



ELSEVIER

# HESI<sup>®</sup>

## Implementation Guide

*with Personalized Learning Plans*





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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 allows all stakeholders to come to consensus to support student success. A testing committee works with program faculty and leadership to identify curricular gaps, to support high-risk students who struggle academically, to help guide faculty decision making, legal and ethical necessity in relationship to fairness, consistency, communication. Please refer to the HESI Policy Checklist, available in Appendix B, during policy development and review.
- 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.*

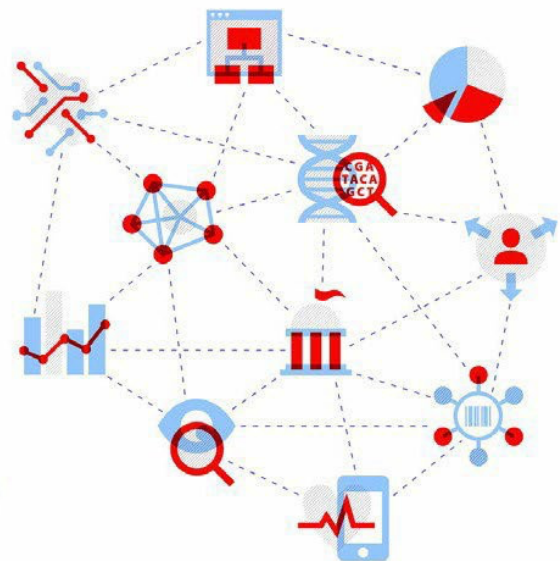
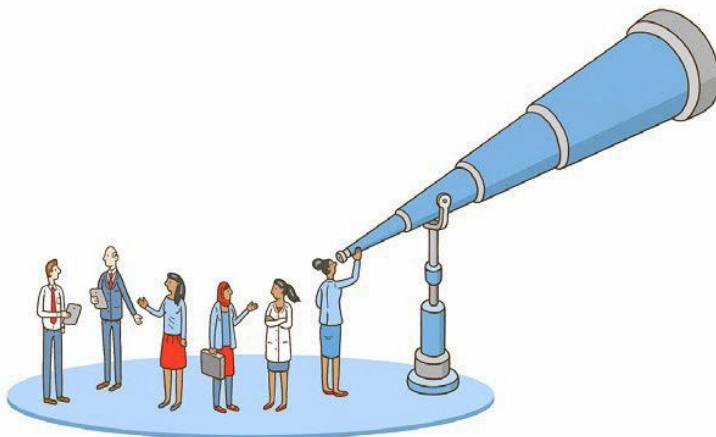


- Faculty might consider a policy giving them the right to disavow a score if group or individual scores indicate that some students may have had prior knowledge of the exam/question content. A new test can be issued in this case. Here is some wording to consider: “We use data forensics to analyze exams 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. Please refer to the sample testing policy as a guide or template when developing your own institution’s policies to ensure comprehensive and consistent procedures.*

For a full HESI Testing and Remediation Policy sample, please see Appendix C.





# 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:

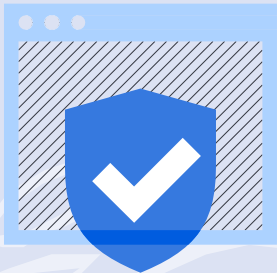
- A. All HESI exams and accompanying materials including rationales and other remediation content (collectively the "HESI Materials") are protected by the federal Copyright Act, 17 U.S.C. § 101, et seq. Further, all HESI Materials are confidential and proprietary and are the exclusive property of Elsevier. 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 personalized learning plan(s) 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 and
  - ii. will not assist someone else in the infringement or misuse of these or any other Elsevier copyrighted works.

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# 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 (faculty or graduate teaching assistant)
  - 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.)

