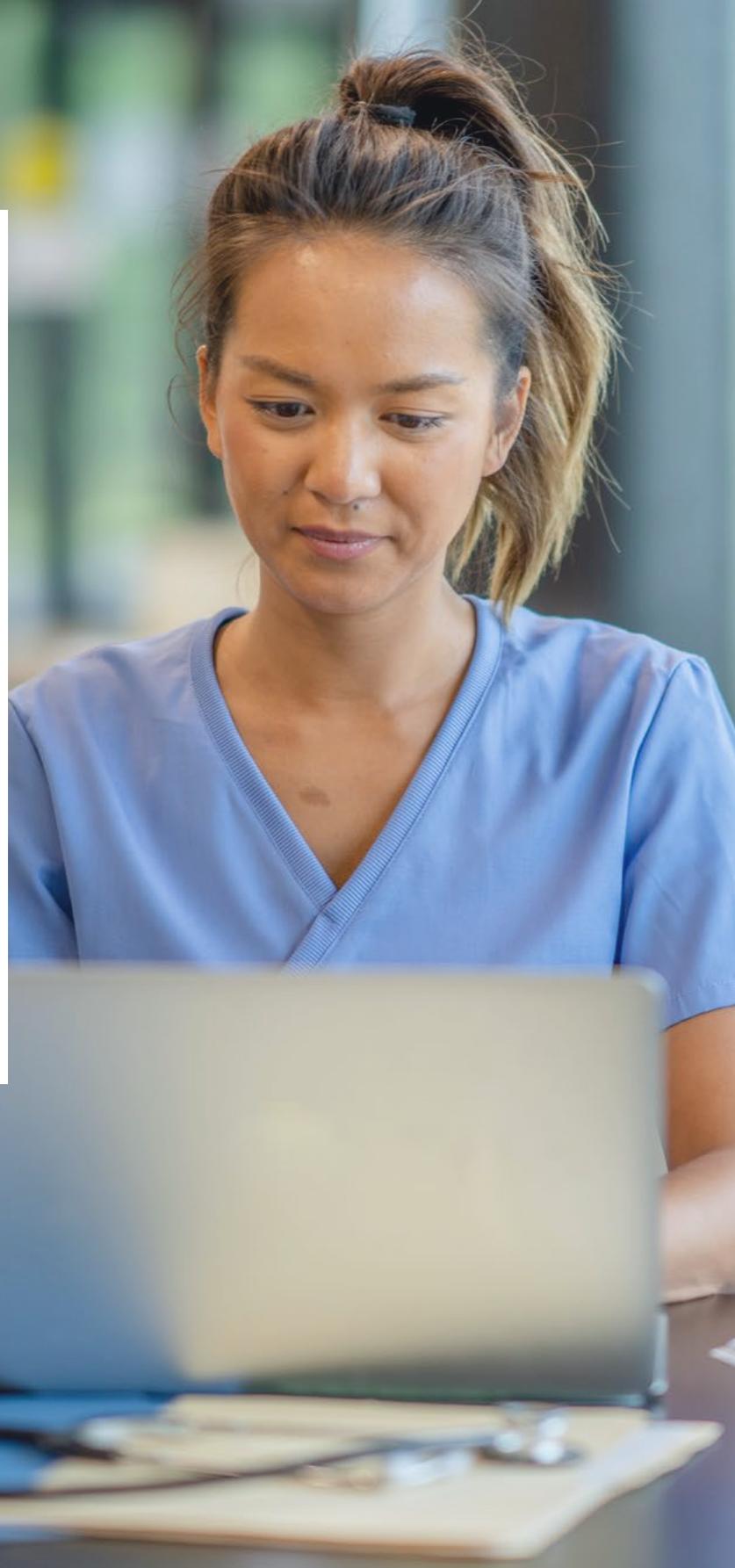




ELSEVIER

# HESI<sup>®</sup>

Implementation  
Guide for PN





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This guide is designed to help faculty implement HESI exams and Elsevier products in their curriculum. It includes strategies that have proven successful and made an impact on student HESI exam and NCLEX® performance. Suggestions for policies in this document are ideas for your consideration and not a set standard.

# Testing Policy



There are several steps critical to successful implementation of HESI testing and educational resources in your nursing program. We recommend you address each of the following as a program and develop policies, procedures, and practices appropriate for your specific program needs.

## TESTING POLICY

The foundation of any standardized testing in a program is a consistent testing policy. Such a policy should clearly define student and faculty roles and responsibilities in the testing process, the process for using standardized tests in the program, and expectations regarding student exam preparation, review, and remediation (Mee & Schreiner, 2016).

