**Teaching in Small Groups: Handout**

**Background**

Small group teaching has been shown to increase learner satisfaction, long-term retention, and the application of clinical knowledge (Wolff et al 2013). Teaching in small groups should be student-led and geared towards collaborative problem solving. The following guide provides some strategies for facilitators leading small groups, specifically in Emergency Medicine residencies.

**Pre-reading:** Not Another Boring Lecture: Engaging Learners with Active Learning Techniques
Wolff, Margaret et al. Journal of Emergency Medicine, Volume 48, Issue 1, 85 - 93

**General Best Practices**

* Prioritize active learning in small groups rather than passive listening
* Rapid-fire case discussions with targeted learning points have been highly rated by students (King et al 2017)
* Incorporate “pause procedures” to allow for internal active processing
* Consider allowing open (self-chosen) resources for pre-class preparation for adult learners
* Keep pre-meeting preparation materials short (<20 minutes)
* The learners should lead, not the facilitator

**What is a flipped classroom?**

Learners pre-view materials that might formerly have been used as didactic lecture, and use class time to engage in student-centered learning activities (Moraros et al 2015).

→ Example agenda:

* **Pre-class** preparation may include a brief 15-20 minute video lecture, podcast, or textbook reading.
* **During class,** students take a brief informal (5 minute) formative quiz to gauge understanding.
* Questions and misconceptions may briefly be addressed (5-15 minutes).
* Students use the remainder to engage in discussion, problem-solving, or performance to apply the skills learned

**Pause Procedures:** ways to pause, cement, and self-assess learning in real time, and which are inclusive to all learning styles.

* *Think-Pair-Share:* Allows learners who may be unwilling to speak up in larger groups to practice answers and come to a consensus in a safe learning environment
* *One-minute Paper*: Pause procedure that allows for private written processing
* *Commitment activities:* Requiring learners to commit to an answer, whether anonymously via clicker or reporting system, or by moving around the room to preassigned answer choices. Allows for active engagement and formative assessment of learner understanding

**Collaborative learning techniques**

* *Team Based Learning:* A common way to conduct a flipped classroom, in which learners complete pre-class preparation and are then challenged to apply core content to scenarios as a team. Especially applicable in the Simulation Lab.
* *Jig Saw:* A type of cooperative learning that allows learners to become teachers by breaking a larger topic into several smaller, interrelated topics that learners synthesize and teach each other
* *Problem-based learning:* Team members solve complex problems in groups. Especially well-suited to case-based problems.

**Resources**

1. Poll Everywhere online polling for commitment activities: <https://www.polleverywhere.com>
2. A helpful collation of FOAMed/Emergency Medicine open source resources: <https://www.nuemblog.com/resources>
3. Helpful websites for SIM planning
	1. <https://emsimcases.com/>
	2. <https://www.acep.org/tox/sim-cases.html>
	3. <https://www.healthysimulation.com/780/emergency-medicine-sim-case-library/>

**References**

1. Denson K, Manzi G, Crowe C, Rehm J. TBL: navigating delirium, polypharmacy and home care services with an elderly emergency department patient. MedEdPORTAL. 2013. Available at: [www.mededportal.org/publication/9599](http://www.mededportal.org/publication/9599)
2. King AM, Mayer C, Barrie M, Greenberger S, Way DP. Replacing Lectures with Small Groups: The Impact of Flipping the Residency Conference Day. *West J Emerg Med*. 2018;19(1):11-17. doi:10.5811/westjem.2017.10.35235 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5785176/>
3. Koestler J, Waite E, Chietero M, et al. Problem-based learning (PBL): abdominal pain in a pregnant woman. MedEdPORTAL. 2009. Available at: [www.mededportal.org/publication/517](http://www.mededportal.org/publication/517)
4. Moraros J, Islam A, Yu S, Banow R, Schindelka B. Flipping for success: evaluating the effectiveness of a novel teaching approach in a graduate level setting. *BMC Med Educ. 2015 Feb 28; 15():27.*<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4363198/>
5. Wolff, Margaret et al. Not Another Boring Lecture: Engaging Learners with Active Learning Techniques. Journal of Emergency Medicine, Volume 48, Issue 1, 85 - 93
6. Wolff M, Pomeranz E, Carney M. Febrile young infant learning module. MedEdPORTAL. 2013. Available at: [www.mededportal.org/publication/9568](http://www.mededportal.org/publication/9568)