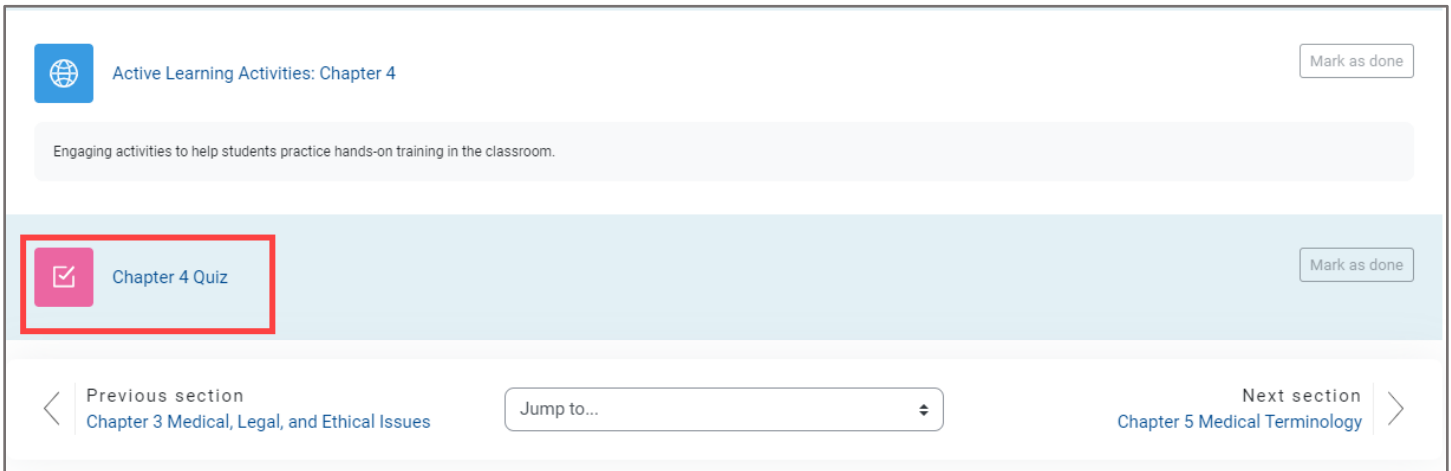


How to Interpret Navigate's Test Item Analysis Results

This document contains an overview of the statistical data provided in your course's test item analysis page.

1. Start by clicking on the **Quiz** for which you want to review test item analysis.



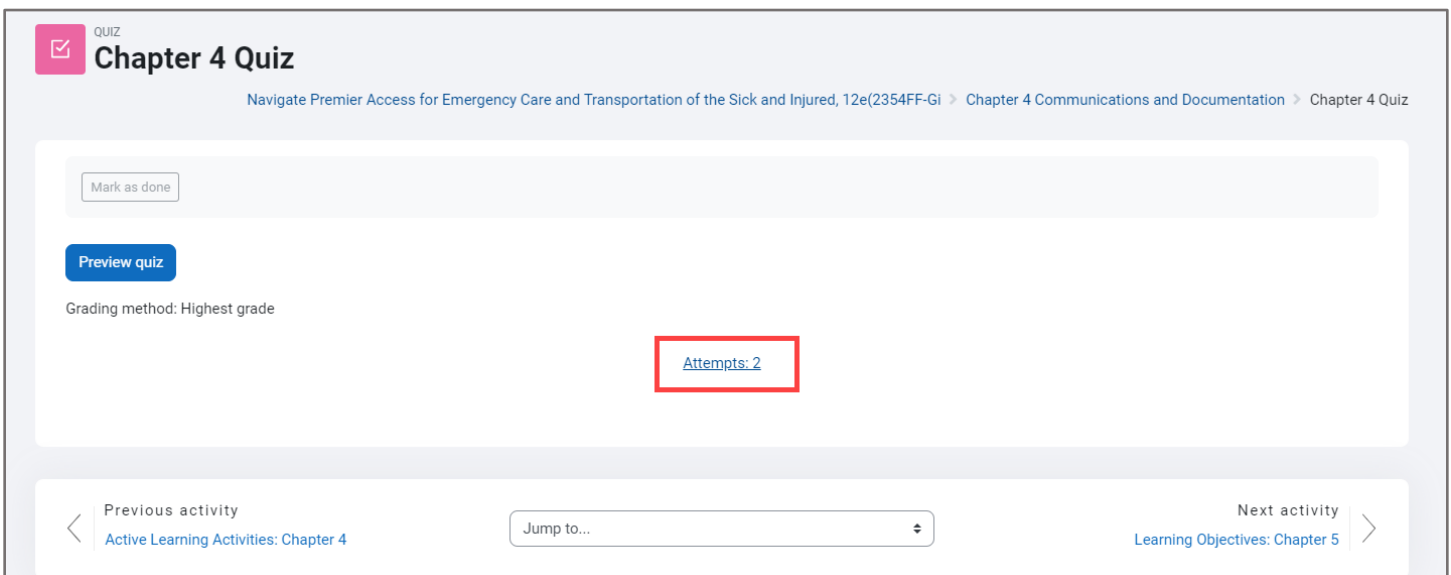
Active Learning Activities: Chapter 4 Mark as done

Engaging activities to help students practice hands-on training in the classroom.

