

Developing Rubrics

Rubrics are developed to assist faculty in rating qualities of learning outcomes. When provided to students before and during learning, rubrics also assist students to more successfully interpret and anticipate expected levels of performance. Therefore, rubrics effectively help teachers to specifically and consistently assess and evaluate qualities of learning and communicate expected standards of learning, and help students interpret their own level of performance, learn what must be done to improve performance and achieve higher standards of performance.

What is a rubric?

A rubric can be defined as a descriptive guideline, a scoring guide or specific pre-established performance criteria in which each level of performance is described to contrast it with the performance at other levels. This is in contrast to a rating scale which provides a scale (1-5) and a description of each number in the scale (1 = Unacceptable to 5 = Exceeds Expectations), but does not provide a description of what the specific differences are among performances at each level.

A set of rubrics is used to guide the rating of performance, products or processes of student learning at various levels of performance (Figure 1). Levels of performance are typically divided into three- to six-point scales and given labels such as basic-proficient-advanced; needs improvement-meets expectations-exceeds expectations; or seldom-sometimes-usually-often; poor-good-excellent-superior; beginning-basic-proficient-advanced-outstanding. The rubric for a particular level describes the performance outcome at that level, and each subsequent rubric describes the quality of performance at each subsequent level in the series. Rubrics do not use numbers or grades without descriptors and below average, average, above average, excellent aren't used because rubrics are not used to compare the performance of students, but to compare a single student against the set criteria.

Figure 1: Generic set of rubrics

Level 1: Rubric performance criteria; description of performance at level 1
Level 2: Rubric performance criteria; description of performance at level 2
Level 3: Rubric performance criteria; description of performance at level 3

Performance outcomes can also be assessed across various *attributes* or *elements of the performance* using a rubric for each attribute at each level (Figure 2). The specific attributes applied to a set of rubrics can be scored individually or the overall performance can be scored at once.

Figure 2: Rubrics for four levels and three attributes of performance

	Level 1	Level 2	Level 3	Level 4
Performance Attribute 1	Rubric 1.1	Rubric 1.2	Rubric 1.3	Rubric 1.4
Performance Attribute 2	Rubric 2.1	Rubric 2.2	Rubric 2.3	Rubric 2.4
Performance Attribute 3	Rubric 3.1	Rubric 3.2	Rubric 3.3	Rubric 3.4

The number and type of rating scales and attributes are determined based on the objectives and standards of the performance task. Most any learning task can be considered as a performance for which rubrics can be written. Performance tasks can be a written paper, an oral presentation, daily classroom attendance and participation, attitude or disposition, practice performance in a professional role such as musician, athlete, counselor, attorney, teacher, scientist or mathematician and can even include descriptions of performance on an exam or on a portfolio. The descriptive criteria for each level of performance and the specific attributes of the learning task move the assessment process beyond traditional grading to reinforce clearer criteria for grading.

Types of Rubrics

Holistic Rubrics

The two basic types of rubrics are holistic and analytic. Holistic rubrics ask the evaluator to make a single judgment about the object or behavior being evaluated. If you are using a 4 point holistic rubric to evaluate students' oral presentations, you indicate whether the presentation is a 1, 2, 3, or 4 based on the level at which it meets the described criteria. This is a quick way to provide an overall evaluation of the presentation. Table 1 presents an example of this type of rubric.

Table 1: Holistic Rubric for Assessing Student Essay*

Rating	Detailed Description of Performance at Each Level
Inadequate	The essay has at least one serious weakness. It may be unfocused, underdeveloped, or rambling. Problems with the use of language seriously interfere with the reader's ability to understand what is being communicated.
Developing Competence	The essay may be somewhat unfocused, underdeveloped, or rambling, but it does have some coherence. Problems with the use of language occasionally interfere with the reader's ability to understand what is being communicated.
Acceptable	The essay is generally focused and contains some development of ideas, but the discussion may be simplistic or repetitive. The language lacks syntactic complexity and may contain occasional grammatical errors, but the reader is able to understand what is being communicated.
Sophisticated	The essay is focused and clearly organized, and it shows depth of development. The language is precise and shows syntactic variety, and ideas are clearly communicated to the reader.

*Source: Allen (2004), p. 139.

Analytic Rubrics

Analytic rubrics are used to assess multiple outcomes simultaneously or for multidimensional outcomes and each dimension needs to be rated separately, resulting in multiple judgments about an object or performance. The analytic rubric describes the criteria for each of the judgments. Analytic rubrics provide more useable data than holistic rubrics because the criteria provide strengths and weaknesses and describe the performance at each level in more detail, thus providing more information on what is

lacking in the poorer performance. Table 2 is an example of an analytical rubric for information literacy in a term paper.

