TEACHING WELL IN THE TIME OF COVID

Strategies for Teaching WELL in a Pandemic

11/19
2020

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@SMHS_TLAS #AskTLAS

COVID

COVID

- No choice
- Had to do it fast and hope for the best

WHAT DID WE MISS?

- Technology Barriers
- Less engagement
- Harder to interact
- Difficult to integrate materials not on your computer

WHAT DID WE MISS?

- Lost in translation
- We shouldn't have been doing some of what we did before
- If all we want is to lecture, could just record it and email

WHAT DID WE MISS?

- Technology affordances
  - Breakout groups with privacy
  - Share electronic materials
  - Track and record
  - Project collaboration tools

AGENDA

- How do we:
  - Maximize affordances and minimize barriers?
  - Know what tools to use?
  - Know when to meet face-to-face?
  - Make online learning more engaging?

CAN TECHNOLOGY TEACH?

That is the wrong question.

Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies

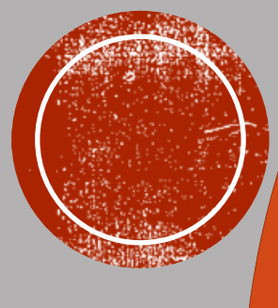
However, they CAN support outcomes and strategies not easily accomplished with other modalities, (e.g., simulations, motor skills, modeling) and solve problems of time, distance, and access.

IS TECHNOLOGY THE ANSWER?

Online Teaching CAN be as Effective as F2F:

- Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies

WHAT'S WRONG WITH THIS PICTURE?



Tom Ra er

@MrTomRa

My kiddo's schoo sing two hours early so teachers can "prepare for dista earning" in the event of a closure. Which is cool. I e preparing distance learning for an extended clo ike that should take, oh, about exactly two hours, right?

