

Sigma's 30th International Nursing Research Congress Passing NCLEX: What Courses and Tools Matter Most to Students

Taralyn W. McMullan, DNP¹

Jackie Lollar, DNP¹

Bettina H. Riley, PhD, RN²

(1)College of Nursing; Maternal/Child Dept., University of South Alabama, Mobile, AL, USA

(2)College of Nursing, Community Mental Health Nursing, University of South Alabama, Mobile, AL, USA

Purpose:

Obtaining success with baccalaureate students first time pass rates on the National Council Licensure Examination for Registered Nurses (NCLEX-RN) is a key outcome for any nursing school and influences many aspects of the program itself. One common goal for nursing faculty members and administrators, is to utilize a curriculum that lends to NCLEX success. The ability for a school to successfully grow their program is reliant on the effectiveness of the curriculum, accrediting body recognition and ability to meet state board of nursing education standards. Factors such as: accreditation agencies, state boards of nursing, faculty and students rely on this rate to measure success of a program influencing admission process, curriculum, retention, remediation and nursing school selection. The curriculum and progression policies for nursing programs have many factors that can positively or negatively influence NCLEX pass rates. Additionally, many outside resources are available to students and faculty to assist in enhancing nursing student education. Many educational companies rely on their product to be utilized, in conjunction with the nursing curriculum, to improve NCLEX pass rates.

Methods:

Our team began a project to examine various factors that influence NCLEX success. Our project has completed the first stage in realizing which courses and tools are most influential in leading students to be more successful on NCLEX-RN. This retrospective review evaluated program success and failures over a 2-year period. Our research questions measured: (1) number of attempts to pass nursing courses on prediction of NCLEX-RN outcomes, (2) nursing course grades to determine influence on pass rates, (3) is Assessment Technologies Institute (ATI) as an assessment tool stronger at predicting NCLEX-RN outcomes, and (4) impact of cut off points in nursing course grades as a predictor of success on NCLEX-RN outcomes. Data was gathered from July 2014 - May 2016 and statistically analyzed using SPSS. Information collected included: final grades in 7 theory courses required for graduation, ATI (2017) Comprehensive Predictor Scores, and number of attempts to pass the course. Students marked as unsuccessful were further classified as: withdrew failing, withdrew passing, failed or other to explain possible reasons for unsuccessful completion of the course. Students were also divided into cohorts based on expected graduation dates. All students were required to complete the ATI proctored assessment in all content areas and the final ATI Comprehensive Predictor exam in the final semester of the curriculum.

Results:

After evaluating 196 students who had taken the NCLEX-RN, 162 passed; 34 failed which resulted in a 82.7% pass rate. Means and standard deviations of 7 course grades paired with NCLEX-RN outcomes were reported. Little impact can be seen with the

number of attempts a student receives to take a course on NCLEX-RN success. Adult/Gerontology (II) course is the best predictor of success on NCLEX-RN pass rates. However, ATI-Med Surg and Nutrition assessments were most predictive for passing NCLEX-RN. Increasing the cutoff point to pass a course, raising it from 70% to 74% was not significant enough to recommend curricular changes because grade average does not serve as a single predictor of success. As a result, the cutoff point remained the same and the current utilization of ATI was not changed.

Conclusion:

After close review of the data collected, faculty members began to rely on the outcomes of the Adult/Gerontology II course grades to predict NCLEX success of the graduating class. Moreover, the ATI Med-Surg and Nutrition assessments are administered in this Adult/Gerontology II course. The faculty members are able to analyze the all influential scores of the particular cohort and try to strengthen any areas in which the students may be scoring low or appear to be weak. Because this course is taken during the fourth semester of a five-semester program, there is time for remediation and enhancement of certain content areas. The value in the knowledge gained from the study has great impact for students and faculty. Students could use this information to determine nursing school admission/acceptance by determining which tools are required in the program. Additionally, knowing curricular expectations of when the Adult/Gerontology course would be taken and course score pass rates would be important for students as they apply. Faculty can further use this information to determine curricular changes in the sequence of courses, pass rate scores, remediation procedures and enhancement with assessment tools, such as ATI.

