



FEMA

FEMA-Higher Education SoTL Focus Group 2020

Overview of Previous AERA Reports (2017, 2018, 2019)

6.2.20

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SoTL Focus Group Overview

SoTL: Scholarship of Teaching and Learning (The application of scientific study of the processes and outcomes involving teaching and learning in educational environments.)

Our **discipline** is EM, we are **professional** educators within higher education

Participants selected through an application process (2017, 2018, 2019, and 2020)

Previous focus groups attended AERA (American Educational Research Association) annual conferences. 2020 meeting canceled, so FG will be attending the annual Association for the Study of Higher Education (ASHE) conference in November, 2020



Renea Frey

4 hrs · 🌐



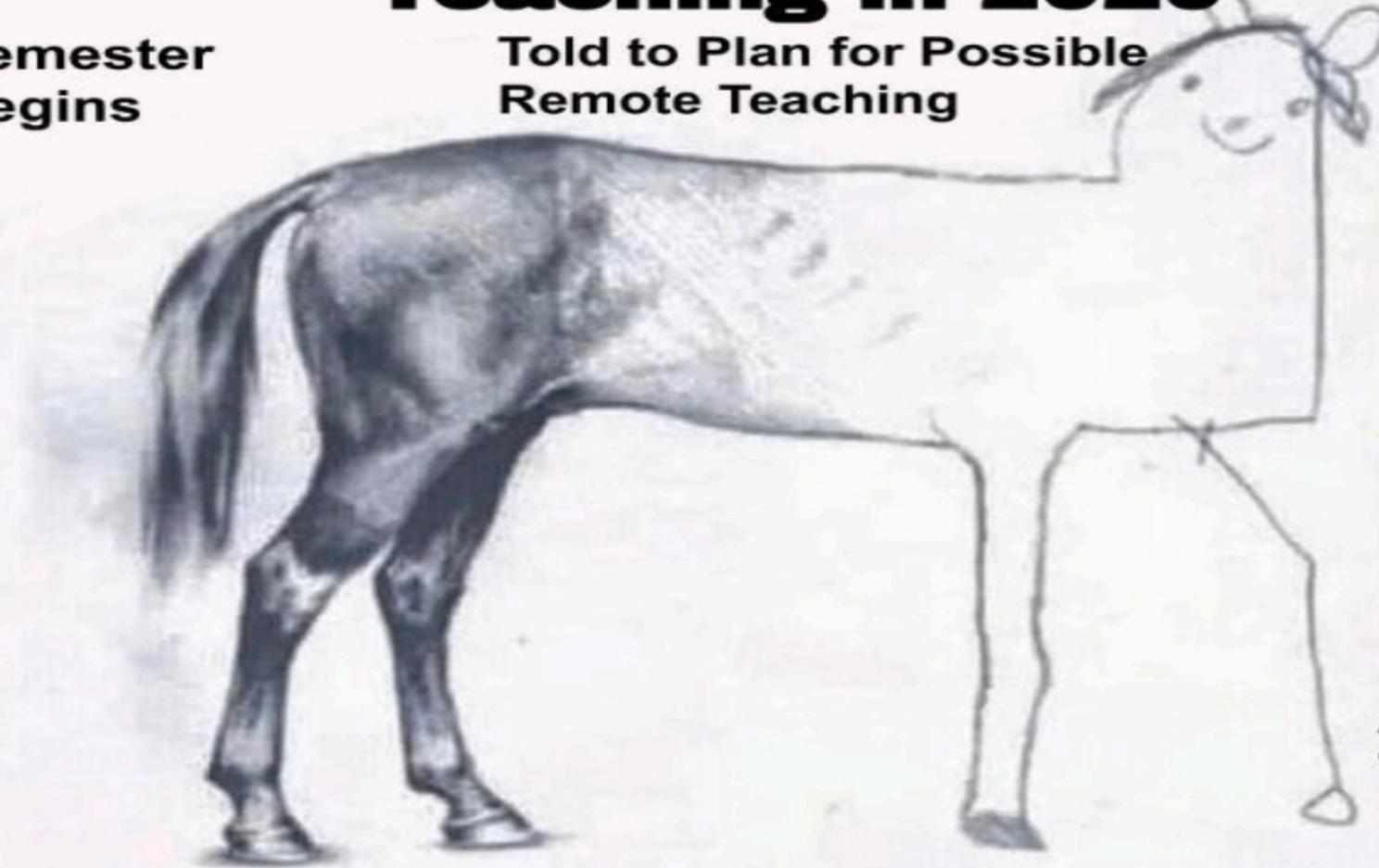
I made a thing. We're all stick-footin' it now, people.

