

Looking at Multiple-Choice Item Data Protocol

This is a protocol for looking at multiple-choice item data to identify areas of student need in any content area.

- 1. Sort the test items by the percentage of students who answered each item correctly.
- 2. Decide on the thresholds to divide the items into three color-coded categories, based on percent correct: e.g., Red for below 60%, Yellow for 60 – 80%, and Green for over 80% correct.
- 3. Look for trends among the standards associated with the questions marked Red. (use optional chart below for analyzing items by % correct vs. standard and looking for patterns)
- 4. Select up to five items for investigation, either because their standards fit a pattern or a low percent correct.

For each of the selected items, complete steps 5 - 6:

- 5. List the content, skills, and vocabulary a student would need to answer the item correctly on the Multiple Choice Item Deconstruction Chart below.
- 6. Look at the distractor patterns for the selected item.

Once the information for each item has been recorded in the chart, complete the worksheet:

- 7. Record inferences about why students may have gotten these items wrong on the provided worksheet.
- 8. Look for patterns that run across the selected items.

Optional chart for separating questions by % correct and standard or strand in order to look for patterns - list item numbers in appropriate boxes (add columns as needed, and decide ranges for red, yellow, green):

% correct	Standard or Strand 1	Standard or Strand 2	Standard or Strand 3
Example: Items that 80-100% of students answered correctly			

Multiple-Choice Item Deconstruction Chart

Question #	Standard	% Correct	Distractors	Content: What do students need to know in order to answer this question?	Skills: What do students need to be able to do in order to answer this question?	Vocabulary: What vocabulary do students need to know in order to answer this question?

3

What patterns seem to emerge from the deconstruction chart?	
What inferences can you make that might explain why students are having trouble with the selection	cted items?