4:12 PM · Mar 12, 2020 · Twitter for iPhone

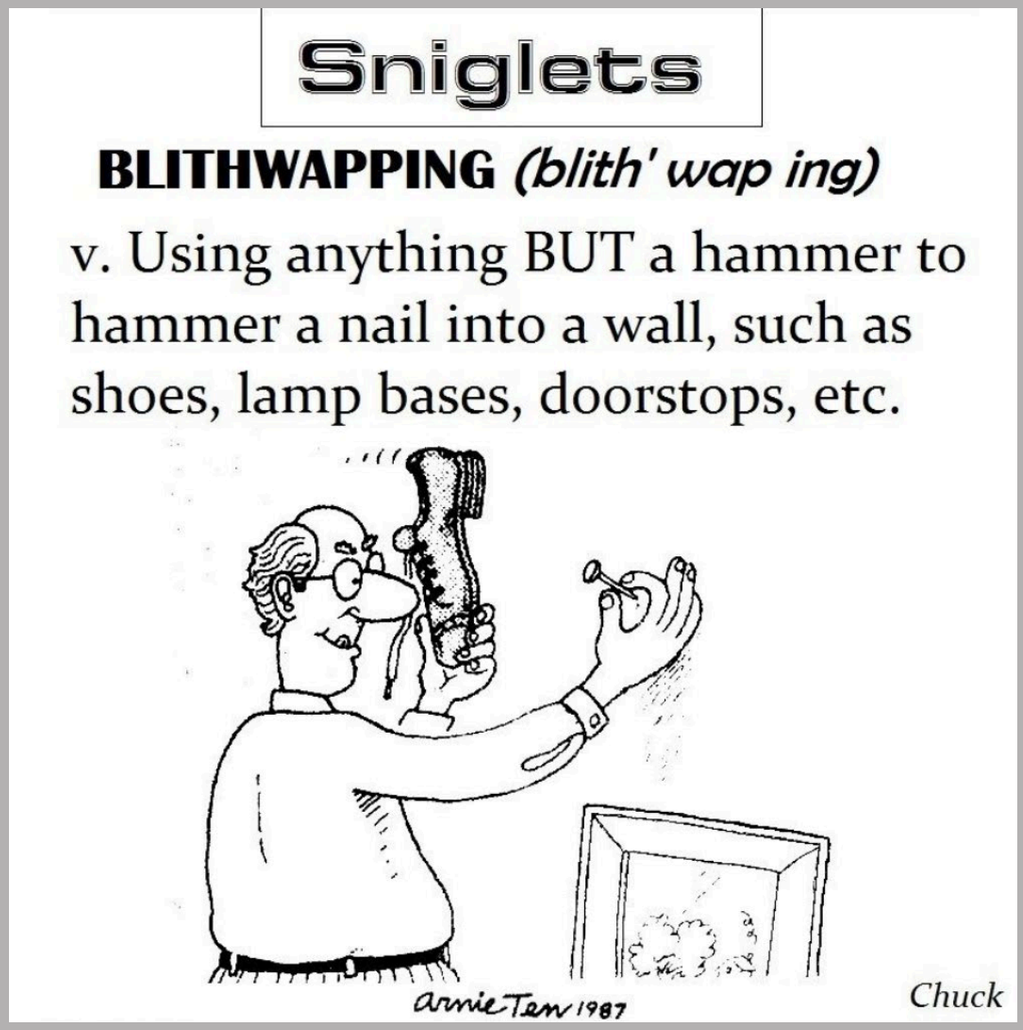
THE MEDIA QUESTION

- Can't just "transfer" teaching models to eLearning*
  - Good teaching accounts for learners, resources, and technology
  - Distance students, resources, and technologies have unique characteristics

* Not even good ones!

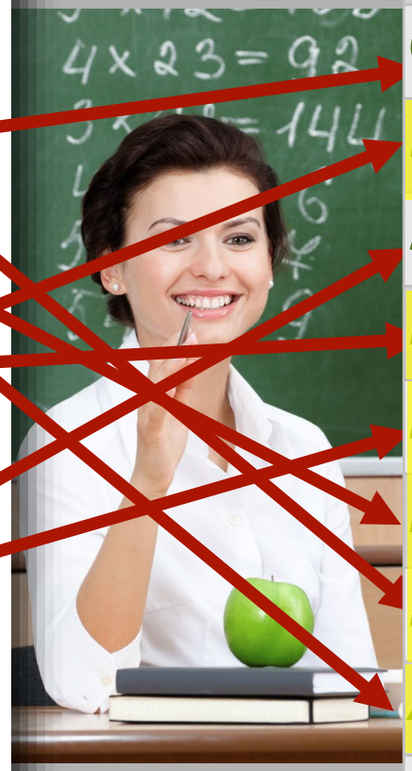
DON'T BLITHWAP YOUR TEACHING

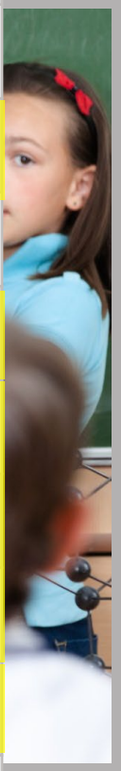
- Just because you CAN post a 60-minute lecture recording online doesn't mean you SHOULD!



* Not even good ones!

