Masterclass Part 2: Where are You R2D2?: Addressing Diverse Online Learner Needs with the Read, Reflect, Display, and Do Model

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3 Reasons to Read the Higher Ed Supplement to National EdTech Plan (e.g., conversation starter, examples of innovation, cross-section of expertise)

Joshua Kim, Inside Higher Ed


January 2017

Higher Education Supplement to the National Education Technology Plan

U.S. Department of Education, Office of Educational Technology


Poll #1: How many of you cannot keep up with educational technology reports and are frustrated?
January 7, 2017
Overworked? Join the club. Here's how to handle it.
Laura Petrecca, USA Today
http://www.usatoday.com/story/money/2017/01/07/overworked-americans/96235044/

Solution?: The R2D2 Model: Read, Reflect, Display, Do...

Addressing Learning Styles with R2D2

Question: How can technology address diverse learner needs?

August 12, 2015
Create Engaging Learning Experiences


Southern Illinois University, Carbondale, Illinois
Heidi Jung and Cheryl L Bosarge
Instructional Designer
Center for Teaching Excellence
Heidi Lynn Jung hjung@siu.edu
Cheryl L Bosarge cbosarge@siu.edu
1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.

January 20, 2016
Read 1a. Podcasts
IU Bloomington podcast series to launch Jan. 24, Steve Hinnefeld, IU Newsroom

IU’s Media School dean James Shanahan, at left, will host a new campus podcast. Senior Luqmann Ruth will read the news for the inaugural podcast.

Read 1b. Collect Oral Histories
E.g., Joan Kang Shin, George Mason University, has her students write “This I believe” statements. (EFL teachers around the world interview elders in their community for a rich database of oral histories and documentaries for social change)

Oral History Society: http://www.ohs.org.uk/

Read 1c. Reading Life Histories
(bio.com)
http://www.biography.com/people/bob-marley-9399524

The R2D2 Method
1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)
Read 1d. Using Unique Open Educational Resources and Portals  
(e.g., Mozart: http://www.mozartproject.org/)

Read 1e. Exploring Various Resources to Track the Life of a Prominent People  
(e.g., Vannevar Bush in Atlantic Monthly, Wikipedia, Time, etc.)  

May 28, 2015  
Read 1f. Open Access Scientific Reports/Studies  
New species from Ethiopia further expands Middle Pliocene hominin diversity, Nature  
http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html

May 28, 2015  
Read 1g. Immediate Science  
Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN  

January 28, 2015  
Read 1h. Twitter Fed Class Discussions  
Live-Tweeting Assignments: To Use or Not to Use?  
The Chronicle of Higher Education, Adeline Koh  
http://chronicle.com/blogs/profhacker/live-tweeting-assignments-to-use-or-not-to-use/58949

Read 1i. Grammar Checkers  
(e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)  
http://www.grammarly.com/
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)), Feb 3, 2015
(e.g., Is curiosity essential for human flourishing?)
https://www.bigquestions.com/content/do-we-have-souls/

Reflect 2b. What-if Reflections
What if Aaron Burr had missed Alexander Hamilton?, Thomas Fleming, CNN

Reflect 2c. Discussion Starter News Stories
Aboriginal Australians are Earth’s oldest civilization: DNA study, Emiko Jozuka, CNN

Reflect 2d. Sharing Future Forecasts and Projections
Meet the giants of tomorrow: The tallest buildings rising in 2017, Ian Spula, CNN

Reflect 2e. Interpreting Interactive Graphs
Tech billionaire announces $250 million in cancer immunotherapy funding, Jayne O’Donnell, USA Today
Reflect 2f. Blogging and Reusing Other Blogs
(e.g., Dr. Kim Foreman, San Fran State Univ, Come and See Africa Blog:
http://comeandseeafrica.blogspot.com/)

Reflect 2g. Case Analysis and Online Discussion (e.g., Kelley Direct, IU)

