

University of North Texas **Empirical & Quantitative Skills Rubric**
 Approved by OCCC March 2016

Criteria	4 Advanced	3 Proficient	2 Developing	1 Unsatisfactory
Define Problem/Topic	Skillfully provides well-supported definition of problem.	Successfully provides adequately detailed definition of problem.	Provides superficial definition of problem.	Does not define problem.
Gather, identify, or recognize appropriate qualitative or quantitative information. Where relevant, systemic or data bias should be avoided, and the sampling design should be appropriate.	Skillfully gathers, identifies, or recognizes all nonbiased, relevant information into an insightful portrayal that contributes to further or deeper understanding of the problem.	Successfully gathers, identifies, or recognizes all unbiased, relevant information.	Gathers, identifies, or recognizes partial information, OR the information gathered is biased, OR the information is not relevant.	Does not gather, identify, or recognize information. Attempts to gather, identify, or recognize information, but the sample is biased, the information is incomplete, or irrelevant to the problem.
Process, synthesize, or manipulate numerical data or observable facts	Skillfully processes, synthesizes, or manipulates data to solve problem.	Successfully processes, synthesizes, or manipulates data to solve the problem.	Attempts to process, synthesize or manipulate data but is unable to solve the problem.	Does not process, synthesize, or manipulate data or facts, but merely restates data/facts.
Interpret, analyze, or explain numerical data or observable facts culminating in one or more conclusions.	Skillfully interprets, analyzes, or explains data to draw well-supported conclusion.	Successfully interprets, analyzes, or explains data to draw conclusion.	Attempts to interpret, analyze, or explain data, but is unable to draw conclusion.	Does not interpret, analyze, or explain the numerical data.

Empirical & Quantitative Skills

Texas Higher Education Coordinating Board Language

Empirical & Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

VALUE language

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).

Overview

This rubric has been designed for the evaluation of work that addresses Empirical and Quantitative Skills in a substantive way. EQS is not just computation, not just citing of someone else's data. EQS is a "habit of mind", a way of thinking about the world that relies on data and on the analysis of data to make connections and draw conclusions.

Acknowledgments

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