Teaching in 2020

Semester Begins

Told to Plan for Possible Remote Teaching

Making Remote Teaching Plan



Actual Teaching

Goals of SoTL Focus Group

Where are we now?

What should we examine?

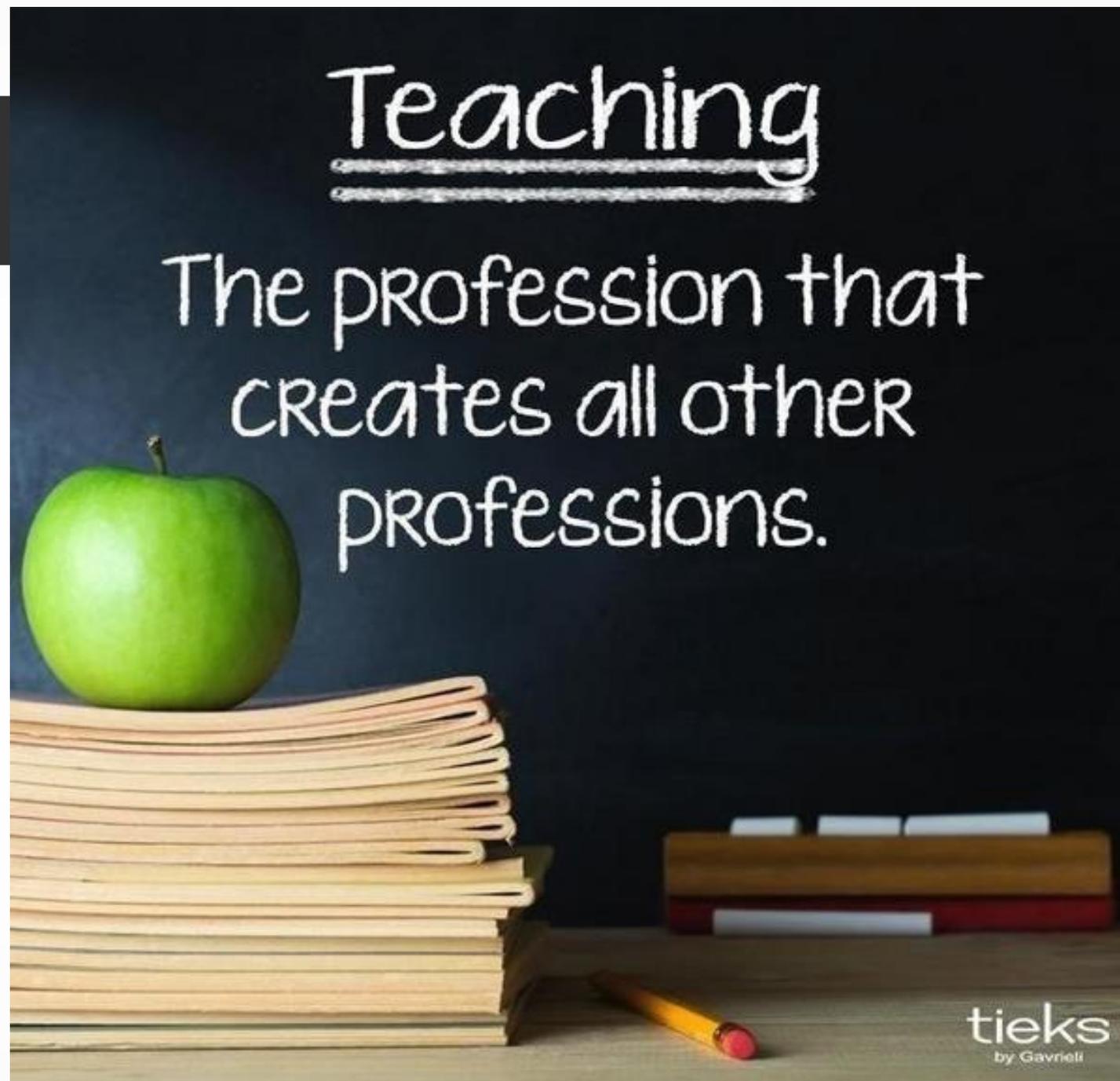
Links:

