Assessment How-to

**Creating and Using Rubrics**

**1. What is a rubric?**

A rubric is an assessment tool often shaped like a matrix, which describes levels of achievement in a specific area of performance, understanding, or behavior.

There are two main types of rubrics:

**Analytic Rubric**: An analytic rubric specifies the criteria to be assessed at each performance level and provides a separate score for each criterion.

* Advantages: provides more detailed feedback on student performance; scoring more consistent across students and raters
* Disadvantages: more time consuming than applying a holistic rubric
* Use when:
  + You want to see strengths and weaknesses.
  + You want detailed feedback about student performance.

**Holistic Rubric:** A holistic rubrics provide a single score based on an overall impression of a student's performance on a task.

* Advantages: quick scoring, provides an overview of student achievement, efficient for large group scoring
* Disadvantages: does not provided detailed information; not diagnostic; may be difficult for scorers to decide on one overall score
* Use when:
  + You want a quick snapshot of achievement.
  + A single dimension is adequate to define quality.

**2. Why use a rubric?**

* 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.

**3. What are the parts of a rubric?**

Rubrics are composed of four basic parts. In its simplest form, the rubric includes:

1. **A task description**. The outcome being assessed or instructions students received for an assignment.
2. **The characteristics to be rated (rows)**. The skills, knowledge, and/or behavior to be demonstrated.
3. **Levels of mastery/scale (columns)**. Labels used to describe the levels of mastery should be tactful but clear. Commonly used labels include:
   * Not meeting, approaching, meeting, exceeding
   * Exemplary, proficient, marginal, unacceptable
   * Advanced, intermediate high, intermediate, novice.
   * 1, 2, 3, 4
4. **The description of each characteristic at each level of mastery/scale (cells)**.

**4. Developing a rubric**

**Step 1:** *Identify what you want to assess*

**Step 2:** *Identify the characteristics to be rated (rows)*

* Specify the skills, knowledge, and/or behaviors that you will be looking for.
* Limit the characteristics to those that are most important to the assessment.

**Step 3:** *Identify the levels of mastery/scale (columns).*

Tip: Aim for an even number (4 or 6) because when an odd number is used, the middle tends to become the "catch-all" category.

**Step 4:** *Describe each level of mastery for each characteristic (cells).*

* Describe the best work you could expect using these characteristics. This describes the top category.
* Describe an unacceptable product. This describes the lowest category. Keep language positive, not negative.
* Develop descriptions of intermediate-level products for intermediate categories.]
* Important, each description and each category should be mutually exclusive.

**Step 5:** *Test rubric.*

* Apply the rubric to an assignment.
* Share with colleagues.

**Step 6:** *Discuss with colleagues. Review feedback and revise.*

**5. Sample rubrics**

**6. Scoring rubric group orientation and calibration**

When using a rubric for program assessment purposes, faculty members apply the rubric to pieces of student work (e.g., reports, oral presentations, design projects). To produce dependable scores, each faculty member needs to interpret the rubric in the same way. The process of training faculty members to apply the rubric is called "norming." It's a way to calibrate the faculty members so that scores are accurate. Below are directions for an assessment coordinator carrying out this process.

Suggested materials for a scoring session:

* Copies of the rubric
* Copies of the "anchors": pieces of student work that illustrate each level of mastery. Suggestion: have 6 anchor pieces (2 low, 2 middle, 2 high)
* Score sheets
* Extra pens, tape, post-its, paper clips, stapler, rubber bands, etc.

Hold the scoring session in a room that:

* Allows the scorers to spread out as they rate the student pieces
* Has a chalk or white board

Process:

1. Describe the purpose of the activity, stressing how it fits into program assessment plans.  Explain that the purpose is to assess the program, not individual students or faculty, and describe ethical guidelines, including respect for confidentiality and privacy.
2. Describe the nature of the products that will be reviewed, briefly summarizing how they were obtained.
3. Describe the scoring rubric and its categories. Explain how it was developed.
4. Analytic: Explain that readers should rate each dimension of an analytic rubric separately, and they should apply the criteria without concern for how often each score (level of mastery) is used. Holistic: Explain that readers should assign the score or level of mastery that best describes the whole piece; some aspects of the piece may not appear in that score and that is okay. They should apply the criteria without concern for how often each score is used.
5. Give each scorer a copy of several student products that are exemplars of different levels of performance. Ask each scorer to independently apply the rubric to each of these products, writing their ratings on a scrap sheet of paper.
6. Once everyone is done, collect everyone's ratings and display them so everyone can see the degree of agreement. This is often done on a blackboard, with each person in turn announcing his/her ratings as they are entered on the board. Alternatively, the facilitator could ask raters to raise their hands when their rating category is announced, making the extent of agreement very clear to everyone and making it very easy to identify raters who routinely give unusually high or low ratings.
7. Guide the group in a discussion of their ratings. There will be differences. This discussion is important to establish standards. Attempt to reach consensus on the most appropriate rating for each of the products being examined by inviting people who gave different ratings to explain their judgments. Raters should be encouraged to explain by making explicit references to the rubric. Usually consensus is possible, but sometimes a split decision is developed, e.g., the group may agree that a product is a "3-4" split because it has elements of both categories. This is usually not a problem. You might allow the group to revise the rubric to clarify its use but avoid allowing the group to drift away from the rubric and learning outcome(s) being assessed.
8. Once the group is comfortable with how the rubric is applied, the rating begins. Explain how to record ratings using the score sheet and explain the procedures. Reviewers begin scoring.
9. If you can quickly summarize the scores, present a summary to the group at the end of the reading. You might end the meeting with a discussion of five questions:
   * Are results sufficiently reliable?
   * What do the results mean? Are we satisfied with the extent of students' learning?
   * Who needs to know the results?
   * What are the implications of the results for curriculum, pedagogy, or student support services?
   * How might the assessment process, itself, be improved?

**7. Suggestions for Using Rubrics in Courses**

* Have students apply your rubric to sample products before they create their own. Faculty members report that students are quite accurate when doing this, and this process should help them evaluate their own projects as they are being developed. The ability to evaluate, edit, and improve draft documents is an important skill.
* Have students exchange paper drafts and give peer feedback using the rubric. Then give students a few days to revise before submitting the final draft to you. You might also require that they turn in the draft and peer-scored rubric with their final paper.
* Have students self-assess their products using the rubric and hand in the self-assessment with the product; then faculty members and students can compare self- and faculty- generated evaluations.