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

- H. 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>)

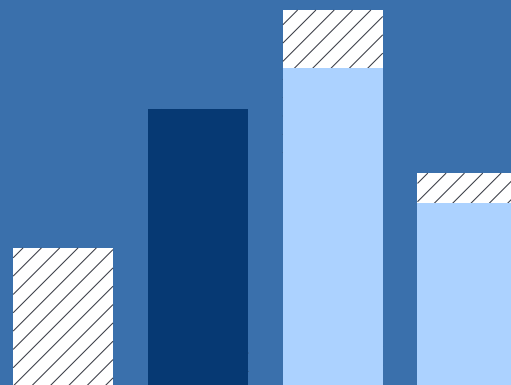
### Considerations for Testing/Proctoring

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.
- Use lockdown browsers that restrict access to other applications, websites, or communication tools during the exam.
- Disable copy-paste, screen capture, and printing features.

# HESI Exam Scoring

Prepared by Kim Brunnert, PhD, CESP, Director of Psychometrics; Francisco Jimenez, PhD, Psychometrician in Review and Testing.



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 which describes the percentage of correct responses from a large sample.

## 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 1500). The HPM considers several factors, including the difficulty level of each test item and the performance by that student on all of 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.

## 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

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 9% of the HESI score and can be calculated by multiplying the HESI score\* .09. A look-up table is also available. HESI made this change in the spring of 2024 to respond to occasional confusion when interpreting the HESI and conversion scores together.

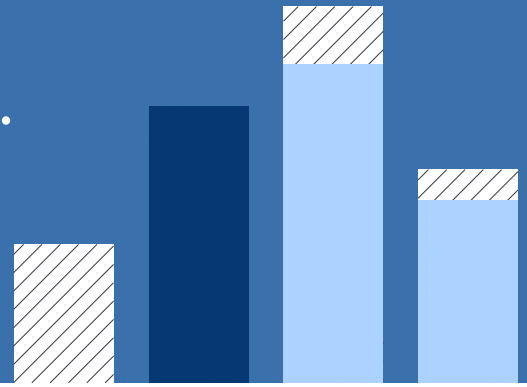
## Application of the Conversion Score

Faculty have reported using the exam as 5% – 15% of the total course grade. This seems to be a good balance between incentivizing the test takers to do their best work but not making the exam so important test takers are driven to collude to better their grade.



# HESI Exam Scoring, *cont.*

Prepared by Kim Brunnert, PhD, CESP, Director of Psychometrics; Francisco Jimenez, PhD, Psychometrician in Review and Testing.



## 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. We recommend the HESI CAT exam be taken once either at the beginning of the final course prior to graduation or at the end of the program (after Exit Exam); as the last step prior to graduation.



# HESI Exam Scoring

## FAQs

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

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.

### **Did the conversion scores change?**

Yes, the conversion score formula changed to be easier to use and understand. In the spring of 2024 the conversion scores will become direct derivatives of the HESI score. The conversion score is 9% of the HESI score and can be calculated by multiplying the HESI score  $\times .09$ . A look-up table is also available.

### *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.

### **Why is the KR-20 no longer reported?**

During the transition to including NGN items and partial credit scoring, we removed KR-20 from our reports since KR-20 can only be used with dichotomous (right/wrong) scoring. To continue to supply exam reliability data for our exams, we have created a supplemental report that can be requested from your Sales Representative.



# 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, we recommend that faculty create a 50 item custom quiz in the associated content or specialty area as a practice test prior to taking the HESI Specialty Exam. Consider creating a second practice test for students who do not achieve a passing score on the first attempt. We also recommend assigning the associated NGN case items prior to taking the HESI Exam.

We recommend students self quiz, minimally reaching novice/optimally reaching intermediate mastery in the associated content or specialty area prior to their exam.

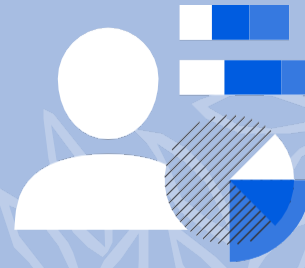
The HESI Exit Exam measures student readiness for licensure with an exam blueprint that matches the latest NCLEX test plan. In preparation for the Exit Exam, we recommend that faculty create a 100 item custom quiz that includes all the Client Needs categories for a HESI practice test. Consider creating a second practice test for students who do not achieve a passing score on the first attempt.

