

Comparing Methods to Improve Student Engagement, Performance, and NCLEX Readiness in an Associate Degree Nursing Program

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BACKGROUND

Concerns regarding nursing student performance in academia is becoming increasingly high, especially, after the advent of the Covid-19 pandemic. Nationally, we are seeing a decline in the average NCLEX scores. Studies suggest that the more engaged the student is in their learning, the better their performance. Research has attempted to determine what teaching strategies increase engagement and if increased engagement affects performance and ultimately NCLEX scores. However, further research is warranted.

PICOT

Do first year nursing students who use ATI Engage Fundamentals display higher engagement, tests, and NCLEX readiness scores than those who don't?

PURPOSE

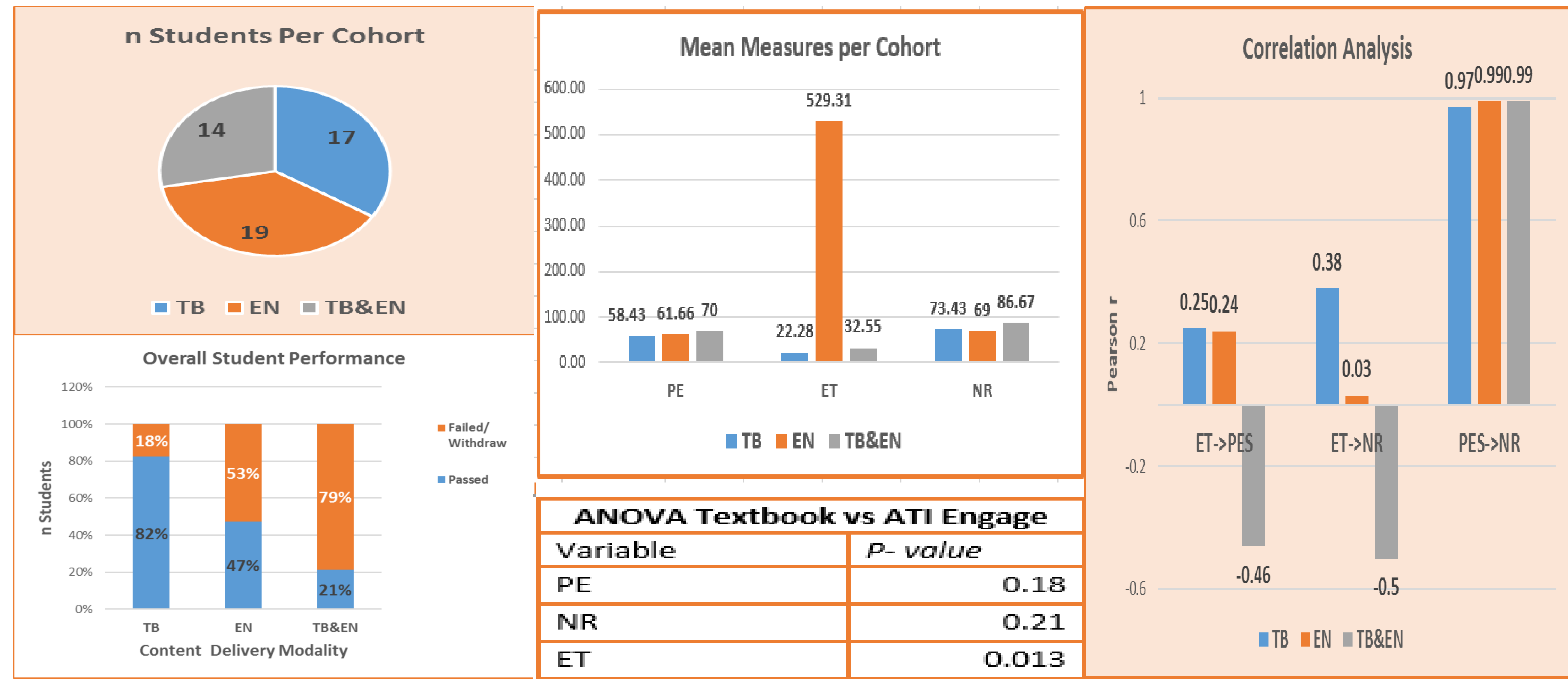
The purpose of this study is to compare the effects of a digital platform learning tool on student's engagement, performance and NCLEX readiness in first year associate degree nursing students.

METHODS

This is a retrospective cohort study of an Associate Degree nursing program in a community college in a major urban city. Faculty collected retrospective data from an implemented digital learning platform on the engagement time (ET) defined as minutes of usage and active learning, performance (PE) defined as assessment scores from practice and proctored exams, and NCLEX readiness (NR) based on digital platform scores. We compared these measure outcomes in first semester nursing students across 3 different sequential cohorts who utilized only the specific learning tool in the digital learning platform (EN) to students who utilized only the course textbook (TB), and to students who utilized both the textbook and the digital learning platform (TB&EF). Descriptive statistic, Pearson r correlation coefficient and ANOVA multivariate analysis were calculated for comparison and statistical significance.

RESULTS

- Results showed similar engagement in the TB and TB+EN and higher in the EN cohort (m= 22.2, 32.55, 529.3 engagement minutes).
- PE score was similar in the TB and EN but higher in the TB+EN cohort (m= 58.4%, 61.6%, 70%).
- NR score was higher in the TB+EN cohort (m= 86.6%). Additionally, the results of the regression analysis showed a strong positive correlation between PE and NR scores across all cohorts (Pearson r= 0.97, 0.99, 0.99), as well as a positive correlation between ET and PS in both the EN and TB cohorts (Pearson r= 0.25, 0.24) and a positive correlation between ET and NR in the TB cohort (Pearson r= 0.38).
- ANOVA multivariate analysis showed no statistical significance for PE and NR scores between cohorts (p= 0.18, 0.21), however it did show statistical significant difference in engagement time (p=0.013).



CONCLUSIONS/RECOMMENDATIONS

Engagement has always been challenging to measure for multiple reasons. Faculty must strive to engage the student and encourage effective student self regulated learning. Traditional methods such as assigning a textbook chapter to read to measure engagement can be challenging and subjective. A digital platform can offer more objective ways of measuring student engagement. However, it is imperative faculty measures student engagement using different types of formative and summative assessments.

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