Masterclass Part 3: Where are you R2D2?: Addressing Diverse Online Learner Needs

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Addressing Learning Styles with R2D2

Question: How can technology address diverse learner needs?

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.
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.

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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/

May 28, 2015

Read 1d. Immediate Science and Open Access Science

Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN


http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html

Read 1e. Reading Life Histories

(OER, bio.com; Mozart: http://www.mozartproject.org/)

http://www.biography.com/people/bob-marley-9399524

January 28, 2015

Read 1f. 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 1g. 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., Can a Living Creature Be as Big as a Galaxy?)
http://www.bigquestionsonline.com/

Reflect 2b. "What if" Questions?
Emma Morano, Last Known Person Born During The 1800s, Dies, Hilary Hanson, Huffington Post
http://www.huffingtonpost.com/entry/emma-morano-dies-born-1800s_us_58f2581de4b0bb9638e455d5

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

Reflect 2d. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State Univ, Come and See Africa Blog; http://comeandseeafrica.blogspot.com/)
Reflect 2e. Workplace Internship, Practicum, and Field Experiences

September 21, 2016
Reflect 2f. Discussion Starter News Stories
(e.g., Aboriginal Australians are Earth’s oldest civilization: DNA study, Emiko Jozuka, CNN)

Elder Thomas Wales, of the Thanakwith Pine River People, is one of the co-authors of the study.

Reflect 2g. Weekly Synchronous Guest Chats
(e.g., Emily Hixon, January 20, 2015)
https://connect.iu.edu/p259wpjab9/

January 12, 2017
Reflect 2h. Sharing Future Forecasts and Projections
Meet the giants of tomorrow: The tallest buildings rising in 2017, Ian Spula, CNN

Reflect 2i. Interpreting Interactive Graphs
Tech billionaire announces $250 million in cancer immunotherapy funding, Jayne O’Donnell, USA Today

Dr. Jedd D. Wolchok, Chief, Melanoma and Immunotherapeutics Service at Memorial Sloan Kettering Cancer Center in Photo by John O’Boyle, Freelance ORG XMIT: JO 134700 seanparker 4/7/2016 [Via MerlinFTP Drop}

April 13, 2016
Reflect 2j. 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
Reflect 2k. Online Database Queries
(e.g., WolframAlpha)
http://www.wolframalpha.com/

Reflect 2L. Dual Coding Content
(Dual Coding Theory: Text + Video)
Video (September 20, 2000): http://www.gigwise.com/news/84165/audio-pioneer-

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
**November 19, 2016**  
**Display 3d. 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 3f. Maps of Languages**  
Langscape, Language at Maryland  
https://languagescience.umd.edu/beyond-umd/langscape  
http://theweek.com/articles/545768/cool-interactive-map-lets-explore-worlds-languages  
http://langscape.umd.edu/map.php

**December 17, 2015**  
**Display 3h. Graphical Recordings**  
Elliott Masie’s Learning 2015, Nov 1-4, 2015  
http://www.imagethink.net

**February 21, 2017**  
**Display 3i. ”My classroom is like a,” Khendum Gyabak**  
http://wheeldecide.com/index.php?c1=Jungle&c2=Hospital&c3=Warzone&c4=Temple&c5=Garden&t=My+classroom+is+like+a&time=5

**July 21, 2017**  
**Display 3e. A total solar eclipse is happening Aug. 21 and here’s what you need to know**  
Sarah Kaplan, The New York Times  
February 23, 2017
Display 3j. Global Comparison Graphs
(Longevity in rich countries, The Economist; A new study suggests South Koreans will have the world’s highest life expectancy by 2030, The Economist)

March 2, 2016
Display 3k. Weekly 1 minute Video Updates
(e.g., Pinkcasts from Daniel Pink )

October 31, 2014
Display 3L. Live Science
Penguin Science (Penguin Cam) Jean Pennycook
http://www.penguinscience.com/
http://www.thistle.org/pcam2/images.shtml

