Structuring Feedback and Debriefing to Achieve Mastery Learning Goals

A synopsis of the article Structuring Feedback and Debriefing to Achieve Mastery Learning Goals by Eppich, Hung, Duval-Arnould, Siddal and Cheng in the journal Academic Medicine.

What did I learn from this article?

This article presents a study of mastery learning strategies in the context of ACLS and Pediatric Advanced Life Support (PALS) training for residents to explore the essential elements for mastery learning to occur. Building on the concept of ‘deliberate practice’, the authors unpack how an educational activity in a simulation setting can be designed to foster learners’ achievement of mastery.

What is novel or noteworthy?

The curriculum described in the study gave learners opportunities to try leading resuscitation simulations repeatedly with decreasing amounts of feedback until they achieved mastery. The detailed discussion about multiple elements of mastery learning addresses steps that educators can follow to optimize learning:

1. Design the educational intervention with attention to curriculum and available performance measures.
2. Make a plan for gathering and delivering feedback to learners including the timing, source, and content of feedback.
3. Establish a supportive learning environment that will foster comfort and trust to enable learners to take learning risks and welcome corrective feedback.
4. Employ micro-debriefing: asking questions of the learner during and after the learning activity to promote reflection on performance. Their work with pediatric trainees emphasizes the value of micro-debriefing during the learning activity, a less common approach than debriefing after the activity. In the context of this study, micro-debriefing occurred with a coach asking questions of the simulation participant during the scenario (‘reflection-on-action’). The authors propose that this building of understanding and success during a learning activity promotes competence which aligns with self-determination theory.

How does it relate to what we're doing at UCSF?

With many learning activities ongoing in the Kanbar simulation center and a robust coaching program for medical students, this article can inform the ways in which teachers give feedback to learners. This article would suggest that asking questions that promote learners’ own insights can enable them to make needed adjustments. In addition, the authors also recommend additional feedback from other sources, including peers, videos of performance, and information provided by the simulation equipment.
