Adding Some TEC-VARIETY for Authentic Learning Experiences

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Poll #1: Have you ever been to North America?

a. Yes many times.
b. Yes, once or twice.
c. No, but I want to go.
d. No, I don’t understand the language.
e. No. And I am not going to go.

Poll #2: Have you been to Bloomington, Indiana or an Indiana University campus?

a. Yes many times and I loved it!
b. Yes once and it is great…I want to go back.
c. Yes and it is so-so. Probably not coming back.
d. Not sure.
e. No, but I have been to the USA.
f. No, but I really want to visit.
g. No, and I prefer it that way. Indiana us way too boring for me.

Poll #3: Have you seen Dr. Bonk speak before?

a. Yes more than once.
b. Yes once.
c. Not sure.
d. No, but I am here now.
e. No, and I prefer it that way. He’s rather boring.

(Circa Confucius 551–479 BCE)

Education 20/20...
Education 20/20…
Learning is Changing!

20 New Roles of the Instructor

Bonk’s Last (“Learning Activation System Template”) Principles of Teaching/Instruction (Education 20/20 or Education 4.0)

1. The Principle of Flexibility
6. The Principle of Choice and Options

http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

(e.g., sign up for weeks to present, have 10 midterm or final options and pick any 4, choose if want to work in a group/teams or individually alone, etc.)

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

http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

Poll #4: Before COVID, did you ever teach a blended (face-to-face and online) course?

a. Yes many.
b. Yes, just a couple.
c. No, but I taught one or more technology enhanced ones.
d. No but I am willing to try.
e. No and I like it that way.

Poll #5: Before COVID, did you ever teach a fully online course?

a. Yes, many.
b. Yes, just a couple.
c. No, but I taught one or more blended ones.
d. No but I am willing to try.
e. No and I like it that way.

Poll #6: 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 #7: 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.
Part 1: Introducing the TEC-VARIETY Model
http://tec-variety.com/

Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

1. Risk
High Risk
Low Risk

1. Risk
Easy to Embed
Extensive Planning

2. Time
Free or Inexpensive
Enterprise Licenses

3. Cost
Instructor-Focus
Student-Focus

4. Student-Centered
Low
High

Examples of TEC-VARIETY

March 26, 2020
1. Tone/Climate: A. Musical Intros
What the World Needs Now is Love
Students at the Boston Conservatory at Berklee created a social
distancing rendition of ‘What the World Needs Now is Love’
https://www.youtube.com/watch?v=qv7jI5ACHCw

October 11, 2020
1. Tone/Climate: B. Musical Choirs
Heejung An, William Paterson University
(1) “Minuet in G” by Bach: https://youtu.be/KphJOvDM9RI
(This is better)
(2) “Habanera” from Carmen: https://youtu.be/1xTgUt9HJtw
(This was too long and all of the instruments were not synchronized well, but we tried...).

September 24, 2020
1. Tone/Climate: C. 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=rR1mhGmB6ek&feature=emb_logo
https://colab.plymouthcreate.net/resource/non-boring-zoom-breakout-groups/

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

April 3, 2017
1. Tone/Climate:
F. Sli.do (students get a code; e.g., 9801)
https://www.sli.do/

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

2. Encouragement, Feedback:
B. Voice/Audio Feedback
Vocaroo: http://vocaroo.com/
2. Encouragement, Feedback:
C. Online Practice Tests and Interactive Flash Cards (e.g., Pharmacy, OT, etc.)
http://quizlet.com/

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, Screen, Overstream, 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
Variety, Novelty, Fun, Fantasy:

A. Create Animated Presentations
Animaker
https://app.animaker.com/animo/2h5b0Hz2gxURJ5x4/?shareid=view%7C2h5b0Hz2gxURJ5x4

Animaker is a cloud-based do-it-yourself video maker. Free version provides a list of characters, props, transitions, and background images.