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. We recommend students continue to self-quiz prior to their HESI exit, with a goal to achieve intermediate mastery in all Client Needs Categories.

### 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.

# Personalized Learning Plans (PLP)



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.

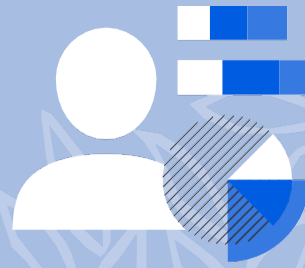
Remediation is a critical piece of the standardized testing process, improving student retention and academic success (Myles, 2018). Remediation is most effective when it is individualized based on the student's areas of weakness, and when there is a consistent remediation process across the curriculum (Mee & Schreiner, 2016). Each HESI exam will provide students with personalized readings/videos, case studies, and quizzing to reinforce understanding of content. Effective remediation is multimodal (Mee & Schreiner, 2016).

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. The Personalized Learning Plan will be set to the recommended best practices default setting, but faculty can customize these settings if desired. The remediation policies and expectations should be consistent across courses. Teach students the value of remediation early so they understand the benefits of the HESI Personalized Learning Plan — be sure they are clear that HESI exams provide personalized remediation to their content areas of weakness.

Students should review their personalized learning plan (PLP) 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 readings/videos, case studies, and quizzing, and any additional activities as assigned by faculty. It is recommended that all students complete their Personalized Learning Plan regardless of their score. Even though a student scored the benchmark they still have areas of weakness and would benefit from remediation. Time requirements can be included in the remediation policy, but it is not recommended as the sole measure of remediation completion.



# Personalized Learning Plans (PLP), *cont.*



## Considerations for Remediation Consequences

- Students may choose not to complete their Personalized Learning Plan unless there is some consequence or defined requirement.
- Consider a penalty for an uncompleted Personalized Learning Plan. 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 their Personalized Learning Plan to prepare for NCLEX. Some students with high scores may be overly confident that they will pass and not prepare well for NCLEX.
- 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.
- Early in the program, teach students how to read and understand their student exam reports and how to access and complete their Personalized Learning Plan. This will start students off strong with good habits related to reading HESI reports and using HESI Personalized Learning Plans.
- Consider developing an in-person group remediation review session after an exam based on the group's identified weaknesses. This session can supplement the Personalized Learning Plan 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.

## Additional Remediation Considerations

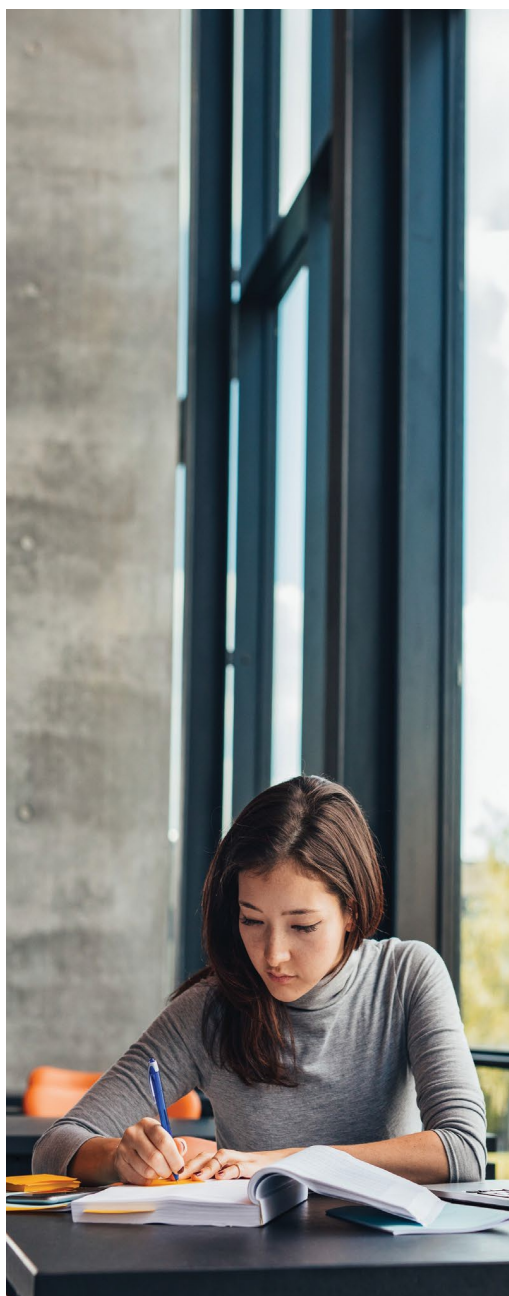
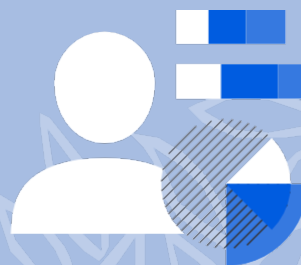
- For programs using HESI Compass: Students will receive robust study plans based on the NCLEX test plans as part of HESI Compass. Students will also receive Personalized Learning Plans (PLP) after their HESI Exit Exams. Though not required as part of HESI Compass, the PLP will provide students additional unique readings, videos, case studies, and quiz questions for additional learning and practice as they prepare to take the NCLEX.

