Blend but Don’t Break:
Introducing the Education 20/20, the TEC-VARIETY, AND R2D2 Models
for Motivation and Engagement
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March 26, 2020
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

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.

Poll #4: Have you ever taught a blended course (face-to-face and online)?
  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: Have you ever taught a fully online course?

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

Part I. Education 20/20

July 30, 2020

November 20, 2020
Many Texas families say remote learning isn’t working and they want it fixed
https://www.texastribune.org/2020/11/20/texas-schools-remote-learning/

September 3, 2020
Screen time guidelines:
DepEd sets number of hours on screen, depending on grade level
Jaehwa Bernardo, ABS-CBN News
https://news.abs-cbn.com/news/09/03/20/screentime-elementary-highschool-preschool-online-learning-deped

October 15, 2020
Formative Assessment Is Reshaping Education During Covid-19
Rod Berger, Forbes
June 24, 2020
Millions Learning Real-time Scaling Labs: Emerging findings and key insights
Penny Perlman Robinson, Molly Curtiss, and Patrick Hannahan
https://www.brookings.edu/research/millions-learning-real-time-scaling-labs-emerging-findings-and-key-insights/

(Circa Confucius 551–479 BCE)

Fast Forward 30+
Years...
“Anyone can now learn anything from anyone at any time.”

Learn anything from anyone, anywhere.

November 11, 2020
Educational technology is coming of age during the pandemic: Nowhere more so than in India
The Economist

Education 20/20...

Education 3.0...Education 20/20

"In Education 3.0, classrooms would move away from lectures, such as this one, to having class time be spent on discussions and projects, using digital technology."
(Per Wikipedia: https://en.wikipedia.org/wiki/Education_3.0)
Café Classroom and Café Connectedness
Starbucks Your Classroom!
Oskar Cymerman, Teaching Channel
https://www.teachingchannel.org/blog/2016/07/29/starbucks-your-classroom/

Sterile, industrial-era rows aren’t very attractive or motivating. ...I believe the “Starbucks” environment will promote that freedom and movement...Freedom is the key ingredient to social-emotional well-being and deeper learning. Rows and columns constrict. They hold and stifle.

1. Instructor as Counselor

2. Instructor as Consultant

3. Instructor as Conductor

4. Instructor as Course Ambassador
20 New Roles of the Instructor

- 5. Instructor as Curator
- 6. Instructor as Concierge
- 7. Instructor as Camping Trip Guide
- 8. Instructor as Cultivator
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.)

2. The Principle of Convenience
(e.g., multiple ways to turn in, record the class, get student input on time to teach the class, etc.)

3. The Principle of Collegiality
(e.g., help turn papers into publications, introduce students to colleagues, share resources or class materials, etc.)

4. The Principle of Cheerfulness and Optimism
(e.g., smile, celebrate accomplishments, positive feedback before any criticisms, etc.)
5. The Principle of High Expectations

6. The Principle of Choice and Options

7. The Principle of Empowerment and Autonomy

8. The Principle of Support and Feedback

9. The Principle of Spontaneity

10. The Principle of Organization
11. The Principle of Sharing
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

12. The Principle of Nontraditional Learning
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

13. The Principle of Passion and Inspiration
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

14. The Principle of Relevance and Meaningfulness
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

15. The Principle of Trial and Error (i.e., it is ok to fail)
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

16. The Principle of Expanded Resources
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html
The World of Open Education

The World is Open: How Web Technology Is Revolutionizing Education

17. The Principle of Human Connectedness

18. The Principle of Cognitive Apprenticeship

19. The Principle of Purpose and Vision
20. ??? (what is missing)

Bonk's 20 "Last" Principles of Instruction (LAST = Learning Activation System Template)

Convenience
Cheerfulness and Optimism
Support and Feedback
Spontaneity
Collegiality
Nontraditional Learning
Relevance and Meaningfulness
Trial and error (i.e., it is ok to fail)
Choice and Options
High Expectations
Purpose and Vision
Empowerment and Autonomy
Human Connection
Cognitive Apprenticeship

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/

Clearly...
Learning is Changing!