### Considerations in Developing a Testing Policy

- Establish a testing committee and testing policies — come to consensus and seek support from administration. Gather research from the relevant literature. The testing committee should have support to make decisions for change and regular policy reviews.
- Establish a positive testing culture (i.e., learning about your weaknesses is a good thing and can help you better focus your study efforts). Emphasize the value of the tests and individual remediation that can help students succeed. A positive attitude helps encourage positive student perceptions.

- The consequence or exam grade weight should be fair, and students should not be evaluated on standardized exam scores alone. We recommend programs comply with the NLN Fair Testing Guidelines.
- Include references in your policy to reflect the literature used to make your policy decisions. For example, some policies cite HESI validity study research.
- Setting a target threshold score can help motivate students to study and do their best on the exam. Without a consequence, students might not take the exam seriously (Lauer, 2013). For example, the student could choose to click through an exam and select item responses randomly to complete it quickly.

Testing policies and policies on academic honesty/integrity go hand-in-hand. Reinforce these policies each semester with students — not just first semester. Clearly define and document what academic dishonesty and unacceptable behavior is for students. This may include mentioning that sharing of information about test content is prohibited. Specify that discussing test content with students who will be taking the exam is considered academic dishonesty. Consider having students sign an acknowledgement of understanding of policies every semester and refer to your academic honesty policy in each course syllabus.

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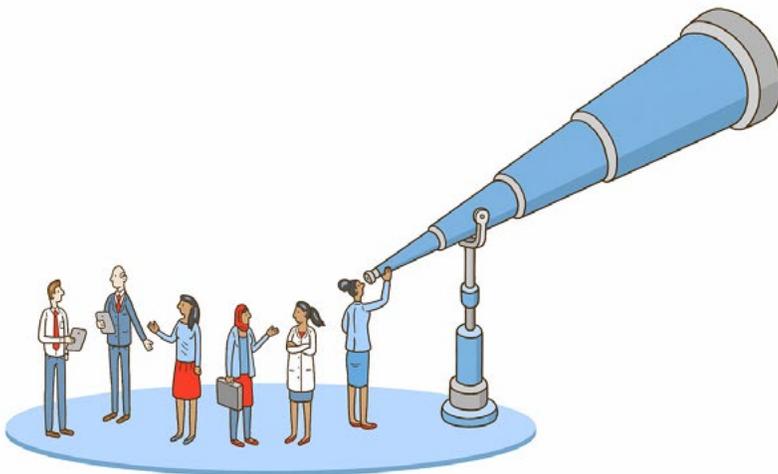
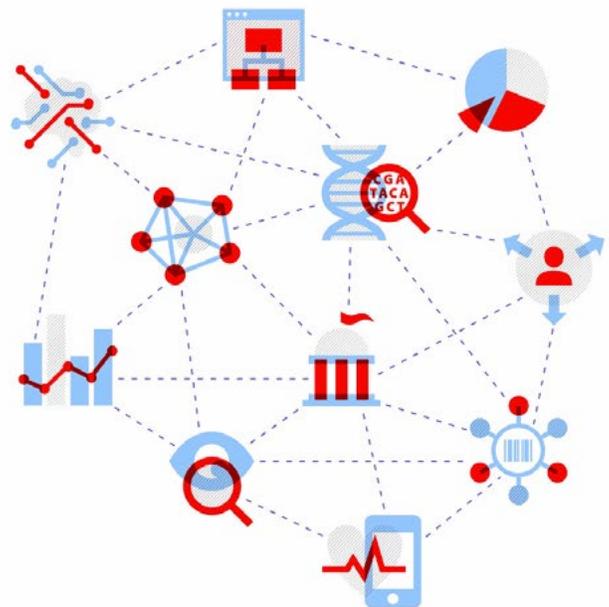
# Testing Policy, *cont.*



- Faculty might consider a policy giving them the right to disavow a score if group or individual scores indicate that some students may have had prior knowledge of the exam/question content. A new test can be issued in this case. Here is some wording to consider: “We use data forensics to analyze exams and items for aberrancy. We reserve the right to reissue an exam in cases where aberrant scores are detected” or “We reserve the right to require students who have scores that increase more than \_\_\_\_ points since their last testing to retest using another exam version, so they can sufficiently demonstrate content mastery.”
- Consider wording around copyright infringement such as: “Using illegally purchased test content is grounds for dismissal from the program.” Note that HESI exam content is copyright protected.

## Sample Policy Text

*Standardized testing is used in the College of Nursing as part of the program assessment plan, as well as a tool for students to measure their progress and remediate in areas in which they may be deficient. Standardized testing will occur at designated points during the prelicensure undergraduate curriculum, as determined by the faculty and in consultation with the program directors and the Dean. Please review associated course syllabi for standardized testing information and associated grading.*



# HESI Exam Security Policy

The HESI exams must be administered in a proctored environment and all individuals who have access to the exams and related materials must comply with copyright and confidentiality restrictions. Maintaining security helps ensure that the exam results reflect each student's knowledge, skill, and understanding of the exam content, rather than reflecting unauthorized access to content or information.

