

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

Curt Bonk, Professor, Indiana University
President, CourseShare, LLC
cjbbonk@indiana.edu
<http://mypage.iu.edu/~cjbbonk>



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)

A collage featuring the MIT OpenCourseWare website interface, including a page titled 'MIT OpenCourseWare Highlights for High School'. Below the website are two video thumbnails: one showing a man in a white shirt and tie, and another showing a man in a blue shirt speaking.

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

A collage featuring the Curriki website interface, including a page titled 'Curriki'. Below the website are two video thumbnails: one showing a man in a dark shirt speaking, and another showing a man in a dark shirt speaking with a 'Sun' logo in the background.

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

A man with a frustrated expression is surrounded by logos for various technology and social media services: LVEJOURNAL, Google, Facebook, Ning, PBWORKS, Slideshare, Blogger, and photobucket.

Perhaps Blending Online Is the Solution!

Two blenders are shown. The one on the right is actively blending a red liquid, with a large splash of the liquid erupting from the top, symbolizing the 'blending' of online and face-to-face instruction.

Blending Online Defined

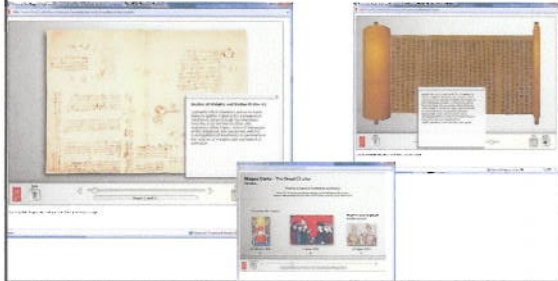
- "Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

A small red blender is positioned at the bottom right of the slide.

Blended Solution #1. United Nations Opens World Digital Library

A screenshot of the United Nations World Digital Library website, showing a map of the world with various digital resources and a sidebar with search and navigation options.

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 Online Historical Document (e.g., Turning The Pages, British Library)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
Recap, Jenny Sawyer
<http://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

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

A Circle of Knowledge Building and Sharing

Promote these organically & sustainably

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

- Tone/Climate:** Psych Safety, Comfort, Belonging
- Encouragement, Feedback:** Responsive, Supports
- Curiosity:** Fun, Fantasy, Control
- ...
- Variety:** Novelty, Intrigue, Unknowns
- Autonomy:** Choice: Flexibility, Opportunities
- Relevance:** Meaningful, Authentic, Interesting
- Interactive:** Collaborative, Team-Based, Community
- Engagement:** Effort, Involvement, Excitement
- Tension:** Challenge, Dissonance, Controversy
- Yields Products:** Goal Driven, Products, Success, Ownership

1. Risk (Low Risk to High Risk)

2. Time (Easy to Embed to Extensive Planning)

3. Cost (Free or Inexpensive to Enterprise Licenses)

4. Student-Centered (Instructor-Focus to Student-Focus, Low to High)

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

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.:
A. New Self-testing Skills.
High School Student Self-Testing
(e.g., Calm Chemistry)

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

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

3. Curiosity, Fun: B. WolframAlpha
(access knowledge)
<http://www.wolframalpha.com/>

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 touts deep sea web surfing (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 Minoru Saito, age 75, 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: I. Tracking Live Internet Thawing: A Colossal of an Idea



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 Mixxer, Livemocha, Friends Abroad)

7. Interactive, Collaborative:
B. Global Collaboration (e.g., EPals and iEARN (Int'l Education and Resource Network))

This collage illustrates global collaboration through digital platforms. It features a photograph of students working together at a computer, two world maps highlighting different regions, and screenshots of the iEARN website which shows various educational resources and project listings.

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

This collage shows examples of online communities. It includes screenshots of a Ning website for 'Santa Fe High School' with various discussion threads and a Yahoo! Groups page for '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

This collage documents an online adventure. It features a photograph of a sailboat with red sails, a screenshot of a blog titled 'ZAC'S BLOG', and a video frame showing two men on a boat.

