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11 Asynchronous Case-based Learning Using Slack: A Pilot

Katia Johnston, MD; Neeraj Chhabra, MD; Tarlan Hedayati, MD

Learning Objectives: We prospectively evaluated the feasibility and usability of Slack as an e-learning platform for case-based learning (CBL) for PGY-1 EM residents.

Abstract:

Introduction/Background: The use of internet technologies to facilitate asynchronous learning is common in graduate medical education. Advantages to virtual learning in EM include accommodating shift schedules and remote learning in the setting of the COVID-19 pandemic. Slack is a channel-based messaging application used in many industries to facilitate communication. The use of Slack has been described by EM residency programs as a recruitment tool, but little is known about the use of Slack as an educational tool.

Educational Objectives: We prospectively evaluated the feasibility and usability of Slack as an e-learning platform for case-based learning (CBL) for PGY-1 EM residents.

Curricular design: Clinical case vignettes for common EM chief complaints were written by a senior resident and reviewed by two EM board-certified faculty for content. Cases consisted of a prompt and residents progressed through cases by asking questions and requesting diagnostic studies. Additionally, prompts were provided to discuss clinical controversies in diagnosis and management. Slack was chosen as the platform due to free cost, ease of uploading multimedia, and the ability for anonymous participation. Cases were discussed as a group, one at a time, asynchronously, without dedicated participation time. Three cases were covered in the one month pilot period. The system usability scale (SUS), a validated ten-question survey that classifies tool usability, was then distributed to all interns via SurveyMonkey.

Impact/effectiveness: Fifteen of seventeen interns completed the survey. Mean SUS score was 77.2 (95% CI 70.6-83.7) indicating above average usability.

This pilot study indicates that Slack is a feasible and usable platform for asynchronous CBL learning. Further study is needed to better understand how to maximize resident learning using Slack. Plans for implementation and evaluation of Slack-based cases for all resident classes and medical students is ongoing.

12 Bridging The Gap: Incorporating An Interactive Student-Led Teaching Session Into A Virtual Clerkship

Natasha Wheaton, MD; Andrew Grock, MD; Stephen Villa, MD; Ignacio Calles, MD

Learning Objectives: Our objective is to create a teaching activity in which students effectively teach their

peers, creatively involve their audience, and express their own interests and personality. We also used the activity to allow student implementation of course content regarding online teaching and learning.

Abstract:

Background: The progression and incorporation of technology into education in conjunction with the COVID19 pandemic has made virtual learning vitally important. However, it lacks the interactions of a traditional rotation that highlight the intangible qualities that often influence both program rank lists and student views of a residency. Here, we provide students the opportunity to express their own creativity and unique characteristics despite the virtual learning modality.

Curricular Design: The exercise provides a break from traditional lectures while allowing students an opportunity to leave a unique impression. Students created a five minute presentation teaching a non-medical topic. We provided example slides and video demonstrations ahead of time. Students received multiple days of content on effective teaching modalities and learning strategies in preparation for effective presentation in the virtual environment. They each discussed ideas with a resident mentor, allowing them to feel comfortable and confident in their topic selection and teaching plan. Students presented to peers with a resident or faculty facilitator. Topics included a live cooking show, kickboxing class, and guided meditation. Presenters received individual feedback from the facilitator. The students evaluated the session in the post-rotation survey. They were informed prior to the exercise that they would not be formally graded, but would be provided feedback for improvement purposes.

Impact: Of 25 survey respondents, 92% agreed or strongly agreed that the session was worthwhile and should be repeated. 24% listed the teaching session as their favorite aspect of the rotation. Students felt it made the rotation enjoyable despite the limits of virtual learning. The teaching session in our virtual clerkship will remain a cornerstone of future virtual efforts as it proved effective in helping bridge the digital gap and made our students feel closer to the program and their peers.

Closing Rotation Feedback Response to "What was my favorite thing about this rotation?"

The teaching sessions! I really enjoyed the creative outlet for people to pick any topic and teach it in any way they like. I think this was especially effective in making the rotation enjoyable even with the limitations of this being a virtual rotation.

My favorite day of the rotation was definitely the teaching session. I loved being able to get to know everyone a little better that day and it was just a fun way to learn something new.

The teaching exercise. It was amazing to see what everyone else was passionate about and definitely learned some new things.

I also really liked the teaching session. It was a great way to get to know more about my peers and build a bond.

Table. Participants filled out a feedback survey at the conclusion of the rotation. Shown above are selected responses when asked about their favorite aspects of the course.