Proctoring is the active oversight by a trained, authorized, and neutral person to protect the integrity of the testing experience by

1. creating and maintaining an environment that is conducive for secure testing
  - A. ensure technology is working
  - B. provide materials when required (e.g., headphones)
  - C. ensure prohibited materials are not brought into the testing session (e.g., smart devices)
2. verifying the test taker's identity and eligibility to test,
3. ensuring no forbidden study or collusion materials are allowed during testing,
4. monitoring the proctoring dashboard and/or patrolling the room watching individual test taking behaviors ensuring that no protected test content is removed from the test session

Recommended types of proctoring include either in-person live proctoring by a trained proctor or remote proctoring using an Elsevier-approved remote proctoring vendor. Use of trained proctors for remote proctoring via a group meeting platform (like Zoom) is allowed but not recommended.

## 1. Legal Obligations for Test Security

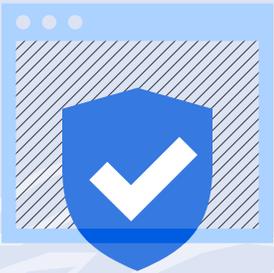
Elsevier requires its institutional customers to:

- A. All HESI exams and accompanying materials including rationales and other remediation content (collectively the "HESI Materials") are protected by the federal Copyright Act, 17 U.S.C. § 101, et seq. Further, all HESI Materials are confidential and proprietary and are the exclusive property of Elsevier. Access to all such HESI Materials, as further detailed below, is strictly conditioned upon agreement to abide by Elsevier's rights under the law, including the federal copyright laws.
- B. In addition to being protected by federal copyright laws, HESI Materials are confidential under contractual obligations. As such, access to all HESI Materials is strictly conditioned upon agreement by all Authorized Users (including but not limited to faculty, students, administrators, and proctors) that they
  - i. will not copy, reproduce, adapt, disclose, or distribute examinations, in whole or in part, before, during, or after taking an exam, by any means now known or hereafter invented and
  - ii. will not reconstruct exam content from memory, by dictation, or by any other means or otherwise discuss exam content with others.

Authorized Users further acknowledge that disclosure or any other use of HESI exam content constitutes professional misconduct and may expose them to criminal as well as civil liability and may also result in Elsevier's imposition of penalties against them, including but not limited to, invalidation of examination results, exclusion from future examinations, suspension, and other sanctions.

- C. With respect to assessment practice products, rationales, and remediation content within the HESI Materials, all Authorized Users agree access to such content components is strictly conditioned upon agreement that they
  - i. will not copy, reproduce, distribute, or make any adaptations of such materials in any manner
  - ii. will not assist someone else in the infringement or misuse of these or any other Elsevier copyrighted works.

# HESI Exam Security Policy, *cont.*



## 2. Institution responsibilities to maintain HESI Exam Security – apart from the legal obligations for ensuring security, Elsevier further requires all institutional customers accessing HESI Materials to:

- A. Establish academic honesty policies that are
  - i. Detailed — specifically outline for students both what is expected of them and what is considered inappropriate behavior
  - ii. Actionable — specify the corrective procedures corresponding to inappropriate behaviors
  - iii. Enforced — retain documentation of inappropriate behaviors and corrective actions taken with the ability to produce such documentation upon written request
- B. Ensure that access codes for the HESI exams are kept secure and delivered to the trained proctor and/or students in a secure manner.
- C. Ensure that faculty members do not take HESI secure exams for any reason.
- D. Ensure that every potential test taker is eligible, has their identity confirmed, and is scheduled to take the current exam. (Do not allow unconfirmed students to test.)
- E. Require proctoring of all HESI exams by trained proctors
  - i. To ensure the highest possible validity for each exam score
  - ii. To protect Elsevier’s intellectual property.

For example, for in-person test takers, direct them to seats and do not allow them to choose where to sit.
- F. Ensure that no electronic or photographic devices (phone, watch, smart glasses, other wearables, etc.) are visible or accessible to any test taker while testing (answering items and rationale viewing) is active.
- G. Refrain from sharing exam-specific details (like version) with test takers before, during, or after exam administration. (To discourage illicit behavior, it is recommended that the selection of test versions be varied across cohorts and semesters.)
- H. (For Legacy customers) Establish a process to close exams as soon as the last test taker has finished testing to ensure that
  - i. no one else can use the access code for this session
  - ii. remediation content is viewable in a timely manner.

If others still need to take the exam, Institution should administer a separate exam (ideally a different version) with a new access code.