**Please note:** The Sample Plan/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.

We recommend that all students complete their Personalized Remediation Plan. Even though a student scores the benchmark, they will still have areas of weakness and would benefit from remediation.



# Personalized Learning Plans (PLP), cont.



## HESI Personalized Remediation Plan

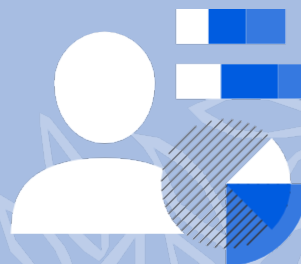
After each HESI exam, learners will receive a personalized learning plan (PLP). These plans are specific to each student and the questions missed on the assessment. PLPs will contain content to **review** in the form of short text excerpts and Osmosis videos, Case studies to **apply** the content to a relevant patient scenario, and quiz questions to **assess** learning. The amount of each resource within a PLP will vary based on HESI score, with students scoring higher receiving less and students scoring lower receiving more.

All students are required to complete their HESI PLP as part of post-exam remediation. Progress and completion of all components of the PLP is tracked in HESI for both students and faculty. In order to receive credit, all PLP requirements must be met on or before the due date.

## RECOMMENDED HESI REMEDIATION PLAN FOR SPECIALTY AND CUSTOM HESI EXAMS

HESI Exam Score	Personalized Learning Plan Expectations
900 or above	Review: 4 readings or videos Apply: 1 case study Assess: 5 quiz questions
850-899	Review: 7 readings or videos Apply: 1 case study Assess: 10 quiz questions
750-849	Review: 9 readings or videos Apply: 2 case study Assess: 15 quiz questions
Below 750	Review: 12 readings or videos Apply: 2 case study Assess: 20 quiz questions

# Personalized Learning Plans (PLP), cont.



## RECOMMENDED HESI REMEDIATION PLAN FOR HESI EXIT EXAMS

HESI Exam Score	Personalized Learning Plan Expectations
<b>900 or above</b>	Review: 4 readings or videos Apply: 1 case study Assess: 5 quiz questions
<b>850-899</b>	Review: 7 readings or videos Apply: 1 case study Assess: 12 quiz questions
<b>750-849</b>	Review: 9 readings or videos Apply: 2 case studies Assess: 18 quiz questions
<b>Below 750</b>	Review: 12 readings or videos Apply: 2 case studies Assess: 25 quiz questions



### For Programs Utilizing HESI Compass

HESI Compass includes robust study plans based on the NCLEX test plans. Students will also receive Personalized Learning Plans (PLP) after their HESI Exit Exams. Though not required as part of HESI Compass, the PLP will provide students additional unique readings, videos, case studies, and quiz questions for additional learning and practice as they prepare to take NCLEX.



