

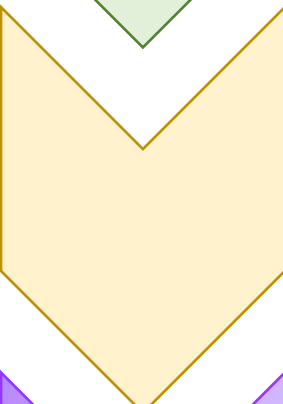
Impact of COVID-19 on Virtual Learning Modalities for Housestaff and Educators

December 16th, 2020






- 
- Introduction
 - Objectives


- 
- Overview of COVID-19 & Medical Education
 - Survey, Results & Tips

- 
- Virtual Education: Test Run
 - Future



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Impact of COVID-19 on Virtual Learning Modalities for Housestaff and Educators

Please post your comments in the chat box



Objectives

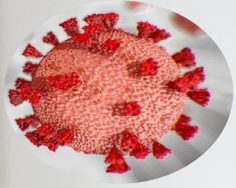
1. Discuss implications of COVID-19 on medical education
2. Review survey data of learners and educators during the pandemic
3. Understand the ways to improve medical education during the pandemic



March 11, 2020
PANDEMIC
COVID-19

NYACP

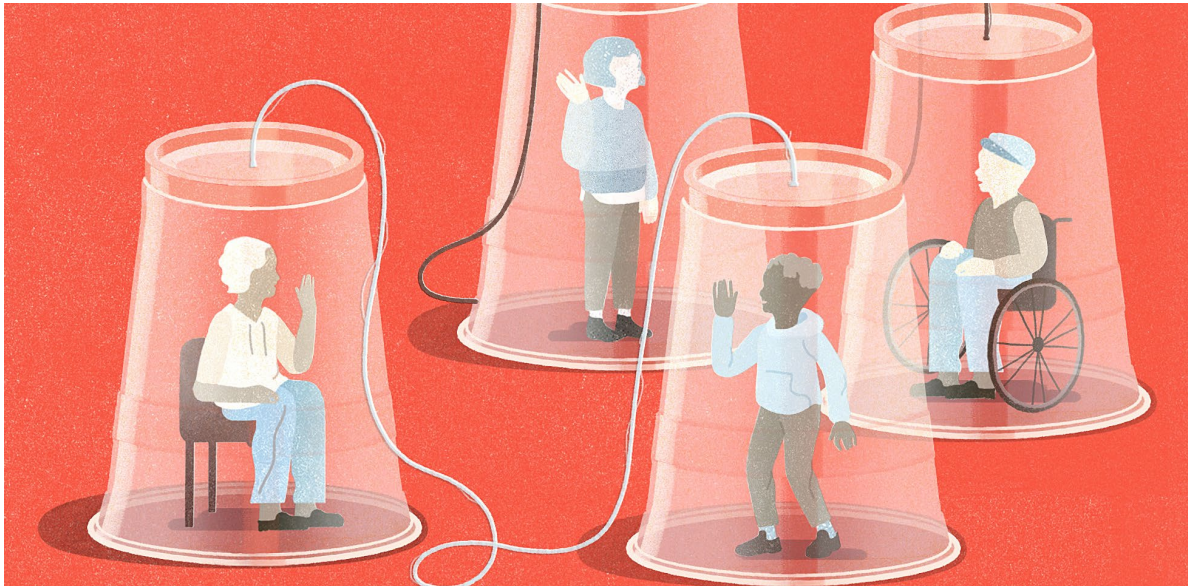




Social distancing

Trainees

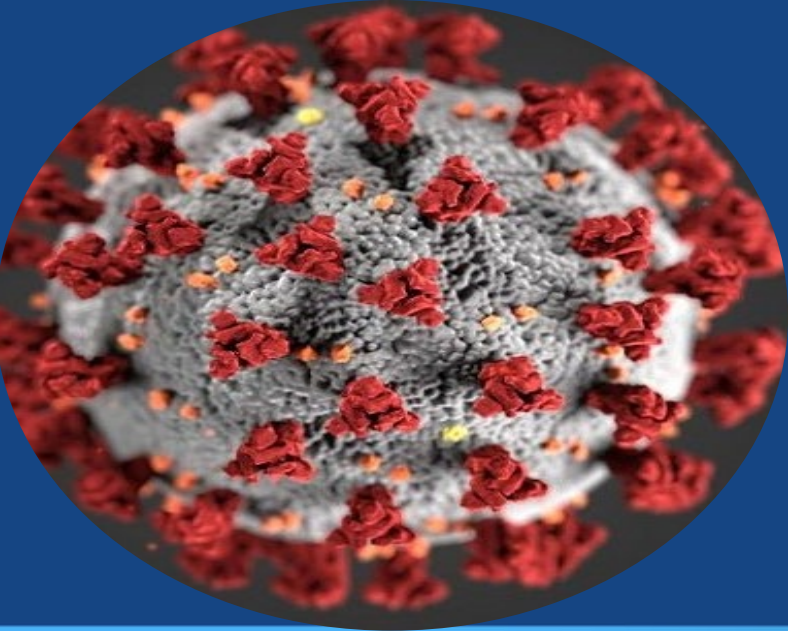
Faculty



- *Bedside Teaching*
- *Rounds on the floors*
- *Interactions with trainees*
- *Interactions with families*

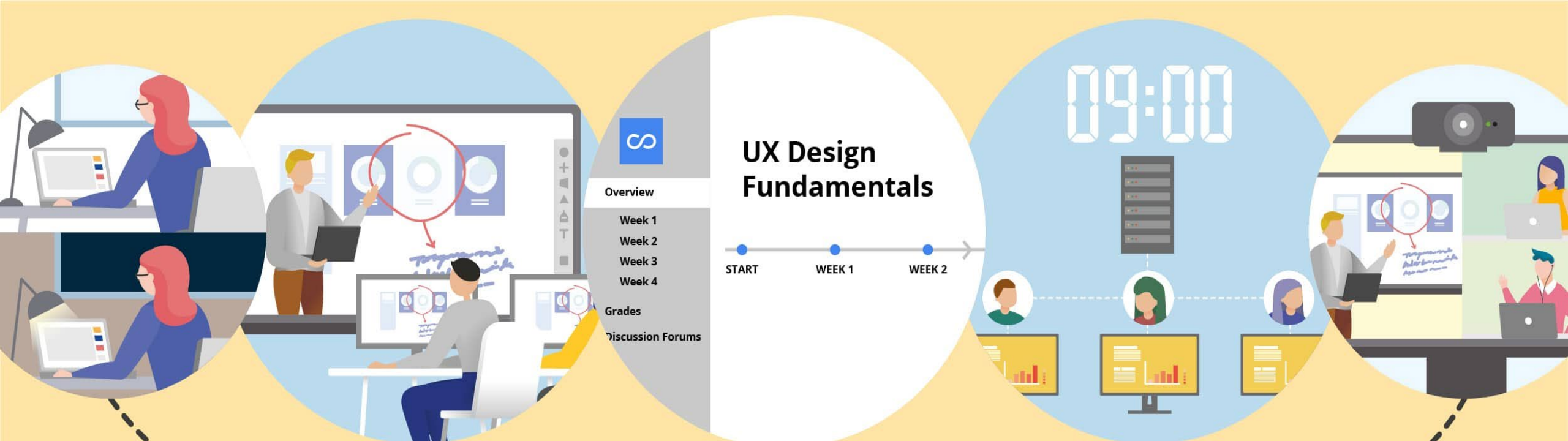
Social distancing

- *Tele Medicine*
- *Limited staff & faculty*
- *Reduction of in person visits*
- *No families*



disruption





Catalyst



**VIDEO
CONFERENCING**

SYNCHRONOUS

ASYNCHRONOUS

OPEN-SCHEDULE

FIXED TIME

New York



Early Career Task Force Committee

Resident Committee

Wellness Committee

TRAINEE COHORT

- Did your institution transition to new online education methods during the pandemic?
- Which platform was used for online education?
- How effective was online education format for your educational needs as compared to pre-pandemic?
- Was the online education format an adequate replacement for in-person education?
- How did COVID-19 impact your education flow on rounding teams?
- How would you rank the impact of COVID-19 on medical students pursuing Internal Medicine?
- How comfortable did you feel with your role?
- How did Covid-19 impact the house-staff education experience as a learner at your institution?
- How would you rank the impact of COVID-19 on your post-graduate training plans?
- Have the changes to education implemented during the peak of COVID-19 been sustained post-peak? Yes/No
- Please share additional comments/concerns about your Covid-19 experience.

