

Masterclass 3: Where Are You R2D2?:

Addressing Diverse Learner Needs with
the Read, Reflect, Display, and Do Model

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This Generation of Students



November 25, 2014
OER Research Hub, OER Evidence Report:
Building Understanding of Open Education
2013-2014

<http://oerresearchhub.files.wordpress.com/2014/11/oerh-evidence-report-2014.pdf>



What about the Instructor in the Open World?



Nine "C" Metaphors of Instructors (e.g., "Cat Herders")



1. Instructor as Credit Manager



2. Instructor as Court Room Judge**3. Instructor as Counselor****4. Instructor as Consultant****5. Instructor as Conductor****6. Instructor as Course Ambassador****7. Instructor as Curator**

8. Instructor as Concierge



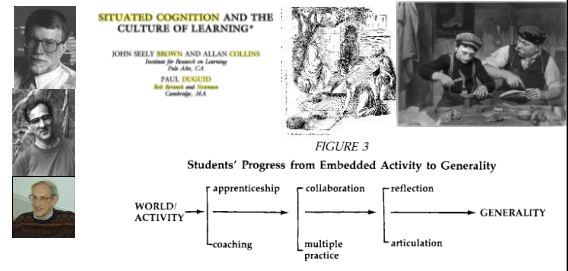
9. Instructor as Camping Trip Guide



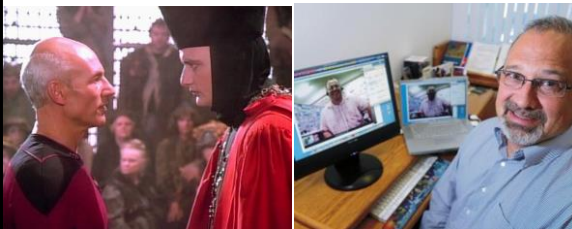
#10? How About Instruction as a Cognitive Apprenticeship?



Brown, J. S., Collins, A., & Duguid, P. (1988).
Cognitive apprenticeship, situated cognition, and social interaction.
 Bolt, Beranek, and Newman, Inc., Technical Report No. 6886.



Expert Apprenticeship from Video



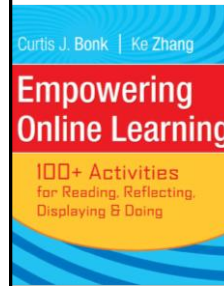
Addressing Learning Styles



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)



1. Auditory or Verbal Learners

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



Read 1a. Collect and Listen to Interactive Stories

(e.g., Meograph: <http://www.meograph.com/>)



Read 1b.

Reading about the Life of a Musician (bio.com)

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



Read 1c.

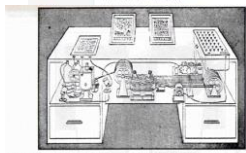
Exploring the Life of a Prominent People (Wikipedia)

http://en.wikipedia.org/wiki/Vannevar_Bush

JULY 1945

As We May Think

VANNEVAR BUSH | JUL 1 1945, 12:00 PM ET

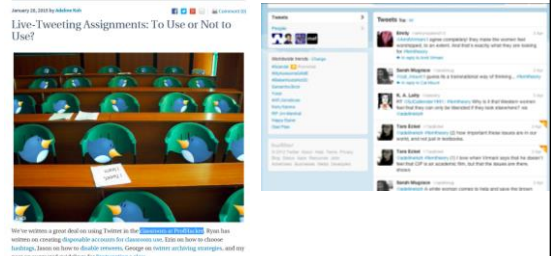


January 28, 2015

Read 1d. Twitter Fed Class Discussions

Live-Tweeting Assignments: To Use or Not to Use?

he Chronicle of Higher Education, Adeline Koh
<http://chronicle.com/blogs/profacker/live-tweeting-assignments-to-use-or-not-to-use/58949>



Read 1e. Grammar Checkers (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)

