

### Learning Outcome for Quantitative Literacy:

The student is able to locate, read and interpret data from quantitative displays (line and bar graphs, pie charts, maps, tables and diagrams), identifying patterns, deducing relationships, and formulating generalizations. The student is then able to compare and contrast “interpreted” data in a quantitative display with interpretations from other quantitative displays and with other written claims. He/she is able to marshal an argument using quantitative evidence in favor of a focused conclusion. Analysis and arguments are to be expressed clearly and concisely.

This rubric has been designed to extend a more specific scoring guide for the College Proficiency Examination (CPE) Task 2, in which students are required to identify and match claims from a written passage to graphical evidence that supports or contradicts these claims. It is intended to measure a student’s ability to carry out a more in-depth quantitative investigation of real data, which may take the form of the above-mentioned graphs, charts, and tables, for example—or be “mined” as Internet queries. Prompts for such assignments will reflect this broader intention; in so far as they may not present appropriate data content, conventional textbook exercises with precisely calculated answers are to be avoided.

Score	Rating	Rating Criteria
6	Excellent	<ul style="list-style-type: none"><li>• Student consistently selects appropriate and best data for reading and interpretation</li><li>• Student’s analysis of quantitative display (charts and graphs...) is complete and precise with respect to labeling and scaling</li><li>• Student is keenly aware of patterns and relationships within data and articulates these cogently</li><li>• Student makes apt and perceptive generalizations from given data where appropriate; at the same time he or she is aware of the limits of generalization</li><li>• Student achieves insightful and well-argued comparisons with other quantitative presentations or written interpretations</li></ul>
5	Proficient	<ul style="list-style-type: none"><li>• Student almost always selects appropriate data for analysis</li><li>• Occasional isolated errors may occur in the reading and interpretation of quantitative data</li><li>• Student’s awareness of pattern and relationship is less fine and not as concisely expressed (in written form)</li><li>• Generalizations are less perceptive. Awareness of the limits of generalization is inarticulate or lacking entirely</li><li>• Comparison between (among) alternative quantitative presentations is less focused; interpretive errors may occur in “parsing” these alternates</li></ul>

4	Satisfactory	<ul style="list-style-type: none"> <li>• Data selection is less consistently on target, more disconnected to the task or prompt at hand</li> <li>• Errors in reading/interpretation are more prevalent</li> <li>• Student's ability to infer patterns and relationships from data grows weaker; inaccuracies and errors may occur</li> <li>• Student's ability to generalize begins to be compromised. There is no sense of the limits of generalization</li> <li>• Errors in interpretive comparison of data presentations occur</li> </ul>
	Limited	<ul style="list-style-type: none"> <li>• Data selection begins to be haphazard, inappropriate to task</li> <li>• Student's ability to read and interpret quantitative displays is insufficient</li> <li>• Manifest error in detection of pattern and relationship is present</li> <li>• Student demonstrates little ability to generalize</li> <li>• Student's ability to compare and contrast analytically is barely developed</li> </ul>
2	Poor	<ul style="list-style-type: none"> <li>• Data selection is scattershot</li> <li>• Student's ability to read and interpret quantitative data is at the rudimentary level or below</li> <li>• Student possesses little or no ability to detect pattern and relationship in quantitative data</li> <li>• There is little or no generalization from given data</li> <li>• There is little or no evidence of comparison between differing data presentations</li> </ul>
1	Insufficient	<ul style="list-style-type: none"> <li>• Student does not understand concept of data selection</li> <li>• Student is incapable of reading, interpreting quantitative data</li> <li>• Student cannot identify patterns, relationships in data</li> <li>• Student cannot generalize; he or she does not grasp the concept</li> <li>• Student is unable to compare/contrast data from different sources</li> </ul>