R2D2 to the Matrix: A Galaxy of Online Learning Style, Motivational, and Blended Learning Examples
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Will we become increasingly mobile learners?

Of course, there will always be smaller and cheaper devices...

And Social Networking Games (e.g., Farmville)

More and More Shared Online Video (e.g., Link TV, TED Conference, Edutopia Videos)

An Explosion of e-Book Readers
OpenCourseWare (e.g., MIT OCW Highlights for High School)

Open Educational Resources (e.g., Curriki, Connexions, National Repository of Online Courses (NROC))

Poll #1: Who finds it hard to keep track of all the technology-related changes today?

Perhaps Blending Online Is the Solution!

Blending Online Defined

- “Blended learning refers to events that combine aspects of online and face-to-face instruction” (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

Blended Solution #1. United Nations Opens World Digital Library
Blended Solution #2. Online Historical Document (e.g., Turning The Pages, British Library)

Blended Solution #3. Explore Online Museums, Zoos, Library Exhibits (Museum of Online Museums or MoOM)

Blended Solution #4. Free High Quality Online Lesson Plans (Smithsonian Education, U.S. Dept of Ed)
http://www.free.ed.gov/

Blended Solution #5. Online Portal Explorations

Blended Solution #6. Interactive Portals (e.g., The Diary of Samuel Pepys and Phil Gyford, UK)

Blended Solution #7. A Grain of Rice (John Breen)
Blended Solution #8. 60 Second Recap, Jenny Sawyer
https://www.60secondrecap.com/
English major, 24, rambunctiously recaps the classics in 60-second Web videos

Blended Solution #9. Videos of the Periodic Table (Univ of Nottingham)

Blended Solution #10. Collaborative Document Exchange (e.g., Google Docs, Collanos)

Blended Solution #11. Horizon and Flat Classroom Projects (combine blogs, videoconferencing, chat, async discussion, etc.)

Blended Solution #12. Anchored Instruction (find anchoring event in YouTube, CNN, BBC, TeacherTube, CurrentTV)

Blended Solution #13. Shared Online Video (e.g., the Khan Academy; videos on math, bio, trig, chemistry, money and banking, economics, statistics, etc.)
We are not motivating students with the technologies that they love.

John Dewey, Seymour Papert, John Seely Brown

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, 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

What if kids minds were on fire for learning? (Educause Quarterly, Jan-Feb 2008)

1. Risk
   - Low Risk
   - Easy to Enlist
   - Free or Inexpensive
   - Instructor-Focus
   - Low

2. Time
   - High Risk
   - Extensive Planning
   - Enterprise Licenses
   - Student-Focus
   - High

3. Cost
   - Low Risk
   - Easy to Enlist
   - Free or Inexpensive
   - Instructor-Focus
   - Low

4. Student-Centered
   - High Risk
   - Extensive Planning
   - Enterprise Licenses
   - Student-Focus
   - High
1. **Tone/Climate:** (open, inviting)
   A. Create a Class Wiki (Wikispaces)

2. **Encouragement, Feedback, etc.:**
   A. New Self-testing Skills.
      High School Student Self-Testing
      (e.g., Calm Chemistry)

3. **Curiosity, Fun:**
   A. Online News
      (Giant jellyfish, Tiny T. rex, and Ardil)

1. **Tone/Climate:** B. Video Course Intros from Instructors.
   Yun Yun Chow, Open U Malaysia
   Making Art Lessons Come Alive with Web 2.0

2. **Encouragement, Feedback, etc.:**
   B. Tutorials with Screen Capture
      (e.g., Jing, Screencast)

3. **Curiosity, Fun:** B. WolframAlpha
   (access knowledge)
   [Link to WolframAlpha]
3. Curiosity, Fun: C. Virtual Tours and Field Trips

3. Curiosity, Fun: D. Adventure Learning (e.g., GeoThentic, GoNorth, Polar Husky, Nat'l Geographic; Aaron Doering, U of Minnesota)

3. Curiosity, Fun: E. Videoconference (e.g., Global Nomads Group, Int'l Studies for Indiana Schools (I.e., ISIS); Mandarin Chinese, Niger, Sudan, Life in Eastern Europe Today (Bulgaria), History and Culture of Mexico)

3. Curiosity, Fun: F. Oceanographer (e.g., Nautilus Live allows people to not only learn about the expeditions but watch them live and listen to the scientists in the control rooms as discoveries are made, eSchool News, June 2010)

3. Curiosity, Fun: G. Tour a Museum (e.g., British Museum, Smithsonian, Louvre)

3. Curiosity, Fun: H. Solo Sailing (e.g., Michael Perham & Zac Sunderland, Summer 2009 (each age 17, youngest person to sail solo around the world...meet Minors Bello, age 73, oldest solo sailor)
May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.