## 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 and the Clinical Judgment Measurement Model (CJMM) 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 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 and programs that have the HESI Readiness Dashboard will find additional HESI insights. 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.

**Designate a 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? Review your HESI Specialty Exam and/or Exit Exam data each time they are administered.

**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. Consider using the data to implement at student success program to decrease attrition.



## 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 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.

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
CJMM			CJMM		
HESI Category	HESI Score	# of Questions	HESI Category	HESI Score	# of Questions

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## Appendix A

### HESI and Conversion Score Lookup Table

Conversion Score	HESI Score Range	Conversion Score	HESI Score Range	Conversion Score	HESI Score Range	Conversion Score	HESI Score Range
100	>1111	75	834 - 844	50	556 - 566	25	278 - 288
99	1100 - 1111	74	822 - 833	49	545 - 555	24	267 - 277
98	1089 - 1099	73	812 - 822	48	534 - 544	23	256 - 266
97	1078 - 1088	72	800 - 811	47	523 - 533	22	245 - 255
96	1067 - 1077	71	789 - 799	46	512 - 522	21	234 - 244
95	1056 - 1066	70	778 - 788	45	500 - 511	20	223 - 233
94	1045 - 1055	69	767 - 777	44	489 - 499	19	212 - 222
93	1034 - 1044	68	756 - 666	43	478 - 488	18	200 - 211
92	1023 - 1033	67	745 - 755	42	467 - 477	17	189 - 199
91	1012 - 1022	66	734 - 744	41	456 - 466	16	178 - 188
90	1000 - 1011	65	723 - 733	40	445 - 455	15	167 - 177
89	989 - 999	64	712 - 722	39	434 - 444	14	167 - 177
88	978 - 988	63	700 - 711	38	423 - 433	13	156 - 166
87	967 - 977	62	689 - 699	37	412 - 422	12	145 - 155
86	956 - 966	61	678 - 688	36	400 - 411	11	134 - 144
85	945 - 955	60	667 - 677	35	389 - 399	10	112 - 122
84	934 - 944	59	656 - 666	34	378 - 388	9	100 - 111
83	923 - 933	58	645 - 655	33	367 - 377	8	89 - 99
82	912 - 922	57	634 - 644	32	356 - 366	7	78 - 88
81	900 - 911	56	623 - 633	31	345 - 355	6	67 - 77
80	889 - 899	55	612 - 622	30	334 - 344	5	56 - 66
79	878 - 888	54	600 - 611	29	323 - 333	4	45 - 55
78	867 - 877	53	589 - 599	28	312 - 322	3	34 - 44
77	856 - 866	52	578 - 588	27	300 - 311	2	23 - 33
76	845 - 855	51	567 - 577	26	289 - 299	1	12 - 22
						0	<12

## Appendix B

### Testing Policy Checklist

Policy Item	Completed (✓)	Comments/Notes
Policy Purpose and Objectives		Clearly define the goals of the HESI exam policy.
Programmatic HESI Benchmark Score		Establish the minimum passing score for program progression.
Exam Time Allotment		Specify exam duration and scheduling within courses.
Exam Placement and Timing in a Course		Define when exams are administered during the course.
Programmatic Exam Sequencing		Outline the order and frequency of programmatic exams.
HESI Exams and Course Points		Clarify how HESI scores impact course grades and progression.
Faculty-Designed Exams and Blueprinting		Ensure faculty align exams with course and program outcomes.
Assessment Blueprinting and Alignment		Confirm assessments are aligned with course objectives and competencies.
Exam Security and Academic Integrity		Establish protocols to prevent cheating and ensure exam integrity.
Online Testing Procedures		Detail procedures for remote or online exam administration.
In-Person Testing Procedures		Outline protocols for on-site exam administration.
Absence and Make-up Exam Policies		Define procedures for missed exams and retakes.
Remediation and Support for Low Scores		Describe strategies for student remediation and coaching.
Accommodation and Support Services		Ensure policies support students with disabilities or special needs.
Faculty Data Review and Analysis		Schedule for reviewing exam results for program improvement.
Confidentiality and Copyright		Protect exam content and student data in compliance with policies.
Policy Review and Revision Schedule		Set timelines for periodic review and updates of policies.

