

# Nurturing Excellence: Using Formative Assessments in Nursing Simulation for Competency Evaluation

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## ABSTRACT

Formative evaluations play a vital role in enhancing nursing education. By utilizing digital tools for formative assessments, educators can streamline the feedback process, allowing for real-time data collection and analysis. This approach improves the quality of feedback to students and promotes opportunities for curriculum development while maintaining a safe learning environment.

Grounded in the theoretical framework of Assessment for Learning, this project aims to provide practical guidance for effectively incorporating digital formative evaluations into nursing simulations. Reviewing findings from a pre-licensure mental health nursing course over two years, we highlight significant improvements in simulation practices and student performance. The Creighton Competency Evaluation Instrument (CCEI) was utilized to ensure students received relevant and constructive feedback, enhancing their learning outcomes. Faculty employed these evaluations to improve curriculum development and review processes.



## OBJECTIVES

- 1.Explore how digital assessment tools, such as the CCEI, influence the effectiveness of student performance and simulation practices in mental health nursing education, while creating a brave space for learning.
- 2.Analyze strategies for incorporating digital formative evaluations into nursing simulation programs to enhance curriculum development and simulation design.
- 3.Illustrate effective use of the Creighton Competency Evaluation Instrument (CCEI) to provide constructive feedback to students and faculty.

### Acknowledgements

Special thanks to Creighton University and Dr. Martha Todd for granting permission to utilize the Creighton Competency Evaluation Instrument (CCEI). Their support in allowing us to operationalize and break down the evaluation points was instrumental in deepening our analysis of student competencies and enhancing our overall program evaluation efforts.

## APPROACH

Our approach was the intentional creation of a safe and brave space where pre-licensure nursing students feel empowered to give and receive constructive feedback. By emphasizing that it is acceptable to make mistakes, students are encouraged to identify and address gaps in their understanding. This psychologically safe environment fosters open communication, critical thinking, and continuous improvement—ultimately enhancing learning outcomes.

To ensure students demonstrate the required competencies, the CCEI was implemented as a structured framework for evaluating performance in simulation scenarios. In collaboration between the Simulation Coordinator and Course Coordinator, CCEI data points were clearly defined to provide consistent and meaningful evaluation. Data points were then aligned with the End-of-Program Student Learning Outcomes (EPSLOs). This mapping allowed for systematic gathering and assessing data that illustrates how the simulation program supports the achievement of EPSLOs, offering meaningful evidence for accreditation purposes and program improvement.

A digital format for the CCEI was developed to streamline the evaluation process. This digital approach enables efficient data gathering, trend analysis, and reporting—providing meaningful insight into student performance and curriculum effectiveness over time.

### Example of Definition: Obtain Pertinent Data

In order to obtain full points students need to demonstrate both below

☐ Demonstrates Competency- Obtains VS (BP, HR, RR, O2Sats, Pain)

P.V.: 0.1

☐ Demonstrates Competency- Assess Lung Sounds

P.V.: 0.2

☐ Demonstrates Competency - Seeks input from the patient regarding their feelings and goals (how they are adjusting with the recent move)

P.V.: 0.2

☐ Demonstrates Competency - Provides balanced time on psychosocial and clinical aspects of patient care

P.V.: 0.1

☐ Demonstrates Competency - Uses questions in a balanced way, avoiding patient's passive participation (only responding to questions)