Chapter 4 Quiz Mark as done

Previous section: Chapter 3 Medical, Legal, and Ethical Issues | Jump to... | Next section: Chapter 5 Medical Terminology

2. On the next screen, click on **Attempts**.



Chapter 4 Quiz QUIZ

Navigate Premier Access for Emergency Care and Transportation of the Sick and Injured, 12e(2354FF-GI) > Chapter 4 Communications and Documentation > Chapter 4 Quiz

Mark as done

[Preview quiz](#)

Grading method: Highest grade

[Attempts: 2](#)

Previous activity: Active Learning Activities: Chapter 4 | Jump to... | Next activity: Learning Objectives: Chapter 5

3. In the dropdown menu on the top left of the quiz page, choose the **Statistics** option.

The screenshot shows the 'Chapter 4 Quiz' interface. At the top left, there is a dropdown menu with the following options: Grades, Grades, Responses, **Statistics** (highlighted with a red arrow), Manual grading, and Paper Quiz. Below the menu, the text 'Attempts: 2' is visible. The main content area includes sections for 'Attempts from', 'Attempts that are', and 'Display options'. The 'Display options' section has a 'Page size' of 30 and 'Points for each question' set to 'Yes'. A 'Show report' button is located at the bottom of the section.

4. Scroll down to the **Quiz structure analysis** section. This section displays various statistics which may be used to evaluate students' collective performance.

Quiz structure analysis

Download table data as: Comma separated values (.csv) Download

Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1	A _____ receives messages and signals on one frequency and then automatically retransmits them on a second frequency.	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
2	A patient's refusal of EMS treatment and/or transport must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			
5	As you are wheeling your patient through the emergency department doors, you receive another call for a major motor vehicle crash. You should:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%

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5. The **Facility index** is the most straightforward of the statistics. This column reflects the percentage of students who submitted the correct answer choice for each question. Using the Facility index, you can quickly spot if a question may have been too difficult or if the class requires remediation on the related subject matter if the index is a lower number (<50%).

Quiz structure analysis

Download table data as

Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1	A _____ receives messages and signals on one frequency and then automatically retransmits them on a second frequency.	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
2	A patient's refusal of EMS treatment and/or transport must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

6. **Standard Deviation (SD)** is a common calculation used to measure the variation of scores for a given question. A low SD indicates that there is less variation between the students' scores, thus putting most scores closer to the average. A higher SD tells you that student scores are wider spread, meaning that a greater number of students are receiving either lower or higher scores than the average performer.

Quiz structure analysis

Download table data as

Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
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3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

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7. A **Random guess score** only applies to multiple-choice questions and displays the percent chance a student has of submitting the correct answer choice if they were to randomly select an option by guessing.

Quiz structure analysis

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Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
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2	A patient's refusal of EMS treatment and/or transport must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

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8. Both the **Intended** and **Effective weight** columns' data are only meaningful if you have chosen to assign certain questions a higher value relative to others in the quiz. The **Intended weight** column displays the question's weight as a percentage of the total test score, and the **Effective weight** column shows an estimation of the actual weight the question had in contributing to the overall variation in scores.
- If the effective weight is greater than the intended weight, this means that question had a larger impact in the spread of scores than may have been intended.
 - If the effective weight is less than the intended, this tells you the intended weight did not have much impact in the variation of scores.

Quiz structure analysis

Download table data as

Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1	A _____ receives messages and signals on one frequency and then automatically retransmits them on a second frequency.	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
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3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

9. Questions highlighted in red indicate the question has a low **Discrimination index**. This is the correlation between the achieved score for the question and the scores reported for the whole quiz. In other words, it measures the variation between how stronger performing students scored on the question versus the weaker performers.
- If the Discrimination index is a positive and higher number, this tells you that the question is valid as best performing students were more likely to answer the question correctly.
 - If the Discrimination index is a very low and/or negative number and the question is highlighted, this indicates that there could be an issue with how the question was written, as your higher performing students may have answered it incorrectly, whereas weaker performers got it right.

Quiz structure analysis

Download table data as

Q#	Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1	A _____ receives messages and signals on one frequency and then automatically retransmits them on a second frequency.	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
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3	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

10. **Discriminative efficiency**, a variation on the Discrimination index, estimates how effective the discrimination index is relative to the difficulty of the question. Thus, a higher discriminative efficiency score indicates that the question is a reliable indicator of your stronger students' performance versus the weaker students' performance.

Quiz structure analysis

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Q#		Question name	Attempts	Facility index	Standard deviation	Random guess score	Intended weight	Effective weight	Discrimination index	Discriminative efficiency
1	☰ ⚙	A _____ receives messages and signals on one frequency and then automatically retransmits them on a second frequency.	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
2	☰ ⚙	A patient's refusal of EMS treatment and/or transport must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
3	☰ ⚙	All information recorded on the PCR must be:	2	50.00%	70.71%	25.00%	20.00%		-100.00%	-100.00%
4	☰ ⚙	Any radio hardware containing a transmitter and a receiver that is located in a fixed location is called a:	2	100.00%	0.00%	25.00%	20.00%			

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