Abby Sunderland's blog


3. Curiosity, Fun: J. Ice Stories Project from Antarctica

4. Variety, Novelty: A. Cool Resource Provider or Tech Demos

4. Variety, Novelty: B. Expert Chats/Real Explorer or Teacher Interaction (Jean Pennycook, blogger)

5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys) (links to text, soundtracks, video clips, etc.)
5. Autonomy, Choice: B. Clickers/Student Response Systems

5. Autonomy, Choice: C. Famous Person Web Explorations, Searches, Twitter Tracking, and Interviews (e.g., famous Australian actors)

6. Relevance, Meaningfulness: A. Tour an Oil Drilling Site (i.e., BP)

6. Relevance, Meaningfulness: B. Concept Mapping Tools (vue, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

6. Relevance, Meaningfulness: C. Virtual Tours and Timelines (i.e., HyperHistory; http://simile.mit.edu/timeline/)

7. Interactive, Collaborative: A. Online Language Learning (Skype with Mixser, Livemocha, Friends Abroad)
7. Interactive, Collaborative:
B. Global Collaboration (e.g., EPals and EARN (Int'l Education and Resource Network))

7. Interactive, Collaborative:
C. Create an Online Community in Ning, Google Groups, or Yahoo Groups.

8. Engagement, Effort:
A. Follow Online Adventure
Australian adventurer Don McIntyre and teenage circumnavigator Mike Perham to re-enact Capt. William Bligh's epic mutiny on the Bounty open boat voyage

8. Engagement, Effort:
B. Synchronous and Asynchronous Events (Webinars in Eliminate, Dimdim, WebEx, Adobe Connect Pro)

8. Engagement, Effort:
C. Basic Acoustics of Musical Instruments (Univ. of New South Wales)

9. Tension, Challenge, etc.:
A. Ethical Medical Debates
Students to pretest human body exhibit
9. Tension, Challenge, etc.: B. Controversial Science (e.g., Ida (a transitional species), 47-Million-Year-Old Darwin's Missing Link? (www.CNN.com, May 20, 2009))

10. Yields Products, Goals: A. Movie Festivals, Virtual Timelines, Digital Movies

10. Yields Products, Goals: B. Video Blogs

10. Yields Products, Goals: C. Photo Festivals and Competitions (e.g., COFA at UNSW, Scrapblog, flickr, etc.)

10. Yields Products, Goals: D. Student Developed Wikibooks (Wikibooks and Wikibooks Junior)

TEC-VARIETY Model for Online Motivation and Retention
- Tone/Climate
- Encouragement, Feedback
- Curiosity
- Variety
- Autonomy
- Relevance
- Interactive
- Engagement
- Tension
- Yields Products
Poll #2: How many ideas did you get...so far?

a. 0 if I am lucky.
b. Just 1.
c. 2, yes, 2...just 2!
d. Do I hear 3? 3!!!!
e. 4-5.
f. 5-10.
g. More than 10.

Addressing Diverse Learners with R2D2

The R2D2 Model

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

Poll #3: Podcast Questions (check all that apply)

a. Who has listened to a podcast?
b. Who listens to a certain podcast on a regular basis?
c. Who has created a podcast?
d. Who has created a vodcast?
e. Who thinks podcasting is simply more talking heads?
Read 1a. Kids Podcasts

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

Read 1c. Course Announcements
(e.g., Teaching with Twitter)

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

Poll #4: Blogging Questions
(check all that apply)

a. Who has a blog?
b. Who regularly reads other people's blogs?
c. Who assigns blogging tasks?
d. Who has created a video blog?
e. Who thinks it is an utter waste of time to blog?

Reflect 2a. Kids Blogs
Reflect 2b. Teacher Classroom Blogs

Mrs. Huff’s English Classes

Reflect 2c. Reuse Blog Posts, Chat Transcripts, Interviews, Conferences, Online Presentations

Reflect 2d. Videos on Book Websites (e.g., Brain Rules, John Medina)

Reflect 3e. Big Think (short topical videos from famous people)

3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Display 3a. Find Open Source Photography (e.g., Flickr, Everystockphoto.com)
Display 3b. Flash, 3-D Visualization, & Laboratory Software

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

Display 3d. Download and Use Online 3D Sketches (e.g., Google SketchUp)

Display 3e. Explore Virtual Worlds and Online Representations (e.g., Rome Reborn 1.0, University of Virginia, UCLA)

Display 3f. Shared Online Video (TeacherTube and WatchKnow)

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.
Poll #5. Wiki Questions (check all that apply)

a. Who regularly reads Wikipedia articles just for fun?
b. Who regularly reads Wikibooks?
c. Who seeks Wikipedia for content?
d. Who has edited or written new articles on Wikipedia or Wikibooks?
e. Who thinks it is ok for students to cite from Wikipedia?

Do 4a. Student Work in a Wiki
(e.g., Wet Paint, a free wiki tool for online collaboration; e.g., medical education)

Do 4b. Student Blogging

Do 4c. Student Podcasting
(in schools—kids have power!)

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

Do 4e. Online Performances Virtual Worlds and Podcasts
(e.g., Shakespeare plays reenacted)
Poll #6: How many ideas did you get from the second part of this presentation on R2D2?

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:
http://www.publicationshare.com/
Archived talks:
http://www.trainingshare.com/