P.V.: 0.2

☐ Demonstrates Competency - Utilizes PHQ9 for depression assessment

P.V.: 0.2

☐ Does Not Demonstrate Competency

P.V.: 0

☐ NA

P.V.: 1

Category: ADN Nursing Interventions

Question Point Value: 1.00

## References

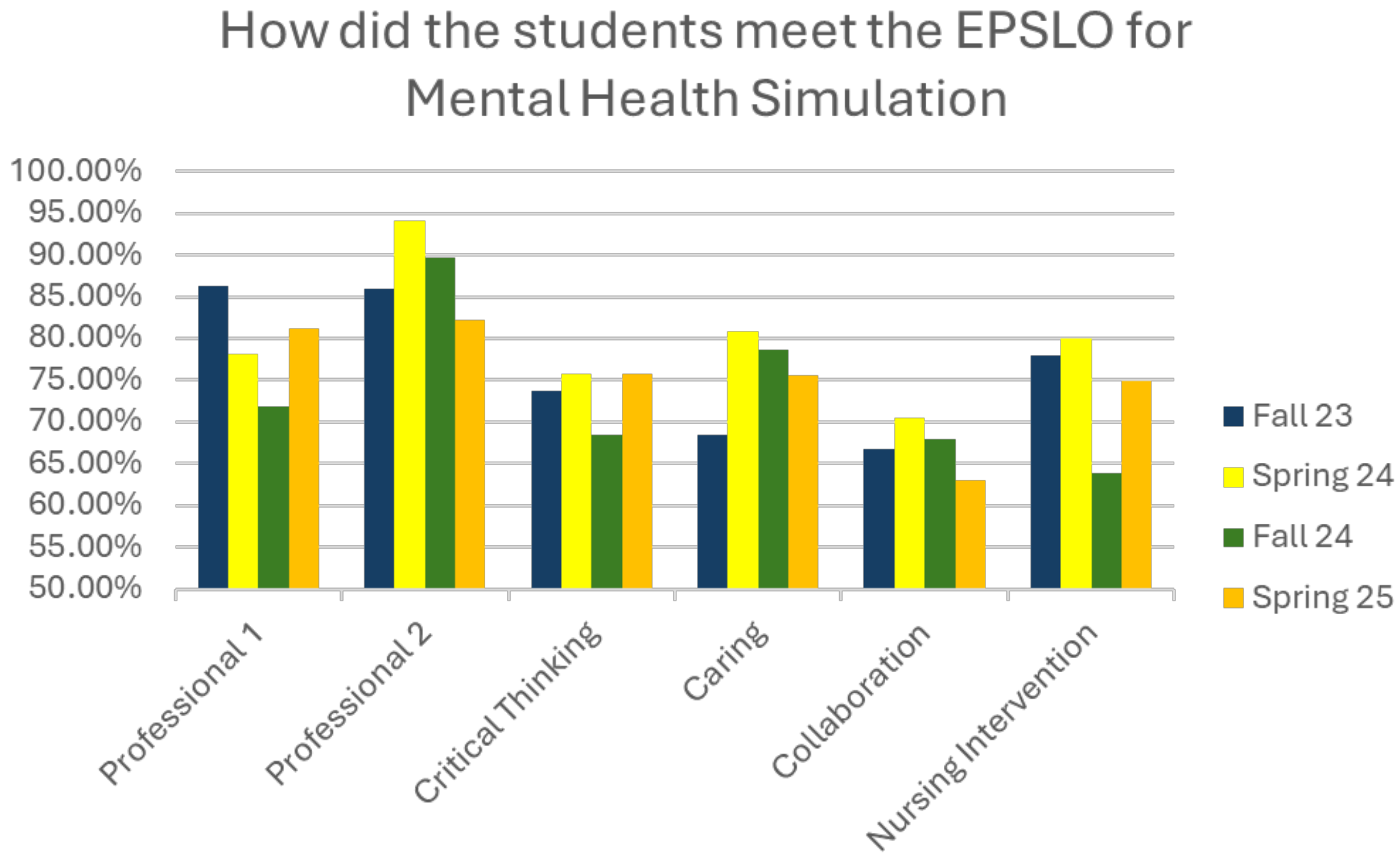
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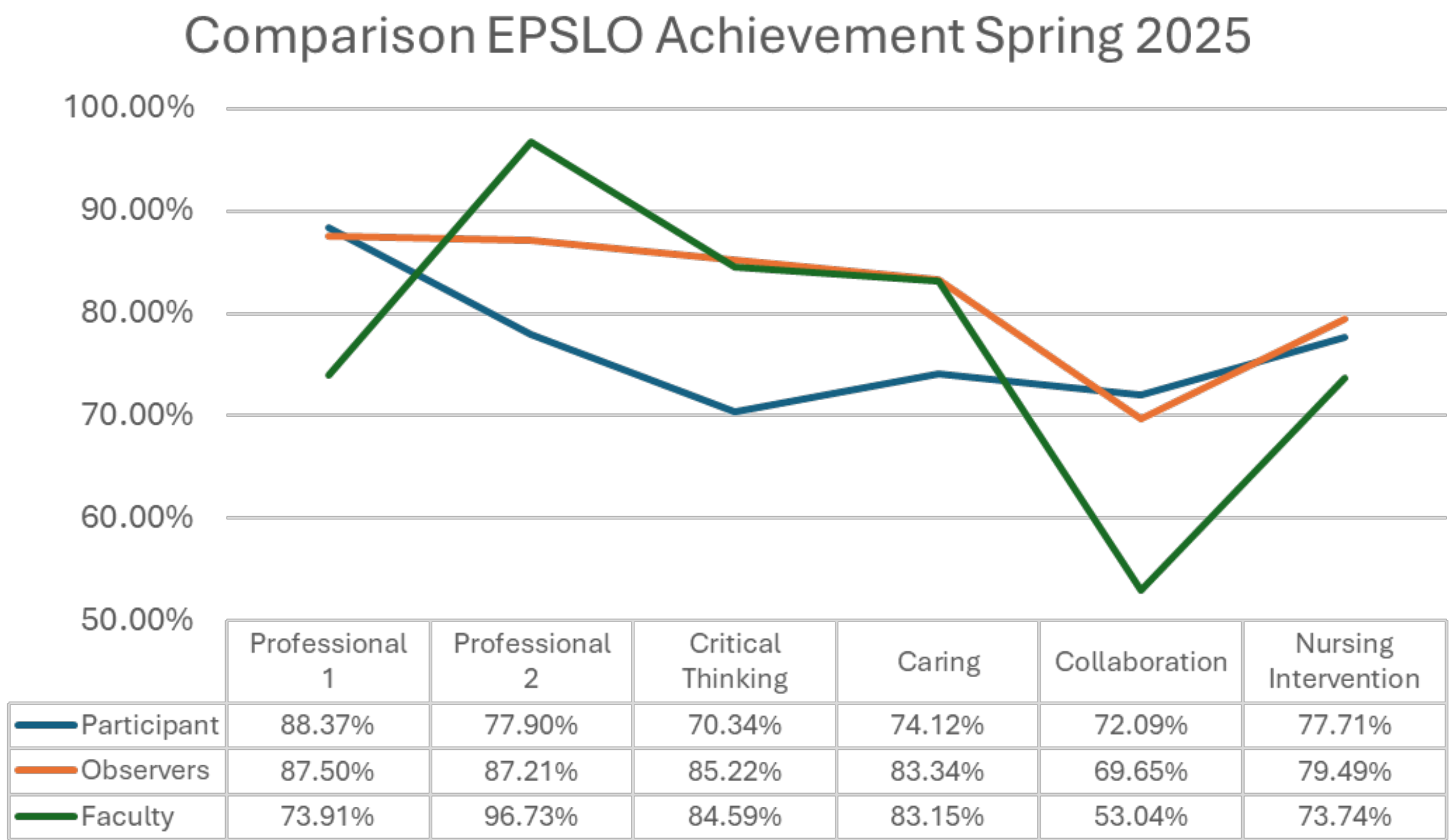
## RESULTS