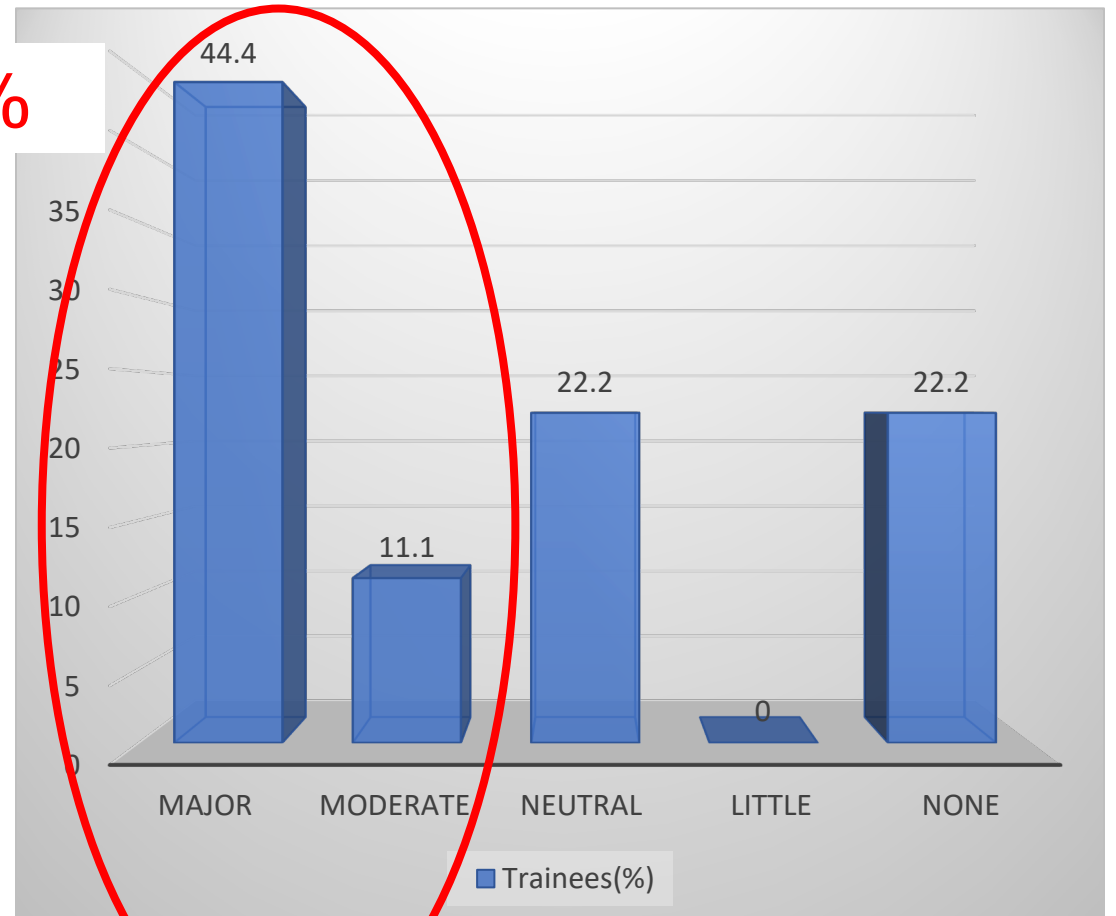
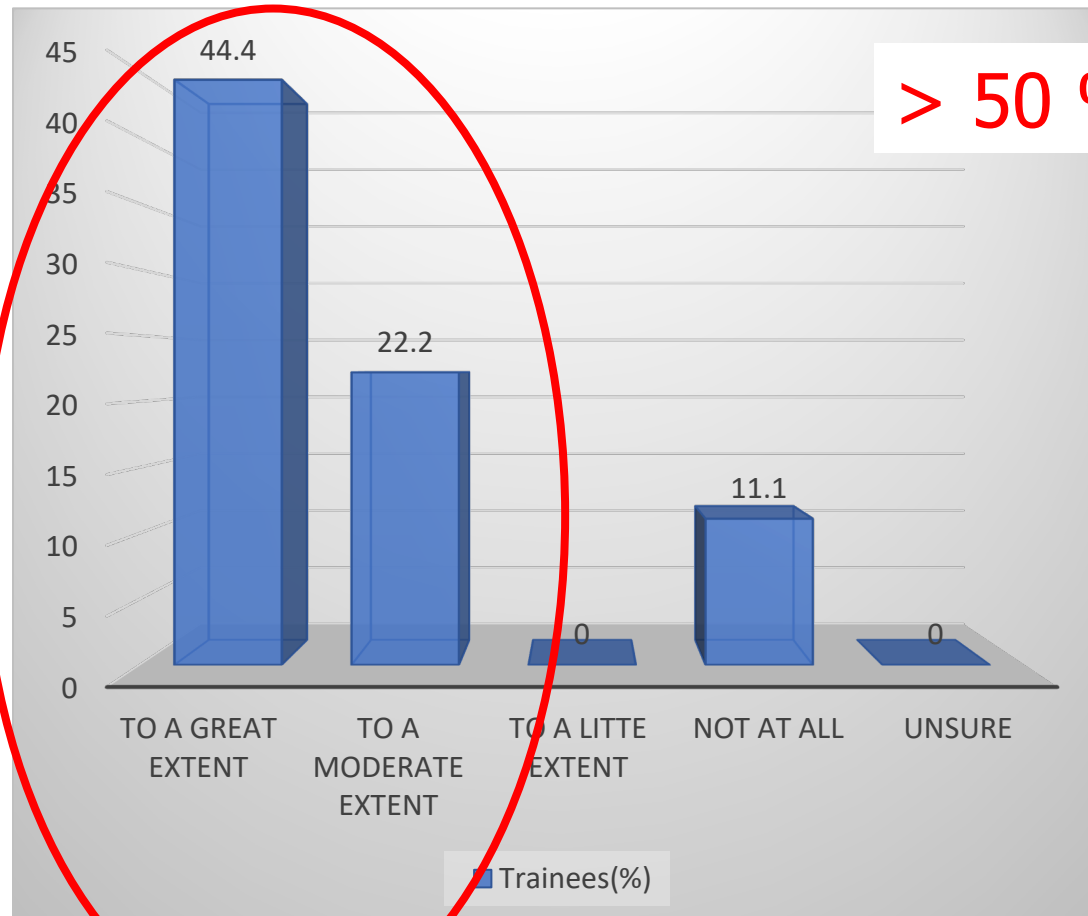
FACULTY COHORT

- Did your residency or fellowship program transition to new online education methods during the pandemic?
- Which platform was used for online education?
- How successful was online education with engagement of trainees as compared to pre-pandemic?
- How did Covid-19 impact your ability to conduct education at your institution?
- How did COVID-19 change the education on team rounds?
- Name 1-2 ways in which education plans can be modified in preparation for a second wave of COVID-19.
- How much did COVID-19 impact your level of teaching involvement?
- Have the changes to education implemented during the peak of COVID-19 been sustained post-peak?
- Please share additional comments/concerns about the impact of COVID-19 on education.



How would you rank the impact of COVID-19 on medical students pursuing Internal Medicine?

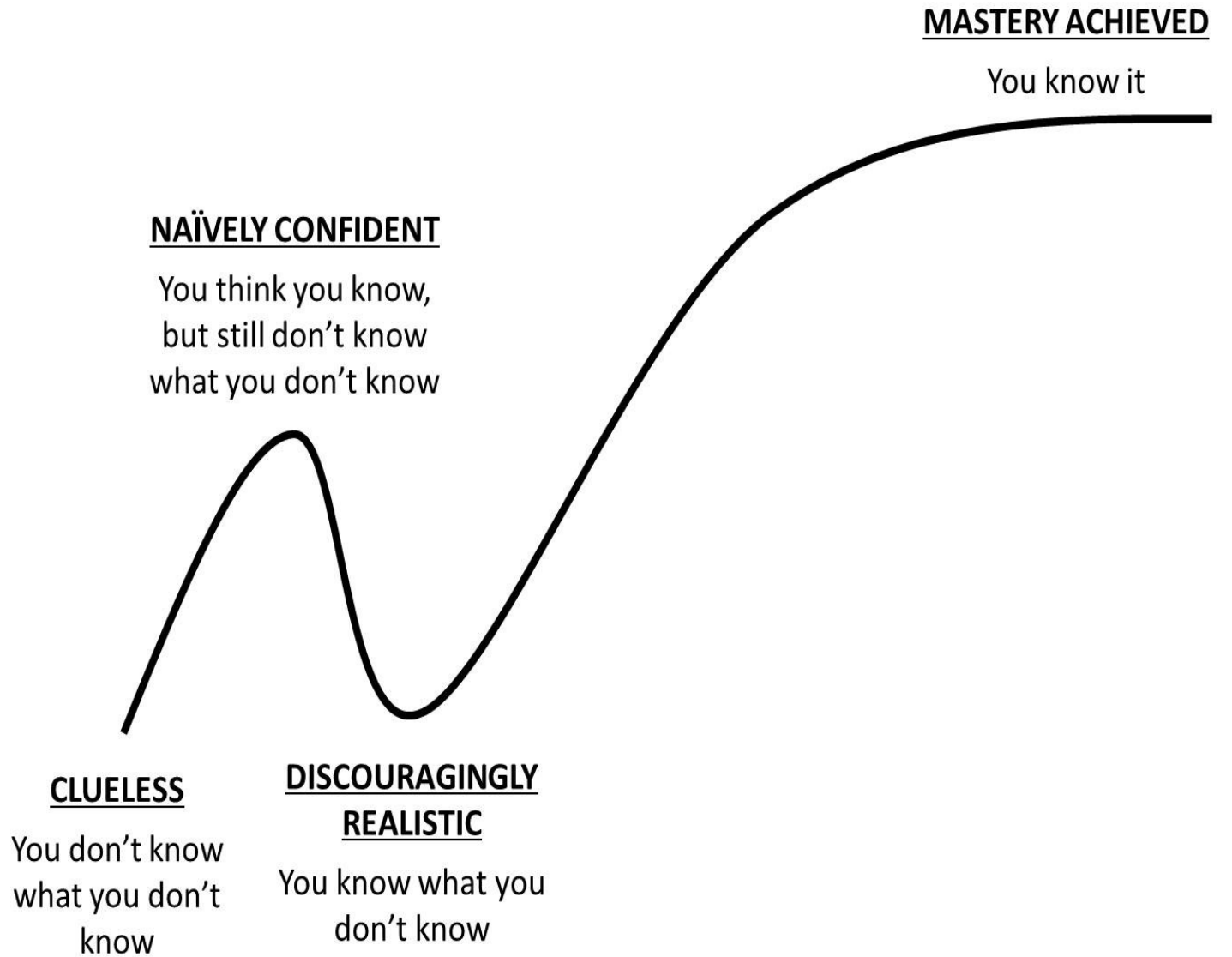
How would you rank the impact of COVID-19 on your post-graduate training plans?