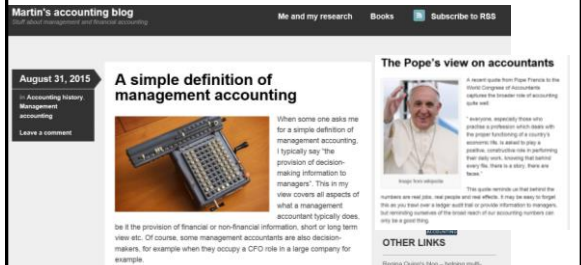
<http://www.grammarly.com/>



August 31, 2015

Read 1f. Review Blog Resources (e.g., Martin's Accounting Blog)

<http://martinquinn.com/>



Display 3b. Map Animations

Yes, Mr. President, We Remade Our Atlas to Reflect Shrinking Ice

Christine DelfAmore, National Geographic, August 3, 2015
http://news.nationalgeographic.com/2015/08/08-03-delf-amore-ice-shrinks-climate-change-science/yes-mr-president-remade-our-atlas-to-reflect-shrinking-ice-source-center.com/utm_campaign=buffer

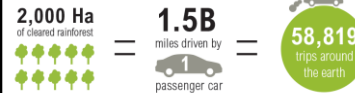


Display 3c. Interpreting Infographics

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/>

Land-Use Change Emissions in Miles Driven



<http://bit.ly/rainforest-chocolate>

WORLD RESOURCES INSTITUTE

Reflect 2d. More Interpreting Infographics

June 12, 2015

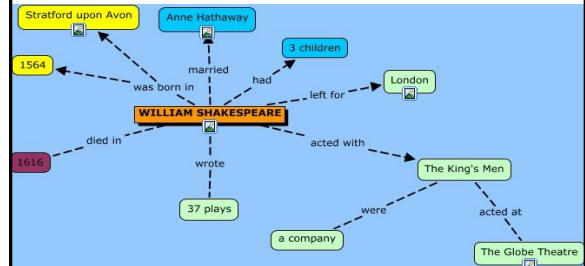
Google vs. Apple

<https://visual.ly/google-vs-apple-%E2%80%9D3-facts-figures-app-stores-race>



Display 3e. (April 28, 2015) Concept Mapping and Flowcharting

(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)
<http://www.spicynodes.org/index.html>



Display 3f. October 31, 2014

Penguin Science (Penguin Cam), Jean Pennycook

<http://www.penguinscience.com/>
<http://www.thistle.org/pcam2/images.shtml>



Display 3g. Videos for clinical education

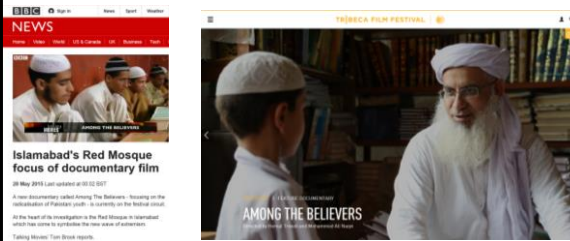
(Verdi - La Traviata (1988) - Complete opera)

<https://www.youtube.com/watch?v=49UZa0T02zQ>

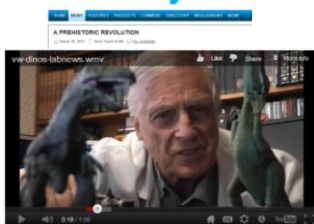


Display 3h.**Educational Videos:****CNN, BBC, TED, TED-Ed, ForATV**

Patsy Redenberg: Why I Do Theater: https://www.ted.com/talks/patsy_redenberg_why_i_do_theater
 Ben Cameron: The true power of the performing arts: http://www.ted.com/talks/ben_cameron_the_true_power_of_the_performing_arts
 Karolina Elise: My magic moves: <http://www.bbc.com/1/hi/entertainment/10111111>
 Malika Sarabhai: Dance to change the world: http://www.ted.com/talks/malika_sarabhai_dance_to_change_the_world
 Wayne McGregor: A choreographer's creative process in real time: http://www.ted.com/talks/wayne_mcgregor_a_choreographer_s_creative_process_in_real_time
 Bill T. Jones: The dancer, the singer, the cellist... and a moment of creative magic: http://www.ted.com/talks/bill_t_jones_the_dancer_the_singer_the_cellist_and_a_moment_of_creative_magic