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
http://www.chronicle.com/interactives/50-years-of-technology

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

Display 3o. Unique OER
(e.g., Dead Sea Scrolls)
http://www.deadseascrolls.org.il/explore-the-archive
http://www.deadseascrolls.org.il/explore-the-archive/search#q=site_en:'Qumran,_Cave_4'
March 22, 2015
Display 3p. 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 3q. Exploring Online 3-D Exhibits
3-D Google exhibit to tell history of black America, Jessica Guynn, USA Today

March 10, 2016
Display 3r. Videostreamed Conferences
Watch SXSWedu Live, Connie Yowell

March 7, 2016
Display 3s. Brief Training Videos
Chief Learning Officer

Display 3t. Video Tutorials, Demonstrations, and How-To’s
(WonderHowTo and Howcast)
http://www.wonderhowto.com/
http://www.howcast.com/
http://www.howcast.com/?s=tune+a+drum

Display 3u. Videos for clinical education
(Sungkyunkwan University School of Medicine, www.mededu.or.kr)
Why Governments Should Invest in Innovation, Bill Gates, YouTube (1:19)
https://www.youtube.com/watch?v=TjNVNWQa4ak

March 2, 2016
Display 3x. 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”
http://www.youtube.com/watch?v=cZC8eF95Kog

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)

iDoneThis
Changing your life is hard. Doing it by yourself is harder.

Do 4b. Student Research Recap Video
R511, Rob Elliot, Erin Milanese, and Patrick Walsh
Traditional Textbook (8:11)
https://drive.google.com/file/d/0B25AtCR9Ddd5NE9DaS16RlpiMW8/view
Do 4c. Student Website Development  
R511 Final Projects, April 2016  
IT and HPT Comparison (Website), Doug Hau  
http://dougandindira.wix.com/r511finalproject  
“IST Construction, Co.”  
Rob Elliot, Patrick Walsh, Erin Milanes, R511, December 2016  
http://relliott.net/istconstruction/index.php  
“Cousins but Not Twins: Instructional Technology and Human Performance Technology,”  
Merve Basdogan and Brett Gary, R511, December 2016  
http://educbasdogan.wixsite.com/511final

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

Do 4e. Student Exploration Video  
R511, Merge Basdogan, Self-Regulated Learning (6:08)  
https://www.youtube.com/watch?v=G1FpopGmk1c&feature=youtu.be#t=3.346833

Do 4f. Goal Setting Tools  
(e.g., I Done This, Milestone Planner, and 43 Things)

Do 4g. Student Music Recordings of Course Content  
IST Groove Song, Jeffrey Jenkins, R511:  
https://www.youtube.com/jeffjenkins25/ist-groove  
The World is Open, J. Kaufman, R678:  
https://www.youtube.com/watch?v=J5h4jPmEav9  
Daniel Halluska, P540:  
http://www.youtube.com/watch?v=tOL7lrGsqnw  
Weipeng (William) Yang: IST History (1:40):  
https://drive.google.com/file/d/0B9YDNkNTIa4DaDNSVXdOeDM1SkU/view  
IST Paradise (2:52) (It all started with IST):  
https://drive.google.com/file/d/0B9YDNkNTIa4DSzhNd3VBdzVpZlE/view

October 26, 2016  
Do 4h. Student Debate Animations  
Do 4i. Interactive Archive/Gallery of Student Work

- Exemplary First-Year Writing Projects
  (Fresh Writing, University of Notre Dame, September 24, 2014; https://freshwriting.nd.edu/)

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Poll #1: Which do you prefer...
(A) TEC-VARIETY or (B) R2D2?

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Poll #2: How many ideas did you get from this talk?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.

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Poll #3: Three Words from this Session...

- e.g., “I am happy!” and...
- My minions are happy!

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Any Questions or Comments?

- Slides at: TrainingShare.com
- Papers: PublicationShare.com
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