[SoTL FG Report 2017](#)

[SOTL FG Report 2018](#)

[SOTL FG Report 2019](#)

[Research Agenda](#)



General Themes from Previous Focus Groups

- Involvement in AERA offers the FEMA HiEd Community unique opportunities and benefits. Active participation with educational research organizations should be continued.
- Potential to identify critical needs to inform, incentivize, and support ongoing SoTL in EM education. Focus Group and SoTL SIG can serve as support/informational mechanism.
- Critical need for scientific research to ensure instructional design supports intended learning outcomes. Need to select pedagogy, andragogy, and design decisions on empirical evidence, not “hunches” or assumptive “best practices”
- Program quality, course quality, and instructor skill key components for developing discipline and HiEd profession



General Themes from Previous Focus Groups (cont)



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- Access and Inclusion must be considered to ensure the faculty and the students reflect the communities they will serve.
- Learning environments must support student inclusion and learning outcomes.
- Online learning environments present unique problems in terms of faculty preparation, student learning, safety, bullying, and disproportionate negative impacts on diverse students and faculty. Cannot assume the “democratization” of online education.
- Need to connect educational programs with EM profession and experiential learning.
- Need to inform curricula with empirical field research.

Questions SoTL for Discussion & Consideration



Is SoTL something all EM/HS faculty should do or is it just for a select few?



What are the SoTL questions of our disciplines? What have we already discovered? Are we successful integrating what has been discovered? Do we have discipline models of practice?



Are the EM/HS academic communities ready for a systematic and formal approach? Or perhaps are we more at the reflective teaching level, scholarly teaching or a mix?



How do we teach EM/HS discipline teachers? What are the professional development opportunities? Is there motivation?