Reflect 2h. Workplace Internship, Practicum, and Field Experiences

Reflect 2i. Online Database Queries
(e.g., WolframAlpha)
http://www.wolframalpha.com/

Reflect 2j. Dual Coding Content
(Dual Coding Theory: Text + Video)

Reflect:
Jot down 2-3 new ideas that you learned so far…
3. Visual Learners

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

Display 3a. Interpreting Infographics
August 5, 2015
How much rainforest in that chocolate bar?
Global Forest Watch, Nancy Harris, Octavia Payne and Sarah Mann
http://blog.globalforestwatch.org/2015/08/how-much-rainforest-is-in-that-chocolate-bar/

Display 3b. Virtualize Words Used
(e.g., Wordle, Taggedo, Tagul, WordSift, Word It Out)

Display 3c. Map Animations
Yes, Mr. President, We Remade Our Atlas to Reflect Shrinking Ice
Christine Dell’Amore, National Geographic, August 3, 2015

Display 3d. Global Data Visualizations
The Arctic is showing stunning winter warmth, and these scientists think they know why, Charles Mooney, Washington Post

Visualization of a very wavy northern hemisphere jet stream. Credit: NASA

Display 3e. Global Data Visualizations
With Google Earth Timelapse you can now view 32 years of Landsat satellite images, Aleks Buczkowski
http://geoawesomeness.com/google-earth-timelapse-can-now-view-32-years-landsat-satellite-images/
**November 19, 2016**

Display 3f. Cartograms, Maps, and Other Visualizations

Metrocosm: Cartograms Archive

The Housing Value of Every County in the U.S.

http://metrocosm.com/category/cartograms/

**March 24, 2015**

Display 3g. Maps of Languages

Langscape, Language at Maryland

http://theweek.com/articles/545768/cool-interactive-map-lets-explore-worlds-languages

**Display 3h. (April 28, 2015)**

Concept Mapping and Timeline Tools

(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)

http://www.spicynodes.org/index.html

**December 17, 2015**

Display 3i. Graphical Recordings

Elliott Masie’s Learning 2015, Nov 1-4, 2015

http://www.imagethink.net/

**Display 3j. Unique OER (e.g., Dead Sea Scrolls)**

http://www.deadseascrolls.org.il/explore-the-archive/search#q=site_en:'Qumran,_Cave_4'

**March 22, 2015**

Display 3k. Online News with Embedded Media

Madagascar marvel: Divers find fossils of extinct giant lemurs

Daisy Carrington, for CNN, March 22, 2015

### September 14, 2016
**Display 3L. Exploring Online 3-D Exhibits**
3-D Google exhibit to tell history of black America, Jessica Guynn, USA Today

### December 15, 2016
**Display 3m. Interactive Media Timelines**
The Digital Era: How 50 years of the information age transformed college forever, Ben Myers & Erica Lusk, The Chronicle of Higher Education

### March 10, 2016
**Display 3n. Videostreamed Conferences**
Watch SXSWedu Live, Connie Yowell

### March 7, 2016
**Display 3p. Brief Training Videos**
Chief Learning Officer

### Display 3o. Short Educational Videos:
CNN, BBC, TED, TED-Ed, ForaTV
BBC One-Minute World News (August 31, 2015)

### Display 3q. Video Tutorials, Demonstrations, and How-To’s
(WonderHowTo and Howcast)
Display 3r. Videos for clinical education
(Sungkyunkwan University School of Medicine, www.mededu.or.kr)

Display 3s. Virtual Microscopes

January 20, 2016
Display 3t. Embedded Videos
Why the Future Is Bright for the World’s Poorest Farmers, Gates Notes, the blog of Bill Gates

October 6, 2016
Display 3u. Explanatory Videos
Why Governments Should Invest in Innovation, Bill Gates, YouTube (1:19)
https://www.youtube.com/watch?v=TjNVNWQa4ak