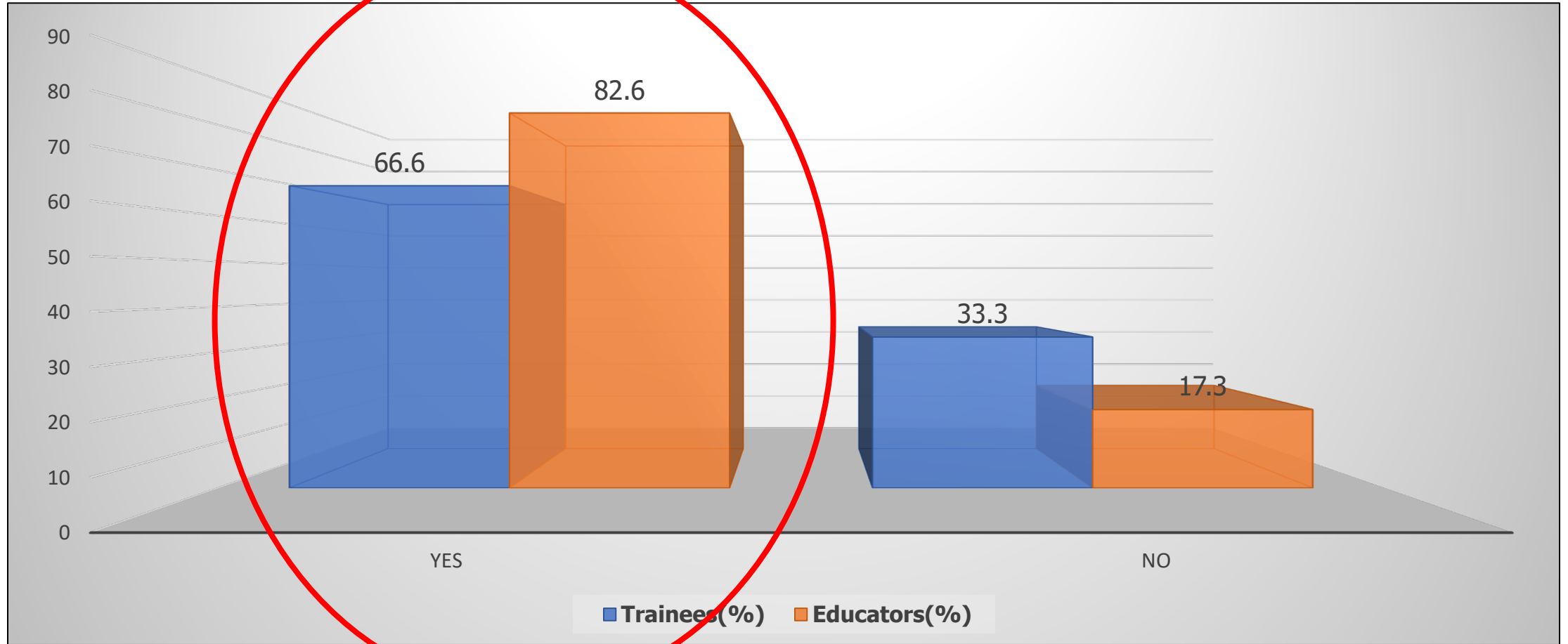


LOSS of

Medical Community
Bed side teaching
In person Interaction
Mentoring
Peer Support
Networking

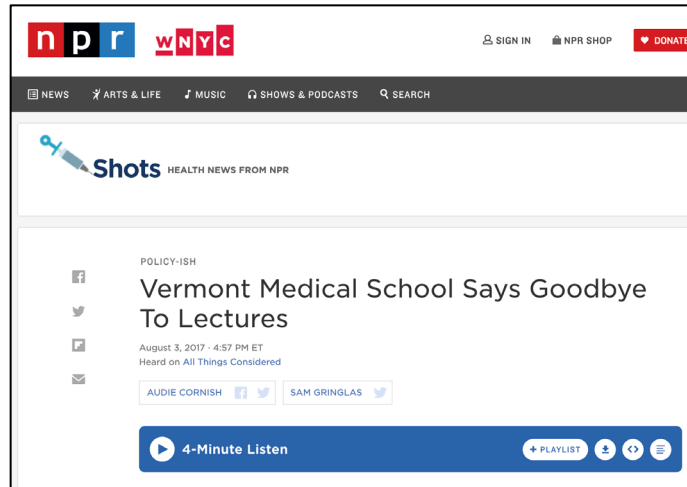


Have the changes to education implemented during the peak of COVID-19 been sustained post-peak?



Accelerated Transformation in Medical Education

2017



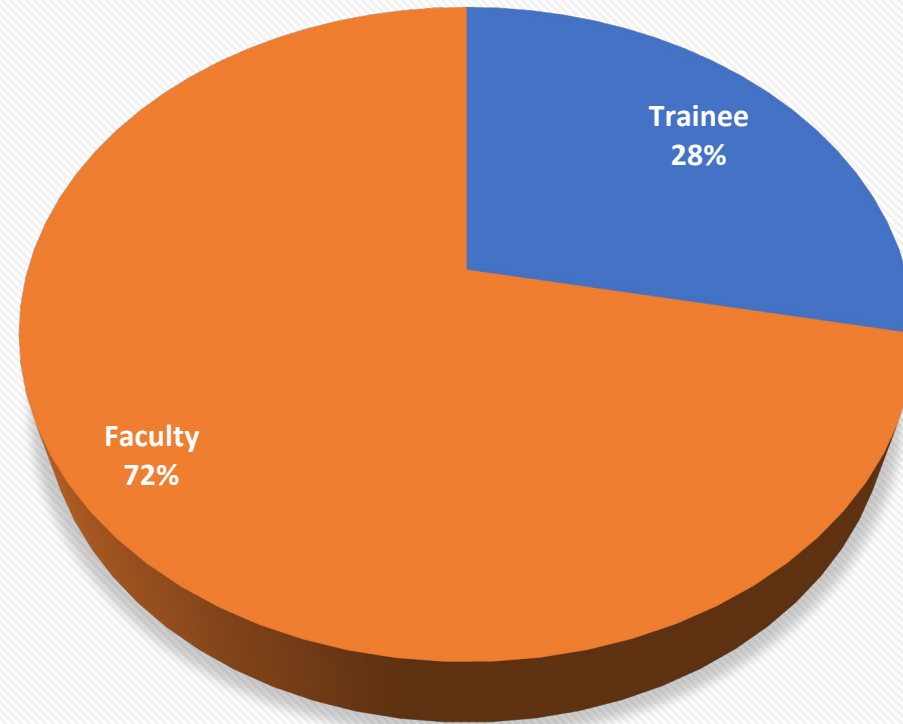
Transformative efforts in medicine and medical education that were in progress were accelerated by the pandemic:

- Distance learning, recorded lectures
- Virtual and simulated learning
- Interprofessional care
- Scope of practice
- Professional/personal wellbeing
- Disparities in healthcare
- Social justice

2020

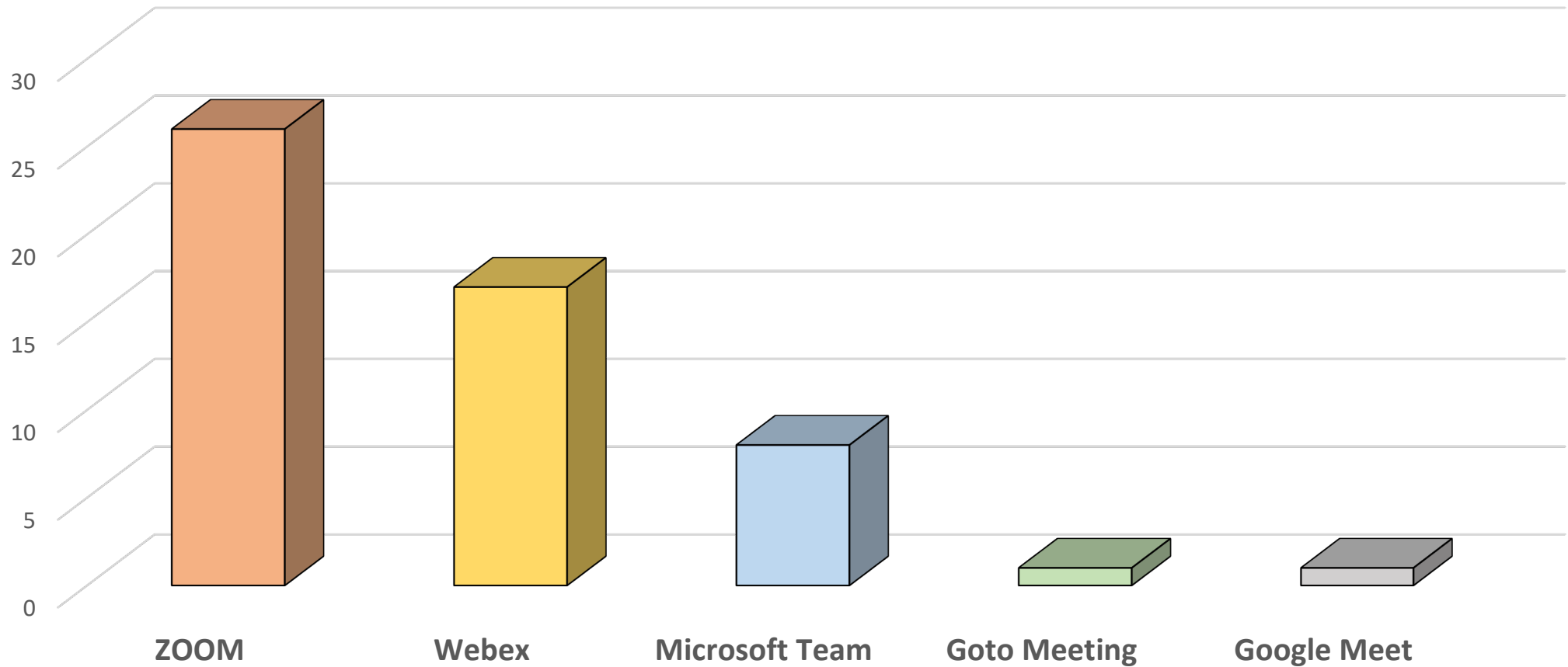


Did your residency or fellowship program transition to new online education methods during the Pandemic?