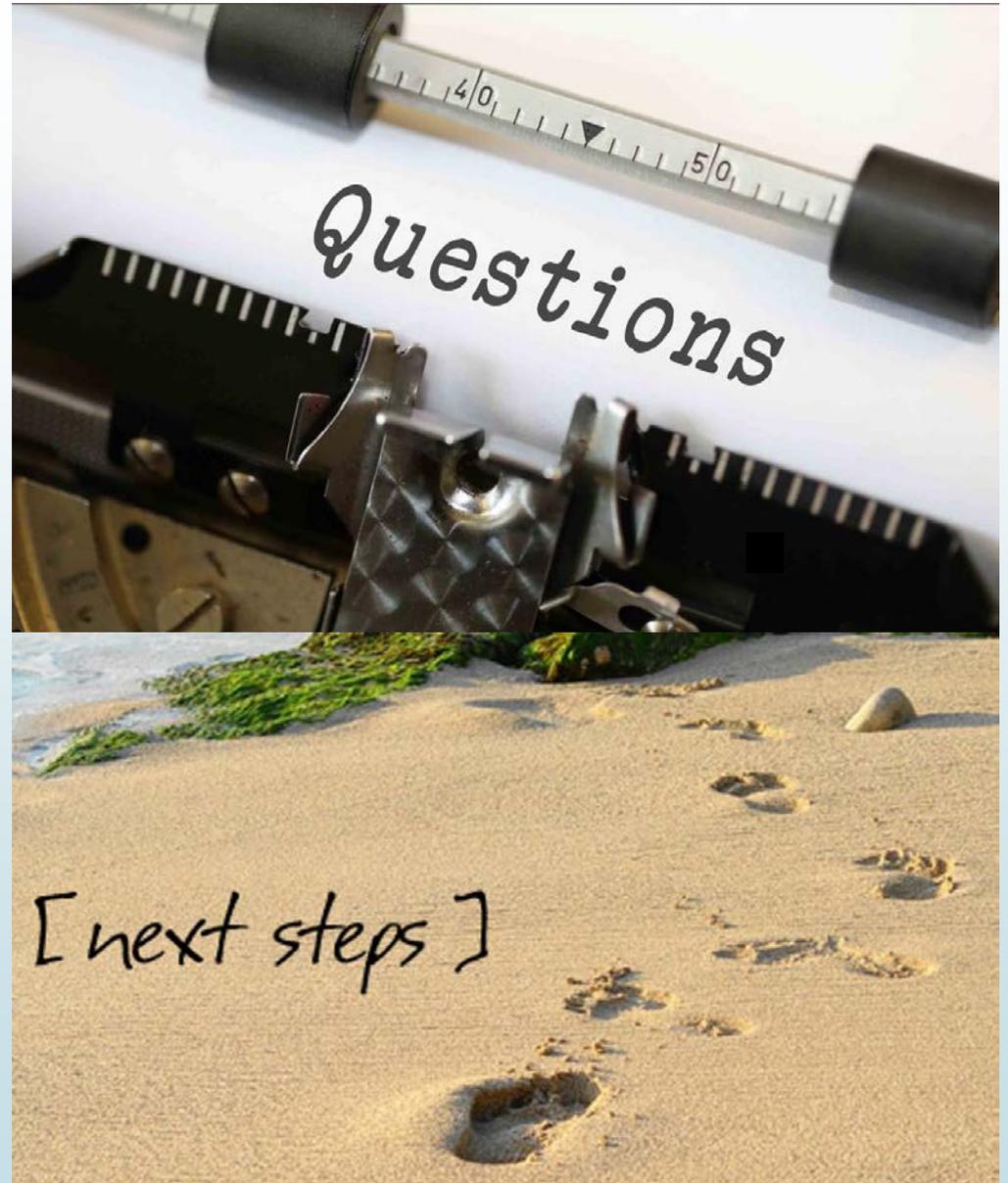
Can our SoTL work lead to quality (consistent) discipline teaching?



Do we have a systematic process? Are we teaching this to our faculty?

Questions & Next Steps

- ▶ Small Group Projects
- ▶ ASHE Conference Nov. 2020
- ▶ Join the SIG
- ▶ Questions





Subteam - Sim

- ▶ Critical analysis questions

- a. *How are disaster simulations being used to measure (evaluate?) learning?*

- b. *How can simulations be used in EM/HS higher education to develop the leadership skills needed to manage emergencies and crises?*

