<u>MITE Monthly Tip - Improving Education Skills in Virtual Small Group Learning</u>

Medical education experts have been studying the effects of both virtual learning and small group learning for many years. Evidence suggests that virtual learning is as effective as traditional learning across multiple different types of studies and analyses. This has been noted across both a broad field such as health professions[i] as well as in specific disciplines, such as pediatrics.[ii] Additionally, small group learning in teams has also been studied and reviews of the literature have shown it to be a positive learning experience for students.[iii]

As we have moved into the COVID pandemic-induced age of replacing traditional face to face education with virtual education, questions remain about how to adequately design small group learning in the virtual environment. Medical educators around the world, and at our institution, have been forced to innovate ways to adopt small group/team based learning into the virtual didactic educational session for trainees at all levels of the medical education hierarchy.

As you continue to work on adjusting your traditional face to face educational sessions for medical students and residents/fellows into the virtual world of the ZOOM platform, consider how to leverage virtual technology such as the breakout room feature to engage students more readily in educational content. The following 5 tips should be helpful as you plan and deliver small group/team based learning in virtual sessions using breakout rooms.

1) Know your learners; do they all have the same background? Are some learners more advanced than others? If different backgrounds (residents from different programs and different PGY-level +/- medical students), consider splitting up your groups evenly with different stage learners in each group
2) Consider assigning a specific individual in each group in advance to help facilitate in each small group. No need to ask them to do extra preparatory work, just to be willing to guide the group through whatever small group task you assign during your session.
   a. Alternatively, consider the use of the "Flipped Classroom" technique and ask your learners to read/prepare in advance of the didactic session
3) Be familiar with how to use breakout rooms in zoom (and consider coming to the <u>virtual engagement webinar on this topic being presented on October 2</u> or reviewing the recording of it afterwards)
   a. Consider assigning students to rooms in advance if you know exactly who your learners are
   b. If you don't have an accurate list of learners in advance, find one person (a colleague, chief resident, senior resident, etc) to help you with assigning small groups once the zoom didactic begins
4) Prepare your learners for different roles in the small group
   a. Ex: MSIV to read the case and provide summary statement, intern to provide initial differential diagnosis, PGY-2 to provide testing and treatment ideas, PGY-3 to summarize how to educate patient/family

      b. if available, consider asking colleagues to help facilitate inside breakout rooms as their ability to be present for just a few minutes in a virtual didactic session is much greater than their ability to come to an in person didactic away from their other clinical or administrative duties

5) Consider the 4 S's of team based/small group learning [iii] as you plan for each of your breakout rooms:
      a. the educational topic needs to be *significant*,
      b. all teams need to have the *same* problem to solve,
      c. students should provide a *specific* answer,
      d. teams need to report *simultaneously*

[i] Tudor Car L, Soong A, Kyaw BM, Chua KL, Low-Beer N, Majeed A. Health professions digital education on clinical practice guidelines: a systematic review by Digital Health Education collaboration. *BMC Med*. 2019;17(1):139. Published 2019 Jul 18. doi:10.1186/s12916-019-1370-1

[ii] Brusamento S, Kyaw BM, Whiting P, Li L, Tudor Car L. Digital Health Professions Education in the Field of Pediatrics: Systematic Review and Meta-Analysis by the Digital Health Education Collaboration. *J Med Internet Res*. 2019;21(9):e14231. Published 2019 Sep 25. doi:10.2196/14231

[iii] Burgess AW, McGregor DM, Mellis CM. Applying established guidelines to team-based learning programs in medical schools: a systematic review. *Acad Med*. 2014;89(4):678-688. doi:10.1097/ACM.0000000000000162