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

C. Random Lists
(Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

D. My classroom is like a,
http://wheeldecide.com/

E. Kahoot!
https://getkahoot.com/

F. FutureMe.org
Write a letter to the future
https://www.futureme.org/
July 18, 2020
5. Autonomy, Choice:
A. Enroll in a MOOC and Reflect (e.g., see Class Central)

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/p540courseglossary
Ozgur Ozdemir, December 2012
http://r685glossary.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

August 2, 2020
5. Autonomy, Choice:
E. Virtual Jigsaw (group choice)
Catlin Tucker blog
10 Strategies Designed to Engage Elementary Students Online
8 Ideas Designed to Engage Students In Active Learning Online
https://catlintucker.com/

April 6 and April 28, 2020
6. Relevance, Meaningfulness:
A. Weekly Guest Expert Chats
SMILE, Paul Kim Stanford, https://youtu.be/bMDs1l4YVLU
February 22, 2020, Jima Ngei in Nigeria (1 hour 15 minutes)
Video: https://youtu.be/aM6VMsfOJXc
6. Relevance, Meaningfulness:
B. Case-Based Learning: Instructor Cases (e.g., Mark Braun, IU)

March 20, 2018
6. Relevance, Meaningfulness:
C. Editing Wikipedia Pages
Women’s-Studies Students Across the Nation Are Editing Wikipedia
Emme Kerr, The Chronicle of Higher Education
Women’s-Studies Students Across the Nation Are Editing Wikipedia
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

6. Relevance, Meaningfulness:
D. Analyzing Online Raw Data (e.g., computer code, health data, financial statements)

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/)
Also: Google Docs, NowComment, etc.
e.g., https://nowcomment.com/documents/131228

7. Interactive, Collaborative:
C. Guest Speaker Quotes (Rey Junco, February 25, 2013)
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 Altshul, Drexel: https://virtuallyinspired.org/portfolio/mobile-virtual-labs/

8. Engagement, Involvement:
A. Interactive Maps
(Thinglink: interactive map creator; Google Map Adventures)
https://www.thinglink.com/ (Thinglink: Freemium): Direct students to the discussions, assignments, course files, and syllabus. She added hyperlinks to pictures or videos to facilitate navigation. Thinglink makes any still picture interactive. You can put links into a picture and students easily navigate to necessary website. For example, it is used commonly for online history and geography courses.

Students can choose the part of the map; for example, they can click on a single country or continent. Clicking on the geographic location will take to the discussion, assignments, course files, and syllabus. They can also make interactive hyperlinks for their learning to the geographic location. For example, if the user is sharing the virtual map of the world, students can use Thinglink to make hyperlinks for the assigned continent or country.

8. Engagement, Involvement:
B. Healthcare Scenarios and Simulations
http://phet.colorado.edu/en/simulation/energy-skate-park

8. Engagement, Involvement:
C. Interactive Labs and Simulations
http://phet.colorado.edu/en/simulation/energy-skate-park

8. Engagement, Involvement:
D. Virtual Reality Comes to the Classroom
Beth McMurtrie, The Chronicle of Higher Education
https://www.chronicle.com/interactives/20190528-ImmersiveTech

Using a special recording system, Hamilton College created a virtual-reality experience for students in a conducting class. Heather Buchman, a music professor, first recorded a performance using 3-D audio and video. (Andrew Groll)

Students later practiced conducting the virtual orchestra by wearing a special headset through which the sound of the orchestra changes as they turn their head. (Ben Salzman)
8. Engagement, Involvement:
E. Virtual Reality Comes to the Classroom
Beth McMurtrie, The Chronicle of Higher Education
https://www.chronicle.com/interactives/20190528-ImmersiveTech
A virtual reality experience for students in a conducting class:
http://curtbonk.com/virtual-o.htm
A group of students could gather around a virtual heart as their professor takes it apart to show them the components. (Microsoft)

May 1, 2018
8. Engagement, Involvement:
G. Augmented Reality
3 ways districts can use AR and AI
Justin Angilio, eSchool News
https://www.eschoolnews.com/2018/05/01/3-amazing-ways-our-district-is-using-ar-and-vr/
When a teacher glances around her classroom, Lumilo allows her to see real-time analytics (in the form of icons) floating directly above each student’s head. The teacher can glance directly at a student or “click” on a student’s icon to see more detailed information about where and how that student might be struggling.

