

## Quantitative Literacy

### Definition:

Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate). - AAC&U



### RUBRICS

Select one or more of these rubrics to assess the dimensions of quantitative literacy. **Add the rubric to the assignment, test, or discussion that best captures students' ability to demonstrate the specific dimension. Please use each rubric no more than once per course.**

Dimension	Meets outcome (5)	Outcome nearly met (3)	Outcome not met (1)	No Submission (0)
Ability to perform mathematical calculations. ( <i>Calculation/Computational Skills</i> )	Calculations are correct and lead to a successful completion of the problem.	Calculations are attempted but either contain errors <u>or</u> are not complete enough to solve the problem.	Calculations are attempted but contain errors <u>and</u> are not complete enough to solve the problem.	

Dimension	Meets outcome (5)	Outcome nearly met (3)	Outcome not met (1)	No Submission (0)
Ability to convert information from one quantitative form (e.g. equations, graphs, diagrams, tables, words) into another. ( <i>Representation</i> )	All relevant conversions are present and correct.	Some correct and relevant conversions are present but some conversions are incorrect or not present.	Some information is converted, but it is irrelevant or incorrect.	

Dimension	Meets outcome (5)	Outcome nearly met (3)	Outcome not met (1)	No Submission (0)
Ability to <del>make and</del> draw conclusions based on quantitative analysis. ( <i>Analysis and Synthesis</i> )	Uses correct and complete quantitative analysis to make relevant and correct conclusions (e.g., there are no logical errors and all claims are substantiated).	Quantitative analysis is given to support a relevant conclusion but it is either only partially correct or partially complete (e.g. there are logical errors or unsubstantiated claims).	An incorrect quantitative analysis is given to support a conclusion or the conclusion is not based on quantitative analysis.	

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Dimension	Meets outcome (5)	Outcome nearly met (3)	Outcome not met (1)	No Submission (0)
Ability to identify and report quantitative information presented in various forms (e.g. equations, graphs, diagrams, tables, words). ( <i>Interpretation</i> )	Correctly identifies and reports all relevant information.	Correctly identifies and reports some, but not all, relevant information.	Some relevant information is reported, but none of the reported information is correct.	

Dimension	Meets outcome (5)	Outcome nearly met (3)	Outcome not met (1)	No submission (0)
Ability to express quantitative information in an organized and contextualized form (e.g. equations, graphs, diagrams, tables, words, etc.). ( <i>Communication</i> )	A correct and complete quantitative form is clearly presented.	A partially correct relevant quantitative form is present, but incomplete or poorly presented.	A relevant quantitative form is present, but is illogical, incorrect, illegible, or incoherent.	



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