July 29, 2020
Round 2 of online school: How to get your remote learning act together for fall
Jenna Ryu, USA Today

July 23, 2020
6 ways to be more inclusive in a virtual classroom
Flower Darby, Chronicle of HE

1. Provide course content in 2 formats.
2. Allow options on how students complete assignments.
3. Give choice in final project.
4. Reach out to help students.
5. Use picture to depict how feeling.
**August 24, 2020**  
Transitions 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.

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**August 24, 2020**  
Transitions 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.

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**August 2015**  
Best Practices in K-12 Online and Hybrid Courses  
Hanover Research  

1. Start slowly: fun, easy, and supportive.  
2. Focus on engagement.  
3. Require student reflections  
4. Establish norms.  
5. Make expectations clear.  
6. Respond to students in a timely manner.  
7. Grade timely.  
8. Create challenging assignments.

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**July 27, 2020**  
Online Classroom Management: Five Tips for Teachers in Transition  
Jeff Lisciandrello, Room To Discover  
[https://inelearninglab.com/](https://inelearninglab.com/)

1. Test the technology.  
2. Involve students in establishing norms.  
3. Emphasize engagement—polls, breakouts, explore, etc.  
4. Connect with small teams of students  
5. Proceed slowly in comfort zone.

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**June 23, 2020**  
Learning is More Synchronous  
Turns Out You Can Build Community in a Zoom Classroom  
Rachel Toor, The Chronicle of Higher Education  

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**November 10, 2020**  
Learning is More Synchronous  
"Telepresence" robots are making virtual school feel a little more like real school  
Jennifer Davis, The Washington Post  
September 23, 2020
Introduction to Class for Zoom
Michael Chasen, Co-Founder & CEO of Class for Zoom
https://www.youtube.com/watch?time_continue=3&v=3_2MVEOlzRs&feature=emb_logo

July 8, 2020
Yes, Your Zoom Teaching Can Be First-Rate
Stephen Hersh, Inside Higher Ed

Thirty Ways Learning is Changing...
(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

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

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.
June 3, 2020
Contact North | Contact Nord Webinars
https://teachonline.ca/webinars

July 25, 2020
Silver Lining for Learning
https://silverliningforlearning.org/
https://www.youtube.com/channel/UC9XEsh89qElpnV9pQ3_ahA/live

August 3, 2020
Tips and Guidelines
Catlin Tucker blog
https://catlintucker.com/

August 23, 2020
Tips and Guidelines
Catlin Tucker blog
https://catlintucker.com/

August 2, 2020
Digital Choice Walls
10 Strategies Designed to Engage Elementary Students Online
https://catlintucker.com/

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)


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/
October 11, 2020
1. Tone/Climate: c. 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
(3) “This was too long and all of the instruments were not synchronized well, but we tried...”.

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

2. Encouragement, Feedback:
A. Poll Everywhere, Zoom Polling, MicroPoll
Girls + Data is a non-profit 501(c)(3) that hosts data camps, interactive workshops, and seminars where
different analytics tools are introduced. Participants explore the data, learn to use the different tools, and
submit a project to the dashboard. The program culminates in a project that allows the participants to tell a story with data. To date, girls +
data has educated over 450 kids at 17 events across the nation.

