

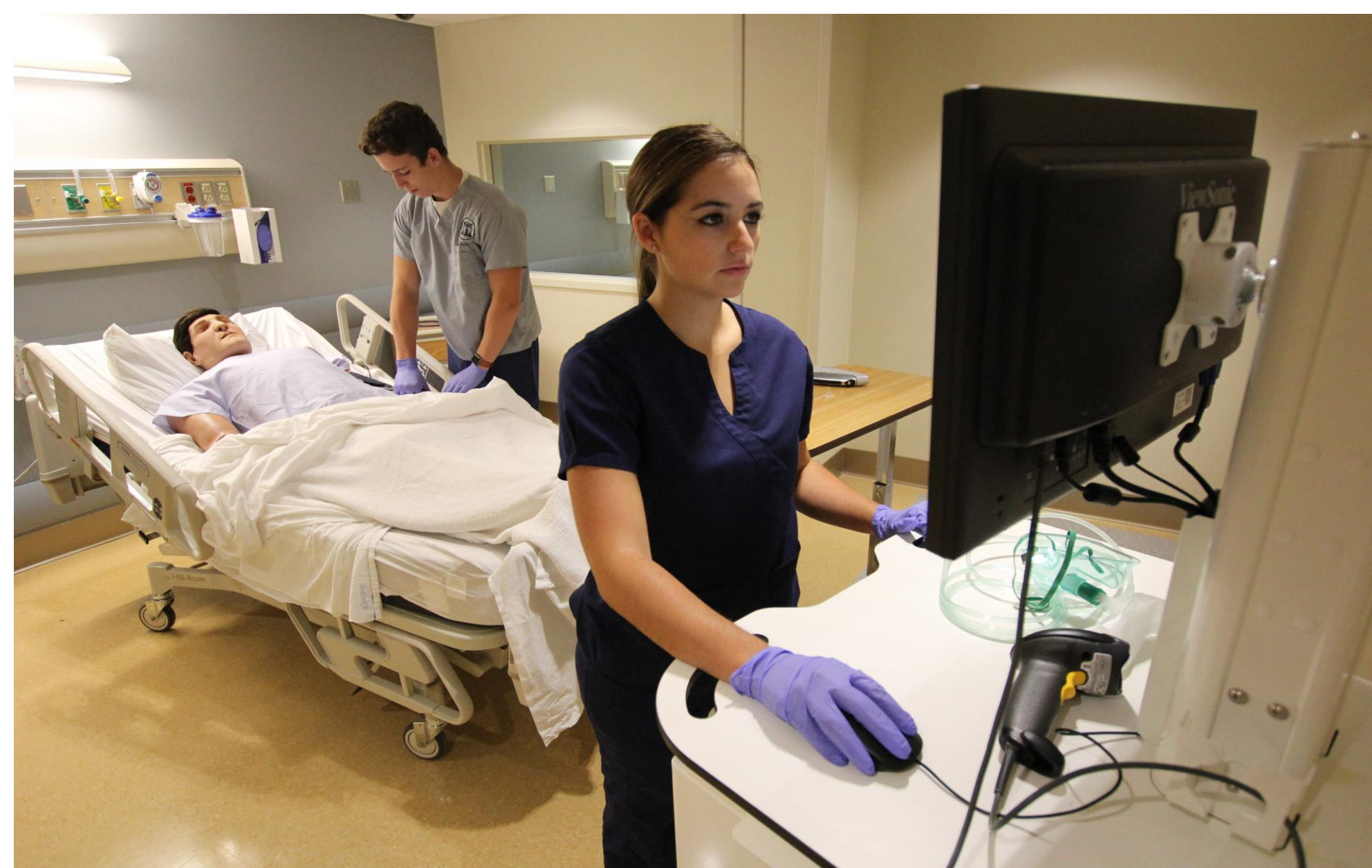
# Increasing Clinical Judgment by Using Simulation in Associate of Science in Nursing Prepared Students

