

A New Way of Learning for Intraoperative Registered Nurses— A Virtual Platform for Orientation

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DEFINE

BACKGROUND

Surgical educational concepts and job components are not routinely taught in most nursing school curriculums. To bridge the gap in knowledge, in-person orientation classes and lectures were required for intraoperative registered nurse preceptees. The goal was to provide the knowledge needed to perform safe and competent patient care. The time away from the work unit, attending these classes, contributed to:

- Delayed networking for the preceptee with surgical colleagues
- Decreased continuity in the operating room (OR)
- Increased distractions

GAP IN QUALITY

The intraoperative registered nurse (RN) orientation classroom learning time required an average of 14 hours of time away from the OR. Having the preceptee leave the OR during a procedure impacted the preceptor's teaching strategies and interrupted the engagement of the OR.

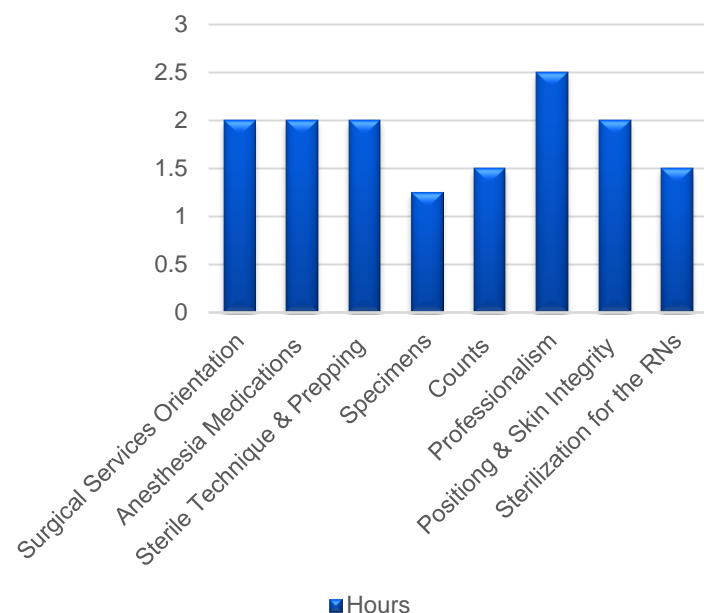
AIM STATEMENT

Our target for improvement is to decrease the amount of time intraoperative RN preceptees are away from the OR for orientation classes from 14 hours to a target goal of eight hours within the project timeline of six months.

MEASURE

IMPROVEMENT MEASURE BASELINE AND SAMPLE SIZE

The 56 intraoperative RN preceptees from September 2019 through February 2020 averaged 14 hours of learning time out of the OR – in the classroom and completing pre-work for classes.



Graph 1: The intraoperative RNs attended eight in-person classes. The eight classes totaled to 14 hours and 45 minutes.

ANALYZE

POTENTIAL CAUSES

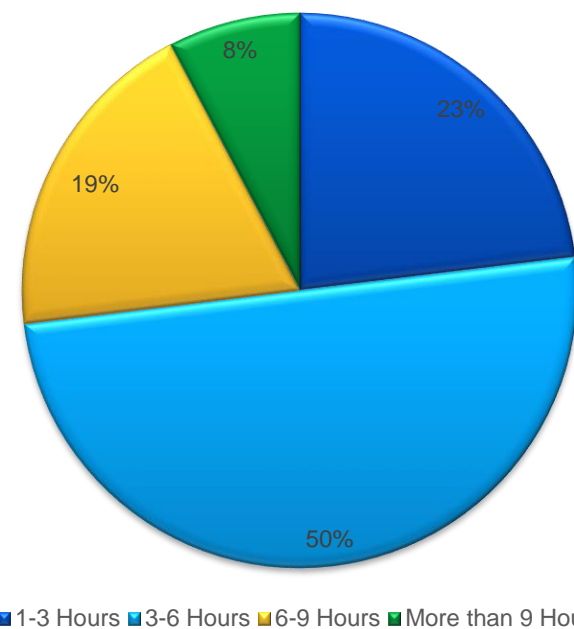
The educational content provided to the intraoperative RN preceptees during their classroom time was valuable; however, it did cause a disruption in the flow of the preceptee's day. It is important to note that many of the classes required travel time to different sites, which also increased the preceptee's time away, as the travel time was not included in the scheduled classroom time. The classes had a variety of start times, which directly impacted the preceptee being able to provide continuity of care to their patients.

IMPROVE

INTERVENTIONS ARE SELECTED AND TESTED

By creating a virtual platform in Blackboard, the preceptees would continue to receive high-quality, timely, and effective orientation education, while decreasing their time spent out of the OR.

COMPARISON FOR THE IMPROVEMENT MEASURE: HOW MUCH TIME DID IT TAKE TO COMPLETE BLACKBOARD ONLINE COURSES?