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

This collage illustrates various online events. It includes screenshots of webinar interfaces from Elluminate, Dimdim, WebEx, and Adobe Connect Pro, along with a photograph of a classroom setting.

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

This collage focuses on the acoustics of musical instruments. It features a photograph of a violin, a close-up of a woman's face, and a screenshot of a software interface displaying sound wave graphs and diagrams of instruments.

9. Tension, Challenge, etc.:
A. Ethical Medical Debates

Students to protest human body exhibit

This collage addresses ethical medical debates. It includes a photograph of a human body exhibit, a screenshot of a YouTube video titled 'Students to protest human body exhibit', and a photograph of a protest scene.

9. Tension, Challenge, etc.:

B. Controversial Science (e.g., *Ida* (a transitional species) 47-Million-Year-Old *Darwinius Masillae* Fossil the Missing Link? (wowOwow, May 20, 2009)

This slide features a collage of images related to controversial science. It includes a portrait of a man, a fossil of a primate-like creature, and a book cover titled "THE UNDISCOVERED DARWIN: HIS ANCESTOR". The text above the images discusses the fossil *Ida* and its significance as a potential missing link.

10. Yields Products, Goals:

A. Movie Festivals, Virtual Timelines, Digital Movies

This slide displays a collage of images related to digital storytelling and educational uses. It includes a person sitting at a computer, a virtual timeline, and a digital movie interface. The text above the images discusses the educational uses of digital storytelling.

10. Yields Products, Goals:

B. Video Blogs

This slide features a collage of images related to video blogs. It includes a person speaking, a group photo, and a video player interface. The text above the images discusses the educational uses of video blogs.

10. Yields Products, Goals:

C. Photo Festivals and Competitions (e.g., COFA at UNSW, Scrapblog, flickr, etc.)

This slide displays a collage of images related to photo festivals and competitions. It includes a group of people, a photo of a person, and a photo of a person holding a camera. The text above the images discusses the educational uses of photo festivals and competitions.

10. Yields Products, Goals:

D. Student Developed Wikibooks (Wikibooks and Wikibooks Junior)

This slide features a collage of images related to student developed wikibooks. It includes a book cover, a person, and a bookshelf. The text above the images discusses the educational uses of student developed wikibooks.

TEC-VARIETY Model for Online Motivation and Retention


Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products


This slide presents the TEC-VARIETY Model for Online Motivation and Retention. It lists seven components: Tone/Climate, Encouragement, Feedback, Curiosity, Variety, Autonomy, Relevance, Interactive, Engagement, Tension, and Yields Products. The slide also includes illustrations of a yellow character, a blue character, and a yellow character holding a book.

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




Empowering Online Learning
100+ Activities for Reading, Reflecting, Displaying & 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.



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

The screenshot shows the WillowWeb website interface. At the top, there's a navigation bar with 'Home', 'LIT', 'DND', 'SPD', 'RHS', and '5th'. Below that, the 'Radio WillowWeb' logo is prominent, along with a 'Listen' button and a small video player showing a woman speaking. There are also sections for 'Audio Acquisition via Computer' and 'Radio Australia'.

Read 1b. Wiki Steps on How to do Something: Wikihow

<http://www.wikihow.com/>

The screenshot shows the WikiHow website. The main article is titled 'How to Use English Punctuation Correctly'. It includes a list of steps and a small image of people working together. The website has a clean, blue and white design.

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

A collage of images related to social media and technology. It includes the Twitter logo, a smartphone displaying a Twitter feed, a laptop with a Twitter page open, and several photos of people using mobile devices and interacting in a classroom setting.

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

A diagram showing a circular learning cycle with four stages: 'Observe', 'Reflect', 'Practice', and 'Evaluate'. Below the diagram are several images, including Yoda, Luke Skywalker, and other characters from Star Wars, illustrating the concept of learning from observation.

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

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

A small image of a man with a surprised or expressive face, likely related to the poll or the topic of blogging.