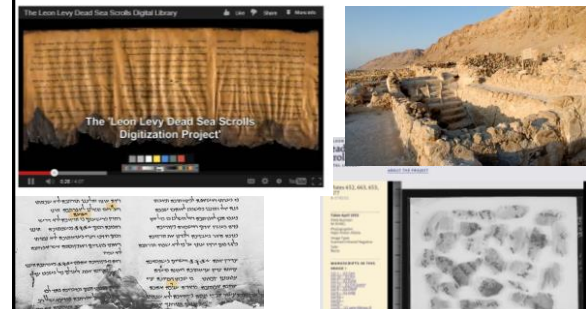
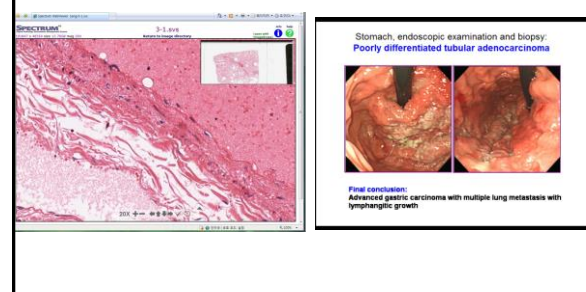
**Display 3i.****Educational Videos:****CNN, BBC, TED, TED-Ed, ForATV****BBC One-Minute World News (May 27, 2015)****Turning Van Gogh's The Night Cafe into virtual reality**<http://www.bbc.com/news/technology-32751392>**Display 3j.****Documentary Debates:**
e.g., Documentaries on Islamic Extremism<http://www.bbc.com/news/entertainment-arts-32901215>**Tribeca Film Festival**<https://tribecafilm.com/filmguide/among-the-believers-2015>**Display 3k. Video Anchor: Drama**
(Urban School Performance Project in Lucknow, India)

Kathleen Gallagher from OISE. She does international/urban work using digital technologies to give voices to marginalized youth through drama.

<https://www.youtube.com/watch?v=JVCgF1cd4ZU>**Display 3L.****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/>**LaboratoryNews****Display 3m.****Video Tutorials, Demonstrations,**
and How-To's**WonderHowTo and Howcast**<http://www.howcast.com/><http://www.wonderhowto.com/><http://www.howcast.com/?s=tune+a+drum>

Display 3n.**Video Tutorials, Demonstrations,
and How-To's**

WonderHowTo, Howcast, MoneySee

<http://www.howcast.com/><http://www.wonderhowto.com/><http://www.monkeysee.com/play/24452-top-accounting-jobs>**Display 3o.****Video Repositories and Portals
(e.g., Khan Academy, Music Masterpieces)**<https://www.khanacademy.org/humanities/music/masterpieces-old-new/ludwig-van-beethoven-music/v/ludwig-van-beethoven-part-1>**Display 3p. Videos for clinical education
(Sungkyunkwan University School of Medicine,
www.mededu.or.kr)****Display 3q. Unique OER
(e.g., Dead Sea Scrolls)**<http://www.deadseascrolls.org.il/explore-the-archive>http://www.deadseascrolls.org.il/explore-the-archive_the_Qumran_Cave_4**Display 3r.****Syrian Cultural Destroyed, CNN,
July 3, 2014**ISIS publicly smashes Syrian artifacts
ISIS publicly smashes Syrian artifacts**Display 3s. Virtual Microscopes**

Display 3t. Video Scenario Learning



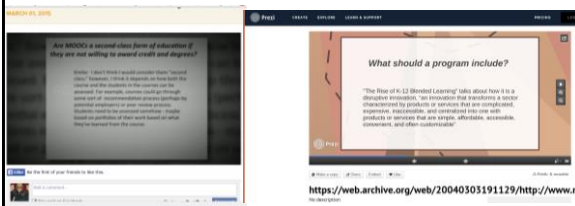
4. Tactile/Kinesthetic Learners

- 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.



