



## Masterclass Part 2: Addressing Learning Styles and Diverse Learners with the R2D2 Model

**Dr. Curtis J. Bonk**  
 Professor, Indiana University  
<http://php.indiana.edu/~cjbbonk>,  
[cjbbonk@indiana.edu](mailto:cjbbonk@indiana.edu)





## Magic #2: The R2D2 Model

Curtis J. Bonk | Ke Zhang


### Empowering Online Learning

100+ Activities for Reading, Reflecting, Displaying & Doing




## 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. Publishing in Open Access Journals (e.g., PLOS)



**The International Review of Research in Open and Distance Learning**  
 A refereed e-journal to advance research, theory and best practice in open and distance learning worldwide  
 Athabasca University

## Read 1b. Course Announcements (e.g., Teaching with Twitter)



### Read 1c. Podcast Shows and Research Report Reflections

- Students listen to a podcast.
- Reflect on what they learned in an online forum.
- Students comment on each other's post.

### 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. Expert and Domain Specific Blog Reflections

### Reflect 2b. Analyze Online Cases (problems, solutions, etc.)

### Reflect 2c. Workplace and Field Reflections

1. Instructor provides reflection or prompt for job related or field observations
2. If a large section class, divide into teams
3. Reflect on job setting or observe in field
4. Record notes on Web and reflect on concepts from chapter
5. Respond to peers
6. Instructor summarizes posts

### Reflect 2d. Student Created Online Resource Library (ORL) or Library Day

- Students find 20 online articles in 1 week.
- Summarize them in a discussion forum.
- Peer assigned to give feedback.
- Write summary paper of what learned.

### 3. Visual Learners

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

### Display 3a. Pubcasts! (videos of scientific papers and science)

NSF, the Public Library of Science, and the San Diego Supercomputing Center created a YouTube for scientists to help demystify important research papers. See SciVee

### Display 3b. Anchored Instruction Discussions (YouTube, CNN, BBC, TeacherTube, CurrentTV)

- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.

### Display 3c. Adventure Learning

Australian adventurer Don McIntyre and teenage circumnavigator Mike Perham to re-enact Capt William Bligh's epic mutiny on the Bounty open boat voyage, September 9, 2009

### Display 3d. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Glify, Mindmeister, or Mindomo)

### Display 3e. World Trends and Indices (e.g. Worldmapper)

**Display 3f. United Nations Opens World Digital Library, April 21, 2009**  
 Chronicle of Higher Ed, <http://www.wdi.org/en/>

The screenshot shows the World Digital Library homepage with a world map and several resource categories like 'Digital Collections' and 'Digital Exhibitions'.

**Display 3g. Shared Online Video**  
 (e.g., Howcast, WonderHowTo, Clip Chef, Link TV, Fora TV, etc.)

A collage of video-sharing and learning sites including Howcast, WonderHowTo, and Link TV, featuring various instructional videos and user avatars.

**Display 3h. Online Historical Document**  
 (e.g., Turning The Pages, British Library)

The screenshot displays a digital viewer of a historical document, showing a scanned page with text and a sidebar with navigation options.

**Display 3i. Medical Animations and Videos**  
 (find anchoring event: YouTube, CNN, BBC, TeacherTube, CurrentTV)

A collage of medical content including YouTube video thumbnails for 'Heart Valve: Coarctation Surgery', 'Anatomy 3D medical animation', and '3D Human Anatomy'.

**Display 3j. Online Timelines**  
 (US Presidents)

The screenshot shows an online timeline for US Presidents, featuring portraits and biographical details for 'EARLY LIFE OF LINCOLN' and 'WILLIAM HENRY CLAYTON'.

**Display 3k. Videos of the Periodic Table**

A collage of videos related to the periodic table, including a grid of elements and various scientific demonstrations.



**Do 4b. Survey Research and Market Analysis**  
 (e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)

The image shows three different online survey platforms. On the left is SurveyShare.com with a 'The World' poll. In the center is Mister Poll with a 'Create Your Web Poll - Free' form. On the right is MicroPoll with a 'Website Polls' section.

**Do 4c. Online Warm-ups Activities Just-In-Time-Teaching (JITT)**  
<http://webphysics.iupui.edu/jitt/jitt.html>

The image features the 'JUST-IN-TIME TEACHING' logo on a yellow background. To the right is a black and white photo of a man looking at a map of the United States. Below the map is a small map of the USA with several states highlighted in red.

**Do 4d. Syllabus, Glossary, etc. in wiki:**  
**Students sign up for tasks**  
 (Ron Owston, York University)

The image displays a screenshot of a wiki page with various sections and text. To the right is a portrait of Ron Owston, a man in a blue shirt.

**Do 4e. Podcasts for students of pronunciation class**  
 (e.g., Tzu-Su Chen, Taiwan)

The image shows a collage of digital content. On the left is a video player with the lyrics 'Hey Jude, don't make it bad / Take a sad song and make it better'. In the center is the Podomatic website interface. On the right is a screenshot of a social media or forum page with Chinese text.

**Do 4f. Create Video Blogs**

- Have students create a blog with videos or a video blog.
- Have them do a final reflection on it.

The image contains a screenshot of a video blog page with a title 'New! Educational Blogs' and a video player showing a person speaking. To the right is a screenshot of a video player showing a person in a video call.

**Do 4g. Virtual World and Podcast Reenactments**

The image shows a collage of digital content. On the left is a screenshot of a virtual world interface with the text 'ST. SHAKESPEARE COMPANY TWELFTH NIGHT LIVE PLAY'. In the center is a screenshot of a podcast player interface. On the right is a screenshot of a social media or forum page with Chinese text.



**Poll #2: How many ideas did you get from the second part of this talk?**

- a. None—you are an idiot.
- b. 1 (and it is a lonely #).
- c. 2 (it can be as bad as one).
- d. 3-5
- e. 6-10
- f. Higher than I can count!

**99 Seconds Stop and Share: Top Three Things you can use!**

**Try the R2D2 Method!  
Try TEC-VARIETY!  
And hope for some magic!!!**

Sample papers : <http://www.publicationshare.com/>  
 Archived talks: <http://www.trainingshare.com/>