Quantitative Literacy

Definition
Select and use the required mathematical/analytical concepts and operations necessary for problem-solving, decision-making, economic productivity and real world applications.

Benchmark for Achievement
The graduate completes calculations that solve the present problem and provides explanations of information presented in mathematical formats such as graphs, charts and words.

The graduate:

- Completes calculations to answer questions

- Uses data as the basis for decisions and judgments and to support an argument

- Converts information into accurate mathematic terms

- Draws graphs, charts and other visual descriptors of trends, relationships, or status changes

At the Program Level
Across the program, students accurately complete calculations and estimations. There are opportunities to reason and solve quantitative problems from a variety of contexts and everyday life situations. Students are expected to work with numerical data and to analyse the data to make connections and draw conclusions.

Questions to Guide Mapping

- Are quantitative problem solving skills taught, practiced or assessed?

- Is the interpretation and evaluation of quantitative data taught or practiced?

- Is the ability to use quantitative data and/or statistics to convey information, support an argument or make inferences practiced and assessed?

- Do students practice quantitative reasoning?

Resources

- ACC&U Quantitative Literacy VALUE Rubric
  The Quantitative Literacy VALUE Rubric contains performance descriptions for four levels of attainment on six categories/aspects of quantitative literacy.

- Quantitative Literacy from Michigan State University
  Michigan State University defines quantitative literacy, offers resources for instruction and recommends quantitative literacy books.

- Teaching with Data
  Browse through this collection of data-related resources to find material you can use to teach/practice/assess quantitative literacy.

- The Case for Quantitative Literacy from St. Olaf College
  The "Skills of Quantitative Literacy" section of this discussion paper lists and explains seven skills associated with quantitative literacy that may be overlooked because they are not "math." The authors explain that these skills may be overlooked due to the distinction between quantitative literacy and "mathematical literacy."

tags : core-literacies, literacies, literacy, quantitative, quantitative-literacy, teaching-and-learning, teaching-and-learning-centre