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/
July 31, 2020
2. Encouragement, Feedback:
D. Khan Academy aims to give 'strategic supplement'
Brett Molina, USA Today

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

September 9, 2020
3. Curiosity, Intrigue, Unknowns:
C. Mystery Stories
Edgewood teachers get creative to keep students engaged
Emily Cox, Hoosier Times

July 7, 2020
3. Curiosity, Intrigue, Unknowns:
D. New Discoveries
'Tiny bug slayer': Meet the pint-size ancient ancestor of dinosaurs discovered in Madagascar
Ryan W. Miller, USA Today

Video: 53 seconds
April 17, 2017

3. Curiosity, Intrigue, Unknowns:

E. 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:

G. Web Resource Scavenger Hunts
https://catlintucker.com/2020/07/8-ideas-designed-to-engage-students-online/

June 27, 2020

4. Variety, Novelty, Fun, Fantasy:

A. Create Animated Presentations
https://app.animaker.com/animo/2h5b0Hz2gxURJ5x4/?shareid=view%7C2h5b0Hz2gxURJ5x4
Animaker is a cloud-based do-it-yourself video maker. Free version provides a lot of characters, props, transitions, and background images.

4. Variety, Novelty, Fun, Fantasy:

C. Random Lists
(Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)
February 21, 2017
4. Variety, Novelty, Fun, Fantasy:
   D. My classroom is like a,”
   http://wheeldecide.com/

October 10, 2018
4. Variety, Novelty, Fun, Fantasy:
   E. Kahoot!
   https://getkahoot.com/

July 18, 2020
5. Autonomy, Choice:
   A. Enroll in a MOOC and Reflect
   (e.g., see Class Central)

August 2, 2020
5. Autonomy, Choice:
   B. Digital Choice Walls
   10 Strategies Designed to Engage Elementary
   Students Online, Catlin Tucker
   https://catlintucker.com/

August 2, 2020
5. Autonomy, Choice:
   C. 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/
5. Autonomy, Choice:
D. Tracking the Life of a Medical Professional
(e.g., biography.com)
https://www.biography.com/scientist/alexander-fleming

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

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

5. Autonomy, Choice:
G. MOOCs for English and College Prep
Greetings from Nepal, Baman Kumar Ghimire
Teacher, Motherland Secondary School, Pokhara
April 6 and April 28, 2020

6. Relevance, Meaningfulness:
A. Weekly Guest Expert Chats
February 22, 2020, Jima Ngei in Nigeria (1 hour 15 minutes)
Video: https://youtu.be/s6VMs6O1Xc

6. Relevance, Meaningfulness:
B. 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/Women-Studies-Students/242866

November 9, 2019
5. Autonomy, Choice:
G. MOOCs for English and College Prep
Greetings from Nepal, Baman Kumar Ghimire
Teacher, Motherland Secondary School, Pokhara

March 20, 2018
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About Wikipedia
Wikipedia is a free editable encyclopedia that enables everyone to have a say in and contribute to the free exchange of ideas. Wikipedia aims to provide reliable and accurate information on all subjects, and to encourage open participation by anyone who has knowledge or interest in a particular topic. Anyone can write anything on Wikipedia, but only editors with a user account (and who meet certain criteria) can make significant changes to the content. This means that Wikipedia is constantly evolving and improving as new information is added and existing information is updated. Contributions can range from small edits to major revisions, and can be made by anyone with a user account. Wikipedia is a non-profit organization that relies on donations from individuals and organizations around the world to continue its mission of providing free and open knowledge for all.
6. Relevance, Meaningfulness:
   C. Case-Based Learning: Instructor Cases
   (e.g., Mark Braun, IU)

6. Relevance, Meaningfulness:
   D. Editing Wikipedia Pages
   Women’s-Studies Students Across the Nation Are Editing Wikipedia
   Emma Kerr, The Chronicle of Higher Education

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:
   E. Analyzing Online Raw Data (e.g., computer code, health data, financial statements)

6. Relevance, Meaningfulness:
   F. Language Lessons Online
   BBC Learning English
   http://www.bbc.co.uk/learningenglish

6. Relevance, Meaningfulness:

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:
   Example: https://youtu.be/L6fUOMXnKxU?t=132

April 6, 2020
7. Interactive, Collaborative:
   B. Interactive Oral Assessments
   Interactive Orals as an alternate authentic assessment,
   Danielle Logan, Griffith University
   https://sway.office.com/yQ2s0Bm3ILkWtGll?ref=Link

Interactive oral assessment; an authentic and integral alternative to examination
Interactive orals in practice in the GBS
7. Interactive, Collaborative:
C. Negotiate Meanings Online
(e.g., MeetingWords: http://meetingwords.com/)
Also: Google Docs, NowComment, etc.

http://blogs.elon.edu/technology/6-
collaborative-
writing-
applications-
for-
group-
projects-
or-
papers/

Also: Google Docs, NowComment, etc.