- ▶ Team

- ▶ Mark Landahl

- ▶ George Schwartz

- ▶ Stacy Willet



Thematic Analysis

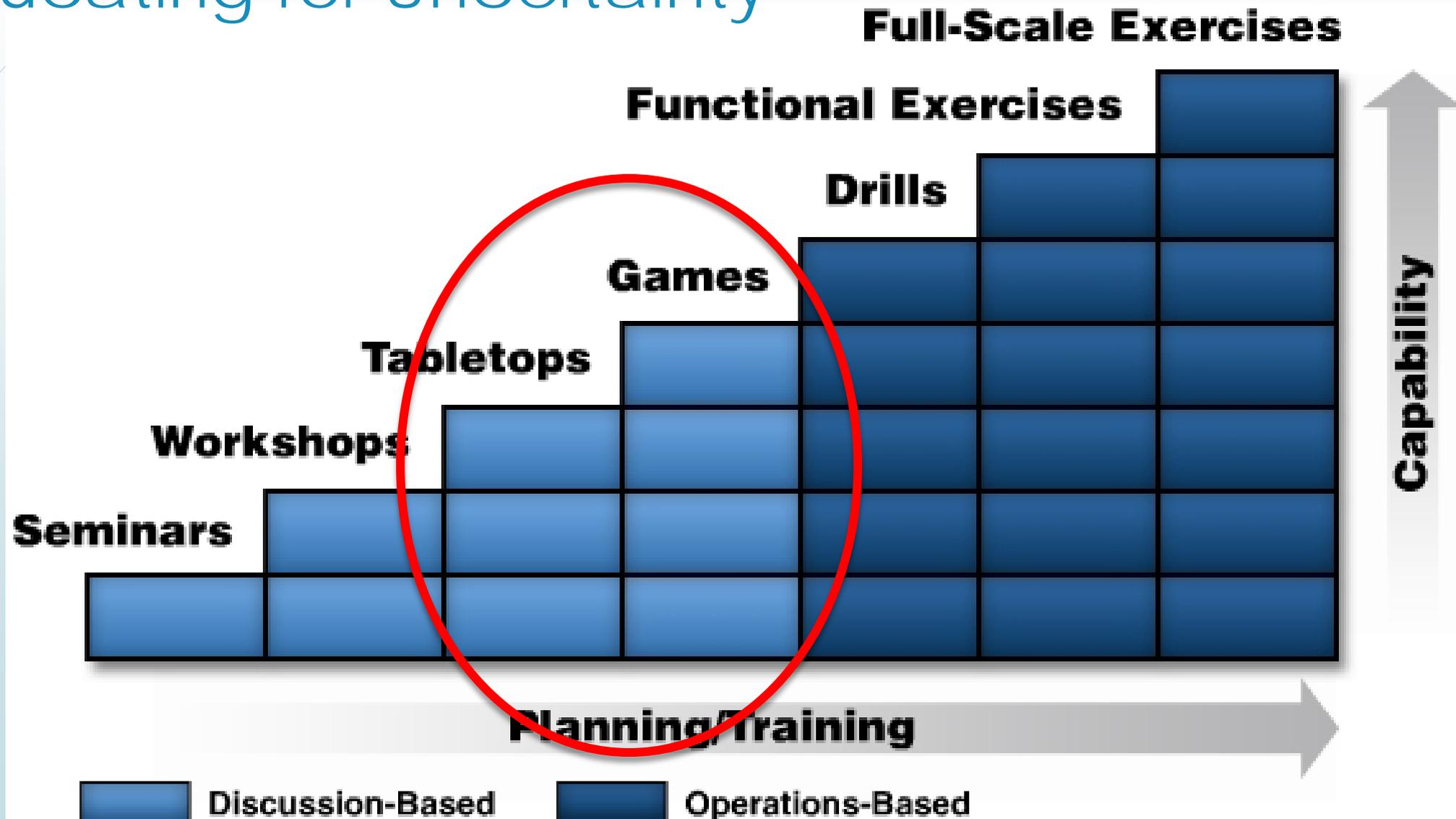
- ▶ Use of simulations for skills-development versus leadership development, or both? (2017)
- ▶ Learning Assessment
 - ▶ **Formative analysis** and professionalism (2017)
 - ▶ Improves student engagement and assessment experience (2018)
 - ▶ Simulations continue to grow as an assessment tool (2018); more information on assessments included in 2018 report
- ▶ Facilitates work-relevant learning
 - ▶ Formative analysis and **professionalism** (2017)
 - ▶ Simulates learning situations that are relevant in a real work context (2018)
- ▶ Decision-Making for Crisis Leadership
 - ▶ Simulations facilitate decision-making (2018)
 - ▶ Crisis Theory/Perspective provides a context for decision-making (2019)



Our Findings So Far...