October 20, 2020
8. Engagement, Involvement:
F. Interactive Timelines
(Sutori, xtimeline, Preceden, TimeLineCurator, etc.)
The British Museum
https://britishmuseum.withgoogle.com/

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
September 3, 2017
10. Yields Products, Goals:
B. Mindmap Recaps of Online Discussions
Mindmap of Week 2 of R511

June 27, 2020
10. Yields Products, Goals:
C. Design Products (students created infographics, brochures, timelines)
Canva is an online design program that does not require much broc

July 25, 2020
10. Yields Products, Goals:
E. Webcast Shows; Silver Lining for Learning
https://silverliningforlearning.org/
https://www.youtube.com/channel/UC9XeSh8PgT3pmYpgo2C-ajhIv

Part II: The R2D2 Model:
Read, Reflect, Display, Do...

The R2D2 Model
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. Listen to Podcasts
(c.e., preventive medicine podcast, NPR: https://www.npr.org/tags/20669374/preventive-medicine)

March 21, 2020
Read 1b. Read Blogs

Read 1c. Twitter Fed Class Discussions
(e.g., OT: https://twitter.com/glenbourneteam)

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

Forestry & Society

Forests of the U.S.—Questions

- What are some major species of eastern forests? Describe them.
- What are some major species of western forests? Describe them.
- What are the main threats to forests in the U.S.? What are the policies to address these threats?
- What are the major forest types in Bangladesh? Describe them.
- What are the main objectives of the National Forestry Policy of Bangladesh?
- For conservation of the forests and wildlife, the government of Bangladesh has declared some areas as “Protected Areas.” What are they?
- What are the challenges of conservation of forests in Bangladesh?

Probable Questions

- Discuss types of forests in Bangladesh.
- What are their issues of concern?
- What are the main objectives of the National Forestry Policy of Bangladesh?
- For conservation of the forests and wildlife, the government of Bangladesh has declared some areas as “Protected Areas.” Why are they?
- What are the challenges of conservation of forests?
Display 3b. Short Educational Videos: Anchored Instruction/Macrocontext
CNN, BBC, TED, TED-Ed

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

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

Display 3e. More Word Clouds (e.g., Tagzedo, Tagul, WordSift, Word It Out):
Week 2 and 5 (13 and 14)
https://www.wordclouds.com/

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

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/

July 9, 2020
Reflect 2f. Collaborative Annotations and Discussions/Group Reading
Teachers can insert a two-column chart into a Google Document then copy and paste text in the left-hand column. Students can highlight keywords and phrases in the text and capture their annotations in the right-hand column.
VideoArt (Free): https://ant.umn.edu/ (Univ. of Minnesota)

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
Crane Makerspace, Tina Closser
https://www.youtube.com/channel/UCbeWfFd9g7pZ0JMBl9TBt5w?view_as=subscriber
https://sites.google.com/view/cranetech/home

Do 4d. Student Created Recap Videos
Piercarlo Abate: http://www.youtube.com/watch?v=_TURzHO0aU
Qi Li, Gangnam: http://www.youtube.com/watch?v=7Q429lqxZaU&feature=youtu.be
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9lW8
Kendal Rasnake (Is IT Right For You?): https://www.youtube.com/watch?v=MJ3GUDICIGw

April 23, 2020
Do 4c. Demonstration Videos
Crane Makerspace, Tina Closser

Poll #8: 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.

Poll #9: 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
Poll #10: 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 #11: 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 #12: 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 #13: What are you most concerned about then teaching online?
- a. Access issues
- b. Personalization issues
- c. Engagement issues
- d. Nothing...everything is running smooth

Poll #14: 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 #15: 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/

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