Blend but Don’t Break: Introducing the TEC-VARIETY AND R2D2 Models for Motivation and Engagement

Curtis J. Bonk, IST Professor
Indiana University
cjbonk@indiana.edu; http://curtbonk.com/

Education 20/20...

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Learning is Changing!

20 New Roles of the Instructor

(Circa Confucius 551–479 BCE)
Merrill’s First Principles of Teaching/Instruction

Integration | Activation
---|---
Problem/ Test | Application | Demonstration

1. The Principle of Flexibility
(e.g., multiple due dates, grace period, flexible agenda, etc.)

6. The Principle of Choice and Options
(e.g., sign up for weeks to present, have 10 midterm or final options and pick any 4, choose if want to work as a group/team or individually submit, etc.)

Bonk’s 20 “Last” Principles of Instruction
(LAST = Learning Activation System Template)

Flexibility | Support and Feedback | Nontraditional Learning | Choice and Options
Convenience | Spontaneity | Passion and Inspiration | #20 ??
Collegiality | Organization | Relevance and Meaningfulness | Empowerment and Autonomy
Cheerfulness and Optimism | Purpose and Vision | Human Connectedness | Cognitive Apprenticeship
High Expectations | Sharing | Trial and Error (i.e., it is ok to fail) | Expanded Resources

July 25, 2020
Silver Lining for Learning
https://silverliningforlearning.org/
https://www.youtube.com/channel/UC9XEahB9q4TlpMVlpQc--akA/live
April 17, 2019
How to be a Better Online Teacher
Flower Darby, The Chronicle of Higher Education
https://www.chronicle.com/article/how-to-be-a-better-online-teacher/

August 24, 2020
Transitioning to Blended
Curt Bonk
1. Get to know your students!
2. Don’t apologize too often.
3. Don’t treat online as inferior.
4. Welcome everyone in with enthusiasm.
5. Different format but same students.
6. Provide scaffolds, tutorials, and other supports.
7. Create short authentic videos.
8. Foster volunteerism.
9. Communicate clearly and a lot.

August 24, 2020
Transitioning to Blended
(Various Authors)
1. Model positive attitude.
2. Provide students with checklists.
3. Set routines (stick to a schedule).
4. Offer flexibility.
5. Give learning environment advice.
6. Survey about technology at home.
7. Explain purpose and debrief and reflect.
8. Encourage real world learning.

October 6, 2020
Faculty Confidence in Online Learning Grows
Doug Lederman, Inside Higher Ed
https://www.insidehighered.com/digital-learning/article/2020/10/06/covid-era-experience-strengthens-faculty-belief-value-online
Poll #1: Have you reflected on your teaching philosophy or approach during COVID-19?

a. Yes many times and I am dramatically changing my philosophy statement.
b. Yes many times and I am taking action (meeting people, reading more, attending webinars like this, etc.).
c. Yes, I thought about it a couple of times and I am tweaking it.
d. Not sure. I’m kinda brain dead right now.
e. No, my teaching philosophy is basically the same.

Poll #2: Have you even been to an e-learning or online learning conference, institute, or summit?

a. Yes many times.
b. Yes, once or twice.
c. No, but I want to go.
d. No. And I am not going to go.

Motivation Research Highlights (Jere Brophy, Michigan State University)

1. Supportive, appropriate challenge, meaningful, moderation/optimal.
2. Teach goal setting and self-reinforcement.
4. Novelty, variety, choice, adaptable to interests.
5. Game-like, fun, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, peer interaction.
7. Allow to create finished products.
8. Provide immediate feedback, advance organizers.
9. Show intensity, enthusiasm, interest, minimize anxiety.
10. Make content personal, concrete, familiar.