GOOD TEACHING IS ACTIVE





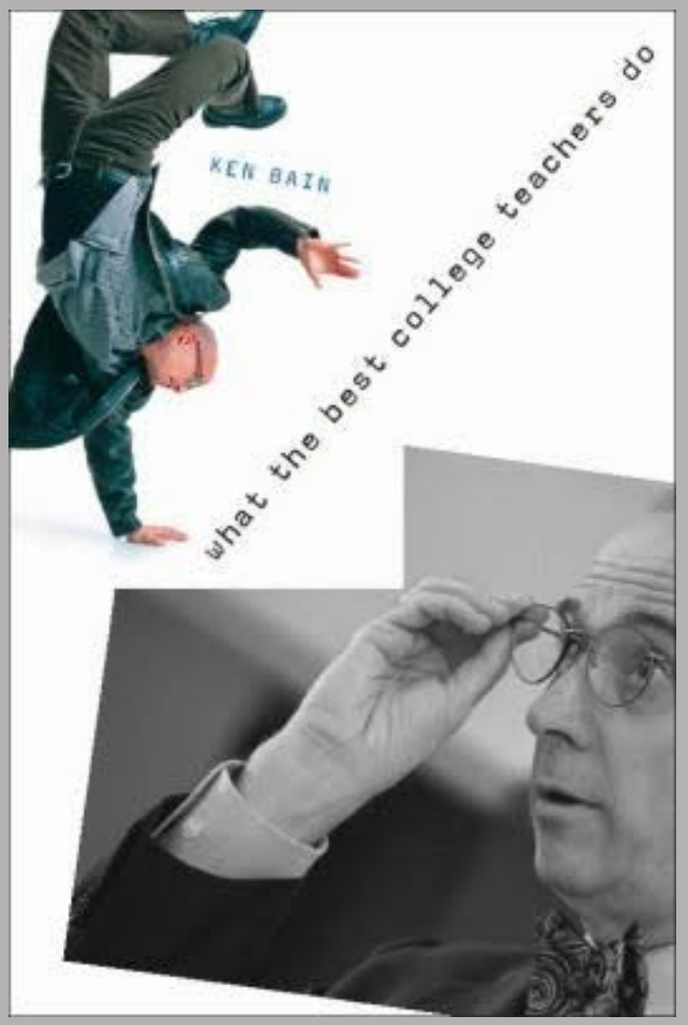
Instructional Event
Gain attention
Inform of objective
Stimulate recall
Present stimulus
Provide guidance
Elicit performance
Provide feedback
Assess performance
Enhance retention

ACTIVE LEARNING ONLINE

- How do we design and support it when:
  - We are together, but virtual?
  - We are not together at all?
- What kinds of approaches promote and require those key events?

WHAT THE BEST COLLEGE TEACHERS DO

- Ken Bain
  - 15-year study of 100 college teachers
  - "What should my students be able to DO intellectually, physically, or emotionally as a result of their learning?"

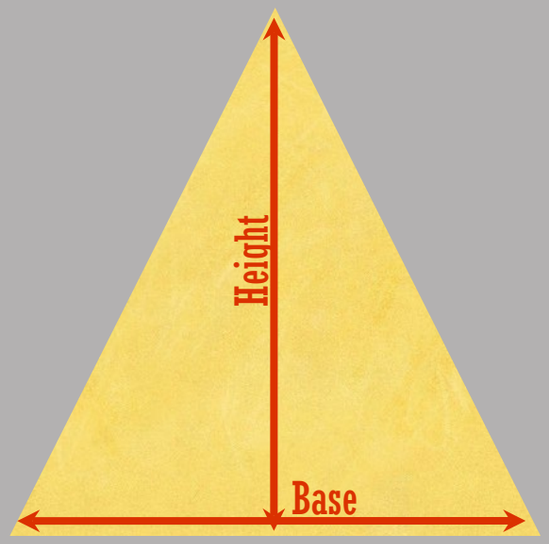


DOING VS. KNOWING

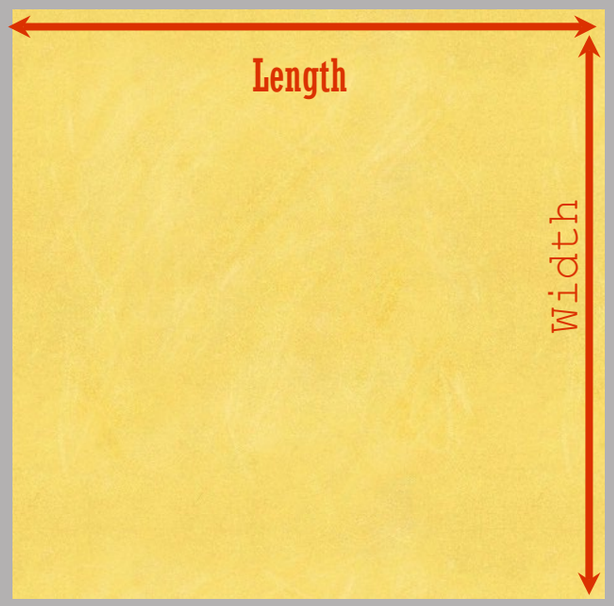
- The medium is the message
  - Face-to-face lets us overcome limitations in our design
  - Online creates BARRIERS and amplifies design limitations
- Forget about the textbook and tests (knowing)
- Focus on problems and projects (doing)