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## ABSTRACT

Nurse Educators are tasked with preparing undergraduate student nurses to care for high acuity patients in the acute care setting. Simulated clinical experiences (SCE) are shown to assist the students in developing clinical judgment while still in nursing school (Kim & Kim, 2015; Mahoney, Hancock, Lorianni-Cimbak, & Curley, 2013). Using simulation, specifically high-fidelity simulation (HFS), has been researched to improve clinical judgment/reasoning in a safe, controlled environment (Lawrence, Messias, & Cason, 2018). HFS allows the student to learn from their mistakes and build clinical judgment skills safely and competently. By creating an SCE which encompasses scenarios of high acuity patient situations, the nursing student will be better equipped to provide safe interventions in the actual acute care setting. Using guidelines providing by the landmark NCSBN National Simulation Study (Hayden, Smiley, Alexander, Kardong-Edgren and Jeffries, 2014) and Simulation the International Nursing Association for Clinical Simulation and Learning (INACSL) Standards of Best Practice: Simulation<sup>SM</sup> (INACSL, 2016) faculty in an associate degree program redesigned how simulation is used to prepare ASN students for clinical practice and increase the use of HFS throughout the ASN curriculum.



## INTRODUCTION

Faculty noticed a decrease in clinical judgment and reasoning while on the clinical units in the ASN program. With the assistance of our literary review and faculty feedback, and current simulation practices, a plan was created to increase the number of simulations in our ASN curriculum. The number of simulations increased throughout the ASN curriculum with particular focus of the final semester of the ASN program. The simulations were designed to facilitate clinical judgment and reasoning skills. Results from proctored standardize testing which is given at the completion of the program were reviewed and compared. The goal was to see if critical thinking and judgment increased when the students were exposed to more simulations.

