An Introduction to Rubrics

I. What is a rubric?

A rubric is an assessment instrument that helps instructors communicate their expectations to students and focus on important criteria as they grade. Rubrics divide an assignment into parts and provide a detailed description of what constitutes acceptable or unacceptable levels of performance for each of those parts. Rubrics provide both a grade (summative evaluation) and detailed feedback to improve future performance (formative evaluation). (Huba and Freed,2000)) Here is a short video on What is a Rubric? (Nestor, 2014).

II. Why use a Rubric?

Here are some primary reasons to use rubrics (Hawaii, 2012).
- A rubric creates a common framework and language for assessment.
- Complex products or behaviors can be examined efficiently.
- Well-trained reviewers apply the same criteria and standards.
- Rubrics are criterion-referenced, rather than norm-referenced. Raters ask, "Did the student meet the criteria for level 5 of the rubric?" rather than "How well did this student do compared to other students?"
- Using rubrics can lead to substantive conversations among faculty.
- When faculty members collaborate to develop a rubric, it promotes shared expectations and grading practices.

Specifically for students, rubrics: (Eberly Center, n.d.)
- Improves student learning by:
  - Defining and clarifying instructor's expectations and
  - Encouraging critical thinking through reflection and self-assessment.
- Shifts the learning experience from:
  - What have I learned? to
  - How well have I learned it?

Specifically for instructors, rubrics: (Eberly Center, n.d.)
- Creates objectivity and consistency in the grading process.
- Helps reduce the amount of time teachers spend evaluating student work.
- Refines teaching skills through the evaluating of rubric results.

III. What are some types of rubrics?

There are two basic types of rubrics: holistic and analytic. The table below provides a brief explanation of each.

Types	Purpose/Distinction	Focal Use
Holistic	Provides a single score based on an overall impression of learner achievement on a task across multiple criteria as a whole.	To provide overall evaluation guidelines that clarify how grades relate to performance or achievement, such as in course grades.
Analytic	Provides specific feedback along several dimensions.	To break assignments or scores down into separate components for grading (description, analysis, grammar, references, etc.).

A. Holistic Rubrics

There are three parts to a holistic rubric: (Brophy, n.d.)
1. Task description describes the assessment activity that serves as a reminder to the grader.
2. The performance scale identifies the levels of performance.
3. Cell descriptions operationalize each level of performance.

Advantages and Disadvantages of Holistic Rubrics
(DePaul University Teaching Commons, n.d.)

Advantage	Disadvantage
Easy to construct	Lack of targeted feedback

How to Develop a Holistic Rubric

1. Determine all the skills and abilities students need to demonstrate in order to achieve the learning outcome.
   a. Clarity, organization, and grammar.
2. Determine the appropriate levels of accomplishment.
   a. Needs improvement, developing, sufficient, and above average.

3. Write an overall description of how a student would demonstrate the learning outcome for each level of accomplishment. When creating a holistic rubric this step cannot be skipped.

Example of a Holistic Rubric: Breakfast in Bed
(Finckel & Searle, 2016).

Performance Scale (2)	Description
Excellent (4)	All food is cooked correctly, all of the meal is presented in a clean and well-organized manner, and the recipient is kept comfortable throughout the meal.
Good (3)	Most of the food is cooked correctly, most of the meal is presented in a clean and well-organized manner, and the recipient is mostly comfortable throughout the meal.
Fair (2)	Some of the food is cooked correctly, some aspects of the meal are presented in a clean and well-organized manner, and the recipient is somewhat comfortable throughout the meal.
Poor (1)	Little, if any of the food is cooked correctly, very little or none of the meal is presented in a clean and well-organized manner, and the recipient is not comfortable throughout the meal.

B. Analytic Rubrics

There are 4 parts of an analytic rubric
- Task description
  - Describes the assessment activity that serves a reminder to the grader
  - Example: Students will write a research paper in the appropriate scientific style.
- Task dimensions
  - Describe the parts of the task and are listed in the first column of the table
  - Example: Thesis statement, Literature Review, Conclusion, Mechanics, References
- Performance scale
  - Identifies the levels of performance along each of the dimensions and is presented in the first row of the table.
  - For example: Exceeds standards, Meets standards, Somewhat meets standards, Does not meet standard
- Cell descriptions
  - Operationalizes what each level of performance means for each dimension. (Brophy, n.d.)

Advantages and Disadvantages of Analytic Rubrics

(DePaul University Teaching Commons, n.d.)

Advantage	Disadvantage
Students have a clear understanding of their scores	Takes a good deal of time to create
Allow for the assessment of complicated skills	Takes more time to grade assignments.

How to Develop an Analytic Rubric

Here are some steps to take when developing a rubric (Hawaii, 2012; Brophy, n.d.).