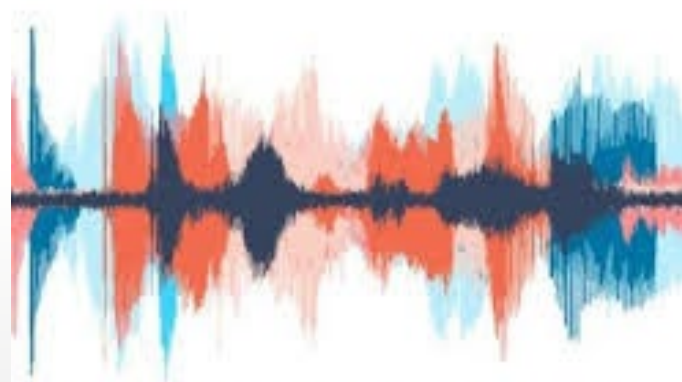
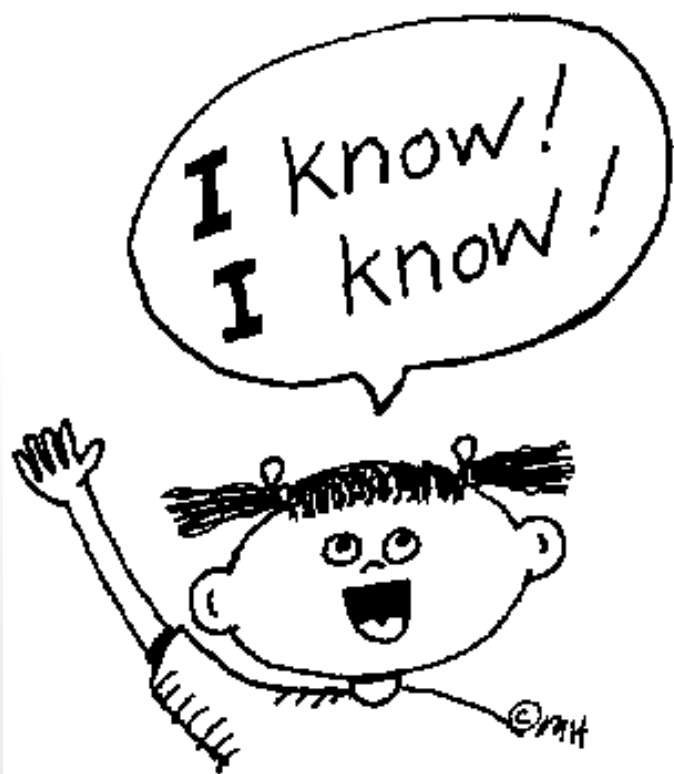


■ Trainee ■ Faculty

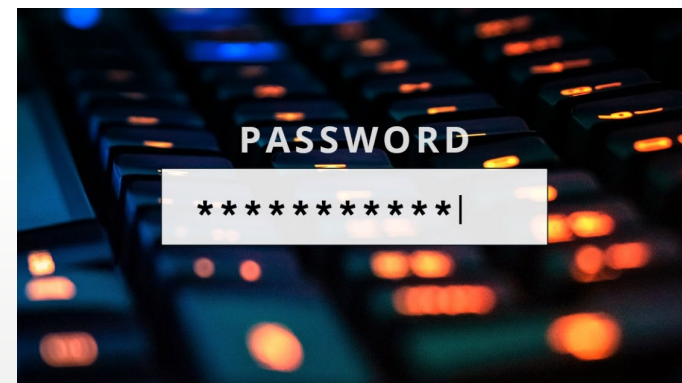
Which Platform(s) did you use?







Remove Background Noise

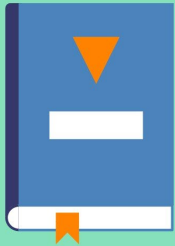




 **Poll Everywhere**



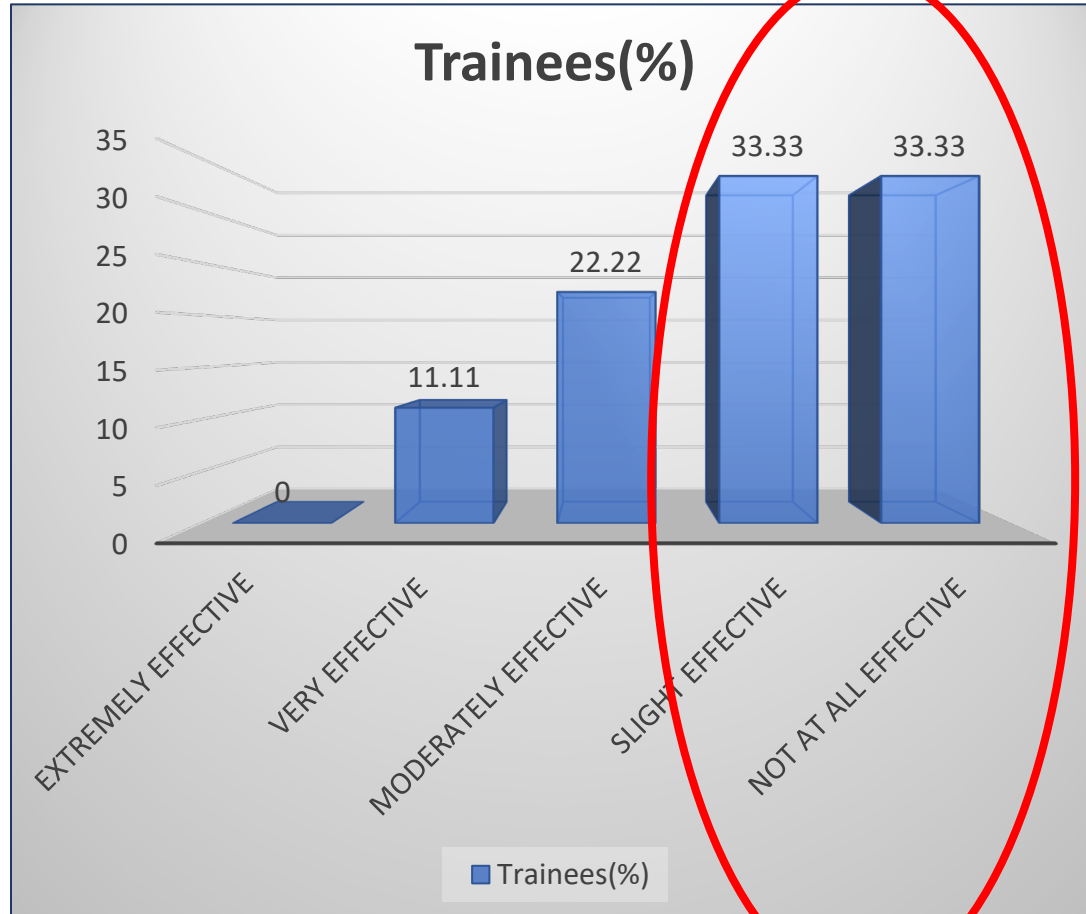
how to annotate



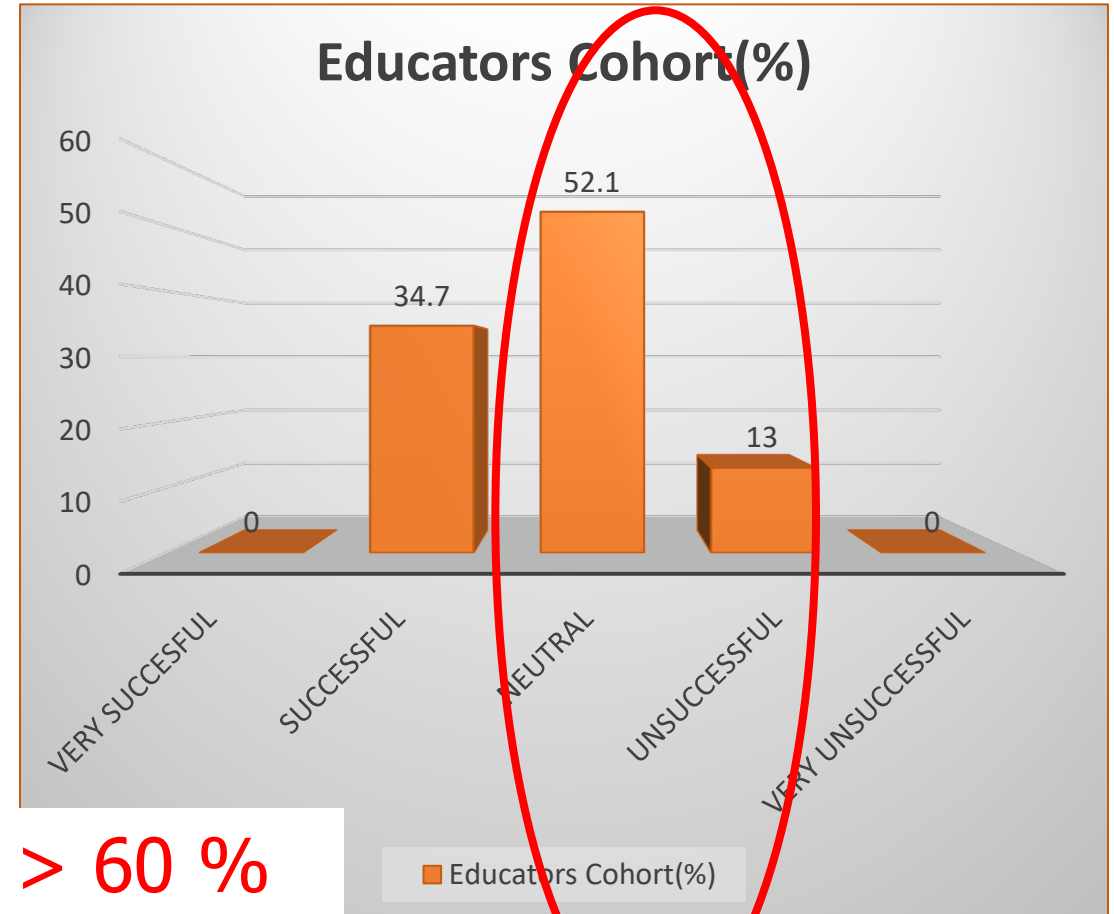
● REC



How effective was online education format for your educational needs as compared to pre-pandemic?