Intrinsic Motivation

“...innate propensity to engage one’s interests and exercise one’s capabilities, and, in doing so, to seek out and master optimal challenges

(i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

Part 1:
Introducing the TEC-VARIETY Model
http://tec-variety.com/

Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

Low Risk
Easy to Embed

High Risk
Extensive Planning

1. Risk

2. Time

Free or Inexpensive
Enterprise Licenses

3. Cost

4. Student-Centered

Instructor-Focus
Low

Student-Focus
High

Examples of TEC-VARIETY

September 24, 2020
1. Tone/Climate: A. Breakout Rooms
   How Do You Make Zoom Breakout Rooms Less Boring?, Expectations, Share a link, Introductions
   Bonni Stachowiak (Columnist), Ed Surge

September 21, 2020
Non-Boring Zoom Breakout Groups
Plymouth State University
   Video 16:50:
   https://www.youtube.com/watch?v=rR1mhGmBBek&feature=emb_logo
   https://colab.plymouthcreate.net/resource/non-boring-zoom-breakout-groups/

April 11, 2020
1. Tone/Climate:
   B. Threaded Video Discussions and Questions
   (e.g., Flipgrid)
   https://techcrunch.com/2018/06/18/microsoft-acquires-social-learning-platform-flipgrid/
1. **Tone/Climate:**

   **C. Instructor Course Introductions**

   Lynne Innes (Scotland): [https://vimeo.com/356645285](https://vimeo.com/356645285)

2. **Encouragement, Feedback:**

   **A. Poll Everywhere, BlogPoll, MicroPoll**

   Connect students across campuses (School of Medicine, Flinders University)

   [https://www.polleverywhere.com/case-studies/distributed-learning](https://www.polleverywhere.com/case-studies/distributed-learning)

   **B. Voice/Audio Feedback**


   **C. Online Practice Tests and Interactive Flash Cards (e.g., Pharmacy, OT, etc.)**


3. **April 3, 2017**

   **1. Tone/Climate:**

   **D. Sli.do (students get a code; e.g., 9801)**

   [https://www.sli.do/](https://www.sli.do/)

4. **July 31, 2020**

   **2. Encouragement, Feedback:**

   **D. Khan Academy aims to give 'strategic supplement’**

   Brett Molina, USA Today

2. Encouragement, Feedback:
e. Video Tutorials, Demonstrations, and How-To's (videos, tutorials, etc.)
(Jing, GoView, Screencast-o-Matic; http://tec-variety.com/TEC-Variety_links-examples-resources.pdf)

June 18, 2020
3. Curiosity, Intrigue, Unknowns:
A. Multimedia News
New Telco Tower Announced For Sabah Village After Student Taking Online Exams In Tree Goes Viral, Kirat Kaur, TRP News

Veveonah Mosibin, a foundation student at Universiti Malaysia Sabah (UMS) had to take her online exams atop a tree to get a strong enough internet connection. (Credit: Veveonah M/YouTube)

January 9, 2020
3. Curiosity, Intrigue, Unknowns:
B. Scientists put 3D glasses on cuttlefish and showed them film clips. The results were surprising (Cuttlefish eyes have well-developed depth perception)
Ryan Prior, CNN

April 17, 2017
3. Curiosity, Intrigue, Unknowns:
c. 1st woman to officially run Boston Marathon does it again, 50 years later
Emanuella Grinberg, CNN, USA Today

July 2, 2020
3. Curiosity, Intrigue, Unknowns:
e. Web Resource Scavenger Hunts
https://catlintucker.com/2020/07/8-ideas-designed-to-engage-students-online/
4. Variety, Novelty, Fun, Fantasy:
   A. Create Animated Presentations
   https://app.animaker.com/animo/2h5b0Hz2gxURJ5x4/?shareid=view%7C2h5b0Hz2gxURJ5x4
   Animaker is a cloud-based DIY video maker. Free version provides a lot of characters, props, transitions, and background images.

4. Variety, Novelty, Fun, Fantasy:
   B. Online Test/Quiz Review Games
   (e.g., Jeopardy Rocks)
   https://www.jeopardy.rocks/r511merve/

4. Variety, Novelty, Fun, Fantasy:
   C. Random Lists
   (Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

4. Variety, Novelty, Fun, Fantasy:
   D. Kahoot!
   https://getkahoot.com/

5. Autonomy, Choice:
   A. Enroll in a MOOC and Reflect
   (e.g., see Class Central)

   FutureMe.org
   Write a letter to the future
   https://www.futureme.org/
5. Autonomy, Choice: B. Tracking the Life of an Expert (e.g., biography.com)
https://www.biography.com/scholar/john-muir

5. Autonomy, Choice: C. Design Multimedia Glossaries
P540 Final Assignment: Nate Wynne, Supersized Personal Course Glossary
http://natewynne1982.wix.com/p540finalglossary
Ozgur Ozdemir, December 2012
http://rt85glossary.shutterfly.com/
Umida Khikmatillaeva, Dec. 2011, P540
http://learningplanet.shutterfly.com/

5. Autonomy, Choice: D. Flipping the Classroom (video lectures online)
https://www.youtube.com/watch?v=_i7owTKJQOE

Poll #3: Any light bulbs going off in your head so far?

a. Yes definitely...many of them...pop...pop...pop!
b. Yes, several times.
c. Yes maybe!
d. Not yet (but hopefully soon...)
e. Nope. Darn it my brain is not working today.
f. There’s no hope with this idiot presenting.