- I. Analyze test taker performance after the exam administration to determine the validity of the testing session.
  - i. Look for uncharacteristic scores that might indicate a test taker’s score is not reflective of their true knowledge. This includes scores that are very high, very low, and/or very different from previous performance by that test taker in prior HESI exams. For example, a student scores in the 600s throughout the program and then earns a score in the 900s.
  - ii. Pay particular attention to the scores of test takers who complete an exam very quickly or very slowly and check their scores against past performance to identify if their score was indicative of their knowledge.



## PROCTORING HESI EXAMS

Diligent proctoring is essential to exam security, which in turn, ensures test validity. If a student has received exam content prior to taking the exam, the exam results are no longer valid. HESI proctor training will ensure proctors understand technical aspects of exam administration. Consistent guidelines for proctors will ensure a consistent secure testing experience for all students. It is suggested that programs follow NCSBN candidate rules for administering HESI exam (<https://www.ncsbn.org/1268.htm>)

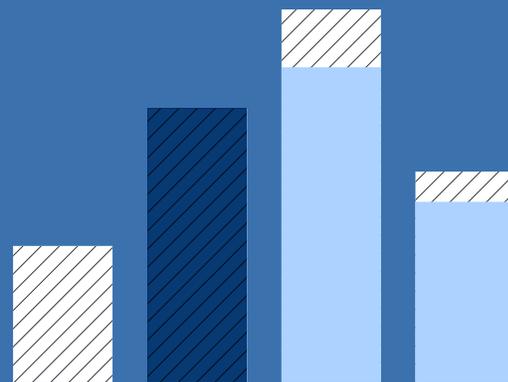
### Considerations for testing/proctoring:

Follow your program's pertinent policies for test administration, including those related to the use of scratch paper and students leaving/re-entering the room during an exam. Ideally, students should not leave the room until their exam is finished.

- Define the list of items not allowed in the testing environment in your policy. Define in detail examples of infractions considered to be academic dishonesty and be as specific as possible. For example, we suggest you do not allow students to have smart watches/cellular phones in the room during testing and consider terminating the exam if a device rings or vibrates.
- Do not allow entry to late students. Establish a time (suggest: 10 min prior to exam start time) for students to be in the room to sit for the exam.
- Proctors should be actively moving about the room watching students and their behaviors.
- Use multiple proctors and cameras in the room as needed to help assure that students are not sharing content.
- Proctors should not answer questions about the content of questions — ask students to do their best and read the question again, look for key words, etc.
- Proctors should be supported in their role in reporting misconduct. Develop guidelines/policy for recognizing and managing concerns of misconduct.

# HESI Exam Scoring

Prepared by **Kim Brunnert**, PhD, CESP, Director of Psychometrics; **Winona Vesey**, PhD, Psychometrician in Review and Testing; and **Cheryl L. Mee**, MSN, MBA, RN, FAAN, Director, Nursing Education and Assessment Consultation



HESI Scores are individually weighted based on both the difficulty level of each test item and the performance of the student on that item. Item difficulty is a mathematical measurement that describes the percentage of correct responses from a large sample. Each time the item is administered, the difficulty level is recalculated, taking into consideration this new response.

## The HESI Score

The HESI Score is used to describe performance on Specialty and Exit Exams. The HESI predictability model (HPM), a proprietary mathematical model, is used to calculate each HESI Score (typical range from 0 to 1,500). The HPM considers several factors, including the difficulty level of each test item and the performance by that student on all the items. Research on predictive accuracy of the HESI exams has been conducted using this HESI Score. Research studies have found the HESI Score to be highly accurate in predicting NCLEX success. For example, while a score of 850 or more is acceptable, students who score at 900 or above on the HESI Exit Exam are predicted to pass the NCLEX without additional preparation.

## Application of the HESI Score

Each nursing program is responsible for establishing its own standard or policy for benchmarked or acceptable scores. Faculty should consider standards and guidelines established by professional organizations and accrediting organizations. It is also recommended that peer-reviewed literature be considered when developing testing policies related to standardized testing. Elsevier is not prescriptive when establishing school-specific benchmarks or testing policies. Benchmarks are set at the discretion of the school's faculty and administrators.

## Conversion Score

While the HESI Score is the single best predictor of future performance, we recognize that instructors often need a score to use in their grade book. To ensure consistency in use, HESI provides a Conversion Score. The Conversion Score is a weighted percentage score that considers the average difficulty of the exam. There is a relationship between the HPM and the Conversion Score, but it is not a simple percentage. For example, a HESI Score of 850 (the typical “acceptable performance” score) can result in a converted score anywhere between 70 and 84, depending on the difficulty of the test items the student answered. The Conversion Score was developed to better reflect the student's ability than a traditional percentage score, which would not take into account the difficulty level of the test items. However, the HESI Score based on the HPM is more accurate in predicting NCLEX success.