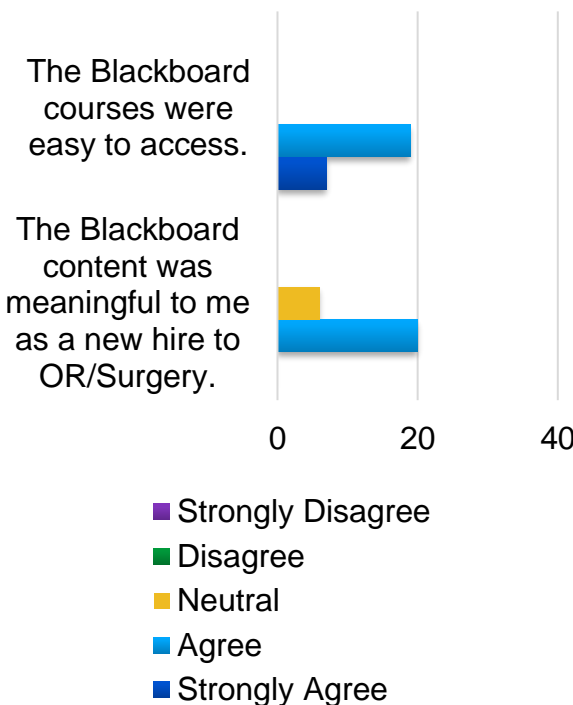
Graph 2: Of the 26 intraoperative RN preceptees that have completed the virtual orientation, 6 have indicated they spent 1-3 hours on the curriculum, 13 spent 3-6 hours on the curriculum, 5 spent 6-9 hours on the curriculum, and 2 indicated they spent more than 9 hours completing their orientation curriculum.

IMPROVE

Surgical Services: Intraoperative Nursing Orientation Classes
Welcome
Initial Concepts
Prepping / Positioning / Skin Integrity
Counts
Specimens
Sterilization for Intraoperative Staff
Clean, Aseptic and Sterile Technique

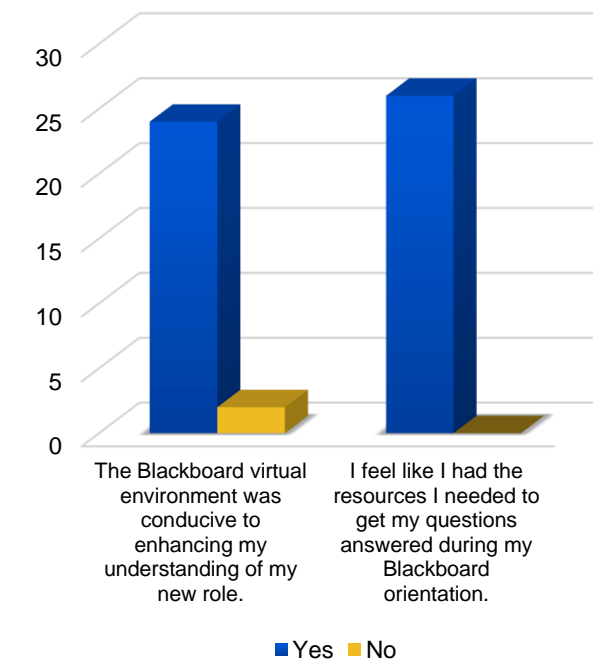
Graph 3: Post-intervention curriculum offers seven orientation sections within the virtual platform.

END OF VIRTUAL PLATFORM ORIENTATION SURVEY RESULTS



Graph 4: All 26 preceptees found Blackboard easy to access. The vast majority, 20 preceptees, found the Blackboard content meaningful as a new hire in the OR. Six preceptees were neutral regarding the meaningfulness of the Blackboard content.

IMPROVE



Graph 5: Ninety-six percent of the intraoperative RN preceptees found the Blackboard environment conducive to their learning, and 100% of the intraoperative RN preceptees felt they had the resources needed to get their questions answered while completing their Blackboard orientation.

FEEDBACK FROM LEARNERS

- "Under the circumstances (COVID-19) I thought it was pretty helpful in terms of getting adjusted to my new role!"

- "I feel the blackboard education was well put together and touched on many areas that pertained to work in the OR."

- "I do not think that anything was missing from the Blackboard orientation."

CONTROL

LESSONS LEARNED

Throughout this implementation, we noted adjustments and additional support measures that needed to be addressed. It was imperative that we continued to assess and adjust teaching strategies to incorporate a variety of options for different learning styles. We needed to be aware of gaps (i.e., access to technology) and provide detailed instructions and increased access to computers, headphones, and webcams. Deciding on the time of the class required us to look at what time of the day would be most beneficial for the preceptees. It was determined having the classes held in the afternoon was most conducive to learning and less distracting to the OR flow. To enhance the communication shared with intraoperative RN preceptees, a standardized email was developed with detailed instructions on how to access Blackboard. The survey question to assess time spent in Blackboard was developed to collect a range rather than an exact hour amount, which directly impacts us analyzing our results.

COMMUNICATION

The results of this quality improvement project was shared with Surgical Leadership. Sharing the data allowed administration, nurse managers and nursing education specialists to review the information and ask questions.

CONCLUSIONS

At the elbow, quality learning is critical for RN preceptees in the intraoperative setting. Collaboration with their preceptor allows the preceptee to:

- Efficiently develop effective communication techniques
- Enhance their critical thinking skills
- Comprehend surgical concepts
- Build collaborative relationships with intradisciplinary team members in the surgical setting

This quality project focused on decreasing in-person classroom time. With the Blackboard virtual platform, intraoperative RN preceptees are spending more quality time in the OR, learning alongside their preceptor.

REFERENCES

1. Chang Rhim, H., & Heeyoung, H. (2020). Teaching online: Foundational concepts of online learning and practical guidelines. *Korean J Med Educ*, 1: 175-183.
2. Bird, D., Farmer, R., & Hart, T. (2019). Using blackboard collaborate, a digital web conference tool, to support nursing students placement learning: A pilot study exploring its impact. *Nurse Education in Practice*, 72-78.