How successful was online education with engagement of trainees as compared to pre-pandemic?



> 60 %

what are other
words for
unprepared?

unready, unrehearsed, impromptu,
extemporaneous, offhand,
extempore, untrained,
spontaneous, improvised

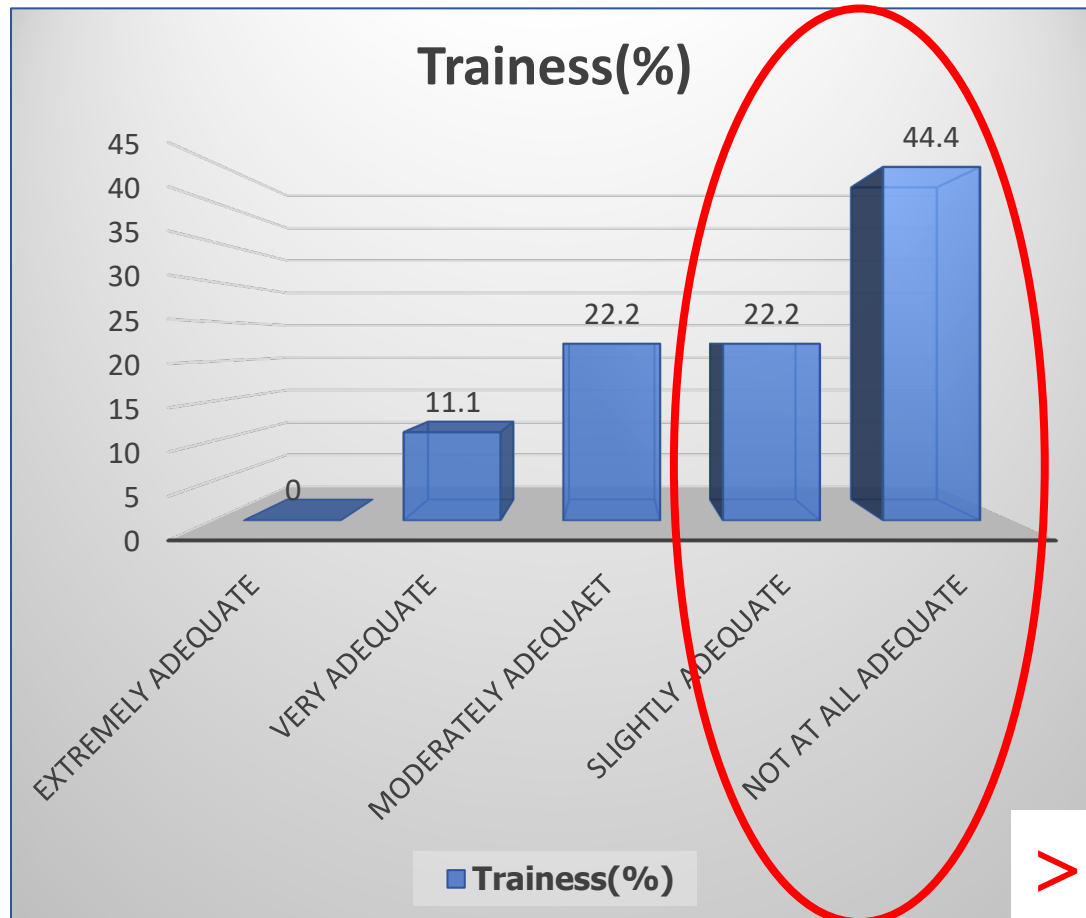


"THE COMFORT ZONE"

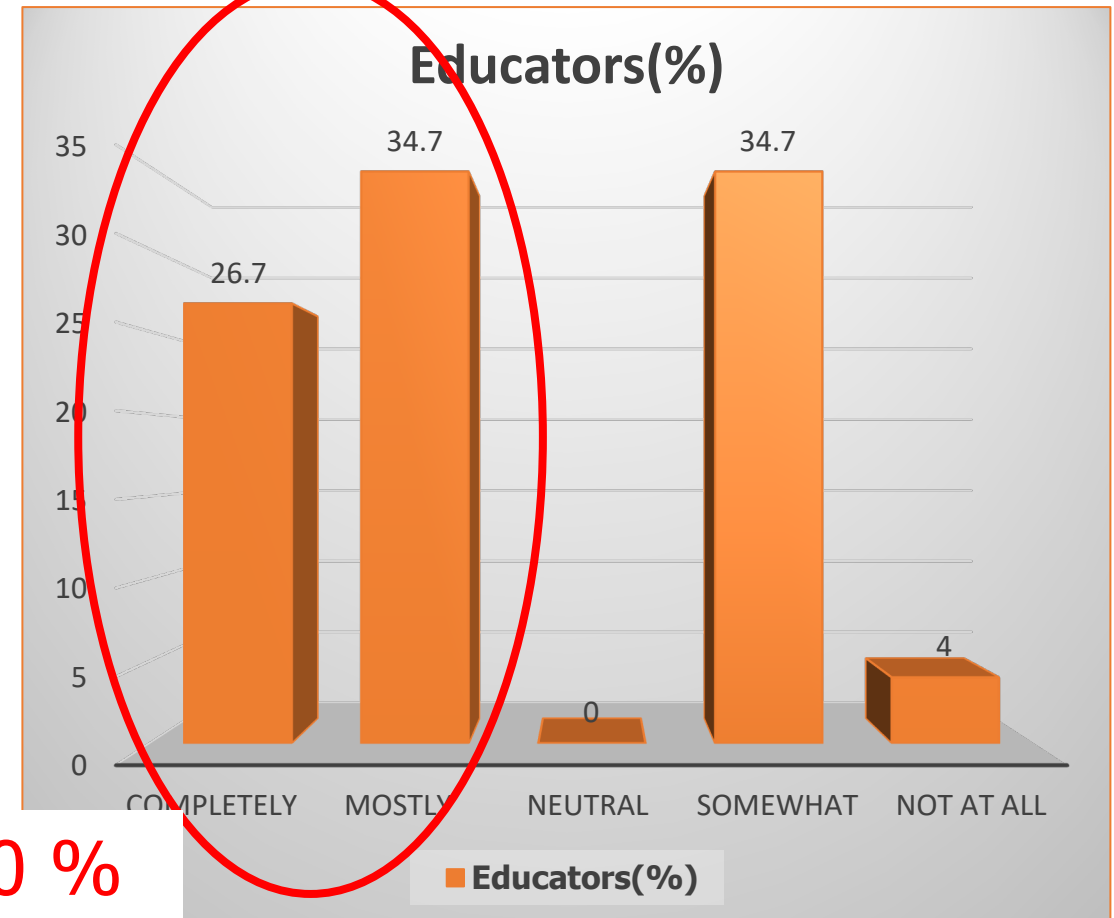


T R A N S I T I O N

Was the online education format an adequate replacement for in-person education?



How much did COVID-19 impact your level of teaching involvement?



> 60 %

How did Covid-19 impact the house-staff education experience as a learner at your institution?

"Severely affected the education."

"Less Formal learning."

"We just did our jobs as always."

"Learning was initially put on hold. Were expected to read on our own while we figured out our pandemic response."

"Extremely stressful & learning incredibly diminished."