## NGN Performance Report

The NGN (Next Generation NCLEX®) Performance Report provides insights into student performance in each of the six cognitive skills of layer 3 of the NCSBN's Clinical Judgment Measurement Model (NCJMM). Until the completion of a Score Setting and Validity Study, students will receive two scores upon completing the HESI NGN Integrated Exam. Within the Exam Results tab of the NGN Performance Report, there are two scoring sections, one for “HESI Performance” and one for “Integrated Pilot Items for NGN.” At this time, the score featured in the “HESI Performance” section continues to be the most reliable indicator of NCLEX success. The score in the “Integrated Pilot Items for NGN” is a directional metric to quantify clinical judgment and exposure to NGN item types. Upon completion of the Score Setting and Validity Study, HESI Exams will provide one integrated score.

## Assigning Grades

Some faculty have used the HESI Score as part of a course grade by developing a scale assigning points to various HESI Score intervals — for example, an 875-899 score might be valued at 10 points in the course grade and 850-874 might be 7.5 points. If neither the HESI Score nor the Conversion Score are desirable, a grade book score, as is suggested in the table below, may make more sense.

TABLE 1: HESI SCORE CATEGORIES MAPPED TO SUGGESTED GRADE BOOK SCORES\*

HESI Scoring Interval	Performance Level	Suggested Grade Book Score
> 1050	Recommended Performance	95
1001 – 1050		90
950 – 1000		85
900 – 949		82
875 – 899	Acceptable Performance	80
850 – 874		78
800 – 849	Below Acceptable Performance	75
750 – 799		71
700 – 749	Needs Further Preparation and Retesting	67
≤ 699		59

\*Suggested grade book scores are based on average Conversion Scores from a large sample size.

## Application of the Conversion Score

Some faculty prefer to use the Conversion Score as a portion of the course grade. Faculty have reported using the exam as 5%–15% of the total course grade, for instance. Keep in mind that the HESI Score is a better predictor of NCLEX success than the Conversion Score because it reflects application of the HPM in its calculation, whereas the Conversion Score does not. The two scores might be used to help faculty make decisions about course grades (using the Conversion Score) and the need for remediation (using the HESI Score).

## A Word About the CAT Exam

The Computer Adaptive Test (CAT) does not use the HPM scoring model to determine student performance levels but reflects the application of the HESI adaptive test engine's scoring model.

An adaptive test engine analyzes two facets of each item (item difficulty and the individual's performance on an item) to tailor testing based on the individual responses. If a test taker answers an item incorrectly, then the computer will present an easier item next. If a test taker answers an item correctly, then a more difficult item will be presented next. This process continues until enough items have been answered for the computer to confidently calculate the test taker's ability. The HESI RN Exit CAT was developed to mimic the NCLEX examination experience in both administration and scoring. The HESI CAT Score (ranging from 0 to 30) was calculated using a formula that combines the number and difficulty of the items answered correctly. Three possible result categories are provided to the student: acceptable, minimally acceptable, and needs further preparation and retesting.

*continued...*

# HESI Exam Scoring

## FAQs

***How can two students answering the same number of questions have different scores?***

Both the HESI Score and the Conversion Score consider the difficulty of the items and the exam for the individual student. Students answering the same number of items, but not identical items, correctly are likely to receive different HESI Scores. Such scores depend not only on the number of items answered correctly, but also on which item the student answered correctly. Consider this scenario: both Student A and Student B answer 80 items correctly on the HESI Exit Exam. Student A correctly answered more difficult items than Student B. Student A will have a higher HESI Score and higher Conversion Score than Student B.

***How can two students with similar HESI Scores get such different Conversion Scores?***

HESI Scores typically range from 0 to 1,500, are individually weighted, and consider the difficulty of the item; whereas Conversion Scores (typically ranging from 0 to 100) use average difficulties and average performance. Conversion Scores were created to give faculty a score they could use in their grade books, but they truncate the finer scale used for the HESI Scores. While a student may have a higher HESI Score (e.g., Student 1 HESI Score = 935 and Conversion Score = 81.17 versus Student 2 HESI Score = 934 and Conversion Score = 84.63) it could be that a handful of the items Student 2 answered correctly were more difficult than those answered correctly by Student 1, which resulted in the slightly higher Conversion Score. In short, not only is the transformation from HESI to Conversion Scores nonlinear, but the difficulty of the item is a major factor as well.

***How can my student have such high Category Scores on their reports but have an 800 HESI?***

Discrepancies between the HESI Composite Score and Category Scores is usually an indication of some gap in knowledge across subject matters. As an example, you might see that Student A performed exceptionally well with scores of 950 or greater in Critical Care, Medical Surgical, Pathophysiology, and Psychiatric/Mental Health, yet has drastically lower scores (e.g., 676) in Maternity, Pediatrics, and Professional Issues. In summary, gaps in student knowledge across subject matters are captured in the HESI Composite Score.