April 6 and April 28, 2020
6. Relevance, Meaningfulness:
A. Weekly Guest Expert Chats
February 22, 2020, Jima Nigel in Nigeria (1 hour 15 minutes)
Video: https://youtu.be/sm6VMStQY9c

6. Relevance, Meaningfulness:
B. Case-Based Learning: Instructor Cases (e.g., Mark Braun, IU)

Stomach, endoscopic examination and biopsy:
Poorly differentiated tubular adenocarcinoma
March 20, 2018
6. Relevance, Meaningfulness:
C. Editing Wikipedia Pages
Women’s Studies Students Across the Nation Are Editing Wikipedia
Emma Kerr, The Chronicle of Higher Education
https://www.chronicle.com/article/Womens-Studies-Students/242866

Samantha Erickson, left, of the Wiki Education Foundation; Tina Brock, a dean of the School of Pharmacy at UC San Francisco; and professor Amin Azzam discuss implementing the integration of Wikipedia pages on medical topics with students’ work.

June 27, 2020
7. Interactive, Collaborative:
A. Team Management and Project Coordination
Trello is a team management tool and list-making application to organize online group tasks easily. Trello is for teams to organize team work. However, teachers can use it to manage online group projects or homeschooling activities like in this Example: https://youtu.be/L6fUOMXnKxU?t=132

7. Interactive, Collaborative:
B. Negotiate Meanings Online
(e.g., MeetingWords: http://meetingwords.com/)
http://blogs.elon.edu/technology/6-collaborative-writing-applications-for-group-projects-or-papers/
Also: Google Docs, NowComment, etc.

7. Interactive, Collaborative:
C. Guest Speaker Quotes
(Rey Junco, February 25, 2013)

Fall 2019, R511
7. Interactive, Collaborative:
D. Team Article Debates
Nuclino (like a wiki...may delete by mistake, trial version, limited)
7. Interactive, Collaborative:

E. Virtual Mobile (at Virtually Inspired)

Virtual laboratory brings the opportunity for remote collaboration enables students to conduct experiments, access, interpret, evaluate, and exchange relevant technical information. 

Susan Aldridge, Drexel: https://virtuallyinspired.org/portfolio/online-virtual-labs/

8. Engagement, Involvement:

B. Healthcare Scenarios and Simulations

http://phet.colorado.edu/en/simulation/energy-skate-park

D. Interactive Timelines

(Sutori, xtimeline, Preceden, TimeLineCurator, etc.)

May 11, 2020

9. Tension, Challenge, Controversy, etc.:

A. What is smileUP & How to use it?

SMILE, Stanford

https://www.youtube.com/watch?v=pblU8sSALWo
9. Tension, Challenge, Controversy, etc.:
B. Virtual Sharing Walls Competitions
e.g., Padlet (A collaboration and discussion board)
https://padlet.com/samarast/urel07b3nwubivel

10. Yields Products, Goals:
A. Database Collection Tools
Article Databases in Pinterest

B. Mindmap Recaps of Online Discussions
Mindmap of Week 2 of R511
https://bubbl.us/Mjg2MzMxOC84MjYzNjczL2UyODQzMzQ0NTQ2YzQwZDlmNDE3ZWE3OWYwMmJmYTI3

C. Design Products (students created infographics, brochures, timelines)
Canva is an online design program that does not require much design skills. You can design professional looking brochures, infographics, PPTs, flyers, and syllabus for free.

D. Student Website Development

Poll #4: Which motivational principle do you see as the most crucial online?
1. Tone/Climate
2. Encouragement, Feedback
3. Curiosity
4. Variety
5. Autonomy
6. Relevance
7. Interactive
8. Engagement
9. Tension
10. Yields Products
Part II: The R2D2 Model: Read, Reflect, Display, Do...