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

http://blogs.elon.edu/technology/6-
collaborative-
writing-
applications-
for-
group-
projects-
or-
papers/

8. Engagement, Involvement:
A. Storytelling Strategies for the Design of Branching Virtual Patient Simulations
Kira King et al., Kynectiv

https://253f0a53-bb62-46af-b495-b4548f4d5d90.filesusr.com/ugd/c9b0ce_1a0143633f894eca965378d23c9b72a4.pdf

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

https://www.nuclino.com/

E. Team Article Debates
Nuclino (like a wiki...may delete by mistake, trial version, limited)

F. 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/ Permits/online-virtual-labs/

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8. Engagement, Involvement:
B. 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 websites. For example, it is used successfully for online history and geography courses.

Students can chart the path of a story on a map, they can connect historical info they are learning to the geographic location where events took place, and students can design creative mathematical challenges.

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8. Engagement, Involvement: 
C. Healthcare Scenarios and Simulations

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

November 23, 2020

8. Engagement, Involvement: 
E. Augmented Reality (students)

Can AR be the antidote to virtual classroom shortcomings?

AR brings learning to life and allows students to experience education during distance learning. With AR, students can walk through Stonehenge, tour the Egyptian pyramids, go on a virtual field trip of the Louvre Museum, or explore the cavities of the human heart—all from the comfort of their homes. Students can even take a journey to outer space or visit UNESCO world heritage sites.

The intersection between AR and education is an obvious and endless road of possibilities. Technology is finally reaching a point where it is more accessible than ever before, and every student deserves to benefit from it. Maintaining student engagement during a lengthy Zoom lecture is a lot easier for teachers when students can expect to explore Mount Rushmore or the muscular system in AR at some point. Education is meant to be experienced, and distance learning should not get in the way of that simple truth.

May 1, 2018

8. Engagement, Involvement: 
F. Augmented Reality (teachers)

3 ways districts can use AR and AI

Justin Anglio, eSchool News

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.

July 17, 2017

8. Engagement, Involvement: 
G. Virtual Reality (Chemistry)

Learning Chemistry in Virtual Reality,
Sarah Hardman, New Learning Times

1:38 video:
https://vialogues.com/vialogues/play/38337/

All:
http://curtbonk.com/chemistry-vr.html

01. - 41: http://curtbonk.com/chemistry-vr-1.html

May 18, 2017

8. Engagement, Involvement: 
H. Virtual Reality (Google Cardboard)

Google Expeditions Adds Augmented Reality for Classrooms, Srir Ravipati, THE Journal

https://thejournal.com/articles/2017/05/18/google-expeditions-adds-augmented-reality-for-classrooms.aspx

https://www.youtube.com/watch?v=3lYqlaMWTVg

27 seconds
http://curtbonk.com/thejournal27.html
38 Seconds
http://curtbonk.com/thejournal38.html
1: 10: http://curtbonk.com/thejournal.html
October 20, 2020
8. Engagement, Involvement:
I. Interactive Timelines
The British Museum
https://britishmuseum.withgoogle.com/

May 28, 2019
8. Engagement, Involvement:
I. 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 Droll)
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. (Dan Saltzman)

May 28, 2019
8. Engagement, Involvement:
J. 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:
http://curtbonk.com/vrheart.html
Unlike VR headsets, augmented-reality glasses allow users to see the world around them, opening up possibilities for shared learning experiences. A group of students could gather around a virtual heart as their professor takes it apart to show them the components. (Microsoft)