# Elsevier Adaptive Quizzing (EAQ) for the NCLEX



Studying for the NCLEX is like training for a marathon, it takes a lot of practice and training. The goal of Elsevier Adaptive Quizzing (EAQ) for the NCLEX is for students to achieve higher levels of mastery on a wide variety of nursing topics as they move through their nursing program to promote optimal student performance.

## HESI PREPARATION WITH EAQ FOR THE NCLEX

EAQ for the NCLEX and HESI are a successful combination, with the use of EAQ as test preparation leading to higher HESI scores and first-time NCLEX pass rates (Gouveia, 2022). Students can practice answering questions for the NCLEX and receive feedback and rationale for immediate remediation.

### HESI Specialty Exams

To prepare for a HESI Specialty Exam, students should quiz in the associated RN Content or Specialty Area. Minimally, students should achieve novice mastery in all associated subcategories OR 70% on custom quizzes (when mastery quizzing is not an option). Optimally, students should achieve intermediate level mastery in all associated subcategories OR 80% on custom quizzes.

For optimal performance and increased exposure to alternative assessment items, it is also recommended that students complete Next Generation NCLEX (NGN) Quizzing in the associated specialty area prior to taking their HESI Exams.

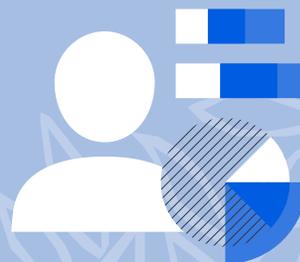
### HESI Exit Preparation

The HESI Exit Exam measures student readiness for licensure with an exam blueprint that matches the latest NCLEX test plan. In preparation for the Exit Exam, students should focus their quizzing on the Client Needs Categories. Remember that every question the student has answered thus far in the program was tagged to the appropriate Client Needs Categories and students should already show some mastery in these areas. At minimum, students should achieve novice mastery in all Client Needs Categories prior to taking the HESI Exit Exam. Optimally, students should achieve intermediate level mastery in these categories prior to the Exit Exam.

### NCLEX Preparation

Students can continue to work toward proficient level mastery in all Client Needs Categories as part of preparation for the NCLEX (after graduation). Encourage students to focus on categories of individual weakness, based on HESI exam results.

# Remediation



Another integral piece of the testing process includes exam preparation and remediation. Programs should consider the HESI/Elsevier resources available to faculty and students and outline a plan to help students successfully prepare for, and remediate after, their HESI exams.

Remediation is a critical piece of the standardized testing process, improving student retention and academic success (Myles, 2018). Remediation is most effective when it is individualized based on the student's areas of weakness, and when there is a consistent remediation process across the curriculum (Mee & Schreiner, 2016). Each HESI exam provides students with targeted remediation study packets to reinforce understanding of content. Effective remediation is multimodal (Mee & Schreiner, 2016). HESI Next Generation (HESI NG) provides students with case studies, allowing them to apply the content they review.

A remediation policy has been demonstrated to make an impact on HESI scores. Mandatory remediation can be a consequence that motivates students to perform well on standardized exams. Faculty can establish remediation expectations based on score (more remediation is required for lower scoring students). The remediation policies and expectations should be consistent across courses. Teach students the value of remediation early so they understand the benefits of HESI remediation — be sure they are clear that HESI exams provide remediation specific to their content areas of weakness.

Students should review remediation that follows the proctored exam as it is specific to the content areas of weakness. Consider adding a measurable component to student remediation, such as completion of assigned Case Studies in HESI NG remediation, to an established threshold (suggested 80%), or including Elsevier Adaptive Quizzing to demonstrate learning has occurred.

Time requirements can be included in the remediation policy, but it is not recommended as the sole measure of remediation completion. Faculty may include mandatory time requirements as a consequence to encourage the use of remediation tools. Time in remediation as a measure of success or completion has not been well explored in nursing education research.

## Considerations for Remediation Consequences

- Students may choose not to complete remediation unless there is some consequence or defined requirement.
- Consider a penalty for uncompleted remediation. This can be as minimal as a 10% reduction in the student's grade or as critical as not allowing the student to take the second version of the exam. This is a program decision, as individual programs know what intrinsically motivates their students best.
- High scoring students should still be studying and using remediation tools to prepare for NCLEX. Some students with high scores may be overly confident that they will pass and not prepare well for NCLEX.