Title:

Passing NCLEX: What Courses and Tools Matter Most to Students

Keywords:

NCLEX Success, curricular changes and retention/remediation

References:

Alameida, M. D., Prive, A., Davis, H. C., Landry, L. Renwanz-Boyle, A. & Dunham, M. (2011). Predicting NCLEX-RN success in a diverse student population. *Journal of Nursing Education*, 50(5), 261-267. doi:10.3928/01484834-20110228-01

American Association of Colleges of Nursing (2018). *Who we are*. Retrieved from: <http://www.aacnnursing.org/About-AACN>

Assessment Technologies Institute (ATI). (2016). *ATI nursing education*. Leawood, KS: ATI.

Bristol, Tim (2015, March 2). [Faculty Development] <https://nursetim.com/>

Carrick, J. A. (2011). Student achievement and NCLEX-RN success: Problems that persist. *Nursing Education Perspectives*, 32(2), 78-83. Retrieved from: <http://www.nln.org/newsroom/newsletters-and-journal>

Commission on Collegiate Nursing Education (2018). Committees and Task Forces. Retrieved from: <http://www.aacnnursing.org/CCNE-Accreditation/Who-We-Are/Committees-and-Task-Forces>

Cox-Davenport, R.A., & Phelan, J.C. (2015). Laying the groundwork for NCLEX success: An exploration of adaptive quizzing as an examination preparation method. *Computers, Informatics, Nursing*, 33(5), 208-215. DOI: 10.1097/CIN.0000000000000140

Dibartolo, M. C. & Seldomridge, L.A. (2005). A review of intervention studies to promote NCLEX-RN success of baccalaureate students. *Nurse Educator* 30(4), 166-171. Retrieved from: <https://journals.lww.com/nurseeducatoronline/pages/results.aspx?txtkeywords=Volume+30+issue+4>

ECollege.com. International Directory of Company Histories, 85. Retrieved May 24, 2018 from Encyclopedia.com: <http://www.encyclopedia.com/reference/dictionaries-thesauruses-pictures-and-press-releases/ecollegecom>

HESI for Nursing (2018). HESI for nursing: Retrieved from: <https://evolve.elsevier.com/education/nursing-review-and-testing/>

HESI Research (2018). HESI research. Retrieved from: <https://evolve.elsevier.com/education/hesi/research/>

IBM Corp. (2015). IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp.

Institute of Medicine (IOM). (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press.

Kaddoura, M. A., Flint, E. P., Van Dyke, O., Yang, C. Q., & Chiang, L. C. (2017). Academic and demographic predictors of NCLEX-RN pass rates in first-and second-degree accelerated BSN programs. *Journal of Professional Nursing* 33(3), 229-240. Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2016.09.005>

Landry, L. G., Davis, H., Alameida, M.D., Prive, A., & Renwanz-Boyle, A., (2010). Predictors of NCLEX-RN success across 3 prelicensure program types. *Nurse Educator*, 35(6), 259-263. DOI: 10.1097/NNE.0b013e3181f7f1c9

Lauer, M. E., & Yoho, M., J. (2013). HESI exams: Consequences and remediation. *Journal of Professional Nursing*, 29, S22-S27. Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2013.01.001>

Lockie, N.M., Van Lanen, R.J., & McGannon T. (2013). Educational implications of nursing students' learning styles, success in chemistry, and supplemental instructions participation on national council licensure examination-registered nurses performance. *Journal of Professional Nursing* 29(1), 49-58. Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2012.04.003>

Lown, S. G., & Hawkins, L. A. (2017). Learning styles as a predictor of first-time NCLEX-RN success: Implications for nurse educators. *Nurse Educator*, 42(4), 181-185. DOI: 10.1097/NNE.0000000000000344

McGahee, T. W., Gramling, L., & Reid, T. F. (2010). NCLEX-RN® success: Are there predictors? *Southern Online Journal of Nursing Research*, 10(4), 1-14. Retrieved

from: http://www.resourcenter.net/images/SNRS/Files/SOJNR_articles2/Vol10Num04Art13.pdf

National Council of State Boards of Nursing (NCSBN). (2009). NCLEX-RN examination. Test plan for the national council licensure examination for registered nurses. Chicago, IL: NCSBN.