February 8, 2015 Do 4a. Recap Discussion (e.g., Prezi from Thuy Han for R678 class Week 4)

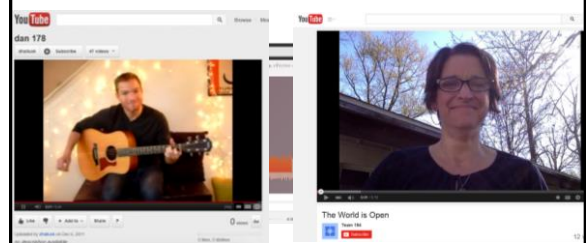
https://prezi.com/cvhwqk953/https://web.archive.org/web/20040303191129/http://www.nctc.edu/campaigns/scholarship_medium-copy



Do 4b. Student Music Recordings of Course Content

April 26, 2015

IST Groove Song, Jeffrey Jenkins, R511: <https://soundcloud.com/jeffjenkins25/ist-groove>
The World is Open, Jill Kaufman, R678: <https://www.youtube.com/watch?v=ZRGY0Mg5Vmw&feature=youtu.be>
Daniel Halluska, P540: <http://www.youtube.com/watch?v=10L7rGsqnw>



Do 4c. Interactive Archive/Gallery of Exemplary First-Year Writing Projects (Fresh Writing, University of Notre Dame, September 24, 2014; <https://freshwriting.nd.edu/>)



10. Yields Products, Goals:

E. Student Created Mobile Apps

The App Builder: <http://www.theappbuilder.com/>
Mintian Guo: <http://myapp.is/r685final>



1. Combining Phases (Media) (Dual Coding Theory: Text + Video)

Text: http://en.wikipedia.org/wiki/Ray_Dolby
Video (September 20,2000): <http://www.gigwise.com/news/84155/audio-pioneer->



2. Combining Phases (Media) Unique Open Educational Resources and Portals

(e.g., Mozart: <http://www.mozartproject.org/>)



3. Combining Phases (Media) Media Generated Content as Instructional Anchor

(e.g., Blues Music, Film, etc.)
(Blues legend B.B. King dies at age 89, May 15, 2015, VNN)
<http://www.cnn.com/2015/05/15/entertainment/bb-king-dead/index.html>



4. Combining Phases (Media) Tracking Researchers and Explorers

<http://lt.umn.edu/eartheducation/expedition6/>



5. Combining Phases (Media) Design Article Database in Facebook, Jenny Webeck

<https://www.facebook.com/JennyBELTT/timeline>
Dr. Bonk's creative fun time group (R546)
<https://www.facebook.com/groups/830496290323899/>



Poll #7: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?



What motivates?

1. Tone/Climate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement, Feedback, Responsiveness, Praise, Support
3. Curiosity: Surprise, Intrigue, Unknowns
4. Variety: Novelty, Fun, Fantasy
5. Autonomy: Choice, Control, Flexibility, Opportunities
6. Referential: Meaningful, Authentic, Interesting
7. Interactivity: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Investment
9. Tension: Challenge, Dissonance, Controversy
10. Yielding Products: Goal Driven, Purposeful Vision, Ownership



Poll #8: 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.
7. More than 10.



Poll #9: Where are we headed? Where is Education 3.0?



February 20, 2013

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

Matt Hartley, Financial Post, Canada

http://business.financialpost.com/2013/02/20/star-trek-like-holodeck-may-be-closer-to-reality-than-you-think/?_ha=0544-d58d

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

MATT HARTLEY / CIBC WORLD WIRE



Poll #10: Any Questions?

Slides at: TrainingShare.com

Papers: PublicationShare.com

Free Book: <http://tec-variety.com/>

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