1. The type of technological sophistication may not always matter to the simulation use. Whether in a simple role-playing exercise or an immersive VR reality "game," playing a role provides the learner with a more immersive learning experience that can be used to reinforce key concepts.
2. Leader simulations (leader serious games) allow learners to practice responses to challenging conditions in a safe, low-cost (relative to real life), and time-compressed environment. These "thin slices" of experience can better prepare a leader for when an emergency does occur.
3. Learner preparation, flexible action, and guided reflection afterwards are essential to achieve learning outcomes.
4. High student satisfaction but not able to fully test learning outcomes. Are positive effects beyond grades? Improved understanding, retention, and interest in subject matter?

Training for Certainty, Educating for Uncertainty



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More Questions

- ▶ Does EMHS curriculum and coursework move students from skills to mastery, to being able to make decisions under uncertainty? While they are moved from basic skills to higher skills, are they shaped into decision-makers along the way?
- ▶ How best to tie EM leader behaviors for simulations to the *Next Generation Core Competencies for Emergency Management Professionals*?



Subteam - Access & Inclusion in Online EM Education

- ▶ Online education and EM Hi Ed programs developed simultaneously
- ▶ Pandemic has highlighted access and inclusion issues
- ▶ Critical Analysis Question:
Can all faculty and students access online learning in equitable ways?

▶ Team

- ▶ Caroline Hackerott
- ▶ Alyssa Provencio
- ▶ Jennifer Santos-Hernández



Our Findings So Far...

1. 83% of all responding EM Hi Ed programs delivered at least some of their curriculum in an online environment. Of these programs, over 73% delivered all of their curricula online (Bennett, 2019).
2. 46% of those enrolled in EMHS were classified as non-traditional students (older adults, returners to higher education, or working full time). Additionally, over a quarter of EMHS students are first-generation and 17% hold military affiliation.
3. Despite the flexibility of the online classroom, there are challenges to the delivery of online courses. A few of these include institutional infrastructure, technological literacy of students and faculty, as well as accessibility.
4. At home, access to reliable, fast internet, as well as technology like computers may be difficult.
5. Lack of fluent technological literacy, as well as the ability to optimize online pedagogy are also issues.
6. Ensuring online materials are ADA compliant persists as problematic.



More Questions



- ▶ Who is responsible for ensuring faculty are educated and trained in the online environment?
- ▶ Why are some faculty, even in EMHS (where we embrace uncertainty), reluctant to learn about teaching in the online environment?
- ▶ Who is responsible for ensuring students are able to access and are included in the online environment?



Subteam PTA (preparing, teaching, assessment)

- ▶ Providing education online has existed for years.
- ▶ Online education is delivered in numerous ways.
- ▶ COVID outbreak is a unique event /opportunity
- ▶ Review of the literature to provide an overview of important concepts and principles regarding preparation, teaching and assessment in order to improve online instruction.

Team PTA

- ▶ Cameron Carlson
- ▶ David McEntire
- ▶ William Lahneman



Subteam PTA (preparing, teaching, assessment)

- ▶ There is a need for online instruction.
- ▶ This was present before Covid and magnified during/after.
- ▶ While we need online instruction, we need *excellent* online instruction.
- ▶ This paper will look at what can be done before, during and after instruction.
- ▶ In other words, it will look at the major concepts and lessons regarding preparation, teaching and assessment.



Subteam PTA (preparing, teaching, assessment)

What we know and what we don't know...

- ▶ Online instruction has existed for years in various forms.
- ▶ The literature indicates that there are a numerous factors which contribute to student success.
- ▶ This review will examine the literature to determine key factors leading to student success in the preparation, teaching and assessment of online education.
- ▶ What can we learn and apply from this review in order to enhance our collective HSEM online instructional capabilities.