National Council of State Boards of Nursing (2017). Retrieved from <https://www.ncsbn.org/nclex.htm>

National Students Nurses' Association (2018). <http://www.nсна.org/prospective-nursing-student-resource-guide.html>

SAKAI (2018). Introducing SAKAI. Retrieved June 8, 2018 from: <https://sakaiproject.org/>

Simon, E. B., McGinnis, S. P., & Kruass, B. J. (2013). Predictor variables for NCLEX-RN readiness exam performance. *Nursing Education Perspectives*, 34(1), 18-24.

Retrieved from: <http://www.nln.org/newsroom/newsletters-and-journal/nursing-education-perspectives-journal>

Simon, W., & Augustus, L. (2009). Comparative analysis of NLN NCLEX-RN readiness exam performance: BSN vs AND. *Journal of Research in Nursing*, 14(5), 451-462.

Retrieved from: <http://www.nln.org/newsroom/newsletters-and-journal/nursing-education-perspectives-journal>

Thomas, M. H., & Baker, S. S. (2011). NCLEX-RN success: Evidence-based strategies. *Nurse Educator*, 36(6), 246-249. DOI: 10.1097/NNE.0b013e3182333f70

Trofino, R. M. (2013). Relationship of associate degree nursing program criteria with NCLEX-RN success: What are the best predictors in a nursing program of passing the NCLEX-RN the first time. *Teaching and Learning in Nursing*, 8, 4 -12. doi.org/10.1016/j.teln.2012.08.001

USA About (2018). Retrieved from: <http://www.southalabama.edu/aboutusa/>

Yeom, Y.J., (2013). An investigation of predictors of NCLEX-RN outcomes among nursing content standardized tests. *Nurse Education Today*, 33, 1523-1528. Retrieved from: <http://dx.doi.org/10.1016/j.nedt.2013.04.004>

Zweighaft, E.L. (2013). Impact of HESI specialty exams: The ninth HESI exit exam validity study. *Journal of Professional Nursing*, 29(2S), S10-S16. Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2012.06.011>

Zweighaft, E.L. (2013). Impact of HESI specialty exams: The ninth HESI exit exam validity study. *Journal of Professional Nursing*, 29(2S), S10-S16. Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2012.06.011>

Retrieved from: <http://dx.doi.org/10.1016/j.profnurs.2012.06.011>

Abstract Summary:

Our project focused on determining what courses/tools are most influential in the successful pass rate of NCLEX for BSN nursing students. We performed a retrospective look at student performance over 2 years to gain perspectives and appreciation in determining how our curriculum impacts NCLEX success.

Content Outline:

I. Overview of team and project

II. Main points:

1. Why
2. Methods

3. Limitations
 4. Outcome
- III. Impact
1. Students
 2. Academic leaders
- IV. Conclusion
- V. Future Projects

First Primary Presenting Author

Primary Presenting Author

Taralyn W. McMullan, DNP
University of South Alabama
College of Nursing; Maternal/Child Dept.
Associate Professor
Mobile AL
USA

Author Summary: Dr. Taralyn McMullan works at the University of South Alabama College of Nursing as an Associate Professor. She currently works exclusively online in the MSN and DNP programs, however, she has years of experience teaching undergraduate theory and clinical courses as well.

Second Author

Jackie Lollar, DNP
University of South Alabama
College of Nursing; Maternal/Child Dept.
Assistant Professor
Mobile AL
USA

Author Summary: Dr. Lollar teaches at the University of South Alabama College of Nursing at the BSN, MSN and DNP levels. She has served as Department Chair and been involved in making curricular changes at various levels throughout her career. Current research interests including nursing education, human patient simulation and maternal-newborn nursing.

Third Author

Bettina H. Riley, PhD, RN
University of South Alabama
College of Nursing, Community Mental Health Nursing
Associate Professor
Mobile AL
USA

Author Summary: Nursing educator for past 9 years; researcher and author; research experience includes influences and motivations of late adolescents, psychiatric rapid response teams, and mental health and depression.