

## **Making Sense of Assessment Data**

### **Using Scoring Rubrics**

Look at the [analytic rubric](#) for a Midterm and the analytic rubric for a Take Home Final, prepared for a seminar level course of Economics.

Scoring rubrics are explicit formats for classifying learning (or other behaviors) into categories that are steps along a continuum. These steps can range from “unacceptable” to “exemplary”, or from F grade to A grade. The number of categories varies depending on the learning objectives.

Rubrics can be used for different purposes within education: they are a way to generate information for grading and assessing student learning at the course level. Their information can also be used to assess learning at the program level. They can also provide formative feedback to students.

### **Relative Outcome Analysis**

Relative Outcome Analysis (or Primary Trait Analysis) uses the same information gathered for grading by means of scoring rubrics. The [attached Excel files](#) illustrate how the information gathered for an Economics seminar course was used first for grading, and then for assessing student learning. Since it applies to a seminar level course, it also useful to develop evidences about learning at the program level; this is particular so if other professors teaching seminar level courses are also using similar rubrics.

Noticed that in the case of scoring rubrics, grading determination depends on absolute levels of knowledge. Grading is not based on a curve.

For simplicity, the example considers only a Midterm and a Take-Home Final. In reality the teacher also generate information regarding Homework, Research Project, and Class Participation.

The Midterm has two parts: One based on multiple-choice questions to determine the student command of vocabulary, economic relations, and economic theories; another based on an Essay accompanied by a scoring rubric. The information is displayed on the Midterm-worksheet.

The Take-Home Final also has two parts: The first one is an exercise that requires knowledge of a model, computational skills, and analytical competences; the second part is an Essay accompanied by a scoring rubric. The information is compiled in two worksheets: Educ Problem and Essay.

When grading, the teacher uses a matrix with the name of students in the first column, and the performance for each learning objective in the first row. The horizontal

summation (for each student) generates a grade. The vertical summation (for each learning objective) of the rubric generates levels of learning outcomes.

In this case, the information computed in the worksheet “Relative Outcome Analysis” is based on the scores of the Take Home Final. The purpose is to assess four of the learning objectives.

The vertical summation for each learning objective is an indicator of learning. The comparison between learning indicators of upper division students indicates that they are more effective learning vocabulary and other concepts of economics and less effective learning critical thinking. However, before generalizing these results to the whole program, it will be necessary to gather similar information within other Economics seminars. Nevertheless, one would expect a similar result, since critical thinking is a more advanced mental ability. Were this pattern replicated the faculty will dialogue on how best to reinforce the teaching of critical thinking in Economics.