From R2D2 to the Matrix:
Addressing Diverse Learner Needs with the Read, Reflect, Display, and Do Model

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1. Risk
   - Low Risk
   - High Risk
   - Extensive Planning
   - Easy to Embed

2. Time
   - Free or Inexpensive
   - Enterprise Licenses

3. Cost
   - Instructor-Focus
   - Student-Focus
   - Low
   - High

4. Student-Centered

Addressing Learning Styles

Question: How can technology address diverse learner needs?
The R2D2 Model

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. Online Article Portals and Databases
   [http://r685articledatabase.weebly.com/]

Read 1b. Online Crossword Puzzles
   (e.g., [http://www.eclipsecrossword.com/])
   [Create Online Crossword Puzzles!]

Read 1c. Interactive Flashcards
   (e.g., Study Stack
   [http://www.studystack.com/flashcard-136259])
Read 1d. Grammar Checkers (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)
http://www.grammarly.com/

Read 1e. Collect and Listen to Interactive Stories (e.g., Meograph: http://www.meograph.com/)
Timelines with Oral Histories, Slavery and the Making of America
Time and Place, PBS
http://www.pbs.org/wnet/slavery/timeline/1857.html

Read 1f. Follow on Twitter
http://venture-lab.org/education
https://twitter.com/electricians

Read 1g. Listen to Open Access Audio Files and Podcast Shows

Read 1h. Talking Dictionaries for Rare Languages
The Wall Street Journal, February 18, 2002
http://online.wsj.com/article/SB10001424052970204880404577228982976760026.html#articleTabs=video

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. Big Issue Reflections (Big Questions Online (BQO)), January 8, 2013 (e.g., Do We Have Souls?)[1]

Reflect 2b. Reflect on Virtual Timelines (Dipity, xtimeline, Simile, etc.) (How Facebook changed our lives, Marco della Cava, USA Today, February 3, 2014)[2]

Reflect 2c. Expert and Domain Specific Blog Reflections (English, Health, Business, etc. blogs)[3]

Reflect 2d. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State Univ, Come and See Africa Blog; http://comeandseeafrica.blogspot.com/)[4]

Reflect 2e. Critical Friend Blog Postings (Kristen and Susan)[5]

3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
Display 3a. Virtualize Words Used (e.g., Wordle, Tagzeda, Tagul, WordSift, Word It Out)
http://shellyterrell.com/2010/02/14/12-word-cloud-resources-tips-tools/

Display 3b. Data Visualization Tools (Harvard and MIT MOOCs) Lawrence Biemiller, February 20, 2014, Chronicle of Higher Education

http://data.huffingtonpost.com/2013/03/gun-deaths/

Display 3d. Videos for clinical education (Sungkyunkwan University School of Medicine, www.medu.or.kr)

Display 3e. Interactive Map Timelines (adults with college degrees by county, May 7, 2012)

Display 3f. Video Animations and Simulations
Display 3g. Virtual Microscopes

Display 3h. Interactive Species Maps
USGS (US Geological Survey)
(Biodiversity Serving Our Nation or BISON)
http://bison.usgs.orl.gov/

Display 3i. Visual Library Search
DPLA (Digital Public Library Of America)
http://dp.la/

Display 3j. Online Timelines
(US Presidents)

Display 3k. TV Lesson
(expert videos)

Display 3L. Medical Animations
(e.g., YouTube, CNN, BBC)
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. Survey Research and Market Analysis
(e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)

Do 4b. Student Class Documentaries
Umida’s R546 Documentary Project
http://www.youtube.com/watch?v=EMLTzqCV_5A
Do 4c. Uploading Mobile Books (e.g., BookRix, http://www.bookrix.com/)

Do 4d. Student Mobile App Creation
The App Builder: http://www.theappbuilder.com/
Mintian Guo (April 2013): http://myapp.is/r685final

Do 4e. Course Recap Prezi Presentations
Jeff Pankin, MIT, Prezi, Emerging Learning Technologies
http://prezi.com/tzbawrgjrnzf/emerging-learning-technologies/?auth_key=4ec2f45a718fab699b35ea460e91a46d9e1bdac7
Jeffrey Barnette, Today's World
http://prezi.com/ijzyothst/r/r685-final-project

Do 4f. Book Trailers for Readers
http://www.booktrailersforreaders.com/how-to-make-a-book-trailer
http://www.booksurge.com/content/Video_Book_Trailer_Samples.html

Do 4g. Singing YouTube Summaries
Daniel Halluska, P540, Fall 2011
http://www.youtube.com/watch?v=tOL7lrGsqnw

Do 4h. Class or Community Oral Histories
(e.g., The History Harvest, December 21, 2012)
http://historyharvest.unl.edu/collections
Do 4i. Student Expertise (e.g., Learnist)
http://learni.st/category/featured/

Do 4j. Podcast Productions and Shows

Do 4k. Virtual Quizzes
(Sungkyunkwan (SKKU) University School of Medicine, www.mededu.or.kr)

Poll: What phase of the R2D2 Method do you like best?
A. Read (Auditory and Verbal Learners)
B. Reflect (Reflective Learners)
C. Display (Visual Learners)
D. Do (Tactile, Kinesthetic, Exploratory Learners)

Next up: The MATRIX!!!!!!!!!!!!!!!

Any Questions?
Try the R2D2 Model!
Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
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