TEACHING WELL IN THE TIME OF COVID
Strategies for Teaching WELL in a Pandemic

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Dr. Adrienne Salentiny

@SMHS_TLAS #AskTLAS
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
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?
That is the wrong question.

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.
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
My kiddo’s school is closing two hours early so teachers can “prepare for distance learning” in the event of a closure. Which is cool. I mean, preparing distance learning for an extended closure like 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
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
Area of a Triangle: \( \frac{1}{2} \times \text{Base} \times \text{Height} \)

Area of a Rectangle: \( \text{Length} \times \text{Width} \)

Perimeter of a Rectangle: \( (\text{Length} \times 2) + (\text{Width} \times 2) \)
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)
- 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
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 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…
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
<table>
<thead>
<tr>
<th><strong>AFFORDANCES AND BARRIERS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asynchronous/Outside Class Time</strong></td>
<td><strong>Synchronous/Online Class Time</strong></td>
</tr>
<tr>
<td>Place-Shifting</td>
<td>Place-shifting</td>
</tr>
<tr>
<td>Time-Shifting</td>
<td>Time-bound</td>
</tr>
<tr>
<td>Equal Participation</td>
<td>Unequal participation</td>
</tr>
<tr>
<td>Longer Teacher Guidance/Feedback</td>
<td>Fast Guidance/Feedback</td>
</tr>
<tr>
<td>Individualized Learning</td>
<td>Difficult to Individualize Learning</td>
</tr>
<tr>
<td>Delayed Interaction</td>
<td>Speed of Interaction</td>
</tr>
<tr>
<td>Time to Reflect/Consider</td>
<td>Shallow Response to New Info</td>
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</tbody>
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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

<table>
<thead>
<tr>
<th>Asynchronous/Outside Class Time</th>
<th>Synchronous/Online Class Time</th>
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<tbody>
<tr>
<td>• Can they do it independently?</td>
<td>• Does it require real-time communication/interaction?</td>
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<td>• If not, can they do it together, asynchronously?</td>
<td>• Is the ROI worth it?</td>
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<td>• Will it take you longer to support than it is worth in learning?</td>
<td>• Would it take too long/be too hard otherwise?</td>
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<td>• Will it free up synchronous time for time-consuming/complex learning?</td>
<td>• Does it require your expert guidance?</td>
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<td>• Will it prepare them for success during synchronous?</td>
<td>• Is it attitudinal or complex learning (problem solving, synthesis)?</td>
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• 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
<table>
<thead>
<tr>
<th>Classroom Processes and Skills</th>
<th>Online Tools and Equivalents</th>
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</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>Yuja (A)</td>
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<td></td>
<td>Voice Thread (A)</td>
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<td>Mediasite (A)</td>
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<td>Teams (A, S)</td>
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<td>Zoom (A, S)</td>
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<td>Providing Feedback</td>
<td>Acrobat (A)</td>
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<td>Yuja (A)</td>
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<td>Word (A)</td>
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<td>Teams (A, S)</td>
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<td>Zoom (A, S)</td>
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<td>Teamwork, Collaboration, Live Meetings</td>
<td>Teams (A, S)</td>
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<td></td>
<td>Zoom (A, S)</td>
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<tr>
<td></td>
<td>Slack (A, S)</td>
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<tr>
<td>Patient Interactions, Tool Demonstrations</td>
<td>SimTutor (A)</td>
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<td></td>
<td>Captivate (A)</td>
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<td>Zoom--Roleplays (S)</td>
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<td>Shared Documents</td>
<td>Google Docs (A, S)</td>
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<td>Dropbox (A)</td>
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<td>Wiki (A, S)</td>
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<td>Teams (A, S)</td>
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<td></td>
<td>LMS (A)</td>
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<td>Questioning</td>
<td>Kahoot (S)</td>
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<td></td>
<td>Zoom (S)</td>
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<td></td>
<td>Top Hat (A, S)</td>
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<td>Qualtrics (A)</td>
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<td></td>
<td>LMS (A)</td>
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<td>Discussion</td>
<td>Discussion Boards (A)</td>
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<td>Zoom (S)</td>
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<td>Teams (A, S)</td>
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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 elephant 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](https://med.und.edu/education-resources/repository.html#activelearning)
  - **Active Lectures for Online Learning**
    - [https://capture.med.und.edu/Mediasite/Play/d201df0df294496a9bafe6be4620c43b1d?catalog=6dd193e89abb455bbebc4ac4452d6dd121](https://capture.med.und.edu/Mediasite/Play/d201df0df294496a9bafe6be4620c43b1d?catalog=6dd193e89abb455bbebc4ac4452d6dd121)

- **Tools for online teaching**
  - [https://med.und.edu/education-resources/go-online.html](https://med.und.edu/education-resources/go-online.html)
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.
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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