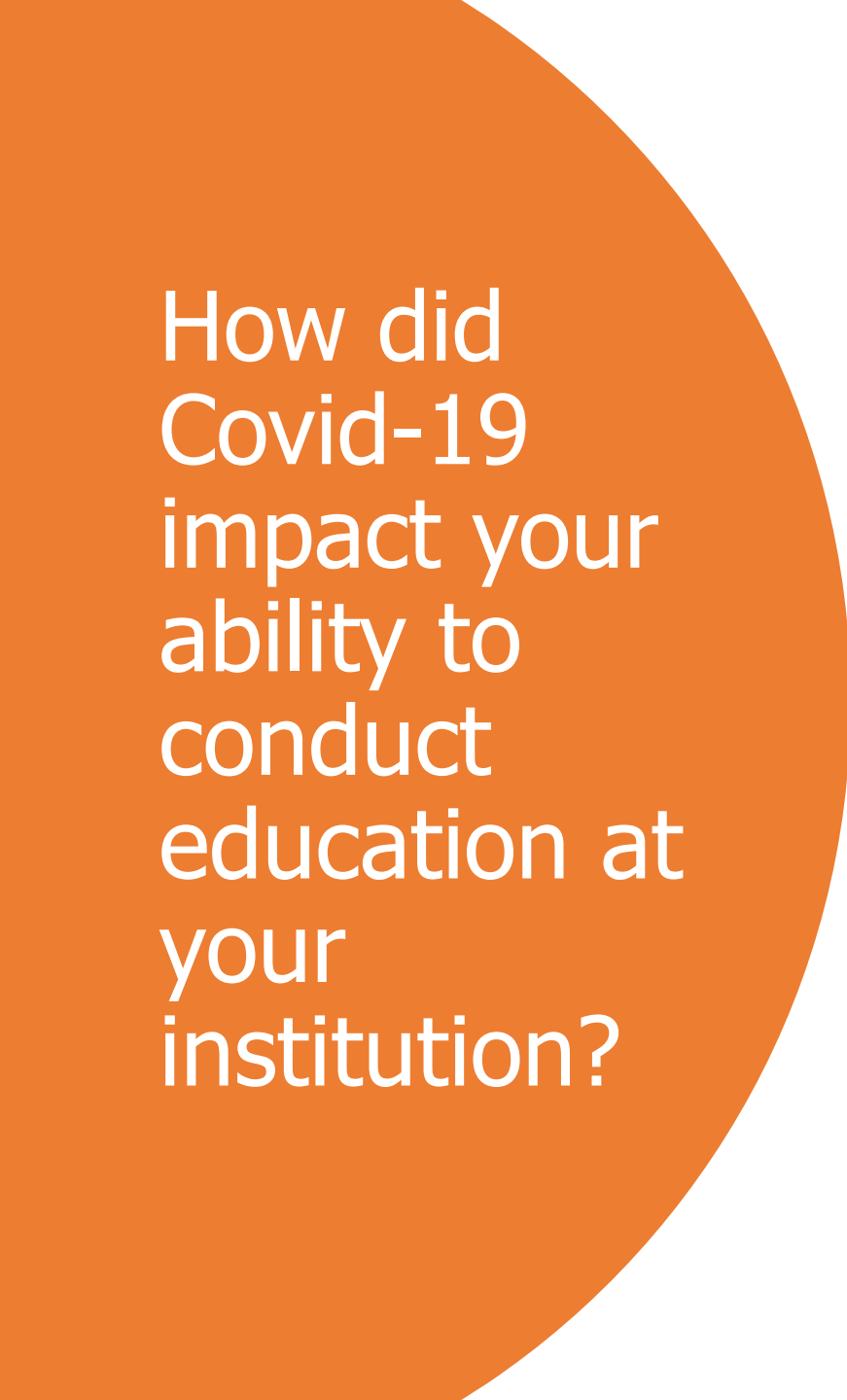
How did Covid-19 impact the house-staff education experience as a learner at your institution?

"Extremely stressful & learning was incredibly diminished."

We transitioned from subspecialty fellowship training (cardiology) to a more generalist, critical care based experience

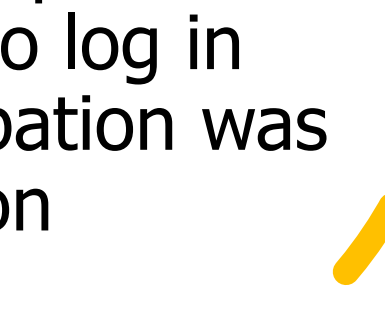
"After 3 months: went back to regular learning only via Zoom instead of in person, or in person in small groups and broadcasted on Zoom for the rest of the students and residents."

The education experience : really impacted due to change in rotations & the deployment of every of every resident

A large orange circle on the left side of the slide, containing the text.

How did
Covid-19
impact your
ability to
conduct
education at
your
institution?

"COVID pandemic negatively impacted over ability to provide educational activities, we suspended regular lectures and morning report. Education was provided only during the rounds at the height of pandemic. Once the situation started improving (May), we established morning report and subsequently restarted noon lectures, but it was hard to engage the trainees over virtual platforms. it was definitely easy for them to log in into the conference, but participation was not the same as during in-person activities."

A yellow dashed line in the bottom right corner of the slide.

How did Covid-19 impact your ability to conduct education at your institution?

"Usage of online platform was very cumbersome and limited interactivity."

"very negative."

"Essentially broke our use of active learning between residents and faculty."

"Less bedside teaching, including history taking skills and physical exam."

"Medical students, pharmacy students kept remote; majority of residents pulled for inpatient/ICU coverage."

How did Covid-19 impact your ability to conduct education at your institution?

"Very stressful to provide the volume of care & get back on our feet educationally."

Out of sight so not out of mind.

"Still don't know how effective & how much resident's have been learning through online sessions."

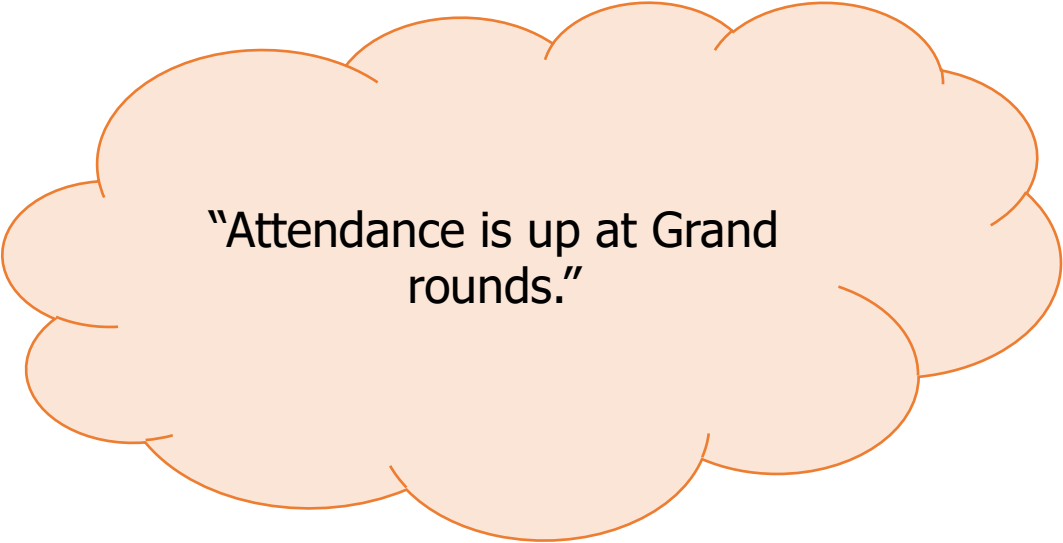
"Daily rounds were circumscribed by the need to socially distance. Zoom lectures did not allow adequate interaction with residents. "

How did Covid-19 impact your ability to conduct education at your institution?

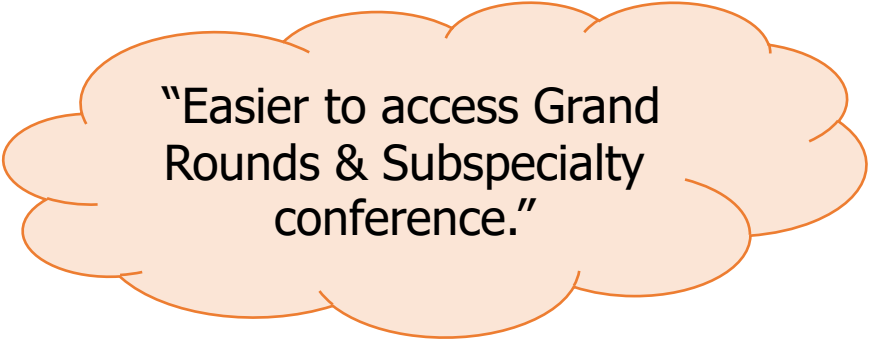
“Frequent interruption by nursing during didactics because residents were signing in remotely from their workrooms in the hospital. ”

“Numerous technical & procedural challenges encountered. Unable to fully engage learners. Exam and other demonstrations severely curtailed. Considerable instability and quality issues with streams and conferences.”

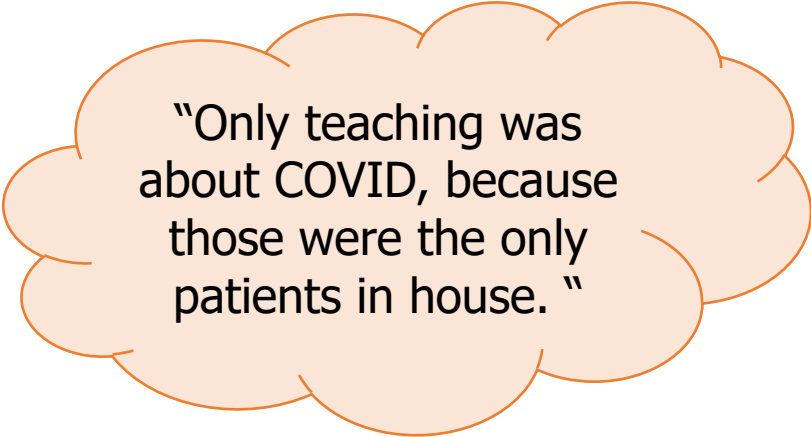
How did Covid-19 impact your ability to conduct education at your institution?



"Attendance is up at Grand rounds."




"Easier to access Grand Rounds & Subspecialty conference."