1. Read (Auditory and Verbal Learners)
   - Auditory and verbal learners prefer words, spoken or written explanations.

March 21, 2020
Read 1b. Read Blogs

January 20, 2016
Read 1a. Listen to Podcasts
(e.g., preventive medicine podcast, NPR: https://www.npr.org/tags/206695374/preventive-medicine)

Read 1c. Twitter Fed Class Discussions
https://twitter.com/FAOForestry
Read 1d. Reading from Open Access Journals (e.g., DOAJ—Directory of Open Access Journals)
https://doaj.org/

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

- Probable Questions
  - Discuss the major types of forest in Bangladesh. What are their issues of concern?
  - What are the main challenges of the National Forestry Policy? Discuss.
  - Describe the ownership section of Bangladesh and the US. What are the major laws that determine forest land policy? What are they?
  - What are the challenges of conservation of forests? Discuss.

Reflect 2b. Interpreting Interactive Graphs and Infographics

Reflect 2c. Vialogues

EdLab Seminar—Engaging Educators with Digital Collections
Vialogue, Sara Hartman, New Learning Times
https://newlearningtimes.com/cms/article/5426/how-academic-publishing-is-changing-in-the

Reflect 2d. Online Role Play or Debate (e.g., documentary production)
3. Visual Learners

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

Display 3a. Short Educational Videos: Anchored Instruction/Macrocontext
CNN, BBC, TED, TED-Ed

April 29, 2020
Display 3b. Animated Videos
Animated COVID-19 prevention video goes viral
Mandy Erickson, SCOPE Stanford Medicine
https://www.youtube.com/watch?v=UcFDdfueQRg

June 7, 2020
Display 3c. Animations of Data
World Mapper, COVID-19
https://worldmapper.org/map-animations-covid19/
https://www.youtube.com/watch?v=6uu1MGyGjvI

October 13, 2020
Display 3d. Maps of World Forests
https://www.thoughtco.com/maps-of-the-worlds-forests-1345035
https://www.globalforestwatch.org/map/

June 21, 2020
Display 3d. Lucid for Education
https://lucidforeducation.com/mini-lessons
April 30, 2020
Display 3e. More Word Clouds (e.g., Tagzedo, Tagul, WordSift, Word It Out): Week 2 and 5 (13 and 14)
https://www.wordclouds.com/

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. Sample Student Work
e.g., Interactive Archive/Gallery of best work

Do 4b. Podcast Shows
Teen’s Podcast explains COVID-19 to his peers
Janey Begley, USA Today, TC Palm

Do 4c. Demonstration Videos

Do 4d. Student Created Recap Videos
Poll 5: 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.

Poll 6: Which pedagogical model or framework do you prefer?
- a. TEC-VARIETY
- b. R2D2
- c. Neither
- d. Both
- e. I will try to create some unique combo of the two.

Poll #7: Are you excited to try anything out that you heard today?
- a. Yes definitely...many of them...
- b. Yes, several of them.
- c. Yes maybe one!
- d. Not yet (but hopefully soon...)
- e. Nope. My brain is simply not working today.
- f. No...I am having Internet connection issues.

Poll #8: Does all this stuff that you heard give you a headache?
- a. Yes, but I am still excited to try things out.
- b. Yes, and I need some medicine and a break.
- c. Not sure.
- d. No, let’s go all day.
- e. No, let’s go another hour.
- f. No, it was just right.

Poll 9: Would you attend a Part 2 follow-up session?
- a. Definitely, Definitely, Definitely...
- b. Probably, Probably, Probably,
- c. Maybe, Maybe, Maybe
- d. You got to be kidding...NO!

Poll 10: As a result of this session, are you going to be a more effective and more confident online instructor?
- a. Definitely, Definitely, Definitely...
- b. Probably, Probably, Probably,
- c. Maybe, Maybe, Maybe
- d. You got to be kidding...NO!
The World is Open for you now...!

We are entering a jumping off point...

Things are heating up!

Education 20/20 and a Learning Revolution is coming within reach!

Remember...
"I cannot do this alone."
"I cannot do this alone."
"I cannot do this alone."

Any Questions or Comments?
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free book: http://tec-variety.com/

Curtis J. Bonk, IST Professor
Indiana University
cjbonk@indiana.edu: http://curtbonk.com/