

# Examining and Improving Active Learning Strategies in an Undergraduate Nursing Curriculum

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## Background

- ❖ In April of 2021, the American Association of Colleges of Nurses (AACN) endorsed the *Essentials: Core Competencies for Professional Nursing Education* to inform curricular content and competency expectations for graduates of nursing programs.<sup>1</sup>
- ❖ Nurse educators are re-designing nursing education with a competency-based pedagogical approach to close the gap between academia and practice.<sup>2, 6, 7</sup>
- ❖ Evidence reveals active learning as a strategy that supports student achievement of competency.<sup>4, 5, 8, 10, 11</sup>
- ❖ Despite evidence supporting active learning strategies to deliver classroom content, barriers to implementation exist, including faculty lack of knowledge, experience, confidence, and skill.<sup>3, 5, 9</sup>

## Purpose

The AIMS of this quality improvement project were to:

- ❖ Provide undergraduate nursing faculty with strategies to facilitate competency-based education through the incorporation of active learning in curricula.
- ❖ Implement a faculty workshop to facilitate faculty curriculum mapping and increase active learning by 10% by December of 2022.
- ❖ Assess and improve faculty knowledge of active learning strategies through achievement of > 85% on a post-workshop knowledge survey by December of 2022.

## Methods

- Location: Northeast, United States
- Degree: Undergraduate baccalaureate nursing program
- Students: 123 in sophomore cohort
- Faculty: 39 full-time, 48 part-time, and 6 adjunct

- 6 full-time faculty teaching sophomore-level nursing courses
- n=6

- Create and implement 3 workshop sessions
- Sessions occurred in September, October, and December of 2022
- Each session was ninety minutes in length
- Teaching plan developed to guide each workshop utilizing active teaching-learning strategies
- Agenda and presentation materials were distributed to participants via email prior to each workshop

- Descriptive statistics
- S.O.A.R. analysis<sup>12</sup>
- Curriculum mapping task
- Qualitative survey data
- Post-workshop knowledge survey

## Results

- ❖ Curriculum mapping revealed a 75% increase of intended use of active learning strategies after faculty participated in the workshops.
- ❖ Faculty scored a 92% on the Post-Workshop Knowledge Survey

**Table 1**  
Results from S.O.A.R. Analysis from Workshop #1

Areas	Results
Strengths: What are we great at?	Interprofessional collaboration Collective expertise (various practice areas) Integral focus on social determinants of health and cultural humility Partnering with an academic medical center Highly educated/dedicated faculty Aligning resources to a "real" environment (simulation, classroom) Compassionate and caring faculty and staff Above average NCLEX pass rates Provision of time and space to engage in re-design Actively engage students in re-design process Design planetary health-upstream solutions Faculty education Student knowledge retention
Opportunities: What are the possibilities?	Improved technology to integrate active learning Faculty collaboration to identify gaps in curriculum Space for active learning activities and alternative learning modalities Preparing great nurses, not just good ones Having students truly enjoy learning Accessible classrooms and learning spaces Flexible course scheduling (hybrid, online, evening) Caring for each other, faculty, student, and community Enjoy teaching and learning More time to design and learn Above average NCLEX pass rates Retention rates Passing case and clinical Survey feedback from stakeholders National or regional recognition Competent and confident graduates Student satisfaction with educational preparation
Aspirations: What are our dreams or wishes?	Faculty collaboration to identify gaps in curriculum Space for active learning activities and alternative learning modalities Preparing great nurses, not just good ones Having students truly enjoy learning Accessible classrooms and learning spaces Flexible course scheduling (hybrid, online, evening) Caring for each other, faculty, student, and community Enjoy teaching and learning More time to design and learn Above average NCLEX pass rates Retention rates Passing case and clinical Survey feedback from stakeholders National or regional recognition Competent and confident graduates Student satisfaction with educational preparation
Results: What are meaningful outcomes?	Retention rates Passing case and clinical Survey feedback from stakeholders National or regional recognition Competent and confident graduates Student satisfaction with educational preparation

**Table 2**  
Type of Active Learning Strategies

Active learning strategies
Case Studies
Incorporating NCLEX style questions into class
Brain Breaks
Kahoot
Jeopardy
Clicker
Minute paper
Peer-deck
Flipped Classroom (pre-work is assigned to students)
Other (please explain)

