Developing and Applying Rubrics

Scoring rubrics are explicit schemes for classifying products or behaviors into categories that vary along a continuum. They can be used to classify virtually any product or behavior, such as essays, research reports, portfolios, works of art, recitals, oral presentations, performances, and group activities. Judgments can be self-assessments by students; or judgments can be made by others, such as faculty, other students, fieldwork supervisors, and external reviewers. Rubrics can be used to provide formative feedback to students, to grade students, and/or to assess programs.
There are two major types of scoring rubrics:

- Holistic scoring — one global, holistic score for a product or behavior
- Analytic rubrics — separate, holistic scoring of specified characteristics of a product or behavior

Online Rubrics

For links to online rubrics, go to **http://www.calstate.edu/acadaff/sloa/.** Many rubrics have been created for use in K-12 education, and they can be adapted for higher education. It's often easier to adapt a rubric that has already been created than to start from scratch.

Online GE Rubrics

● Bowling Green University (http://folios.bgsu.edu/assessment/Rubrics.htm). Links to six general education rubrics for assessing connection, investigation, leadership, participation, presentation, and writing.
● CSU Information Competence Initiative (http://www.calstate.edu/LS/1_rubric.doc). An analytic information competence rubric based on the 2000 ACRL *Information Literacy Competency Standards for Higher Education*.
● California State University, Long Beach (http://www.csulb.edu/divisions/aa/personnel/fcpd/resources/ge/). A holistic and an analytic writing rubric.
● California State University, Fresno (http://www.csufresno.edu/cetl/assessment). Links to four general education rubrics for assessing critical thinking (CTScoring.doc), integration (ICScoring.doc), integrative science (IBScoring.doc), and writing (WritingScoring.doc).
● California State University System (http://www.calstate.edu/acadaff/sloa/links/rubrics.shtml). Links to a wide variety of rubrics that could be adapted for general education assessment.
● Johnson County Community College (http://www.jccc.net/home/depts/S00015/site/plan/). Links to rubrics for culture and ethics, mathematics, modes of inquiry, problem solving, speaking, and writing.
● Northeastern Illinois University (http://www.neiu.edu/~neassess/gened.htm#rubric). Links to a writing rubric and long and short versions of a critical thinking rubric.
● Palomar College (http://www.palomar.edu/alp/benchmarks_for_core_skills.htm). Links to holistic rubrics assessing communication (listening, speaking, reading, and writing),

cognition (problem solving, creative thinking, quantitative reasoning, and transfer of knowledge and skills to a new context), information competency (technical competency), social interaction (teamwork), and personal development and responsibility (self-management and respect for diverse people and cultures).
● State University of New York College at Geneseo (http://gened.geneseo.edu/pdfs/assess_tools_revised.pdf). Links to rubrics assessing numeric and symbolic reasoning, critical writing and reading, humanities, social science, fine arts, basic research, U.S. history, non-western traditions, natural science, and oral discourse outcomes.
● University of Arkansas at Fort Smith (http://www.uafortsmith.edu/Learning/GeneralEducationCompetenciesAndRubrics#BookmarkRubrics). Links to rubrics assessing analytical skills, communication skills, computer literacy, creativity, global and cultural perspectives, information literacy, personal responsibility, quantitative reasoning, scientific and technological literacy, and social interaction.
● University of California (http://www.sdcoe.k12.ca.us/score/actbank/subja.htm). A holistic writing rubric.
● University of South Carolina (http://ipr.sc.edu/effectiveness/assessment/criteria). Links to seven general education rubrics for assessing electronic, humanities/cultural, math, oral communication, science, social/behavioral sciences, and writing outcomes.
● Washington State University (http://wsuctproject.wsu.edu/ctr.htm). An analytic critical thinking rubric.

Rubrics have many strengths:

- Complex products or behaviors can be examined efficiently.
- Developing a rubric helps to precisely define faculty expectations.
- 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?" This is more compatible with cooperative and collaborative learning environments than competitive grading schemes and is essential when using rubrics for program assessment because you want to learn how well students have met your standards.
- Ratings can be done by students to assess their own work, or they can be done by others, e.g., peers, fieldwork supervisions, or faculty.

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Rubrics can be useful for grading, as well as assessment. For example, points can be assigned and used for grading, as shown below, and the categories can be used for assessment. Faculty who share an assessment rubric might assign points in different ways, depending on the nature of their courses, and they might decide to add more rows for course-specific criteria or comments.
Notice how this rubric allows faculty, who may not be experts on oral presentation skills, to give detailed formative feedback to students. This feedback describes present skills

and indicates what they have to do to improve. Effective rubrics can help faculty reduce the time they spend grading and eliminate the need to repeatedly write the same comments to multiple students.