## Appendix C

### HESI Testing and Remediation Policy School Name Here

#### Purpose

The purpose of this policy is to provide guidelines for standardized testing and remediation processes using the HESI examinations. HESI exams are one method to assist in students' success and are known to be highly predictive of their success in passing the NCLEX (Shah et al., 2022). The main purpose of incorporating HESI exams throughout the nursing curriculum is to:

- Students may choose not to complete their Personalized Learning Plan unless there is some consequence or defined requirement.
- Allow students to identify their current knowledge on specific content areas and client needs categories
- Provide information for students to engage in is self-directed and life-long learning
- Identify gaps in knowledge and facilitate a remediation plan to improve deficient areas
- Provide a benchmark and a standardized method for calculating course points
- Identify at-risk students early in the program to offer additional activities that support their success in the program and with passing the NCLEX
- Assist in demonstrating a minimum knowledge level for key nursing competencies involving patient safety (e.g., medication calculations) for clinical rotations and clinical practice
- Provide an opportunity for students to gain experience taking NCLEX-style standardized tests
- Offer insights to faculty about gaps in the curriculum and opportunities to improve teaching practices and integration of content across the curriculum

#### HESI Testing and Benchmarking

The HESI exam is a proctored computerized nursing test given in-person. All HESI specialty exams are allotted 2 hours and 10 minutes test taking time and HESI exit exams 3 hours 30 minutes, except for individuals with university-approved accommodations. Research demonstrates that score of 900 or higher on the HESI exit exams are highly predictive of passing the NCLEX exam (Shah et al., 2022), making the program's established benchmark score of 900 for all HESI specialty and exit exams. The program is permitted to change this benchmark score as needed per necessary policy change.

#### HESI Exam Placement and Timing: Course

When two versions are available, HESI specialty exams within a given course will be scheduled in weeks AA and BB. If a student has an excused absence for the HESI exam, the student must arrange to take the HESI exam earlier and not later than the scheduled date to allow for ample time for remediation. Remediation materials are not available until all exams are completed. The timing of the HESI exam and remediation supports student preparation for their other course finals.

#### HESI Specialty Exam Placement and Corresponding Nursing Courses

- |                                |                               |                                       |
|--------------------------------|-------------------------------|---------------------------------------|
| • Community Health (NUR aaa)   | • Health Assessment (NUR aaa) | • Pediatric (NUR aaa)                 |
| • Critical Care (NUR aaa)      | • Medical-surgical (NUR aaa)  | • Pharmacology (NUR aaa)              |
| • Dosage calculation (NUR aaa) | • Maternal (NUR aaa)          | • Psychiatric/Mental Health (NUR aaa) |
| • Fundamentals (NUR aaa)       | • Pathophysiology (NUR aaa)   |                                       |



## HESI Specialty Exams and Course Points

All HESI specialty exams will contribute to AA% of overall course points. Each course that uses a HESI exam will state in the corresponding syllabus the points allotted to the HESI exam, the total number of points a student would receive, and the remediation requirements to be considered complete and successful in the course.

## Other Faculty-Made Exams and Blueprinting

Other exams not listed as mandated exams are integrated into courses at the discretion of each course lead, and guidelines for scoring and remediation should be explained in the course syllabus. The faculty of School of Nursing shall strive to develop exam items following guidelines in accordance with the National Council of State Boards of Nursing and the National League of Nursing to promote consistency across the curriculum in removing bias and promoting fair testing. Faculty will blueprint each test item to the following: unit objectives, Bloom's Taxonomy, and NCLEX Test Plan Categories. The percentage of difficulty of items and the types of exam items will progress throughout the program. See the chart below for the progression. The Exam Blueprint Student Summary will be shared with students at least three days prior to the exam.

