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To Lois A Halstead/Rush/RSH@RSH

cc Bill J Malan/Rush/RSH@RSH

bcc

Subject Question Statistics in WebCT.

Hello Lois,

This is a follow-up to your question posed yesterday re exam question reliability statistics:

From the Help Tool in WebCT at http://elearn.rush.edu/web-ct/help/en/designer/quiz/quiz_stats1.html

Viewing Question Statistics | [Top](#)

Note: Before you can view the statistics for an individual question, you must submit the quiz statistics. For more information on question statistics, please see [Details, Statistics, and Reports](#).

1. From the *Course Menu* , click **Quiz**. The *Quizzes/Surveys* screen appears.
2. Click **Question Database**. The *Question Database* screen appears.
3. Under *Options: Category* , from the *View* drop-down list, select the category containing the question for which you want to view statistics, and click **Go**. The *Question Database* screen updates and the questions for the selected category are displayed.
4. Do one of the following:
 - To view the statistics for one or multiple questions:
 - a. Next to the questions, select the check box.
 - b. Under *Options: Question* , click **View question statistics**. The *Question Statistics* screen appears with the statistics for the selected questions displayed.
 - To view the statistics for all questions in the category:
 - a. In the table heading row, select the check box. All questions are selected.
 - b. Under *Options: Question* , click **View question statistics**. The *Question Statistics* screen appears with the statistics for the selected questions displayed.
5. If you want to view the statistics for multiple choice questions, click **Multiple choice statistics**. The *Multiple Choice Statistics* screen appears.
6. If you want to reset the question statistics, click **Reset**. A confirmation message appears.
7. Click **OK**. The *Question Statistics* screen updates and the statistics are reset.

Note that in order to see statistics for a given question, the "Add to Question Statistics" button may be clicked from the Quiz "Summary" page. The "Add to Question Statistics" function can only be performed once for each quiz. See below:

Including Quiz Questions in Question Statistics | [Top](#)

You can keep track of how a particular question has performed over time by updating the question statistics for all of the questions on a quiz. The statistics are updated in the *Question Database* . For information on viewing the statistics, see [Question Database -](#)

[Question Statistics](#). **Note:** You can update question statistics only once for a quiz. You should wait until all students have completed the quiz, and all of the questions have been graded, before updating question statistics.

1. From the *Summary* screen, click **Add to question statistics**. A confirmation message appears.
2. Click **OK**. The summary information is added to the question statistics. **Note:** Question statistics for multiple choice questions must be updated separately. For more information, see [Detailed multiple choice question statistics](#).

See below for information re updating question statistics for multiple choice questions.

Viewing Detailed Multiple Choice Question Statistics | [Question summaries](#) | [Top](#)

The detailed multiple choice statistics appear in a table, which includes the following information:

- *N*: the number of students who responded to this question.
 - *Whole Group*: the percentage of students who answered the question correctly.
 - *Upper 25%*: the percentage of students who answered the question correctly, and whose score is in the upper 25% category.
 - *Lower 25%*: the percentage of students who answered the question correctly, and whose score is in the lower 25% category. In the example above, 100% of the upper 25% percentile of students answered the question correctly. Conversely, 66% of the students whose score was in the lower 25% percentile answered this question correctly.
 - *Discrimination*: indicates how well the question relates between high and low scorers. A negative number indicates that the lower-scoring students performed better on this question than the high-scorers.
 - *Frequency*: the number of students who responded to each possible answer. In the example above, three students chose answer one as their answer.
1. From the *Detail* screen, locate the multiple choice question and click **Summary**. The *Detail Summary* screen appears with the *Response Summary* for the question displayed.
 2. Click **Detailed Statistics**. The *Detailed Statistics Summary* screen appears with the statistics displayed in a table.
 3. If you want to update the question statistics in the *Question Database*:
 - a. Click **Add to question statistics**. A confirmation message appears.
 - b. Click **OK**. **Note:** Question statistics for multiple choice questions can only be updated once per quiz. It is best to wait until all students have completed the quiz and all questions have been satisfactorily graded before updating the multiple choice question statistics.
 4. If you want to view more detailed multiple choice statistics, click **More info**. The *More Detailed Statistics Summary* appears with the information displayed in a table.

N	-	a	b	c	d
3	0	0	1	2	0
	0.0%	0.0%	33.3%	66.7%	0.0%

Note: WebCT shows the number and percentage of respondents for each multiple choice answer. In the example above, column *N* shows that three students answered the question. The "-" column indicates the number of students who submitted the quiz without answering the question. Answer (c) was selected by two students (or 66.7% of students). The 2 is in bold and italics, which indicates that it is the correct answer for this question. Only one student answered incorrectly by selecting Answer (b).

Thanks.

Ken

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