Analytic Rubric for Grading Oral Presentations			
Below Expectation	**Satisfactory**	**Exemplary**	**Score**
Organization	No apparent organization. Evidence is not used to support assertions. (0-2)	The presentation has a focus and provides some evidence which supports conclusions. (3-5)	The presentation is carefully organized and provides convincing evidence to support conclusions. (6-8)
Content	The content is inaccurate or overly general. Listeners are unlikely to learn anything or may be misled. (0-2)	The content is generally accurate, but incomplete. Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic. (5-7)	The content is accurate and complete. Listeners are likely to gain new insights about the topic. (10-13)
Style	The speaker appears anxious and uncomfortable, and reads notes, rather than speaks. Listeners are largely ignored. (0-2)	The speaker is generally relaxed and comfortable, but too often relies on notes. Listeners are sometimes ignored or misunderstood. (3-6)	The speaker is relaxed and comfortable, speaks without undue reliance on notes, and interacts effectively with listeners. (7-9)
Total Score			

Suggestions for Using Rubrics in Courses

1. Hand out the grading rubric with the assignment so students will know your expectations and how they'll be graded. This should help students master your learning outcomes by guiding their work in appropriate directions.
2. Use a rubric for grading student work and return the rubric with the grading on it. Faculty save time writing extensive comments; they just circle or highlight relevant segments of the rubric. Some faculty include room for additional comments on the rubric page, either within each section or at the end.
3. Develop a rubric with your students for an assignment or group project. Students can then monitor themselves and their peers using agreed-upon criteria that they helped develop. Many faculty find that students will create higher standards for themselves than faculty would impose on them.
4. Have students apply your rubric to some sample products before they create their own. Faculty report that students are quite accurate when doing this, and this process should help them evaluate their own products as they are being developed. The ability to evaluate, edit, and improve draft documents is an important skill.
5. Have students exchange paper drafts and give peer feedback using the rubric, then give students a few days before the final drafts are turned in to you. You might also require that they turn in the draft and scored rubric with their final paper.
6. Have students self-assess their products using the grading rubric and hand in the self-assessment with the product; then faculty and students can compare self- and faculty-generated evaluations.

Sometimes a generic rubric can be used, and it can be refined as raters become more experienced or as problems emerge.

Generic Rubric for Assessing Portfolios			
Unacceptable: Evidence that the student has mastered this outcome is not provided, unconvincing, or very incomplete.	**Marginal:** Evidence that the student has mastered this outcome is provided, but it is weak or incomplete.	**Acceptable:** Evidence shows that the student has generally attained this outcome.	**Exceptional:** Evidence demonstrates that the student has mastered this outcome at a high level.
Learning Outcome 1			
Learning Outcome 2			
Learning Outcome 3			

Steps for Creating a Rubric: Analytic Method

1. Identify what you are assessing, e.g., critical thinking.
2. Identify the characteristics of what you are assessing, e.g., appropriate use of evidence, recognition of logical fallacies.
3. Describe the best work you could expect using these characteristics. This describes the top category.
4. Describe the worst acceptable product using these characteristics. This describes the lowest acceptable category.
5. Describe an unacceptable product. This describes the lowest category.
6. Develop descriptions of intermediate-level products and assign them to intermediate categories. You might decide to develop a scale with five levels (e.g., unacceptable, marginal, acceptable, competent, outstanding), three levels (e.g., novice, competent, exemplary), or any other set that is meaningful.
7. Ask colleagues who were not involved in the rubric's development to apply it to some products or behaviors and revise as needed to eliminate ambiguities.

Steps for Creating a Rubric: Expert Systems Method

1. Have experts sort sample documents into piles with category labels.
2. Determine the characteristics that discriminate between adjacent piles.
3. Use these characteristics to describe each category.
4. Ask colleagues who were not involved in the rubric's development to apply it to some products or behaviors and revise as needed to eliminate ambiguities.

Managing Group Readings

1. One reader/document.
2. Two independent readers/document, perhaps with a third reader to resolve discrepancies.
3. Paired readers.

Before inviting colleagues to a group reading

1. Develop and pilot test the rubric.
2. Select exemplars of weak, medium, and strong student work.
3. Develop a system for recording scores.
4. Consider pre-programming a spreadsheet so data can be entered and analyzed during the reading and participants can discuss results immediately.

Scoring Rubric Group Orientation and Calibration

1. Describe the purpose for the review, 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. Explain that readers should rate each dimension of an analytic rubric separately, and they should apply the criteria without concern for how often each category is used.
5. Give each reviewer a copy of several student products that are exemplars of different levels of performance. Ask each volunteer to independently apply the rubric to each of these products, and show them how to record their ratings.
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, and 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. 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. You might allow the group to revise the rubric to clarify its use, but avoid allowing the group to drift away from the learning outcome being assessed.
8. Once the group is comfortable with the recording form and the rubric, distribute the products and begin the data collection.
9. If you accumulate data as they come in and can easily present a summary to the group at the end of the reading, you might end the meeting with a discussion of four questions:
    a. What do the results mean?
    b. Who needs to know the results?
    c. What are the implications of the results for curriculum, pedagogy, or student support services?
    d. How might the assessment process, itself, be improved?

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