Table 2: Analytic Rubric to Assess Information Literacy

	Below Expectations	Meets Expectations	Exceeds Expectations
Range of relevant materials	The paper cites only web sites, has too few primary sources, or frequently cites sources only marginally related to the topic	The paper cites Reasonably relevant Web sites, journals, and books, although too few sources are used or key materials that should have been cited are missing.	The paper cites a rich array of relevant web sites, journals, and books, including classic materials related to the topic.
Citations	The paper fails to cite sources using a consistent, formal, citation style.	Most of the citations follow a consistent, formal style, although occasionally citations contain minor errors or provide incomplete information.	All citations are complete, accurate, and consistently conform to a formal style.
Use of Sources	Cited materials are poorly integrated into the paper and connections between sources are not noted.	Cited materials generally are integrated into the paper, but some important connections between sources are not explored.	Cited materials are well-integrated into the paper and connections between sources are explicitly discussed.
Plagiarism	The student fails to cite sources when using other’s ideas or fails to include necessary quotation marks or page numbers for direct quotations.	The source of information is generally clear, but occasionally may be ambiguous. Quotations are properly indicated.	The source of all ideas is carefully documented and quotations are properly indicated.

*Source: Allen (2004), p. 139.

Why use Rubrics?

Developing rubrics helps clarify the expectations you and others have for student performance by providing detailed descriptions of those agreed upon expectations. Well designed rubrics used for assessment increase the reliability and validity and ensure that the information gathered can be used to make changes in the instruction.

Rubrics allow faculty to efficiently assess complex products or behaviors. Once the criteria for a performance are clearly defined, an instructor can align the course with the criteria to help students meet the requirements.

Rubrics that have been defined and agreed upon by all the evaluators increase the likelihood that all evaluators will provide comparable ratings, thus increasing the inter-

rater reliability. As a result, the assessments based on these rubrics will be more effective and efficient.

Writing Rubrics

Set the Scale

Select a learning outcome from your academic program. Use your professional judgment to assess student learning on a scale of 1-3, 1-4, 1-5, or 1-X that is appropriate for evaluating the performance.

Define the Ratings

Add appropriate descriptors to each number on the scale that you have identified.
4 = Advanced; 3 = Proficient; 2 = Basic; 1 = Beginning

Step 3: Identify basic descriptions

Add simple descriptions for each number on the scale.

4 – Advanced ability to _____; 3 – Proficient ability to _____;
2 – Basic ability to _____; 1 – No ability to _____.

Step 4: Descriptions of what performance will look like at each level

- 4 - The student is able to (description of what advanced performance would look like).
- 3 – The student is able to (description of what proficient performance would look like) but not yet able to (description of advanced performance).
- 2 - The student is able to (description of what basic performance would look like) but not yet able to (description of proficient performance).
- 1 - The student is unable to (description of desired performance).

For additional training on developing rubrics:

<http://www.vcu.edu/cte/resources/videos/Rubrics/Rubrics.html>

To access an online program that provides templates for various types of rubrics:

http://www.vcu.edu/cte/resources/videos/Rubistar_tutorial/index.html

Additional Resources

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Web sites and examples:

<http://www2.acs.ncsu.edu/UPA/assmt/resource.htm>

<http://academicaffairs.cmich.edu/caa/assessment/resources/toolkit.shtml>

1. [Winona State University's](#) extensive list of rubrics for various disciplines, skills, and college-level assignments includes examples from many campuses. Note the link you can use to suggest additional examples.
2. Examples of rubrics for general education outcomes: (Also see the [University of North Carolina-Greensboro's](#) links to general education rubrics.)
 - [Bowling Green State University](#). Also has links to other information about assessment rubrics.
 - [Brenau University](#). Select *Forms and Rubrics* and follow the drop-down menus. (*Word* documents)
 - [California State University, Fresno](#), with suggestions for developing and using rubrics.
 - [Isothermal Community College](#) (*pdf* file). See pp. 30ff.
 - [Northern Arizona University](#). Scroll down to *Sample rubrics for the liberal studies skills*.
 - [OpenEd Practices](#) resources. Select *Resource Types=Rubric*.
 - [Palomar College](#). Select *benchmarks*.
 - [State University of New York](#) rubrics for campus-based general education assessment. From [SUNY's system-wide general education assessment initiative](#); posted by Binghamton University.
 - [University of Wisconsin-Eau Claire](#) (*Word* documents).
 - [Washington State University](#) rubric for critical thinking.
 - http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Rubric_Bank/rubric_bank.html
 - Examples of [rubrics](#) for general education outcomes
3. Sites designed for K-12 education, but useful as models and adaptable for higher education performance assessments.
 - [Assessment Matters!](#) has lots of rubric examples, plus other K-12-oriented assessment links.
 - [Assessment and Rubric Information](#): Examples of evaluation scales/rubrics for various student and faculty activities.
 - [Rubric generators](#) create rubrics for various topics.

- [RubiStar](#) lets you find, create, and save rubrics. From the Advanced Learning Technologies (ALTEC) project at the University of Kansas Center for Research on Learning.
- [Steps in creating an assessment rubric](#), from the [WebQuest](#) site at San Diego State University.

References:

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Moskal, Barbara M. (2000). Scoring rubrics: what, when and how? *Practical Assessment, Research & Evaluation*, 7(3). Available online: <http://ericae.net/pare/getvn.asp?v=7&n=3>

Stevens, Dannelle and Levi, Antonia. (2005). *Introduction to Rubrics*. Sterling, VA: Stylus

APPENDIX A

SAMPLE RUBRICS