	First Semester	Second Semester	Third Semester	Fourth Semester
Remembering/Understanding	30 - 40%	20-30%	10 - 20%	0 - 10%
Applying	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Analyzing and above (includes NextGen items)	10 - 20%	20 - 30%	30 - 40%	Up to 50%
Mastery items	<10%			

## Faculty-Made Exam Data Review

After each faculty-made exam, the faculty will review each test item's data and statistics. The faculty reserves the right to eliminate or change item scoring based on the data and statistics, which may result in an exam score change.

## HESI Exit Exams

HESI Exit Exams contents are distributed to align with the NCLEX Test Plan's Client Needs Categories. Two attempts of the HESI exit exam are administered during the final semester of the program. Remediation of client needs categories will be a key component of the course and remediation completion, combined with HESI exit scores, will account for AA% of the course grade. A score of 900 will be considered passing for the HESI exit exam; however, passing this exam is not required to meet final course competencies. The criteria for course passing and the corresponding HESI exit exams will be outlined in the pertinent course syllabus.

## Exam Security and Academic Honesty

HESI test items, including the post-exam review with rationale, are secure items and must not be copied or pictures taken of exam items, and exam items must otherwise not be shared. Any notes taken during the exam must be turned in to the proctor at the completion of the exam. Students taking the HESI remotely will be subject to live proctoring and the determination of any academic integrity issues identified by professional proctors. Any distribution of exam items or rationales or any academic dishonesty on the HESI exam will be managed in accordance with the university's academic integrity and professionalism policies, additional applicable policies, and the student handbook.

The nursing program uses data forensics to analyze exams and items for aberrancy. The nursing program reserves the right to reissue an exam in cases where aberrant scores are detected. The nursing program has the right to conduct an analysis of any student testing to look for uncharacteristic scores that might indicate a student'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 student (e.g., student scores in the 600s throughout the program and then a score in the 900s). If there is any suspicion of aberrant testing, the nursing program will require that the student re-test. If the student refuses to re-test, the student will earn a failing grade for the course.

## Testing Environment

### In-Person

Students are asked not to wait outside of the testing room for more than 5 minutes prior to their scheduled exam time. (This is a courtesy to keep the hallway quiet for those in the testing room prior). Students will be assigned randomized seating by the faculty. Students are not allowed late entry after 15 minutes and must re-schedule the exam arrival is later than 15 minutes for any reason, which may result in an incomplete grade until the exam is taken.

### Proctor Actions

- Review with students the items **not** allowed in the testing environment: personal items, phones, smart watches, papers except for blank scratch papers, ear buds, headphones/earbuds, drinks, and food. Ear plugs **are** allowed.
- Instruct students to remove smart watches and smart devices.
- Remove cellular phones in the room during testing.
- Proctors should be actively moving about the room, watching students and their behavior. Crowded test environments may require multiple proctors to help ensure that students are not sharing content.
- Proctors will not answer questions about the content of questions, but may ask students to read the question again, look for keywords, think critically, etc.
- During any proctored exam, faculty reserve the right to disrupt the exam for security purposes. Students may be asked to step away from their computers while faculty inspect computer screens. If any evidence of academic dishonesty (e.g. collusion, impersonation, and/or proxy testing) is discovered, the student's exam will be ceased immediately.

### Online

Students should be instructed to review the online HESI examination requirements and practice exams at least 24 hours prior to home testing. The online practice test will help students check their equipment, understand testing procedures, and allow students to rectify any issues prior to the date of the examination. Faculty should ensure that remote test-takers have completed this step and should refrain from opening the exam until confirming student readiness.