Reflect 2a. Kids Blogs

The screenshot shows a kids' blog titled 'DogEared'. It features a yellow header with the 'KIDS' logo and a search bar. The main content area has a post about 'Secret Agent Jack Steward' and a 'ROAR!' graphic. There are also smaller images and text elements throughout the page.

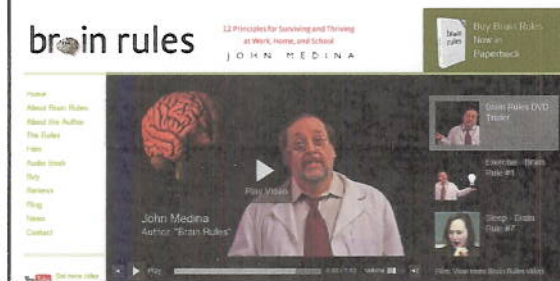
Reflect 2b. Teacher Classroom Blogs



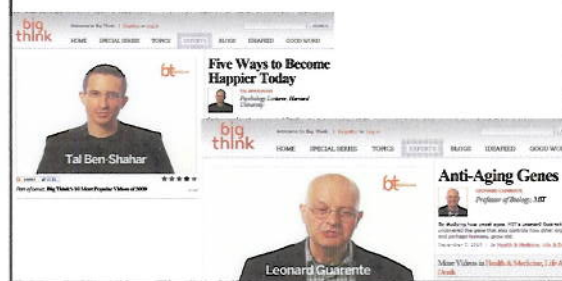
Reflect 2c. Reuse Blog Posts, Chat Transcripts, Interviews, Conferences, Online Presentations



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

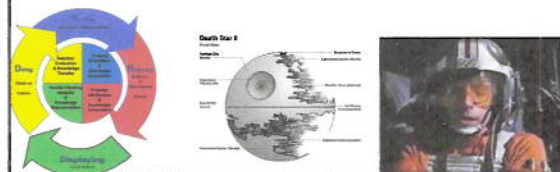


Reflect 3e. Big Think (short topical videos from famous people)

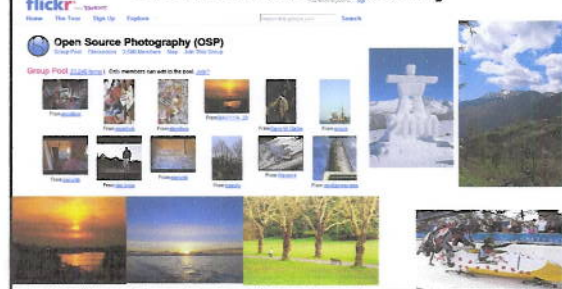


3. Visual Learners

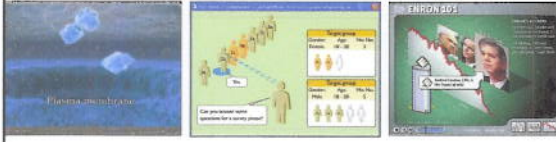
- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.



Display 3a. Find Open Source Photography (e.g., Flickr, Everystockphoto.com)



Display 3b. Flash, 3-D Visualization, & Laboratory Software



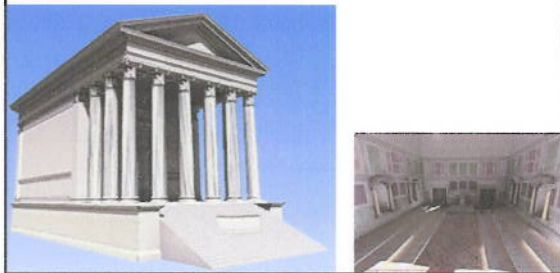
Display 3c. World Trends and Indices (e.g. Worldmapper)



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)



4b. Student Blogging



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



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

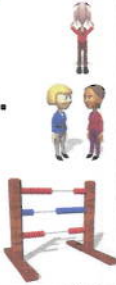


Do 4e. Online Performances Virtual Worlds and Podcasts (e.g., Shakespeare plays reenacted)



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/>

