**Quantitative Literacy Skills Rubric**

**Learning Objective:** 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).

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| **Traits** | | **Performance**  Evaluation: Not Yet 1 2 3 4 5 6 7 8 9 10 Substantially Developed | |
|  |  | **Not Yet** | **Substantially Developed** |
| **Interpretation** | Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words). | Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. | Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. |
| **Representation** | Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words). | Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate. | Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding. |
| **Calculation** | Ability to perform calculations. | Calculations are attempted but are both unsuccessful and are not comprehensive. | Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.). |
| **Application/ Analysis** | Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis. | Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is uncertain about drawing conclusions from this work. | Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work. |
| **Presentation** | Expressing quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized). | Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. | Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality. |