

Rubric Primer

In the bevy of educational terminology aimed at improved student learning and accountability, “rubric” has emerged as a buzzword. The educational field has co-opted the term to describe “a scoring tool that lists the criteria for a piece of work...; it also articulates gradations of quality for each criterion, from excellent to poor” or some such gradation (Goodrich, 1997: 14).

As a type of criteria-based assessment and/or grading, rubrics are a valuable educational tool that can provide benefits to both faculty and students. Sadler (2005) indicates that the arguments for criteria-based assessment and/or grading in relevant literature can be summed in two major points: 1) students are graded on the basis of their work alone without being compared to or competing with other students and 2) students deserve to know the criteria upon which their work will be judged. Sadler goes on to explain that the traditional grading model measuring overall achievement (i.e. the A-F model) can be argued to be a criteria-based model; however, the aggregate nature of traditional grades obscure patterns of strengths and weaknesses in student performance. Rubrics, on the other hand, can be used to determine student grades as well as patterns of strengths and weaknesses. The following are additional reasons to use rubrics:

- Make grading consistent and fair
- Save time in the grading process (at least after the rubric has been developed)
- Clarify expectations to students
- Provide explanation of grades to students (especially useful when students contest grades)
- Track changes in student performance
- Generate consistency in teaching and grading among TAs and adjunct faculty
- Form the basis for course and programmatic assessment
- Assist faculty in agreeing on criteria for common exams, multiple sections and/or sequential courses (Walvoord & Anderson, 1998).

Rubric Types

Rubrics can be sorted into two main categories, holistic and analytic (Quinlan, 2006). A holistic rubric (Figure 8) evaluates a work product based on the overall, perceived quality of the work. An analytic rubric (Figure 9) disaggregates the criteria expected from the work product and evaluates them individually. Analytic rubrics may also be referred to as Primary Trait Analysis.

Neither type of rubric is better per se than the other, but IRPE often recommends the use of the analytic rubric for assessment at UT Arlington. Analytic rubrics allow for trends to be tracked individually. Using the samples above, plot, setting and character can be analyzed individually and this allows for differing scores for each; the holistic rubric however, only allows for one score for all three areas. So you may have a paper with very strong character development, but minimal plot development. The score for work will like be an average of those two elements when using a holistic rubric. The weakness of plot development is lost among the strengths of the work. The analytic rubric allows for each area content area to receive its own rating. This is often quite helpful when using the data in a formative way, to improve programs and services.

Figure 8. Holistic rubric.¹

Fiction Writing Content Rubric

- **5** – The plot, setting, and characters are developed fully and organized well. The who, what, where, when, and why are explained using interesting language and sufficient detail.
- **4** – Most parts of the story mentioned in a score of 5 above are developed and organized well. A couple of aspects may need to be more fully or more interestingly developed.
- **3** – Some aspects of the story are developed and organized well, but not as much detail or organization is expressed as in a score of 4.
- **2** – A few parts of the story are developed somewhat. Organization and language usage need improvement.
- **1** – Parts of the story are addressed without attention to detail or organization.

Figure 9. Analytic Rubric.²

Fiction Writing Content Rubric				
Criteria	4	3	2	1
PLOT: "What" and "Why"	Both <i>plot</i> parts are fully developed.	One of the <i>plot</i> parts is fully developed and the less developed part is at least addressed.	Both <i>plot</i> parts are addressed but not fully developed.	Neither <i>plot</i> parts are fully developed.
SETTING: "When" and "Where"	Both <i>setting</i> parts are fully developed.	One of the <i>setting</i> parts is fully developed and the less developed part is at least addressed.	Both <i>setting</i> parts of the story are addressed but not fully developed.	Neither <i>setting</i> parts are developed.
CHARACTERS: "Who" described by behavior, appearance, personality, and character traits	The main <i>characters</i> are fully developed with much descriptive detail. The reader has a vivid image of the characters.	The main <i>characters</i> are developed with some descriptive detail. The reader has a vague idea of the characters.	The main <i>characters</i> are identified by name only.	None of the <i>characters</i> are developed or named.

Rubric Components³

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).

¹ From "Analytic vs. Holistic Rubrics," n.d.

² From "Fiction-Writing Content Rubric," n. d.

³ Excerpted verbatim from University of Hawai'i at Mānoa, n. d., sect. What are the parts of a rubric?

Steps for Developing a Rubric⁴

Rubrics can be developed using common office productivity software, such as Word or Excel, or you can create them using free or proprietary software. Listed below are a couple of free rubric building web sites include.

- Rubistar: <http://rubistar.4teachers.org/>
- Rcampus: <http://www.rcampus.com/indexrubric.cfm>

Regardless of which tool you use to build a rubric, the steps you take in development of the rubric are the same. The remainder of this section is a step-by-step approach for 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.
- 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.

Tip: 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.

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

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.

You may find it useful to borrow, in part or as a whole, a rubric that another institutional has already developed. The web is full of a variety of rubric samples as well as informational sources for developing, building and testing rubrics. Table 6 is a list of online resources that you might find helpful in you exploration to rubrics. IRPE is also available to assist you in this endeavor.

⁴ Steps are excerpted verbatim from University of Hawai'i at Mānoa , n. d., sect. Developing a rubric.

Table 6

Rubrics Resources	
UTA Active Learning web portal	http://activelearning.uta.edu/FacStaff/tools.htm
Association of American Colleges and Universities	http://www.aacu.org/value/rubrics/index_p.cfm?CFID=35718428&CFTOKEN=86166291
California State University Fullerton (Mihaylo College of Business and Economics)	http://business.fullerton.edu/centers/CollegeAssessmentCenter/RubricDirectory/other_rubrics.htm
Kansas State University	http://www.k-state.edu/assessment/plans/asures/samples/index.htm
Texas A&M University (Division of Student Affairs)	http://studentlifestudies.tamu.edu/sllo/
University of Wisconsin-Madison (College of Engineering)	http://www.engr.wisc.edu/faculty/assessment/resources.html
University of Rhode Island	http://www.uri.edu/assessment/uri/guidance/rubrics.html
Association for the Assessment of Learning in Higher Education	http://course1.winona.edu/shatfield/air/rubrics.htm
University of Hawai'i at Mānoa	http://manoa.hawaii.edu/assessment/howto/rubrics.htm

Rubric Orientation and Calibration⁵

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 carrying out the norming process. IRPE can also coordinate the norming 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 Excerpted verbatim from University of Hawai'i at Mānoa, n. d., sect. Scoring rubric group orientation and calibration.

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?

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