Where Are You R2D2?: Addressing Diverse Learner Needs with the Read, Reflect, Display, and Do Model

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Addressing Learning Styles

Question: How can technology address diverse learner needs?

Framework #2: 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)

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1. Auditory or Verbal Learners

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

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Read 1a. Collect and Listen to Interactive Stories
(e.g., Meograph: http://www.meograph.com/)

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January 28, 2015

Read 1b. 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

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Read 1c. Follow Someone on Twitter (Twitter in Education)
http://twitterforeducation.wikispaces.com/Educational+Uses+of+Twitter

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Read 1d. Online Crossword Puzzles
(e.g., http://www.eclipsecrossword.com/)

Create Online Crossword Puzzles!

http://www.eclipsecrossword.com/
**Read 1e.** Grammer Checkers (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)


**Read 1f.** Facebook Course Pages

(100 ways to use Facebook in education; e.g., homework help, polling students, highlight vocabulary, archive discussions)


1. Ask for information: Instead of trusting Wikipedia, ask the crowd on Facebook. One kindergarten teacher asked parents to research needs and got great information about the largest tree in the world according to the Guinness Book of World Records.
2. Attend remote lectures: Using Facebook, you can turn into remote lectures and presentations from around the world.
3. Move and more: Help your students follow along with local and international museums, art galleries, exhibitions, and more for enriched learning on Facebook.
4. Hand-holding: Students can connect with family members for genealogy assignments, discuss issues with local celebrities and more through Facebook.
5. Follow politicians: If your class is studying the current election, use Facebook to follow politicians on the local, state, and national scale. You can even ask students to present ideas to Facebook and getting feedback.
6. Learning games: Plenty of games are on Facebook, and many are educational. Whether you can find Facebook crossword, math games, and more as a reward in school.
7. Public polling: Students can research and poll friends and family members on Facebook.
8. Applications: Flashcards, courses, and more offer easy ways to learn in the classroom.

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

[Let's Talk About Tech](http://nursingshow.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.** Internship and Practicum Experiences

**Reflect 2b.** Big Issue Reflections

(Big Questions Online (BQO)), Feb 3, 2015 (e.g., Is curiosity essential for human flourishing?)

[http://www.bigquestionsonline.com/content/does-it-make-a-difference](http://www.bigquestionsonline.com/content/does-it-make-a-difference)
Reflect 2c. Reflect on Virtual Timelines (Dipity, xtimeline, Simile, etc.)


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

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

Reflect 2f. Interpreting Infographics July 24, 2014 Woman in Computer Science

http://graduatedegrees.online.njit.edu/mscs-resources/mscs-infographics/women-in-computer-science/

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

Reflect 2h. Scenario Learning (e.g., Krispy Kreme Management 101)
Poll #1:
Any light bulbs going off in your head so far...?
A. Yes definitely
B. Maybe
C. No

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

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

http://shellyterrell.com/2010/02/14/12-word-cloud-resources-tips-tools/

Display 3b. More Interactive Maps
(e.g., New USDA climate zone map reflects northward warming trends, By Janice Lloyd, USA TODAY, January 26, 2012)

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

Reflect 2d. Reflections on Interactive Maps
Mapping the Dead: Gun Deaths Since Sandy Hook, Huffington Post, March 22, 2013
http://www.huffingtonpost.com/2013/03/gun-deaths
Second immigration wave lifts diversity to record high:

Greg Toppo and Paul Overberg, USA Today


Big Data Visualization Tools,
January 20, 2014, 6.00x Introduction to Computer Science and Programming
MITx on EdX Course

Videos for clinical education
(Sungkyunkwan University School of Medicine, www.mededu.or.kr)

Video Animations and Simulations

Virtual Microscopes

Digital Public Library of America
http://dp.la/
Display 3k. Online Timelines (US Presidents)

Display 3l. TV Lesson (expert videos)

Display 3m. Medical Animations (e.g., YouTube, CNN, BBC)

Display 3n. Online Art Google Art Project, NBC Nightly News, April 3, 2012
http://www.msnbc.msn.com/id/3032619/vp/46945508#46945508

Display 3o. Student Collaborative Knowledge Building and Sharing (e.g., Popplet: http://popplet.com/)

Display 3p. Concept Mapping and Timeline Tools (Bubbl.us, Cmap, Gliffy, Mindmeister, or Mindomo)
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 4b. Course Recap Prezi Presentations

Jeff Paskin, MIT, Prezi, Emerging Learning Technologies
http://prezi.com/tzbawrgjrnzf/emerging-learning-technologies/?auth_key=4ec2f45a718fab699b35ea460e91a46d9e1bdac7

Jeffrey Barnette, Today’s World
http://prezi.com/ijzyothst/r685-final-project

Do 4c. Singing YouTube Summaries

Daniel Halluska, PS40, Fall 2011
http://www.youtube.com/watch?v=10L7rGspnw

Do 4d. Class or Community Oral Histories

(e.g., The History Harvest, December 21, 2012)
http://historyharvest.unl.edu/collections

Do 4e. Recap Discussion (e.g., Prezi from Thuy Han for R678 class Week 4)


Do 4f. Student Class Documentaries

Umida’s R546 Documentary Project
http://www.youtube.com/watch?v=EML7zqCV_5A

Do 4g. Student Expertise (e.g., Learnist)

http://learni.st/category/featured/#/category/featured
February 20, 2013
Star Trek-like holodeck may be closer to reality than you think
Matt Hartley, Financial Post, Canada

Star Trek-like holodeck may be closer to reality than you think.

Poll #2: 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)

Poll #3: Which do you prefer... R2D2 or TEC-VARIETY?

Poll #4: 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.

Stop and Explore:
Explore Websites from this Session!
Find the lieu...
Take a break...

Any Questions?
Try R2D2...
Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://tec-variety.com/
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