Between Fall 2023 and Spring 2024, targeted changes were implemented to enhance student performance in the caring and critical thinking competencies identified within the EPSLOs. The need for clearer competency definitions, improved training for standardized participants, and more structured simulation scenarios was identified to ensure consistency in evaluation. These changes were designed to strengthen both the learning experience and the reliability of assessment.

Following these interventions, a measurable improvement in meeting the EPSLOs during the mental health simulation was observed. In Spring 2024, a new layer to our evaluation process by having student participants complete the CCEI immediately after the debriefing session. This allowed for timely self-reflection and promoted metacognitive engagement with the learning objectives.

In Fall 2024, the process was expanded to include student observers, who also completed the CCEI tool immediately following the debriefing session. This allowed comparison of competency ratings across three groups—participants, observers, and faculty—which enriched the depth and reliability of our data. A trend identified that student participants consistently rated themselves lower than faculty, possibly reflecting a more self-critical perspective or uncertainty about performance expectations. In contrast, student observers tended to rate performance similarly to faculty, suggesting a more objective viewpoint when not actively engaged in the scenario.

This finding affirmed the educational value of the observer role and highlighted the importance of debriefing and peer discussion in shaping students’ understanding of competency expectations. The phased implementation of these changes enhanced the accuracy of competency assessment, improved rating consistency, and provided meaningful data for tracking progress toward EPSLO achievement.



## CONCLUSIONS AND RECOMMENDATIONS

This project served as a valuable opportunity for faculty to deepen their understanding of the EPSLOs and reflect on what competencies students should demonstrate upon program completion. Utilizing the CCEI tool allowed us to clearly define expectations, identify gaps in curriculum alignment, and compare simulation data with other EPSLO metrics—ultimately strengthening our program evaluation efforts.

Students responded positively to the non-graded nature of the experience, which encouraged full immersion in the simulation and reduced performance anxiety. The CCEI tool provided clearer expectations, supported self-assessment, and guided peer feedback. The data also revealed areas where student and faculty interpretations of competency differed, offering insight into better practices for instruction alignment and support student readiness for practice.

Recommendations include integrating structured evaluation tools such as the CCEI throughout the simulation curriculum to support consistent feedback, promote student insight, and enhance analysis of the curriculum. The plan is to adopt the CCEI across all simulation experiences, to evaluate competency progression but also as a tool to identify at-risk students early, enabling more targeted support to help with the nursing program retention.



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