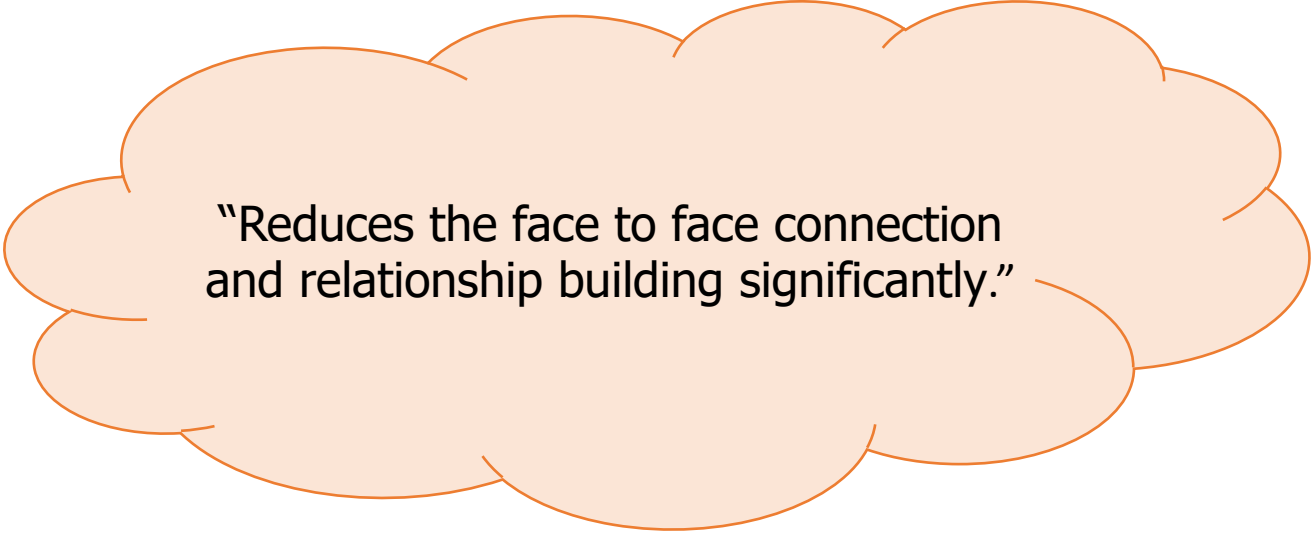


"Only teaching was about COVID, because those were the only patients in house. "

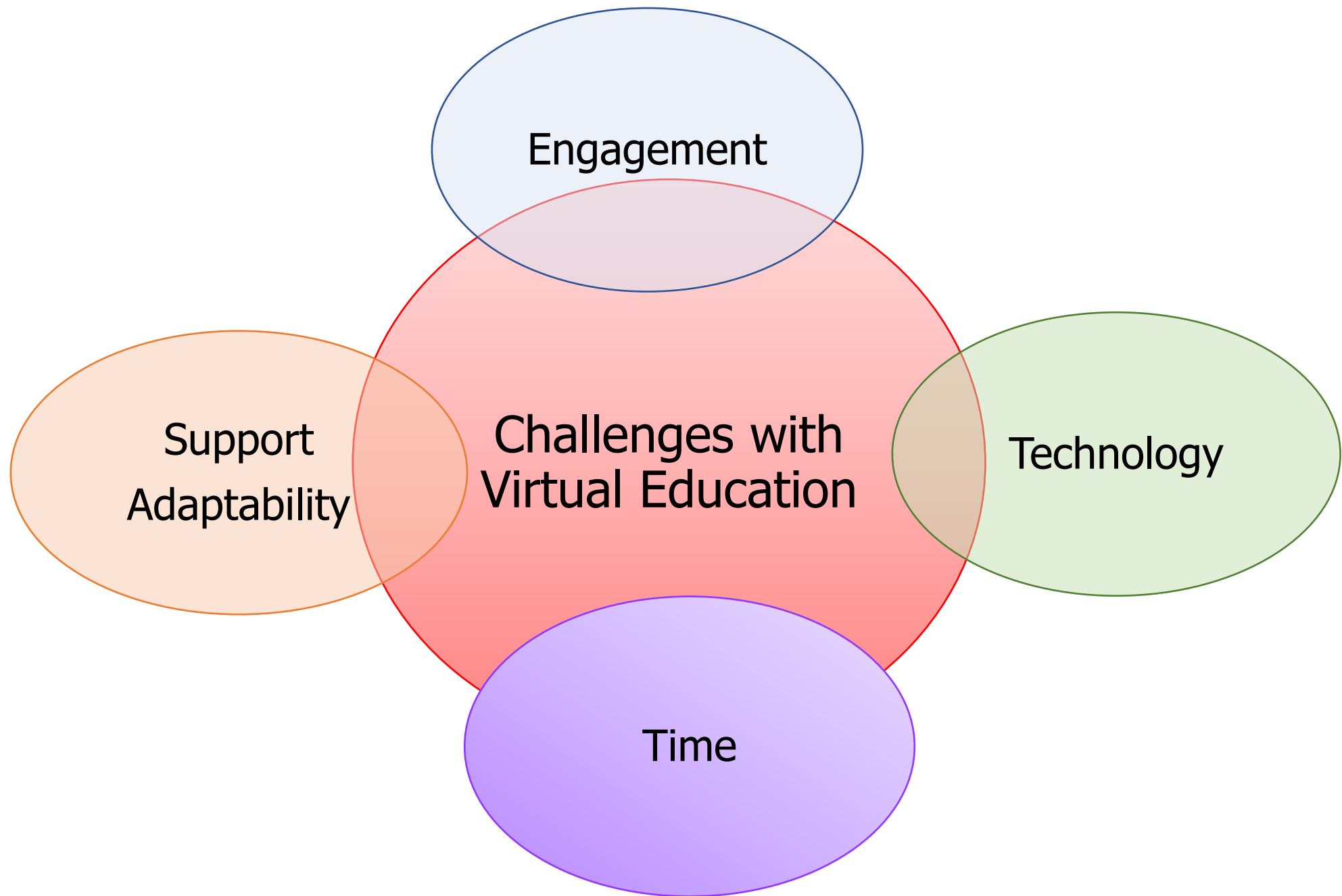
How did Covid-19 impact your ability to conduct education at your institution?



"Conferences continued virtually but resident engagement is a challenge and continue to be."



"Reduces the face to face connection and relationship building significantly."



