Item Analysis Quick Reference Sheet for Instructional Purposes

Question Group	Item	% Correct	Discrimination	A	B	C	D	F	G	H	I	OMITTED
Main Idea, Plot, and Purpose	Section 1 -> 16	44%	1.00	0	0	0	0	**44.4***	**22.2**	**5.6**	**16.7**	**11.1**

Terminology	Meaning	Interpretation	Item Statistic	Indicator	Instructional Focus Question(s)
% Correct –P-value (Difficulty index)	Measure of the percentage of students answering an item correctly.	• 44%, or nearly half of the students answered this item correctly • The difficulty level (P-value) of the item is 0.44	• P-value < 0.25 indicates a difficult item • P-value > 0.95 indicates an easy item	• Relevant for determining whether students have learned the concept being tested. • Adequate numbers of easy and difficult items allow students with achievement levels of both extremes to be measured.	• Was the item easy or difficult for the examinees? • Are the results for other items from this benchmark/strand similar? • Was the content covered adequately?
Discrimination (Point-Biserial)	Correlation of a student's response to that item and their total score. The discrimination index is a measure of the question's ability to differentiate between high and low scorers on the test.	• This item answered correctly by students who have the general knowledge/skill being measured by the test	• Items with Point-Biserial >.30 discriminate sufficiently between low and high abilities.	• Positive Point-Biserial indexes indicate students having high test scores on the test performed well on the item. • Negative Point-Biserial indexes indicate that students having low test scores answered the item correctly, while higher scoring students answered it incorrectly. • Denotes misunderstanding or mis-learning of the content.	• Is there a common misunderstanding of the content among students? • How might the content be presented to clear up misconceptions?
Distractors (Answer Choices)	A comparison of the proportion of students choosing each response option.	• Nearly half chose the correct answer, "F", but almost ¼ chose a distractor, "G". • In-depth view of how students responded to the test item	• The percent of students selecting the correct answer (denoted with an asterisk) is the same as the P-value. • Percentage of students selecting incorrect options (distractor) is displayed under the corresponding letter (A-I).	• Incorrect answer options are clues to students' misunderstanding of the content and thus should guide appropriate remediation. • About an equal selection of all options is an indication of guessing.	• Why might students have chosen the distractor over the correct response? • What common type of error is represented by each "popular" distractor? • How would you re-teach the concept to address the misconception?
Omitted (Omit Rate)	Measure of the percentage of students not responding or marking options.	• 11.1% of the students selected one (and only one) option	• Omit rate of over 5% should be reviewed.	• High omission rates could mean that students were not familiar with the item content. • High omission rates on items at the end of a test could indicate that students did not have sufficient time to finish or were unmotivated.	• Did students have sufficient time to complete the assignment? • Were students familiar with the content? • Were they motivated?