance, Meaningfulness: C. Real Explorer or Teacher Interaction
Jean Pennycook (Geographical blogging)


6. Relevance, Meaningfulness: D. Mobile Health and Medical Education
(Courtesy of Paul Kim, Stanford University)

7. Interactive, Collaborative: A. Online Language Learning
(Mixxer, Livemocha, Friends Abroad)
7. Interactive, Collaborative:
B. Discussion: Starter-Wrapper (Hara, Bonk, & Angell, 2000)
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-Starter-Wrapper (Alexander, 2001)
Instead of starting discussion, student acts as moderator or questioner to push student thinking and give feedback.

7. Interactive, Collaborative:
E. Online Peer Mentoring Sessions
1. Have students sign up online for a chapter wherein they feel comfortable and one that they do not.
2. Have a couple of mentoring sessions in class or online.
3. Debrief on how it went.

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

7. Interactive, Collaborative:
F. Human Graph
- Class lines up: (1-5)
  1 = Strongly agree,
  3 = neutral,
  5 = strongly disagree
- e.g., this workshop is great!
- 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).

7. Interactive, Collaborative:
G. 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, Science)
8. Engagement, Effort: B. Just-In-Time Syllabus

Syllabus is created as a "shell" which is thematically organized and contains print, video, and web references as well as assignments. (Goals = critical thinking, collab, develop interests)

E.g., To teach or expand the discussion of supply or elasticity, an instructor might add new links in the Just-In-Time Syllabus to breaking news about rising gasoline prices.

8. Engagement, Effort: D. Interactive Online Conferences

http://itunes.stanford.edu/

8. Engagement, Effort: C. Flat Classroom Projects!! (combine blogs, videoconferencing, chat, async discussion, etc.)

8. Engagement, Effort: E. Mobile Literacy

(courtesy of Paul Kim, Stanford, Pocket School)

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

9. Tension, Challenge, etc.: B. Electronic Guests & Mentoring


10/1/2008
Poll #2: How many ideas did you get from this workshop so far?

a. None—you are an idiot.
b. 1 (and it is a lonely #).
c. 2 (it can be as bad as one).
d. 3-5
e. 6-10
f. Higher than I can count!

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

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