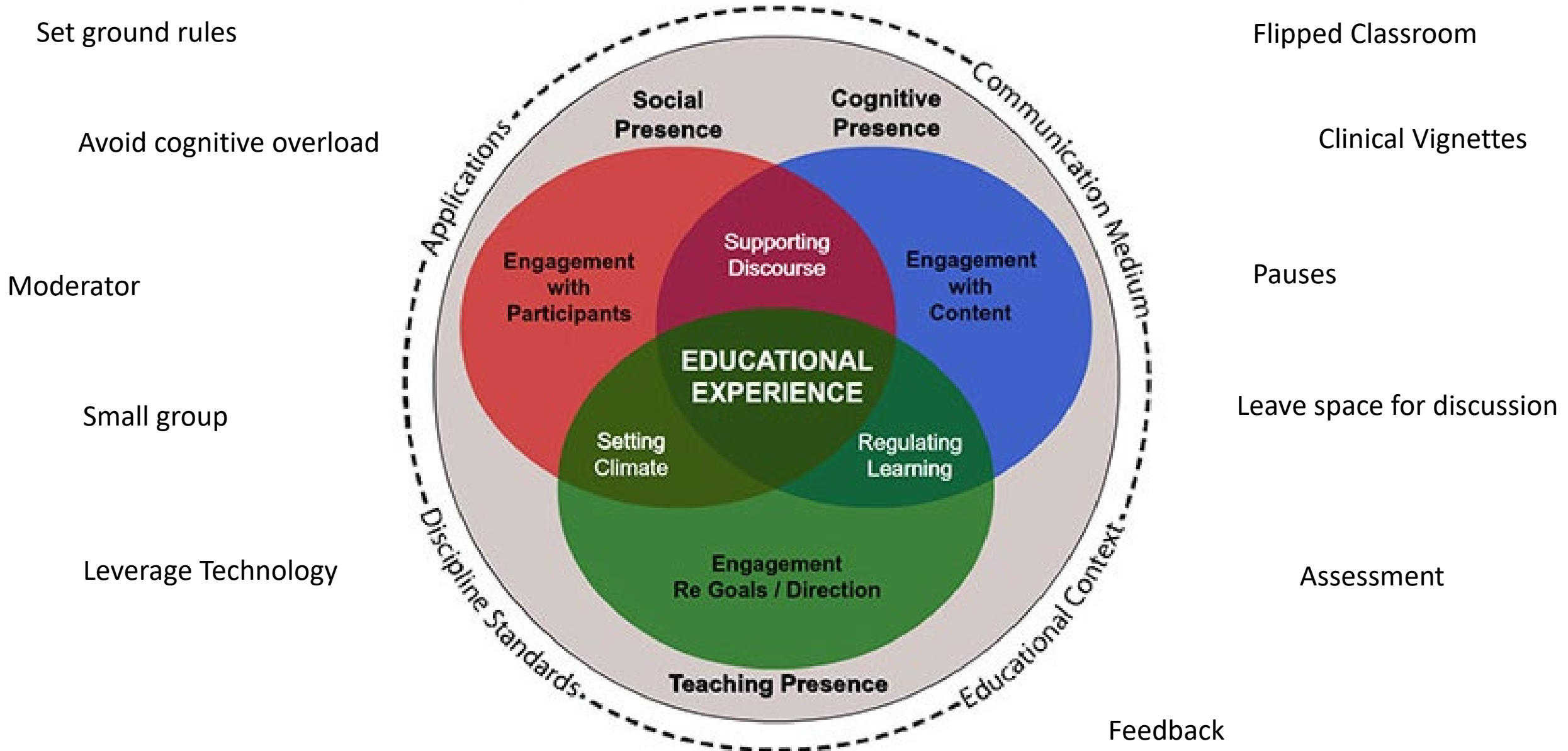


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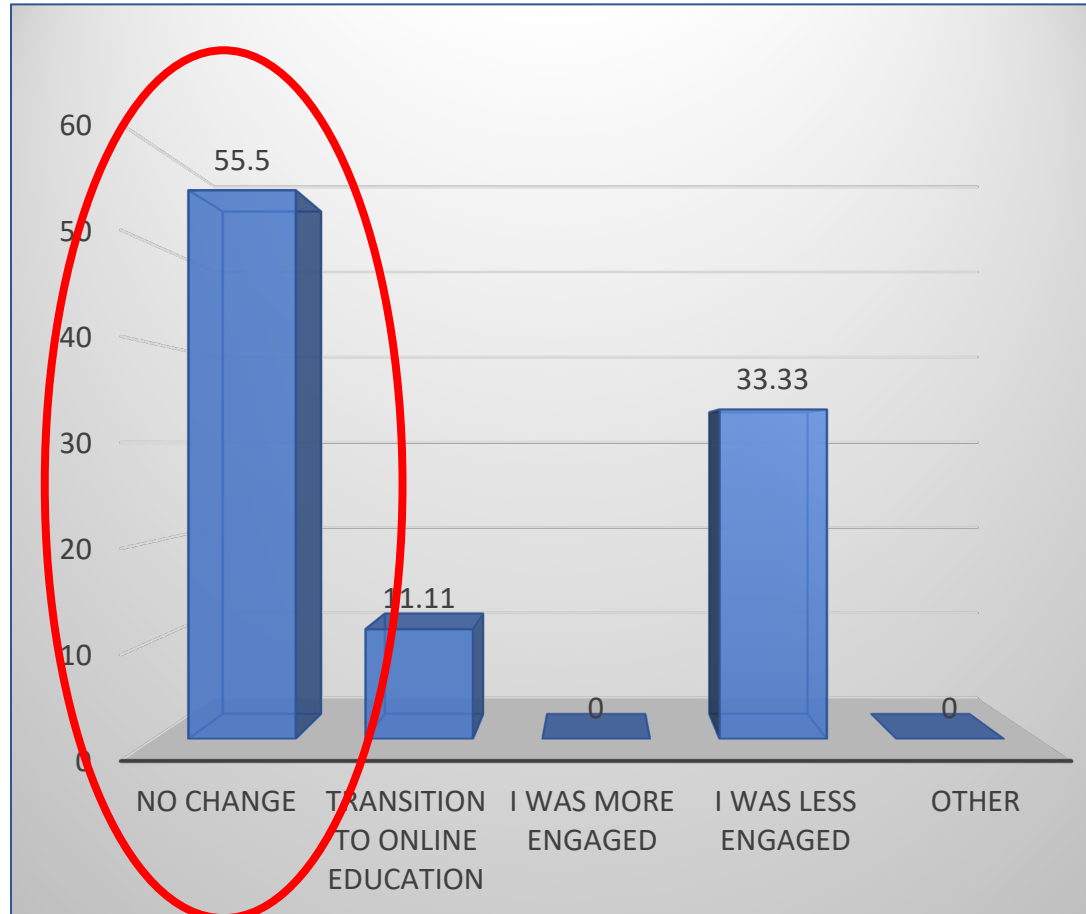
Creating an educational environment



The Fab Five for learner engagement (“PEACE”)

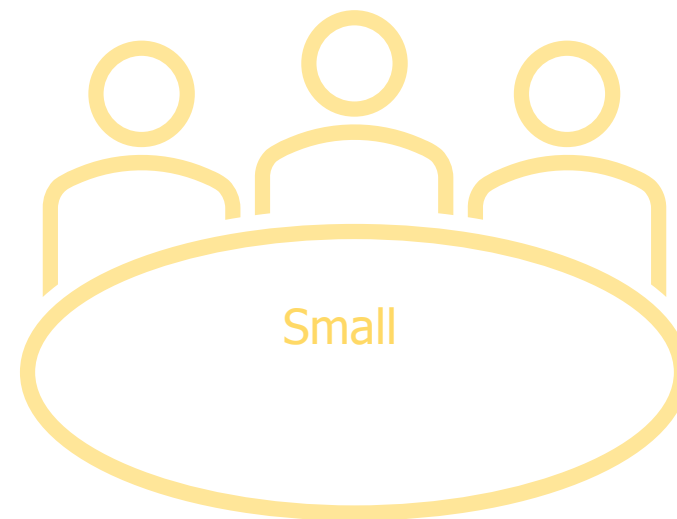
- **Prepare:** Practice using the actual technological tools & **delegate** technical support.
- **Establish:** Set “ground rules” for the session.
Example: Cameras on, mics muted, specify ways to ask questions (i.e. chat room or other).
- **Address:** Make **direct, concrete asks** of learners.
Example: Call on an individual to read a clinical stem/case scenario.
- **Connect:** Make **interpersonal connections** prior to starting the session.
Example: Greet individual participants by name as they enter the session.
- **Engage:** Familiarize, practice with, and use **interactive features**.
Example: Breakout room
Polling (directpoll.com)
Annotation

How did COVID-19 impact your education flow on rounding teams?



How did COVID-19 change the education on team rounds?







Impact of COVID-19 on Virtual Learning Modalities for Housestaff and Educators

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Name 1-2 ways in which education plans can be modified in preparation for a second wave of COVID-19

"Improved communication."

"Prepare short mini topics for discussion related to pandemic."

"The Johns Hopkins COVID Rounds were helpful lectures."

"benefit from centralized source of education, like lectures and updates given by the Faculty from different institutions and available to all programs."

Name 1-2 ways in which education plans can be modified in preparation for a second wave of COVID-19

"decreasing group size."

"Use of larger indoor spaces."

"residents need uninterrupted time for didactics, no matter where they occur and in what format."

"Faster pivot to telehealth for outpatient visits."

Impact of COVID-19 on Virtual Learning Modalities for Housestaff and Educators

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Challenges with Virtual Teaching


Exercise:


You are giving a lecture via Zoom, and jump right into the talk. On the next slide see if you can spot all the things wrong...






User1



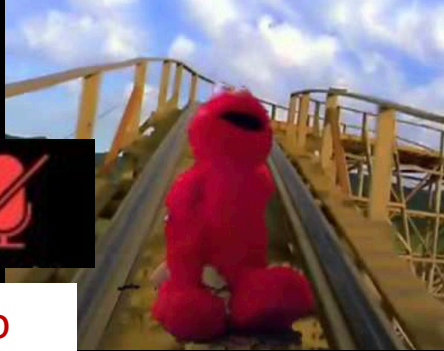



Can anyone hear me?

Elmo

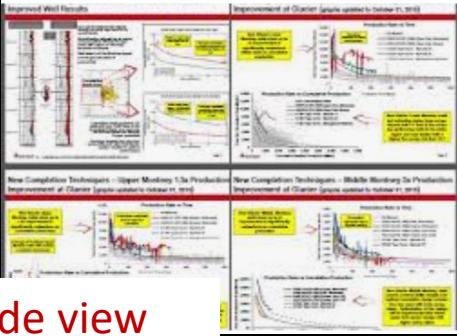



Elmo







Elmo







Elmo







Elmo








Elmo







Speaker view







Join Audio

Stop Video





Invite

Participants



Share Screen

Chat



Record

Reactions

Leave Meeting

What are some thing wrong with this set up?

1. No name
2. Speaking over
3. Background distracting

The image displays a 3x3 grid of video call thumbnails, each representing a different participant in a virtual meeting. The thumbnails are arranged in three rows and three columns. The bottom row shows a meeting control bar with icons for Join Audio, Stop Video, Invite, Participants, Share Screen, Chat, Record, Reactions, and a Leave Meeting button.

- Top Row:**
 - Thumbnail 1 (User1):** Shows a red microphone icon with a slash through it, indicating the user is muted. The name 'User1' is displayed below the icon.
 - Thumbnail 2 (Elmo):** Shows a green 'Unmute' button with a microphone icon. A speech bubble contains the text 'Can anyone hear me?'. The name 'Elmo' is displayed below the button.
 - Thumbnail 3 (Elmo):** Shows a red microphone icon with a slash through it, indicating the user is muted. The name 'Elmo' is displayed below the icon.
- Middle Row:**
 - Thumbnail 1 (Elmo):** Shows a red microphone icon with a slash through it, indicating the user is muted. The name 'Elmo' is displayed below the icon.
 - Thumbnail 2 (Slide view):** Shows a slide with multiple charts and graphs. The name 'Slide view' is displayed below the slide.
 - Thumbnail 3 (Unmute):** Shows a green 'Unmute' button with a microphone icon. The name 'Unmute' is displayed below the button.
- Bottom Row:**
 - Thumbnail 1 (Elmo):** Shows a red microphone icon with a slash through it, indicating the user is muted. The name 'Elmo' is displayed below the icon.
 - Thumbnail 2 (Elmo):** Shows a red microphone icon with a slash through it, indicating the user is muted. The name 'Elmo' is displayed below the icon.
 - Thumbnail 3 (Speaker view):** Shows a green 'Unmute' button with a microphone icon. The name 'Speaker view' is displayed below the button.

1. No video
2. Too busy slide
3. Unmuted, sleeping

1. Poor camera position
2. Inappropriate setting
3. Speaker muted/technical difficulties

How do we prepare doctors in training for the future, when the present is already challenging?

- Flexibility and expectations
- Curricular design (time commitment)
- Diverse approaches to learning
- Technology integration
- Feedback and assessment

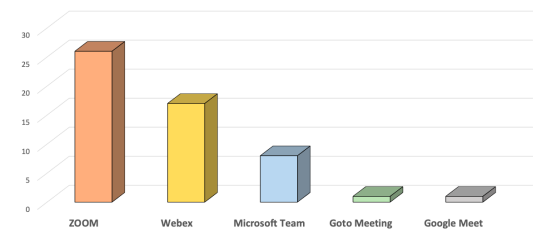
Virtual Learning



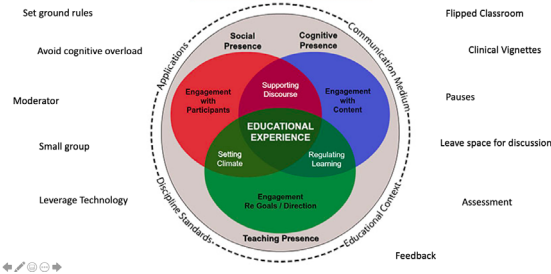
Scaleable
Accessible
No limitation



Which Platform(s) did you use?



Creating an educational environment



The Fab Five for learner engagement ("PEACE")

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Example: Breakout room, Polling (directpoll.com), Annotation

Id, S, Cetnar, J, Rangachari, D. ASCO PD Retreat 2020

Virtual Learning



Take Home points



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gambhirh@upstate.edu



Thank you