DOING VS. KNOWING

CONTEXT IS KING



Area of a Triangle: 1/2 Base x Height



Area of a Rectangle: Length x Width
Perimeter of a Rectangle: (Length x 2) + (Width x 2)

CONTEXT

- What kinds of "decks" does your profession build?
  - Health improvement/disease treatment
  - Defining biomedical processes
- What "tools" do they use?
  - Datasets, theories, models,
  - Diagnostic reasoning and technology
  - Patient safety protocols
  - Techniques (physical exam, transfers)

CONTEXT

- What processes do they employ?
  - Collaboration, simulation, research….
  - Bench research
- What meaningful work products do they generate?
  - Reports, case notes, patient care plans
  - Articles
  - Grant proposals

USE CONTEXT TO DESIGN TEACHING

- Problems & Projects → Outcomes and Assessment
  - Don't teach ABOUT them; teach how to DO them
- Outcomes → artifacts that demonstrate knowledge
  - Articles
  - Reports
  - Proposals
  - Patient care plans
  - QI proposals
  - Population health initiatives
  - Health care policies
  - Congressional testimony
- These will determine tools, processes, and strategies

USE CONTEXT TO DESIGN TEACHING

- Tools and Processes = Teaching & Learning Strategies
  - Discussion, datasets, meetings, collaboration, shared documents, interactions with patients, software and applications,
- Teaching strategies
  - Students you've asked to ACT like competent professionals
    - They require guidance and support
  - Lectures, readings, feedback, questioning, discussion

TO MEET, OR NOT TO MEET?

That is the (next) question!

HOW DOES IT WORK IN "REAL WORLD?"

- How does it work in the "Real World?"
  - When do people come together in authentic context?
  - Why, and for what purpose?
  - What do they accomplish when they are together?
  - What mechanisms and processes do they use?
- How will that work in your class?
  - Asynchronous elements should be done outside the classroom
  - Synchronous elements MAY justify coming together, BUT…

FINKELSTEIN

- Don’t ask people to:
  - Arrange childcare
  - Take time off from work
  - Arrange transportation
  - Skip/purchase meals
- So they can:
  - Listen silently while you recite what’s in the book

AFFORDANCES AND BARRIERS

Asynchronous/ Outside Class Time	Synchronous/ Online Class Time
Place-Shifting Time-Shifting Equal Participation Longer Teacher Guidance/Feedback Individualized Learning Delayed Interaction Time to Reflect/Consider	Place-shifting Time-bound Unequal participation Fast Guidance/Feedback Difficult to Individualize Learning Speed of Interaction Shallow Response to New Info

CONSTRAINTS & ROI OF SYNCHRONOUS

- How much disruption is it for you and learners?
- How will it impact the learning?
  - Will it save time, result in better learning, both, neither?
- How MUCH will it impact learning?
  - If 5% faster/better but a significant disruption…
- How important is what would be learned?
  - If its 25% faster/better and low disruption but only 10% of the outcomes…

OTHER QUESTIONS TO ASK

Asynchronous/Outside Class Time	Synchronous/Online Class Time
• Can they do it independently? • If not, can they do it together, asynchronously? • Will it take you longer to support than it is worth in learning? • Will it free up synchronous time for time-consuming/complex learning? • Will it prepare them for success during synchronous?	• Does it require real-time communication/interaction? • Is the ROI worth it? • Would it take too long/be too hard otherwise? • Does it require your expert guidance? • Is it attitudinal or complex learning (problem solving, synthesis)?

