

Developing Grading Rubrics



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What is a rubric?

- ❑ A systematic scoring guideline to evaluate students' performance (papers, speeches, problem solutions, portfolios, cases) through the use of a detailed description of performance standards.
- ❑ Used to get consistent scores across all students.
- ❑ Allows students to be more aware of the expectations for performance and consequently improve their performance.

What questions do rubrics answer?

- ❑ By what criteria should performance be judged?
- ❑ Where should you look and what should you look for to judge successful performance?
- ❑ What does the range in quality performance look like?
- ❑ How do you determine validly, reliably, and fairly what score should be given to a student and what that score means?
- ❑ How should the different levels of quality be described and distinguished from one another?

What are the essential parts of a rubric?

- ❑ A *scale* of points to be assigned in scoring a piece of work on a continuum of quality. High numbers are typically assigned to the best work.
- ❑ *Descriptors* for each level of performance that contain criteria and standards by which the performance will be judged
 - Indicators are often used in descriptors to provide examples or signs of performance in each level
- ❑ *Criteria* that describe the conditions that any performance must meet to be successful
 - Five categories to consider:
 - Impact
 - Craftsmanship
 - Methods
 - Content
 - Sophistication of the performance
 - Should describe both strengths and errors (errors should be described particularly in lower levels of performance)
- ❑ *Standards* that specify how well criteria must be met
- ❑ Example:
 - Task: Solve calculus problem
 - Scale: 1 to 3
 - Criteria: Solve the problem with clear and appropriate logic (method) and substantiation (content)
 - “Clear and appropriate logic” indicators: provides an explanation, includes a diagram, identified elements of the problem
 - Standard for “Clear and appropriate logic” score of “3”: Gives a complete response with clear, coherent, unambiguous and elegant explanation; includes a clear and simplified diagram; identified all the important elements of the problem

Types of rubrics

- ❑ Rubrics can be holistic or analytic, general or task specific
- ❑ Holistic vs. analytic
 - Holistic rubrics provide a single score based on an overall impression of a student's performance on a task.
 - Advantages: quick scoring, provides overview of student achievement.
 - Disadvantages: does not provide detailed information, may be difficult to provide one overall score.
 - Analytic rubrics provide specific feedback along several dimensions.
 - Advantages: more detailed feedback, scoring more consistent across students and graders.
 - Disadvantage: time consuming to score.
- ❑ General vs. task specific
 - General rubrics contain criteria that are general across tasks.
 - Advantage: can use the same rubric across different tasks.
 - Disadvantage: feedback may not be specific enough.
 - Task specific rubrics are unique to a specific task.
 - Advantage: more reliable assessment of performance on the task.
 - Disadvantage: difficult to construct rubrics for all specific tasks

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.
- ❑ Use a general rubric when:
 - You want to assess reasoning, skills and products.
 - All students are not doing exactly the same task.
- ❑ Use a task specific rubric when:
 - You want to assess knowledge.
 - When consistency of scoring is extremely important.

Development of a rubric

- Steps in the development process:
 1. Clearly define the assignment including the topic, the process that the students will work through and the product they are expected to produce.
 2. Determine the key components that you interested in (e.g. For a writing assignment: coherence, content, and organization).
 3. Decide on what type of rubric to use (holistic/general, holistic/task specific, analytic/general, analytic/task specific).
 - The type of rubric you develop will depend on the type of assignment and what you are interested in evaluating.
 4. Clearly define those key components (e.g., what do you mean by coherence? What does coherent writing look like?).
 5. Establish clear and detailed standards for performance for each component
 - Determine what the different levels of performance look like within each category of assessment.
 - Think of the lowest, middle-range, and highest level of performance.
 - Try to avoid relying on comparative language when distinguishing among performance levels. For example, don't define the highest level of performance as thorough and accurate and the middle level of performance as less thorough and less accurate. Find qualities and descriptors that are unique to each performance standard.
 6. Develop a scoring scale
 - Determine how many score levels you want to use based on the performance standards you set in step five.
 - Clearly define the difference between the score levels.
 - The scoring scale should be consistent across all key components when using an analytic rubric (e.g. a score of 4 for one area is comparable to a score of 4 in another area).

How can I involve students in rubric development?

- After clearly defining the assignment for the students, they can follow the guidelines outlined above to create a rubric.
- Depending on your preference you may or may not want to provide the students with the key components of the assignment and the type of rubric to create.
- Students can either work in teams or as a whole class.
- If students work in teams, you may want to let the students use team-based rubrics or have a class discussion about the team rubrics to reach consensus on one rubric for all students in the class.
- To ease in the development process, provide students with examples of rubrics, a rubric template and previous examples of student work if available.
- As an alternative to having students create a rubric, ask them to give feedback on or to add more detail to existing rubrics.