**Table 3**  
Utilization of Active Learning Strategies Pre and Post Workshop

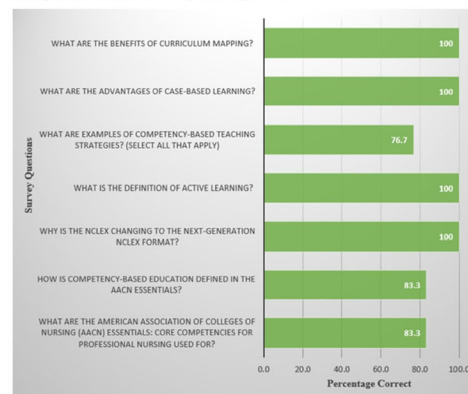
Course	Active Learning Strategies Identified Pre-Workshop (current)	Active Learning Strategies Identified Post-Workshop (future)	Percent Increase
PRNU 119: The Art and Science of Nursing	2	3	
PRNU 111: Research in Nursing	2	5	
PRNU 113: Health Assessment	3	7	
PRNU 114: Introduction to Clinical Practice	5	6	
Total	12	21	75%

Curriculum Mapping Exemplar for Introduction to Clinical Practice

Domain 1: Knowledge of Nursing Practice Competency 1.3-Demonstrate clinical judgment founded on a broad knowledge base	PRNU 114: Introduction to Clinical Practice		Current Teaching Strategies Used in Class	Future Competency-Based Teaching Strategies	
	Do the course objectives need to be updated?	Would you revise the assessment methods? What would you change if it?			
Sub competency 1.3a-Demonstrate clinical reasoning	Current Course Objectives • Identify strategies to promote, maintain, and/or restore optimum level of health. • Perform skills in a professional and culturally sensitive manner. • Use clinical reasoning when performing nursing skills.	No	Yes • EX, Q, L, PA, P • EX, Q, L, PA, P • EX, Q, L, PA, P • EX, Q, L, PA, P • EX, Q, L, PA, P	Lecture, Case Studies, NCLEX style questions, brain breaks, kahoot, minute paper	Clicker
Sub competency 1.3b-Integrate nursing knowledge (theories, multiple ways of knowing, evidence) and knowledge from other disciplines and inquire to inform clinical judgment	• Maintain confidentiality, client privacy & dignity. • Establish a therapeutic environment that promotes biological and psychosocial safety. • Use ANA Nursing Scope & Standards of practice and Code of Ethics for nurses to guide practice.	Yes	Yes	Lecture, Case Studies, NCLEX style questions, brain breaks, kahoot, minute paper	Clicker
Sub competency 1.3c-Incorporate knowledge from nursing and other disciplines to support clinical judgment	• Maintain confidentiality, client privacy & dignity. • Establish a therapeutic environment that promotes biological and psychosocial safety. • Use ANA Nursing Scope & Standards of practice and Code of Ethics for nurses to guide practice.	Yes	Yes	Lecture, Case Studies, NCLEX style questions, brain breaks, kahoot, minute paper	Clicker

Evaluation/Assessment Code: Exam=EX, Quiz=Q, Presentation=P, Simulation=SI, Case Study=CS, Clinical=CL, Lab=L, Paper=PA  
\*Adapted from University of Maryland School of Nursing (2022)

**Figure 1**  
Participant Results of Post-Workshop Knowledge Survey



Note: Average of results was 92%, n=6. One survey question was eliminated after analyzing participant responses to individual questions with the intent of evaluating the quality of the survey. It was noted that only 20% of the participants answered question 11 correctly, prompting elimination of the question due to item difficulty. Partial credit was awarded for correct multiple-choice answers.

## Discussion

- ❖ S.O.A.R. Analysis:
  - Strengths - collective expertise and collaborative nature of faculty
  - Opportunities - more time, faculty education, involve students in curriculum review and change
  - Aspirations - wish for accessible classrooms and flexible course scheduling
  - Results – competent graduates, NCLEX exam pass rates, and student retention
- ❖ Curriculum mapping process was new experience for faculty
- ❖ Faculty scored above 85% on Post-Workshop Survey
- ❖ AIMS of the quality improvement project were met

## Conclusions and Implications for Practice

- ❖ Opportunities for faculty professional development
  - Development of super-user faculty to train-the-trainer
  - Drop-in sessions
- ❖ Engaging entire faculty
- ❖ Utilizing instructional designers

### Traditional Classroom



### Engaging Classroom



## References

