



**Best Practices for Online Learning:
R2D2 and TEC-Variety**


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Part I. Motivational Ideas



I even reflected on this for a moment...and then something magical happened...



The TEC-VARIETY Model for Online Motivation and Retention


- 1. Tone/Climate:** Psych Safety, Comfort, Belonging
- 2. Encouragement, Feedback:** Responsive, Supports
- 3. Curiosity:** Fun, Fantasy, Control
- ...
- 4. Variety:** Novelty, Intrigue, Unknowns
- 5. Autonomy:** Choice: Flexibility, Opportunities
- 6. Relevance:** Meaningful, Authentic, Interesting
- 7. Interactive:** Collaborative, Team-Based, Community
- 8. Engagement:** Effort, Involvement, Excitement
- 9. Tension:** Challenge, Dissonance, Controversy
- 10. Yields Products:** Goal Driven, Products, Success, Ownership

1. Tone/Climate: Social Ice Breakers


A. Public Commitments:
Have students share how they will fit the coursework into their busy schedules

B. Favorite Websites

1. Everyone posts 1-2 of their favorite Websites and explain why.
2. Peers comment on or rate them.



1. Tone/Climate: C. Video Course Intros
(examples from Northern Virginia Community College and Indiana University KD (online MBA) program)



2. Encouragement, Feedback, etc.:
A. Online Self-Testing (e.g., self study in vocabulary, anatomy, chemistry, dissection, etc.)

Upper Extremity Muscles

Which of the following are ANTONYMS for the word MAXIMUM?

A. clear, indefatigable, formidable, undigible
 B. non-plucky, terrified person
 C. retain, withhold, hoopy, bald
 D. make happy, cheer, smile, please
 E. smallest, least, minimum, little

A B C D

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2. Encouragement, Feedback, etc.:
B. Tutorials with Screen Capture (e.g., Jing, Screencr)

Jing

Share a picture of your screen.
 Record video of screen actions.
 Share instantly over the web, IM, email.

screenr

Instant screenshots for Twitter

3. Curiosity, Fun:
A. Online News
 (Giant jellyfish, Tiny T. rex, and Ardi)

Japanese fishermen brace for giant jellyfish

First U.S. man since 1982 wins NYC race

Australia: Boat sinks with 39 on board

4. Variety, Novelty:
A. Cool Resource Provider or Tech Demos

- Have students sign up to be a cool resource provider once during the semester.
- Have them find additional paper, people, electronic resources, etc.
- Share and explain what found with class.

PS40 Cool Resource Provider and Moderator Sign Up Sheet

Knowledge people are working with has been exponentially. It is possible to connect their minds. But what if you are trying to connect your mind? What if you are trying to connect your mind to the mind of the person you are trying to connect with? What if you are trying to connect your mind to the mind of the person you are trying to connect with?

4. Variety, Novelty:
B. Expert Chats
 (Bonk, 2007; Liang & Bonk, 2009)

1. Agree to a weekly chat time.
2. Bring in expert for discussion or post discussion topics or issues.
3. Summarize or debrief on chat discussion.

Call to Action

5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)
 (links to text, soundtracks, video clips, etc.)

5. Autonomy, Choice:
B. Clickers; Innovation is but one click away...

6. Relevance, Meaningfulness:
A. 60 Second Recap, Jenny Sawyer
<http://www.60secondrecap.com/>
 Actress to students: Lend me your earbuds!
 English major, 24, rambunctiously recaps the classics in 60-second Web videos; By Greg Toppo; USA TODAY, September 2009

7. Interactive, Collaborative:
A. Collaborative Groups (Ning, Google Groups, MSN Groups, Yahoo Groups, Diigo)

Ning in Education
 Ning Group for Educational Social Networks

8. Engagement, Effort:
A. Synchronous and Asynchronous Events (e.g., Breeze + Video + Online Forum + Online Papers)

9. Tension, Challenge, etc.:
A. Ethical Medical Debates

Students to protest human body exhibit

Maggie Ybarra
 Issue date: 3/5/02 Section: Issues

10. Yields Products, Goals:
A. Movie Festivals, Concept Maps, Video Papers/Blogs, Virtual Timelines, Digital Movies

II. Addressing Diverse Learners with R2D2

#2: The R2D2 Model

Curie J. Bank | 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

Alabama University

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

Read 1c. Podcast Paper 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. Critical Friend Blog Postings

Reflect 2b. Expert and Domain Specific Blogs (English Teacher Blogs)

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

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. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Giffy, Mindmeister, or Mindomo)

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

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

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

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

Display 3h. Online Timelines
(US Presidents)

Display 3i. Videos of the Periodic Table

Display 3j. Human Embryology Animations
(Valerie O'Loughlin, Indiana University)

Display 3k. Download and Use Online 3D Sketches (Google SketchUp; download <http://sketchup.google.com/3dwarehouse>)

4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process as role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

Do 4a. Wikibooks: International Collaboration (Web 2.0 and Emerging Learning Technologies (The WELT))

Web 2.0 and Emerging Learning Technologies
From Wikibooks, the open content textbooks collecti

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

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

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

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

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

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