How do rubrics enhance student learning?

- When students are made aware of the rubrics prior to instruction and assessment, they know the level of performance expected and they are more motivated to reach those standards.
- When students are involved in rubric construction, the assignment itself becomes more meaningful to the students.

Using rubrics for assessment

- If you are providing a rubric, share it with students before they complete the assignment. This will help them understand the performance standards.
- Rubrics can provide both a grade (summative) and detailed feedback to improve future performance (formative).
- Use rubrics to promote student self-assessment of their own learning and performance.
- Avoid mandating process, format, method or approach.

Using multiple raters

- In order to use a scoring rubric to get meaningful and consistent results, the rater(s) should be trained in the proper use of the rubric.
- If different raters are used to rate the works, make every effort to ensure that the raters are as consistent as possible in their scoring.
- To promote consistency between raters, adequate training with discussion and examples should be provided.

References:

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Taggart, G. L., Phifer, S. J., Nixon, J. A., & Wood, M. (Eds.) (n.d.). *Rubrics: Handbook for construction and use*. Lancaster, PA: Technomic Publishing Co.

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Example General Analytic Writing Rubric

Evaluators should rank each piece of writing on the following criteria on a scale of 1 (lowest) to 3 (highest)

1. Introduction

- 1 = no or poor introduction.
- 2 = some introduction; nothing beyond a forecast.
- 3 = introduction grasps reader's attention (engages the reader) and forecasts major points.

2. Articulation of thesis

- 1 = no or poor articulation of thesis.
- 2 = some articulation of thesis
- 3 = clear articulation of thesis or argument.

3. Paragraph development

- 1 = poor paragraphs with no clear topic sentence; multiple topics; little or no development
- 2 = some structure and development of paragraphs and/or some with clear topic sentences or focus, but not consistently.
- 3 = paragraphs are consistently well developed, with a clear topic sentence and appropriate number of sentences that provide examples and develop points.

4. Use of examples

- 1 = little or no use of examples.
- 2 = some use of examples or evidence, but not consistent; no examples or evidence in places where they are needed
- 3 = frequent or consistent use of examples and evidence; example or evidence appears whenever the reader asks, "For instance?"

5. Conclusion

- 1 = no or poor conclusion or summary of argument
- 2 = some summary of points made, but nothing beyond summary; no broad conclusions/lessons
- 3 = a conclusion going beyond summary of what was written in the body of the essay.

6. Transitions

- 1 = little or no transition between paragraphs; poor flow
- 2 = some transition or flow between paragraphs; partial structure to argument
- 3 = strong and/or consistent transition between points in essay; strong flow

7. Variation of sentences

- 1 = little or no variation of sentences; monotonous use of sentence type. (length/ complexity).
- 2 = some variation of sentences. Sentences of varying length or type, but not varied effectively.
- 3 = effective variation of sentence length and type.

8. Coherence

- 1 = lack of coherence; i.e. mismatch between the thesis and the body; tangents
- 2 = occasional tangents; repetition
- 3 = every paragraph works to support the thesis; “linked” paragraphs

Example General Holistic Oral Presentation Rubric

5 – Excellent	The student clearly describes the question studied and provides strong reasons for its importance. Specific information is given to support the conclusions that are drawn and described. The delivery is engaging and sentence structure is consistently correct. Eye contact is made and sustained throughout the presentation. There is strong evidence of preparation, organization, and enthusiasm for the topic. The visual aid is used to make the presentation more effective. Questions from the audience are clearly answered with specific and appropriate information.
4 – Very Good	The student describes the question studied and provides reasons for its importance. An adequate amount of information is given to support the conclusions that are drawn and described. The delivery and sentence structure are generally correct. There is evidence of preparation, organization and enthusiasm for the topic. The visual aid is mentioned and used. Questions from the audience are answered clearly.
3 – Good	The student describes the question studies and conclusions are stated, but supporting information is not as strong as a 4 or 5. The delivery and sentence structure are generally correct. There is some indication of preparation and organization. The visual aid is mentioned. Questions from the audience are answered.
2 – Limited	The student states the question studied but fails to describe it fully. No conclusions are given to answer the question. The delivery and sentence structure are understandable, but with some errors. Evidence of preparation and organization is lacking. The visual aid may or may not be mentioned. Questions from the audience are answered with only the most basic response.
1 – Poor	The student makes a presentation without stating the question or its importance. The topic is unclear and no adequate conclusions are stated. The delivery is difficult to follow. There is no indication of preparation or organization. Questions from the audience receive only the most basic or no response.
0	No oral presentation is attempted.

Reference:

Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance*. San Francisco, CA: Jossey-Bass Publishers.