## DEVELOPING RUBRICS FOR ASSESSING LEARNING OUTCOMES FOR QUANTITATIVE ANALYSIS

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The Association to Advance Collegiate Schools of Business (AACSB) standards for accreditation require "learning achievement demonstrated by assessment". In our BSBA and MBA programs, one of the learning outcomes is that "Students will be able to demonstrate rational decision making using quantitative tools, strategies, and data." To be able to assess this learning outcome, we needed a method that was more detailed than Bloom's Taxonomy, which gives a general structure for levels of learning. That is, we wanted rubrics that could be used to assess learning outcomes for various mathematical models, such as linear programming and economic order quantity, across multiple sections of courses and would provide enough detail to guide improvement. Developing and using such a rubric clearly defines what students are expected to know about a particular quantitative model. A rubric facilitates consistency in assessment across instructors and sections, regardless of grading schemes used by instructors. In our search for rubrics, we found many rubrics for writing, some for oral presentations, others for solving specific types of mathematical problems (number crunching), and a few for class participation, but none that met our needs for quantitative analysis. This led to research on different types of rubrics and the subsequent development of our own rubrics.

This workshop will benefit attendees because most are at AACSB accredited programs or interested in pursuing the accreditation. The learning outcomes assessment would also be useful for regional institutional accreditation assessment, as well as providing general guidance for program improvement. AACSB standards require coverage of quantitative subjects, including operations management, management science, and business statistics. As indicated above, there are published rubrics for basic problem solving, but none that require students to set up and solve complex problems.

The outline of the workshop is:

- The value of developing and using rubrics for assessing learning outcomes
- Review of Bloom's Taxonomy
- Review of various rubrics that are available online
- Review of basic types of rubrics, including checklists, holistic rubrics, and analytic rubrics, as well as hybrids of these basic types.
- Examples of rubrics we have developed for assessing learning outcomes related to quantitative analysis
- Using rubrics for course embedded assessment
- Questions and answers

## **RELATED RESOURCE MATERIALS**

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