Display 3v. Tracking the Life of a Scientist
(e.g., Brian J. Ford, independent scientist)
http://www.youtube.com/user/tellymonitor#p/a/u/1/LhGeApsKjasr
http://www.labnews.co.uk/news/prehistoric-revolution/

March 2, 2016
Display 3w. Weekly 1 minute Video Updates
(e.g., Pinkcasts from Daniel Pink)
http://www.danpink.com/pinkcast/

Pinkcast 2.
Advice from Adam Grant: Look for “disagreeable givers”
October 31, 2014
Display 3x. Live Science
Penguin Science (Penguin Cam) Jean Pennycook
http://www.penguinscience.com/
http://www.thistle.org/pcam2/images.shtml

November 12, 2016
Display 3y. Online Documentaries and Films
Drokpa (Yan Chun Su is a self-taught documentary filmmaker currently based in Colorado.)
http://www.drokpafilm.com/

Display 3z. Short Video Anchors
(e.g., TubeChop of V-PORTAL: Video Primers in an Online Repository of e-Teaching and Learning)
Curt Bonk: http://www.tubechop.com/watch/378752

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. Goal Setting Tools
(e.g., I Done This, Milestone Planner, and 43 Things)

February 8, 2015
Do 4b. Recap Discussion (e.g., Prezi from Thuy Han for R678 class Week 4)
December 8, 2015
Do 4c. Take a MOOC
PS40 Final Assignment for Meina Zhu: MOOC, Coursera, Introduction to Psychology, University of Toronto
https://www.coursera.org/course/intropsych
https://www.futurelearn.com/courses/mental-health-and-well-being

December 8, 2015
Do 4d. Student Final Project Videos
PS40 Final Assignment: Learning Theories and Psychotherapy, Shu-Yi Wang
https://www.youtube.com/watch?v=PNM6pQxXAJM

October 26, 2016
Do 4e. Student Created Marketing and Explanatory Videos
R511, Kai Westerfield, Jennifer Blankenship, And Colbi Lehman, Online Degree Programs, (11:54) Go Animate

October 26, 2016
Do 4f. Student Music Recordings of Course Content
IST Groove Song, Jeffrey Jenkins, R511: https://soundcloud.com/jeffjenkins25/ist-groove
P540: https://www.youtube.com/watch?v=PNM6pQxXAJM
Daniel Halluska, P540: [Go Animate]
IST Paradise (2:52) (It all started with IST) https://drive.google.com/file/d/0B9YDNkNTIa4DSzhNd3VBdzVpZlE/view
IST History (1:40): https://drive.google.com/file/d/0B9YDNkNTIa4DaDNSVXdOeDM1SkU/view

October 26, 2016
Do 4g. Student Debate Animations

October 26, 2016
Do 4h. Student Exploration Video
R511, Merge Basdogan, Self-Regulated Learning (6:08)
https://www.youtube.com/watch?v=PNM6pQxXAJM
October 26, 2016

Do 4i. Student Research Recap Video
R511, Rob Elliot, Erin Milanese, and Patrick Walsh
Traditional Textbook (8:11)

Do 4j. Student Website Development
R511 Final Projects, April 2016
IT and HPT Comparison (Website), Doug Hsu
http://dougandindira.wix.com/r511finalproject

"Cousins but Not Twins: Instructional Technology and Human Performance Technology,"
Merve Basdogan and Brett Gary, R511, December 2016
http://educbasdogan.wixsite.com/511final

Do 4k. Interactive Archive/Gallery of Student Work
e.g., Exemplary First-Year Writing Projects
(Fresh Writing, University of Notre Dame, September 24, 2014;
https://freshwriting.nd.edu/)

Three Words from this Session...?
e.g., “I am happy!” and...
My minions are happy!

Poll #2: Which do you prefer... (A) TEC-Variety or (B) R2D2?

Any Questions or Comments?
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free book: http://tec-variety.com/
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