## Additional Remediation Considerations

- Define “at-risk students” and include a faculty “owner” for at-risk students. Identify high-risk students and consider targeting more remediation efforts to this group.
- Champion for Student Success — identify a faculty member for student success to help with test-taking strategies, study skills, identifying and working with high-risk students, and remediation.
- Consider developing an in-person group remediation review session after an exam based on the group's identified weaknesses. This session can supplement the individualized online student remediation and focus on areas where the whole group may have had low scores. This is an opportunity to reinforce key concepts that the group might have missed. Consider adding this session into a regular class after each specialty exam. Use summary analysis reports and trend reports to identify these content areas of concern for your cohorts.
- Early in the program, teach students how to read and understand their student exam reports and how to access and complete remediation. This will start students off strong with good habits related to reading HESI reports and using HESI online remediation.

## SAMPLE HESI REMEDIATION PLAN

**Please note:** The Sample Remediation Plan & Sample Rubric are derived from best practices and intended as a starting point. It is recommended that each program choose what best works for their program and customize it to meet individual needs and outcomes.

Complete remediation in the areas for improvement based on your HESI Score:

HESI Score	Remediation / Action Steps
850 or above On Track	<ol style="list-style-type: none"><li>1. Complete all Essential Packets of HESI Remediation</li><li>2. Complete any assigned Case Studies in HESI Remediation</li></ol>
800-849 Needs Improvement	<ol style="list-style-type: none"><li>1. Complete all Essential Packets of HESI Remediation</li><li>2. Complete any assigned Case Studies in HESI Remediation</li><li>3. Complete <b>one</b> 20-question custom quiz for relevant content area (Specialty Exam) or lowest performing Client Needs Category (Exit Exam) with a goal of 80%.</li></ol>
750-799 At Risk	<ol style="list-style-type: none"><li>1. Complete all Essential Packets of HESI Remediation</li><li>2. Complete any assigned Case Studies in HESI Remediation</li><li>3. Complete <b>two</b> 20-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li></ol>
700-749 High Risk	<ol style="list-style-type: none"><li>1. Complete all Essential Packets of HESI Remediation</li><li>2. Complete any assigned Case Studies in HESI Remediation</li><li>3. Complete <b>two</b> 30-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li></ol>
<700 High Risk	<ol style="list-style-type: none"><li>1. Complete all Essential Packets of HESI Remediation</li><li>2. Complete any assigned Case Studies in HESI Remediation</li><li>3. Complete <b>three</b> 30-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li></ol>



## SAMPLE HESI ASSESSMENT RUBRIC

1. Standardized proctored assessments are administered to all nursing students at each level.
2. The HESI proctored assessment is weighted at 10% of the final grade.
3. Students can earn points toward final HESI grade by completing remediation as indicated.

### HESI PROCTORED EXAM RUBRIC

HESI Score 850 or above	HESI Score 800-849	HESI Score 750-799	HESI Score 700-749	HESI Score <700
On Track  10 Points (100%)	Below Acceptable Performance  8 Points (80%)	Below Acceptable Performance  7 Points (70%)	Needs Further Preparation  6 Points (60%)	At Risk  5 Points (50%)
Remediation is recommended, not required  <ul style="list-style-type: none"> <li>• Complete all Essential Packets of HESI Remediation</li> <li>• Complete all assigned Case Studies in HESI Remediation</li> </ul>	Remediation is required  <ul style="list-style-type: none"> <li>• Complete all Essential Packets of HESI Remediation</li> <li>• Complete all assigned Case Studies in HESI Remediation</li> <li>• Complete one 20-question custom quiz for relevant content area (Specialty Exam) or lowest performing Client Needs Category (Exit Exam) with a goal of 80%</li> </ul>	Remediation is required  <ul style="list-style-type: none"> <li>• Complete all Essential Packets of HESI Remediation</li> <li>• Complete all assigned Case Studies in HESI Remediation</li> <li>• Complete two 20-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li> </ul>	Remediation is required  <ul style="list-style-type: none"> <li>• Complete all Essential Packets of HESI Remediation</li> <li>• Complete all assigned Case Studies in HESI Remediation</li> <li>• Complete two 30-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li> </ul>	Remediation is required  <ul style="list-style-type: none"> <li>• Complete all Essential Packets of HESI Remediation</li> <li>• Complete all assigned Case Studies in HESI Remediation</li> <li>• Complete three 30-question custom quizzes for relevant content areas (Specialty Exam) or lowest performing Client Needs Categories (Exit Exam) with a goal of 80%</li> </ul>
<b>Points added to final HESI grade upon completion of remediation</b>				
	<b>Points = 1 (90%)</b>	<b>Points = 1.5 (85%)</b>	<b>Points = 2 (80%)</b>	<b>Points = 2.5 (75%)</b>





## HESI DATA ANALYTICS

Educators are encouraged to use data to make decisions regarding curriculum and policy. Data from HESI Testing can be used to help identify high-risk students early in the program, improve retention rates, track and trend data for accreditation reports, and help pinpoint curriculum strengths and potential curriculum gaps. Such data-driven decisions help focus change efforts in the right direction.