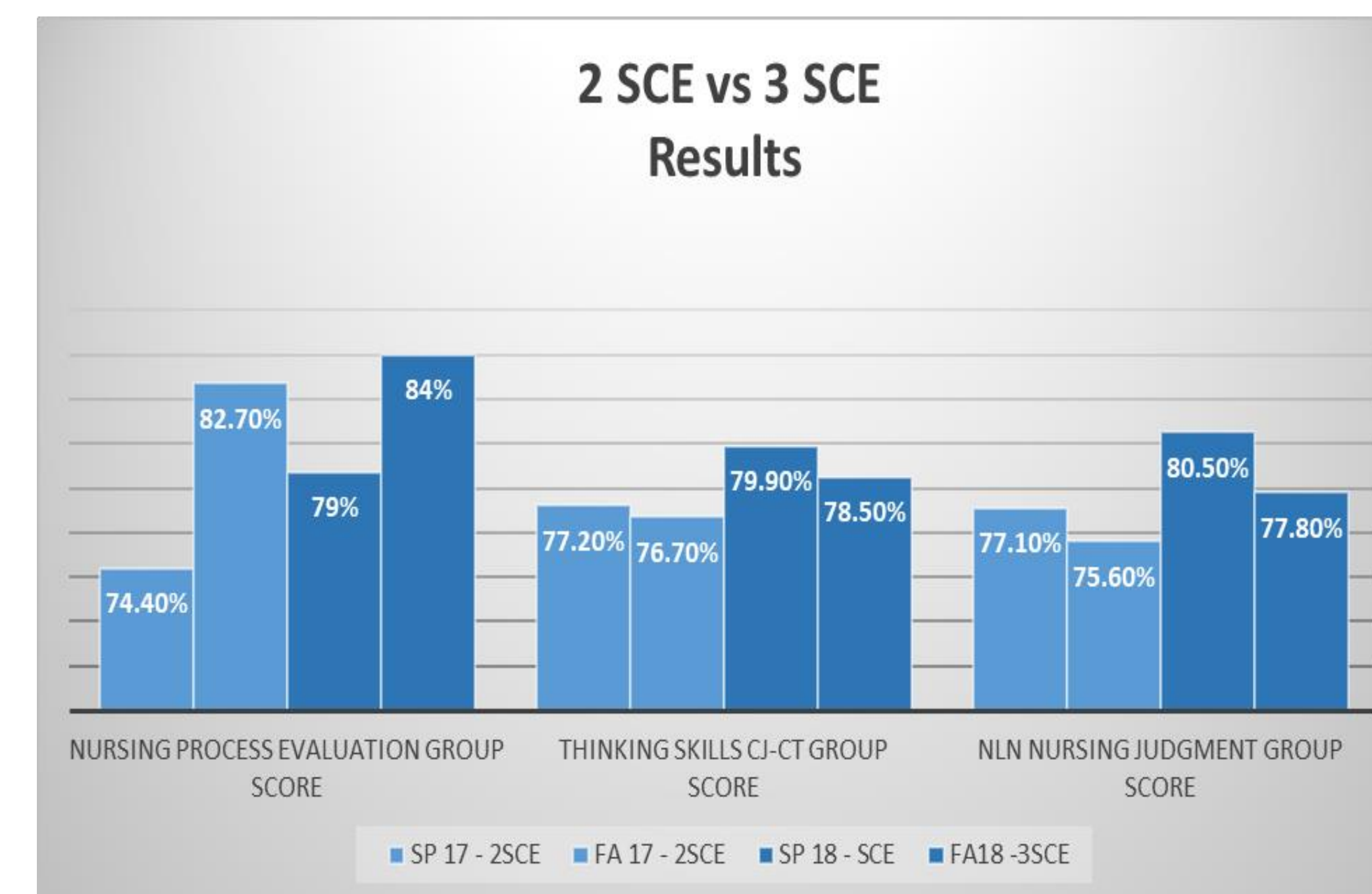


## METHODOLOGY

The simulation design is the same for all simulations and includes Standards of Best Practice: Simulation<sup>SM</sup>. The additional simulation, added in the Spring of 2018, is a respiratory distress scenario per faculty suggestion. Quantitative data was collected from standardized exams in areas that measured clinical judgment/reasoning. The quantitative data collected is from a nationally normed, standardized exam given to students who have successfully completed all program requirements in the ASN Program.

## RESULTS

This ongoing study used the aggregated results related to topic areas that address clinical judgment/reasoning on the standardized exam. The standardized exam data were collected each semester, starting in Spring 2017 (N= 144 Students). An increase in the percentage scores of items related to clinical judgment/reasoning was noted from 76.7% to 79.9%. Since Spring 2017, students have participated in more simulations throughout the ASN program, especially in their final semester. These results suggest that simulation helps to foster increased clinical judgment in the graduate nurse. Currently, students in the ASN program participate in fifteen simulations within four semesters.



## References

- Hayden, J. K., Smiley, R. A., Alexander, M., Kardong-Edgren, S., & Jeffries, P. R. (2014). The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. *Journal of Nursing Regulation, 5*(2), S3-S64. [https://doi.org/10.1016/S2155-8256\(15\)30062-4](https://doi.org/10.1016/S2155-8256(15)30062-4)
- The INACSL Standards Committee (2016, December). INACSL Standards of Best Practice: Simulation<sup>SM</sup>: Simulation Design. *Clinical Simulation in Nursing, Volume 12*, S5-S12. <https://doi.org/10.1016/j.ecns.2016.09.005>.
- Kim, J., & Kim, E. J. (2015). Effects of simulation on nursing students' knowledge, clinical reasoning, and self-confidence: a quasi-experimental study. *Korean Journal of Adult Nursing, 27*(5), 604-611. <https://doi.org/10.7475/kjan.2015.27.5.604>
- Lawrence, K., Messias, D. K., & Cason, M. L. (2018). The influence of simulation experiences on new nurses' clinical judgement. *Clinical Simulation in Nursing, 25*(C), 22-27. <https://doi.org/10.1016/j.ecns.2018.10.008>
- Mahoney, A. E., Hancock, L. E., Lorianni-Cimbak, A., & Curley, M. A. (2013). Using high-fidelity simulation to bridge clinical and classroom learning in undergraduate pediatric nursing. *Nurse Education Today, 33*(2013), 648-654. <https://doi.org/10.1016/j.nedt.2012.01.005>
- Tanner, C. (2006). Thinking like a nurse: a research-based model of clinical judgement in nursing. *Journal of Nursing Education, 45*(6), 204-210.

## RECOMMENDATIONS/LIMITATIONS

Reviewing the quantitative data and the amount of simulations students participate in their final semester of the ASN program, it is plausible the increase in SCE did in fact increased clinical judgment and thinking. Given the richness of the simulation design and the robust debriefing process, clinical faculty recognize a better connection between theory to practice. A variable to consider during this study is in 2017, the ASN curriculum committee encouraged faculty to increase NCLEX-style questions in the didactic classroom. Also, in Fall 2018, fourth-semester faculty in the didactic portion used a “flipped classroom” and increased utilization of case studies in an attempt to enhance students’ knowledge of new course material.

## CONCLUSION

Increasing simulation across the ASN program, with emphasis on the final semester, has suggested increased clinical judgment/reasoning scores on a standardized exam. However, further research needs to be conducted to evaluate if the increase has been from increased simulation, or from the teaching learning activities used in the final semester of the ASN program.

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