Best Practices for Online Learning: R2D2 and TEC-Variety

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Part I. Motivational Ideas

I even reflected on this for a moment...and then something magical happened...

The TEC-VARIETY Model for Online Motivation and Retention
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Support
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: Social Ice Breakers
   A. Public Commitments:
   Have students share how they will fit the coursework into their busy schedules
   B. Favorite Websites
   1. Everyone posts 1-2 of their favorite Websites and explain why.
   2. Peers comment on or rate them.

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. Online Self-Testing (e.g., self study in vocabulary, anatomy, chemistry, dissection, etc.)
   B. Tutorials with Screen Capture (e.g., Jing, Screencr)
5. Autonomy, Choice:
B. Clickers; Innovation is but one click away...

6. Relevance, Meaningfulness:
A. 60 Second Recap, Jenny Sawyer
http://www.60secondrecap.com
English major, 24, rambunctiously recaps the classics in 60-second Web videos; by Greg Toppo; USA TODAY, September 2009

7. Interactive, Collaborative:
A. Collaborative Groups (Ning, Google Groups, MSN Groups, Yahoo Groups, Diigo)

8. Engagement, Effort:
A. Synchronous and Asynchronous Events (e.g., Breeze + Video + Online Forum + Online Papers)

9. Tension, Challenge, etc.:
A. Ethical Medical Debates
Students protest human body exhibit

10. Yields Products, Goals:
A. Movie Festivals, Concept Maps, Video Papers/Blogs, Virtual Timelines, Digital Movies

Filip Miko
MOTP 5176.00

Sleek and Fun

CAMPUS MOVIEFEST
II. Addressing Diverse Learners with R2D2

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. Publishing in Open Access Journals (e.g., PLOS)

Read 1b. Course Announcements (e.g., Teaching with Twitter)
Read 1c. Podcast Paper Reflections
- Students listen to a podcast.
- Reflect on what they learned in an online forum.
- Students comment on each other's post.

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. Critical Friend Blog Postings

Reflect 2b. Expert and Domain Specific Blogs (English Teacher Blogs)

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 Supercomputer Center created a YouTube for scientists to help demystify important research papers. See SciVee

Display 3b. Anchored Instruction Discussions (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 3c. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Giffy, Mindmeister, or Mindomo)

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

Display 3e. United Nations Opens World Digital Library, April 21, 2009

Display 3f. Online Historical Document (e.g., Turning The Pages, British Library)
Display 3g. Medical Animations and Videos
(find anchoring event: YouTube, CNN, BBC, TeacherTube, CurrentTV)

Display 3h. Online Timelines
(US Presidents)

Display 3i. Videos of the Periodic Table

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

Display 3k. Download and Use Online 3D Sketches
(Google SketchUp; download http://sketchup.google.com/3dwarehouse)

4. Tactile/Kinesthetic Learners
- Tactile/kinesthetic senses can be engaged in the learning process through 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. Survey Research and Market Analysis
(e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)

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

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

Do 4e. Podcasts for students of pronunciation class
(e.g., Tzu-Su Chen, Taiwan)

Try the R2D2 Method!
Try TEC-VARIETY!
And hope for some magic!!!
Sample papers:
http://www.publicationshare.com/
Archived talks:
http://www.trainingshare.com/