# HESI: A Quality Improvement Study

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# Purpose

The purpose of this study was to determine if students perceive a need to change the implementation of HESI to better serve their educational needs in the Murray State University School of Nursing.

# Significance

Research has shown that standardized testing does improve NCLEX-RN pass rates (Richards & Stone, 2008). A review by Harding (2010) found HESI to be 96.4 to 98.3 percent accurate in predicting NCLEX-RN success, but this same study found that HESI is not a reliable indicator of NCLEX-RN failure rates.

Multiple studies discuss the usefulness of standardized testing and even HESI specifically in preparing students for the NCLEX-RN. However, few studies were found regarding how to best implement and use HESI in a baccalaureate nursing program. Spurlock and Hanks (2004) examined the use of progression policies that prevent graduation if a satisfactory score is not reached on the HESI exam. Ethington's (2008) research focused on whether or not including HESI exam scores in overall course grades impacted students' performance on the exam itself. Because there are very few existing articles on the topic, additional research is needed in order to improve the implementation and use of HESI in nursing programs throughout the country.

### Methods

**Design:** A mixed methods approach was used in this study, and a one-time survey consisting of eight items was administered to nursing students at Murray State in each semester of the program during the fall of 2016. The data collected in these surveys was reviewed and organized by the researchers. Quantitative data was combined to find mean, median, mode, and standard deviation. Qualitative responses were organized by categories and themes, and a narrative thematic analysis approach was used. Murray State University's Institutional Review Board provided exemption for this study.

Sample: Participants included Murray State nursing students from all six semesters in the program. One-hundred eighty of the 211 students in the program in the fall of 2016 completed the survey.

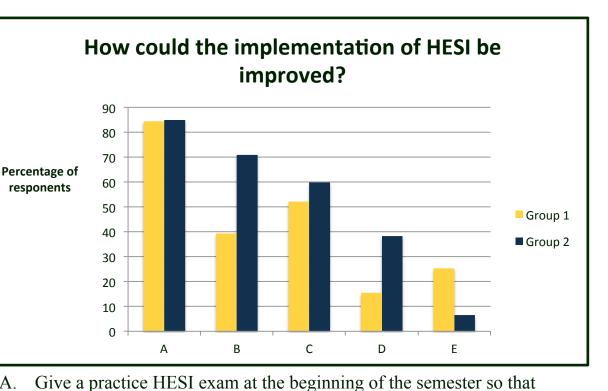
#### Results

The results of this study found a significant amount of stress related to HESI among nursing students. Recommendations for reducing this stress include decreasing or eliminating the impact of HESI scores on course grades and including more practice questions or quizzes throughout the program. When asked if they would take the HESI exams seriously if their scores had no impact on their final course grade, 77.6 percent of respondents answered yes.

Of the students who had completed remediation, the most common suggestion for improving the process was adding an in-person review after the exam. Other suggestions for improvement included giving a practice HESI exam at the beginning of the semester so that students could work to improve their weak areas before the next

## Abstract

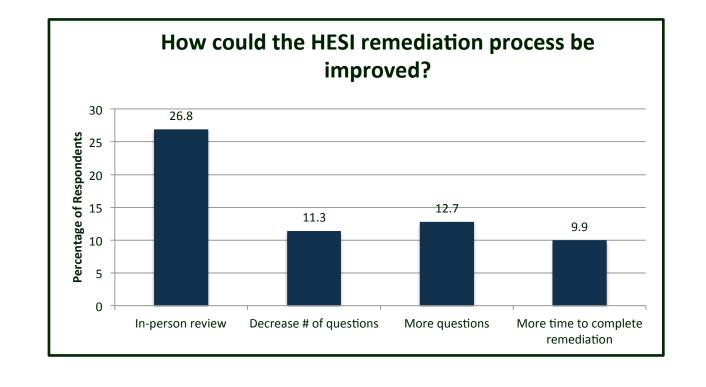
The Murray State University School of Nursing implemented HESI in the fall of 2015 in an attempt to prepare students for the NCLEX-RN so that pass rates could improve. Students in semesters two through five take a standardized HESI exam towards the end of each nursing course. The purpose of this study was to determine whether or not students perceive a need to change the way HESI is used within the program and identify possible improvements that could be made. A mixed methods approach was used. Participants (n=180) completed an eight-item survey. Common suggestions for improvement included decreasing or eliminating the impact of HESI exam scores on course grades and increasing the use of HESI throughout the program. Additional recommendations included giving a HESI exam at the beginning of the semester that does not count as part of the course grade and adding an in-person review to the remediation plan.



HESI could be reduced. % of respondents respondents from Group 2 Decrease or eliminate the impact of the HESI exam score on the overall course grade More practice questions and/or 32.1% 13.5% Practice exam that does not count 0% 12.4% towards grade Increase the use of HESI in class 11.3% Teach in class what is on the exam or 10.1% 1.9% eliminate that content from the exam

List some ways in which your stress regarding

- students can better prepare for the HESI exam at the end of the semester B. Reduce/eliminate the impact of HESI exam scores on course grades C. Increase the use of HESI components in individual courses (i.e. case studies, practice questions, quizzes, etc.)
- D. Adjust/improve the current remediation plan
- E. Allow more time to complete the HESI exam



#### Group 1: What changes in the use of HESI would you like to see made in future courses? % of Response More practice Decrease or eliminate the 23.8% impact of the HESI exam score on the overall course grade Don't know; no changes

Response	# of	% of
	students	respondents
More practice	21	25.6%
Decrease or eliminate the impact of the HESI exam score on the overall course grade	35	42.7%
Give a HESI exam at the beginning of the semester that does not count as a part of the course grade	10	12.5%
Increase the use of HESI in individual courses	9	11.0%
Correlate HESI more with class content	8	9.8%

#### **Discussion**

The results of this study show that students experience a significant amount of stress related to HESI. Robinson and Tagher (2015) noted that stress was a common finding among nursing students preparing for the HESI Exit Exam and that this stress caused students to perceive the exam as a threat rather than a challenge. This suggests that reducing the stress level might improve student perceptions and perhaps performance. Reducing or eliminating the impact of HESI exam scores on course grades was a common suggestion. However, Ethington (2008) found that students whose HESI exam scores did impact their grade actually scored higher. In addition, none of the students in the study failed a course as a result of HESI exam scores (Ethington, 2008). It is also important to note that 77.6 percent of respondents to this survey marked that they would in fact take HESI exams seriously even if it had no impact on course grades. The current remediation plan requires that students who score below a 900 on any HESI exam answer a predetermined number of questions in their low content areas. The results of this study show that more than half (55.6%) of respondents who had completed remediation felt that it had no impact on their understanding of the material. This suggests the need for a new remediation plan. More research is needed in order to determine the best way to improve the remediation process for students.

#### **Conclusion**

Overall, the results of this study indicate that there are improvements to be made in the use of HESI in the Murray State School of Nursing. Possible topics of further discussion include the impact of HESI exam scores on course grades, improving the remediation process, and exploring other ways to reduce students' stress related to HESI. Additional research is needed in order to identify the opinions of nursing students from other schools and to determine whether or not including HESI exam scores in overall course grades actually improves performance. More research is also needed to determine how students' stress levels regarding HESI can be reduced and how the remediation process can be improved.

#### References

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