

# Making the Most of Perioperative Education Time

Melissa Boyer, MSN, AGCNS-BC, RN, CNOR; Hollie Ridgell, MSN, RNFA, CNOR  
MedStar Health

## Introduction

With limited dedicated monthly education hours, perioperative educators must employ strategies that maximize both engagement and learning. Integrating microlearning and gamification into perioperative education has proven effective in increasing staff participation, improving knowledge retention, and enhancing educator efficiency. These interactive approaches enable educators to target knowledge gaps, introduce new equipment and processes, and create focused, impactful learning experiences that align with AORN's Team Communication guideline. By optimizing face-to-face education time and incorporating varied, evidence-based teaching methods, microlearning and gamification strengthen staff confidence, motivation, and professional growth while reducing follow-up workload for educators.

## Literature Review

Across the literature, gamification is consistently shown to increase engagement, motivation, and knowledge retention in nursing education. Studies such as Brull et al. (2017), Garrison et al. (2021), and Leaders et al. (2023) demonstrate that game elements like competition, points, challenges, and interactive scenarios, make learning more active and effective for both students and clinical staff. Research on specific skill development further shows that gamified learning improves speed, confidence, and performance in high-stakes clinical tasks (King et al., 2023). Many interventions use short, focused learning activities, supporting microlearning principles. Together, these sources provide strong evidence for integrating gamification and microlearning into nursing curriculum, orientation, and professional development.

## Implementation Examples

Method (Gamification vs Micro-Learning)	Method Applied to the Following Topics
Scavenger Hunt	Vascular Emergencies
Beach Ball Trivia	Policies and Procedures Periop 101 Review
Escape Room	Malignant Hyperthermia
Human Slot Machine	Fire Safety
Relay Race	Vascular Emergencies
Spot the Error	Sharps Safety
Headband Game	Post-Op Complications Sutures HAPI Prevention
Microlearning Stations	Code Blue Preparedness Loading a Stapler
Digital Board Game	Fire Safety



Perioperative associates celebrate "escaping" from an MH crisis!



Associates play a Headband Game; OR staff learning about the characteristics of sutures, while Perianesthesia staff learn about postoperative complications.

## Results

Gamification and microlearning techniques have been incorporated into dedicated perioperative education sessions. Surveys conducted with perioperative staff show increased satisfaction with gamification and 100% of surveyed staff self-reported increased knowledge retention with microlearning. Education completed through gamification has been reported as interactive, informative, and fun. Staff reported topics taught with microlearning facilitated learning in unique ways.

Feedback is collected in conjunction with attendance at the conclusion of each dedicated education session. This process enables perioperative educators to obtain timely and accurate feedback directly from participants. Common descriptors highlighted in the staff feedback include fun, unique, interactive, helpful, and informative.

**"I enjoyed the scavenger hunt. As someone who is a visual learner it was very helpful to know where these items were located." – OR RN**

## Limitations

- Financial Constraints: Gamification often requires purchased materials or prizes, which may not be sustainable with limited budgets.
- Educator Learning Curve: Some educators need additional time and training to gain confidence with game-based and interactive teaching methods.
- Unclear Learning Objectives: If objectives are not well defined, learners may focus on the game itself rather than the intended educational content.
- Time Intensive Development: Designing, preparing, and maintaining gamified activities requires significant educator preparation time.

## Next Steps

Gamification strategies and microlearning techniques will continue to be integrated into educational initiatives within the perioperative environment. These approaches are being actively incorporated into programs such as Periop 101, annual competency education, and unit-based orientation. As perioperative educators develop gamified activities, microlearning activities, and other innovative instructional methods, a long-term goal is to establish a shared repository of resources accessible to perioperative educators across the MedStar Health system. Creating such a repository will help mitigate the time constraints often encountered during the development of new educational materials and support consistent, high-quality learning experiences throughout the organization.

## References & Contact Information