## Exam Absences

At the discretion of the instructor, students may be excused from exam attendance for reasons such as health, family emergencies, or student participation in an approved university-sponsored event(s). However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. If so, directed by the instructor, the student must bring a written excuse from the professional healthcare provider. If the absence is not excused, the maximum grade is 75. To calculate the grade, the ratio/proportion method will be used (i.e., 90 on unexcused absence makeup exam would be  $90/100: x/75$ , where  $x=67.5$ ). Students are responsible for contacting faculty to schedule make-up exams. Make-up exams will be scheduled in accordance with faculty and students' availability.

## Remediation for all HESI Exams

All students are required to remediate the recommended materials following each HESI exam. The remediation requirements are dependent on each individual student's HESI score associated with each exam and should be clearly stated in the course syllabus. The required levels for remediation and the process for demonstrating completion of remediation will be outlined in the syllabus for each course. Remediation check-in appointments with the student success coach are highly encouraged to facilitate student learning. Research indicates that proper remediation improves students' critical thinking, reasoning, and test-taking skills. Remediation is due by the end of week AA or the final week of the semester.

## Procedure for Personalized Learning Plan

- After taking a HESI exam, students receive a HESI exam report with their scores.
  - Once all students in a cohort have completed the HESI exam, the exams are uploaded for processing to generate their Personalized Learning Plan.
- In the Personalized Learning Plan, students will receive content, case studies, and quizzing
  - Students are requested to complete their Personalized Learning Plan while logged in to the HESI platform.
  - Do not print and log out of the HESI platform to study. Time spent and work completed in their Personalized Learning Plan is monitored within the HESI platform.
- HESI Exam and Personalized Learning Plan results are available as individual student, cohort and program reports. These reports will be used to help support student academic needs, at the end of each semester and throughout the program.
- Student support and guidance will take place via in-person or on-line individual student sessions with faculty and student success coaches.

### HESI Personalized Learning Plan

After each HESI exam, learners will receive a personalized learning plan (PLP). These plans are specific to each student and the questions missed on the assessment. PLPs will contain content to review in the form of short text excerpts and Osmosis videos, Case studies to apply the content to a relevant patient scenario, and quiz questions to assess learning. The amount of each resource within a PLP will vary based on HESI score, with students scoring higher receiving less and students scoring lower receiving more.

All students are required to complete their HESI PLP as part of post-exam remediation. Progress and completion of all components of the PLP is tracked in HESI for both students and faculty. In order to receive credit, all PLP requirements must be met on or before the due date. Students should complete their Personalized Learning Plan while logged in to the HESI platform.

The successful completion of this remediation will be weighted as 2.5% of the final course grade. This component emphasizes the importance of mastering foundational knowledge and skills necessary for safe and effective nursing practice. Students must successfully complete all remediation activities to earn the full remediation credit.

## HESI Exam Placement and Timing: Course

When two versions are available, HESI specialty exams within a given course will be scheduled in weeks AA and BB. If a student has an excused absence for the HESI exam, the student must arrange to take the HESI exam earlier and not later than the scheduled date to allow for ample time for remediation. Remediation materials are not available until all exams are completed. The timing of the HESI exam and remediation supports student preparation for their other course finals.

### Recommended HESI Remediation Plan

#### Specialty/Custom HESI Exams

HESI Exam Score	Personalized Learning Plan Expectations
900 or above	Review: 4 readings or videos Apply: 1 case study Assess: 5 quiz questions
850-899	Review: 7 readings or videos Apply: 1 case study Assess: 10 quiz questions
750-849	Review: 9 readings or videos Apply: 2 case study Assess: 15 quiz questions
Below 750	Review: 12 readings or videos Apply: 2 case study Assess: 20 quiz questions

### Recommended HESI Remediation Plan

#### HESI Exit Exams *(add instructions if using HESI Compass)*

HESI Exam Score	Personalized Learning Plan Expectations
900 or above	Review: 4 readings or videos Apply: 1 case study Assess: 5 quiz questions
850-899	Review: 7 readings or videos Apply: 1 case study Assess: 12 quiz questions
750-849	Review: 9 readings or videos Apply: 2 case studies Assess: 18 quiz questions
Below 750	Review: 12 readings or videos Apply: 2 case studies Assess: 25 quiz questions



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