PUSHBACK PRINCIPLE

- Don’t do anything:
  - In groups that can be done individually
  - In the real-world setting that can be done in a simulation
  - In a simulation that can be done in a classroom
  - In a classroom (synchronously) that can be asynchronously

Classroom Processes and Skills	Online Tools and Equivalents
Lectures	Yuja (A) Voice Thread (A) Mediasite (A) Teams (A, S) Zoom (A, S)
Providing Feedback	Acrobat (A) Yuja (A) Word (A) Teams (A, S) Zoom (A, S)
Teamwork, Collaboration, Live Meetings	Teams (A, S) Zoom (A, S) Slack (A, S)
Patient Interactions, Tool Demonstrations	SimTutor (A) Captivate (A) Zoom--Roleplays (S)
Shared Documents	Google Docs (A, S) Dropbox (A) Wiki (A, S) Teams (A, S) LMS (A)
Questioning	Kahoot (S) Zoom (S) Top Hat (A, S) Qualtrics (A) LMS (A)
Discussion	Discussion Boards (A) Zoom (S) Teams (A, S)

SYNCHRONOUS AL STRATEGIES

- Mini-lectures
  - War stories, synthesis, application
  - Focused lecture on weaknesses or misconceptions from project-based work drafts
  - Don’t just read the phone book for 60 minutes
- Questioning
  - Pause for 2 every 10
  - Ask THEM questions
  - iRAT / gRAT

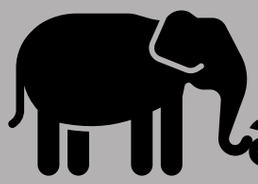
SYNCHRONOUS AL STRATEGIES

- Problem-based learning
- Focused work on projects with real-time support
- Optional check-ins for Q&A
- Fishbowl and Modeling
- Interactive simulations
  - Second Life role-plays (example)

ASYNCHRONOUS AL STRATEGIES

- Recorded Mini-Lectures (with questions!)
- Gamification
  - vaneckgaming.com
- Reading
  - PDFs, Teams, Slack, OERs
- Project-based assignments, drafts
  - Dropboxes, track changes, previous versions, Google Docs, Sharepoint, email
  - Peer-review
- Quizzing
  - Qualtrics, Blackboard, TopHat

SUMMARY

- Covid-19, the  and the things we missed
- Technology Affordances and Barriers
- Knowing vs. Doing
- Synchronous vs. Asynchronous
- Tools and techniques to make the above practical

SEE ALSO:

- Previous sessions on AL
  - Active Learning in General
    - https://med.und.edu/education-resources/repository.html#activelearning
  - Active Lectures for Online Learning
    - https://capture.med.und.edu/Mediasite/Play/d201df0df294496a9bafe6be4620c43b1d?catalog=6dd193e89abb455bbebc4ac4452d6dd121
- Tools for online teaching
  - https://med.und.edu/education-resources/go-online.html

ANNOUNCEMENTS & UPCOMING EVENTS

- Next Evidence-Based Teaching: December 19 at noon on Zoom
- 2021 EBT are on Thursdays at noon on Zoom: Jan. 21, Feb. 18, Mar. 25, Apr. 15
- IAMSE Winter 2021 Webcast Series: USMLE STEP-1 is Going to Pass/Fail… Now What Do We Do?
  - 5-part weekly series begins Jan 7, 2021 at 11 CST. Contact Linda Anderson at EFA to register.

ANNOUNCEMENTS & UPCOMING EVENTS

- Next Evidence-Based Teaching event: Dec. 17 at noon
- Build-a-Rubric hands-on virtual session: January 6 at 3:30
- Instructional design open office hours in Dec. and January: https://med.und.edu/education-resources/instructional-design.html
- Dates for all upcoming faculty development: https://med.und.edu/education-resources/faculty-development.html
- Resources, recordings, and consult info: https://med.und.edu/education-resources/teaching-learning.html
- Workshops on several academic technologies mentioned in this prez.: https://und.edu/academics/ttada/programming.html
- All links to references and resources from this session have been pasted into the Zoom chat box and are available upon request.

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