1. Review the course learning outcomes (Nestor, 2014).
2. Determine the type of rubric you wish to use –holistic or analytic (Carriveau, 2010).
3. Identify what you want to assess.
    a. These form the criteria for the assessment.
    b. These are usually part of the description of the assignment or task.
4. Identify the characteristics to be rated (rows).
5. Specify the skills, knowledge, and/or behaviors that you will be looking for.
    a. Limit the characteristics to those that are most important to the assessment.
6. Identify the levels of mastery/scale (columns).
    a. Aim for an even number because when an odd number is used, the middle tends to become the "catch-all" category.
    b. Describe each level of mastery for each characteristic (cells).
    c. Describe the best work you could expect using these characteristics. This describes the top category.
    d. Describe an unacceptable product. This describes the lowest category.
    e. Develop descriptions of intermediate-level products for intermediate categories. Important: Each description and each category should be mutually exclusive.
    f. Focus your descriptions on the presence of the quantity and quality that you expect, rather than on the absence of them. However, at the lowest level, it would be appropriate to state that an element is "lacking" or "absent"
    g. (Carriveau, 2010).
    h. Keep the elements of the description parallel from performance level to performance level. In other words, if your descriptors include quantity, clarity, and details, make sure that each of these outcome expectations is included in each performance level descriptor.
6. Try out the rubric.
    a. Apply the rubric to an assignment.
    b. Share with colleagues.
        i. Faculty members often find it useful to establish the minimum score needed for the student work to be deemed passable. For example, faculty members may decide that a "1" or "2" on a 4-point scale (4=exemplary, 3=proficient, 2=marginal, 1=unacceptable), does not meet the minimum quality expectations. They may set their criteria for success as 90% of the students must score 3 or higher. If assessment study results fall short, action will need to be taken.
7. Discuss with colleagues. Review feedback and revise.
    a. Important: When developing a rubric for program assessment, enlist the help of colleagues. Rubrics promote shared expectations and grading practices which benefit faculty members and students in the program

Notes on levels of performance

Consider the following questions when developing cells descriptions for the performance scale.

- Are the levels of performance consistent from one level to the next?
- Is the tone of the levels of performance consistent from one level to the next?

Below is an example of consistent and inconsistent cell descriptions.

	Does not meet standards	Somewhat meets standards	Meets standards	Exceeds standards
Consistent	Entries are not all clear and include very few of the required elements.	Entries are somewhat clear and include some of the required elements.	Entries are mostly clear and include most of the required elements.	Entries are clear and include all of the required elements.
Inconsistent	Writing is messy and entries contain spelling errors.	Entries are incomplete and there may be grammatical errors	Entries are mostly clear and include most of the required elements.	Entries are creatively written; procedures and results are clearly explained

Example of an Analytical Rubric: Chocolate Chip Cookies
(Hall & Salmon, 2003).

	Taste Delicious (4)	Taste Pretty Good (3)	Taste Ok (2)	Taste terrible (1)
Number of chips	Chocolate chip in every bite	Chocolate chips in about 75 percent of the bites taken	Chocolate chips in about 50 percent of the bites taken	Chocolate chips in about 25% of the bites taken
Texture	Chewy	Chewy in the middle, but crispy on the edges	Texture is either crispy/crunchy from overcooking or doesn't hold together because it is at least 50 percent uncooked	Texture resembles a dog biscuit
Color	Golden brown	Either brown from overcooking, or light from being 25 percent raw	Either dark brown from overcooking or light from undercooking	Burned
Taste	Home-based taste	Quality store-bought taste	Tasteless	Store-bought flavor, preservative aftertaste, stale, hard chalky
Richness	Rich, creamy, high-fat flavor	Medium fat content	Low-fat content	Nonfat contents

C. What type of rubric works best for your purposes?

Use a holistic rubric when:

- You want a quick snapshot of achievement.
- A single dimension is adequate to define quality. •

Use an analytic rubric when:

- You want to see relative strengths and weaknesses.
- You want detailed feedback.
- You want to assess complicated skills or performance.
- You want students to self-assess their understanding or performance. (Schreyer Institute for Teaching Excellence, 2007, para.2).

D. Rubric Variations

There are two variations of rubrics that can be used successfully, if well calibrated by the users.

- Point system rubrics provide a range of points for each level of achievement; points are given at the scorer's discretion. Each level receives the same number of points.
- Weighted point system rubrics are a variation of the point system rubric, where different criteria are "weighted" by assigning different point ranges to the criteria. These rubrics convert levels descriptors into points, which creates scores that are compatible with the score ranges used in common grading scales. (Brophy, n.d., p.6)

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