9. Tension, Challenge, Controversy, etc.:
A. Embodied VR Experiences
https://embodiedlabs.com/labs
One example is pasted below.
Topic: End of Life Conversations
Summary:
The learner will embody Clay Crowder, a 66-year-old veteran with stage IV, incurable lung cancer.
Learning Objective: Experience what it is like to receive "bad news" from your doctor, and discuss your options.
Have conversations with your family and members of the healthcare team about transitioning to hospice care.
Get assistance from the hospice care team in understanding your symptoms and conflicts that may occur within your family. See the physical changes inside your body as it nears the end of life.
Experience what may happen at the end of your life.

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

9. Tension, Challenge, Controversy, etc.:
C. What is smileUP & How to use it?
SMILE, Stanford
https://www.youtube.com/watch?v=pblU8sSALWo

May 11, 2020
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e.g., Padlet (A collaboration and discussion board)
https://padlet.com/samarast/urel07b3nwubivel

May 11, 2020
9. Tension, Challenge, Controversy, etc.:
C. What is smileUP & How to use it?
SMILE, Stanford
https://www.youtube.com/watch?v=pblU8sSALWo
**November 8, 2018**

Paul Kim keynote in Taiwan Education 4.0 Conference

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October 30, 2018

"AI Question Asking"

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10. Yields Products, Goals:

A. Database Collection Tools

Article Databases in Pinterest

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September 3, 2017

10. Yields Products, Goals:

B. Mindmap Recaps of Online Discussions

Mindmap of Week 2 of R511

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April 23, 2020

10. Yields Products, Goals:

C. Student Generated Timelines, Taxonomies, and Concept Maps

(Sutori, xtimeline, Preceden, Timeline.js, TimeLineCurator, Time Mapper, etc.)

Timeline of the top 10 courses in the instruction technology course from the 1990, 2000, 2010, and 2020 class syllabus.

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June 27, 2020

10. Yields Products, Goals:

D. Design Products (students created infographics, brochures, timelines)

Canva is an online design program that does not require much brochures.
10. Yields Products, Goals: E. Student Website Development
R511 Final Projects, December 12, 2017

"IST Construction, Co."
Rob Elliot, Patrick Walsh, Erin Milanese, R511, December 2016
http://relliott.net/istconstruction/index.php

http://educbasdogan.wixsite.com/511final

April 29, 2020
10. Yields Products, Goals: F. Wikibook Projects and Chapters
R678, Amanda Zwirecki and Ashia Williams

11/27/2020
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.

June 27, 2020
Read 1a. Concept Mapping with Storyline Online is a free literacy platform where kids can listen stories (where actors read to children).
https://www.youtube.com/user/StorylineOnline

Read 1b. Reading and Reviewing articles in Open Access Science Journals (e.g., DOAJ—Directory of Open Access Journals)
https://doaj.org/
Open access journals for kids:
https://sciencejournalforkids.org/about-us.html
https://kids.frontiersin.org/
https://sciencejournalforkids.org/about-us.html

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

Read 1c. Listen to Podcasts
(e.g., Educational: https://discoverpods.com/educational-podcasts/)
June 26, 2020
Learning from Home with Sir Ken Robinson - Episode 3 with Natalie Bigney
https://www.youtube.com/watch?v=1hpikfzI3p0&feature=youtu.be

April 1, 2020
Read 1d. Read Blogs
Punya Mishra, Silver Lining for Learning
https://silverliningforlearning.org/the-value-of-school-part-1/

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

Read 1f. 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 types of forests in Bangladesh. What are their issues of concern?
• What are the main objectives of the National Forest Policy 1997? Discuss.
• 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? Discuss.
July 5, 2018
Reflect 2b. 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

