Designing and Implementing Simulation-Based Mastery Learning Curricula

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Course Description
Mastery learning is a rigorous form of competency-based education. Use of the mastery model has been shown to improve patient care quality and lower costs. Northwestern Simulation faculty are leading experts in the use of simulation-based mastery learning to develop and measure clinical skills. This five-day course will offer participants opportunities to acquire the knowledge and skills needed to design and implement mastery learning curricula in the following key domains:

- Resuscitation
- Procedural skills training
- Communication skills

After this course, participants will be able to:

- Design simulation-based mastery learning curricula
  - Perform needs assessment
  - Modify existing curricula to align with mastery learning goals
  - Select or develop instruments for outcomes assessment
  - Set performance standards to establish mastery learning goals
  - Rater to training to ensure reliable assessment

- Implement simulation-based mastery learning curricula
  - Create supportive learning environments needed for rigorous deliberate practice and robust performance feedback
  - Structure feedback and debriefing tailored to achieve mastery learning goals

- Recognize the value of research and scholarship for program improvement and career advancement

Location: Northwestern University Feinberg School of Medicine
Department of Medical Education and Northwestern Simulation Chicago, Illinois USA
Detailed Course Overview

The course is structured to provide participants both didactic inputs and hands-on practice in areas essential for implementing mastery learning curricula. On Days 2, 3, & 4, participants will engage on hands-on sessions devoted to experiencing deliberate practice in the domains of advanced life support, procedural skills, and communication skills training. In addition, on days 3 & 4, participants will begin facilitating mastery learning with faculty coaching.

Day 1: 8:00am to 5:30pm
- Introduction to mastery learning
- Curriculum development/improvement

Day 2: 8:00 to 5:30pm
- Assessment: overview
- Hands-on deliberate practice sessions
- Feedback & debriefing for mastery learning: educator as a coach

Day 3: 8:00 to 3:30pm (early ending)
- Assessment: instrument creation / selection
- Hands-on deliberate practice sessions, including coaching practice
- Day ends early to allow participants time to enjoy Chicago

Day 4: 8:00 to 5:30pm
- Program implementation and management
- Hands-on deliberate practice sessions, including coaching practice
- Refining your curriculum with faculty support

Day 5: 8:00 to 1:00pm
- Workshop on planning mastery learning research
- Curriculum presentations: each participant will present their curriculum in small groups with faculty and peer feedback