The Nursing Process can guide you as you begin to look at data, analyze it, and make data-driven decisions for your courses and your program.



### ASSESSMENT

**First, identify the question or issue.** Do you have a concern about a course or the program? Are there weaknesses? Are NCLEX pass rates strong? How do we keep pass rates strong?

**Use data to assess your program on an ongoing basis.** Consider reviewing the summary analysis report after every exam. Note high and low category scores in categories, especially those content categories with greater numbers of questions. Where are the strengths and weaknesses? Review item detail from exam items (found in the summary analysis report). Additional info might be gleaned from item topic details and cohort performance on the items compared to national performance.

**Review trends over time, not just one data point.** You can build trend reports that collate exam data from multiple exams by using the Report Builder tool in HESI Faculty Access. Trended data can provide a visual depiction of mean scores over time. Consider reviewing data trends starting with HESI Exit Exam data. Trends in content categories over time can reveal ongoing weaknesses. Dashboards will soon be available for faculty to view data trends more readily over time.

**HESI Champion.** Consider assigning an owner/champion of HESI Data analysis; someone who can help faculty develop a data trend report over time and review the data.



### ANALYSIS

**Be proactive in using data** for curriculum analysis, instead of reactive.

**Identify content that might need reinforcement in later classes.** Sometimes students are strong and know the content earlier in the program, but knowledge might drop off later in the program. This is something you can glean from data analysis.

**Analysis is the key!** Even with strong pass rates, be sure to analyze data for trends that might need early course correction. Faculty who know the syllabi and teach the classes are essential to identify underlying concerns and next steps.



## PLANNING

**Develop a plan for evaluating test data.** Consider the following: How often should data be analyzed? For example, faculty can review data trends and present findings to the team in the fall and the spring. What trends should be analyzed routinely?

**Implement a plan for using the data.** Be sure to not only analyze data but develop an action plan. What will you do with the data? For example, the team might identify three areas to focus on with the next student cohort for a change in teaching strategies or curriculum. Who on the faculty team analyzes data, presents the data, and helps plan correction activities? Be sure to discuss data and scores at faculty meetings and document your work in meeting minutes.



## INTERVENTION

**Assess impact of change** — use the data not only to identify concerns but to help assess scores after a change.

**Curriculum evaluation** — identify areas for change in teaching strategy and/or revision of syllabi or curriculum. Use low category scores from reports as data for external curriculum evaluation.

**Discussion with students** — use the Summary Analysis results for in-class discussion and as a guide for group remediation efforts in content areas of weakness.

**Pinpoint what's working** — use high-scoring categories (categories where students repeatedly score above benchmark) to determine strengths in teaching strategies and course resources. Share these strategies to help make improvements in weaker content areas.

**Student self-assessment** — have students review their HESI Exam scores and assess their strengths and weaknesses. This may help students develop and/or establish personal remediation plans.

**Identify high-risk students** — some students may need additional faculty support due to ineffectual study habits, test anxiety, or for other reasons. Identification of high-risk students and a plan of action can help impact retention rates.



## EVALUATION

**Measure successes** — if you implemented curriculum change or included different teaching strategies, you can review the data following the implementation and document the success of the change. Consider using the data and data trends as part of your documentation for accrediting bodies. Based on your data analysis, what questions do you want to address in future data dives?

The possibilities are endless with the wealth of data provided through HESI testing. Start with small steps, asking a specific question to narrow your initial analysis. Assess your findings, analyze the data, develop a plan, implement your changes, and finally, evaluate the outcome. Set up a plan for continuous review and discussion of data by the faculty team. The entire team owns student success, data analysis, and efforts to improve student performance. By using HESI data and these simple steps, you will be making the data-driven decisions demanded by stakeholders in nursing education.

**Sample: HESI Data Review Document — HESI Exit Exam**

HESI Exam: \_\_\_\_\_ Mean Cohort HESI Score: \_\_\_\_\_ Date: \_\_\_\_\_

- This document can be adapted for faculty to use as they review data.
- This document can be adapted for students to help them organize and design a remediation study plan.
- Using your HESI Exam results, identify strengths and areas for improvement in the following categories.
- Pay attention to the number of questions in a category. A topic area with a low score with a higher number of questions warrants more attention and remediation time than an area with a low score and only one question.
- Consider review of Exit Exam trends as you start to analyze data over time.

STRENGTHS			AREAS FOR IMPROVEMENT		
Nursing Process			Nursing Process		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions
Client Needs (Exit Exams)			Client Needs (Exit Exams)		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions
Specialty (Exit Exams)			Specialty (Exit Exams)		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions
Sub-Specialty			Sub-Specialty		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions
Nursing Concepts			Nursing Concepts		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions

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