July 5, 2018
Reflect 2d. 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

July 5, 2018
Reflect 2c. Interpreting Interactive Graphs and Infographics
How much rainforest in that chocolate bar?
Tech billionaire announces $250 million in cancer immunotherapy funding,
Jayne O'Donnell, USA Today

Reflect 2e. Online Role Play or Debate (e.g., documentary production)

3. Visual Learners
• Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Display 3a. More Royalty Free Images
Medical Graphics in Creative Commons
Display 3b.
Short Educational Videos:
Anchored Instruction/Macrocontext
CNN, BBC, TED, TED-Ed, ForaTV, MedTube
(200,000 users, 20,000 records)

April 29, 2020
Display 3c. Animated Videos
Animated COVID-19 prevention video goes viral
Mandy Erickson, SCOPE Stanford Medicine

January 20, 2017
Display 3d. VR Takes You on a Tour of The Human Body
https://www.youtube.com/watch?v=LBWaj1f_UjM

July 9, 2020
Reflect 2e. 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.

July 9, 2020
Reflect 2f. Collaborative Annotations and Discussions/Group Reading
https://perusall.com/

Display 3g.
Video Annotation and Commenting Tools
VideoAnt (Free): https://ant.umn.edu/ (Univ. of Minnesota)
Edpuzzle (Free): https://www.youtube.com/watch?v=L62wAxCzEM

11/27/2020
May 17, 2020
Display 3h.
Sketch Talks and Presentations
Silver Lining for Learning, Session with Paul Kim
Meenu M Pillai, Freelance Designer at Multiple Corporations
Mumbai, Maharashtra, India

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

March 2020
Display 3j. Visual Depictions of Science
Migrations in Motion
http://maps.tnc.org/migrations-in-motion/#/4/19.00/-78.00

June 21, 2020
Display 3k. Lucid for Education
https://lucidforeducation.com/mini-lessons

June 22, 2020
Display 3l. Animations of Data
Global Deaths Due to Various Causes and COVID-19
By Tony Nickonchuk
https://public.flourish.studio/visualisation/2562261/?fbclid=IwAR2iAZWYIvm14Q64wmNUu4cNFl418KGP4S_8XNJTMJWMAtOpdtBAtqQU_B0

Display 3m. Video Editing Tools
TubeChop: https://www.tubechop.com/
Display 3n.
Concept Mapping and Timeline Tools
(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)
http://www.spicynodes.org/index.html

April 30, 2020
Display 3o. Virtualize Words Used
Word Clouds
I included Weeks 4 blended learning discussions (and 7):
Week’s discussion questions; Word cloud, including link
Number of times top 20 words were used in discussion; and link to complete list
Graphic of how words link to each other; and link to interactive tool
List of “salient points” taken from the discussion. All are de-identified
https://spark.adobe.com/page/RaAjco1BIeL2k/

April 30, 2020
Display 3p. More Word Clouds (e.g., Tagzedo, Tagul, WordSift, Word It Out):
Week 2 and 5 (13 and 14)
http://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. Case Decision Making
(e.g., snake bite)

Do 4b. Sample Student Work
e.g., Interactive Archive/Gallery of best work
August 6, 2020
Do 4c. Podcast Shows
Teen’s Podcast explains COVID-19 to his peers
Janey Begley, USA Today, TC Palm


Do 4d. Demonstration Videos
Crane Makerspace, Tina Closser

https://www.youtube.com/channel/UCbeWfFd9g7pZ0JMBl9TBt5w?view_as=subscriber
https://sites.google.com/view/cranetech/home

Do 4e. Student Created Recap Videos
Piercarlo Abate: http://www.youtube.com/watch?v=TVRzHO0aU
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

November 26, 2019
Do 4f. Courses for a Cause:
MOOC Contributions to a "Better Place for All" (Marianne Krasny et al., 2020)

MOOCs book #3 (2020)

Poll #10: 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 11: 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 12: 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 #13: 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 #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: 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 #16: 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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