Rubrics

Outcomes

By the end of this segment, you will be able to:
1. Describe the purposes and uses of rubrics
2. Recognize different types of rubrics
3. Evaluate rubrics for impact on student learning
4. Understand reliable application of rubrics in assessment
Rubrics – What are they and why use them?

A rubric is a scoring guide: a list or chart that describes criteria used to evaluate or grade student work. (Siskin, 2009)

Rubrics contain a set of criteria specifying the characteristics of a learning outcome and the levels of achievement for each characteristic. (Levy, 2012)

There is no single way to write or format rubrics – they can be created and adapted for the circumstances and situations of your courses and programs.
What can rubrics be used to evaluate?

Performances or behaviors:
- Presentation
- Teamwork
- Role plays
- Performances

Written or visual student work:
- Papers
- Journals
- Artwork
- Portfolios

Rubric Strengths

Complex products or behaviors can be examined efficiently and effectively.
Developing a rubric helps to precisely define faculty expectations.
Student appreciate clarity in expectations for their work and/or behaviors.
Rubrics can serve a variety of purposes:
- Provide formative feedback to students
- Grade student work
- Conduct assessment at the program level
Rubrics are criterion-referenced rather than norm-referenced.
Rubrics and Learning Outcomes

Learning outcomes describe what students will do to demonstrate their learning

The rubric describes:
- The expected properties of that demonstration (criteria)
- The possible levels of achievement/ performance (standards)

Types of Rubrics

Holistic
Describe how one global, holistic judgment is made; provides one score for a product or behavior. Checklist and rating scales are types of holistic rubrics.

Analytic
Involves a series of judgments, each assessing a characteristic of the product being evaluated; provides separate, holistic scoring of specified characteristics of a product or behavior.
Typical Four-Point Rubric Levels

1. Below Expectations
2. Needs Improvement
3. Meets Expectations
4. Exceeds Expectations

Example: Holistic Rubric for Assessing Student Essays

<table>
<thead>
<tr>
<th>Standards</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>The essay has at least one serious weakness. It may be unfocused, underdeveloped, or rambling. Problems with the use of language seriously interfere with the reader’s ability to understand what is being communicated.</td>
</tr>
<tr>
<td>Developing competence</td>
<td>The essay may be somewhat unfocused, underdeveloped, or rambling, but it does have some coherence. Problems with the use of language occasionally interfere with the reader’s ability to understand what is being communicated.</td>
</tr>
<tr>
<td>Acceptable</td>
<td>The essay is generally focused and contains some development of idea, but the discussion may be simplistic or repetitive. The language lacks syntactic complexity and may contain occasional grammatical errors, but the reader is able to understand what is being communicated.</td>
</tr>
<tr>
<td>Sophisticated</td>
<td>The essay is focused and clearly organized, and it shows depth of development. The language is precise and shows syntactic variety, and ideas are clearly communicated to the reader.</td>
</tr>
</tbody>
</table>

Example: Analytic Rubric for Peer Assessment of Team Project Members

<table>
<thead>
<tr>
<th></th>
<th>Below Expectation</th>
<th>Good</th>
<th>Exceptional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Contributions</td>
<td>Made few substantive contributions to the team's final product</td>
<td>Contributed a “fair share” of substance to the team's final product</td>
<td>Contributed considerable substance to the team's final product</td>
</tr>
<tr>
<td>Leadership</td>
<td>Rarely or never exercised leadership</td>
<td>Accepted a “fair share” of leadership responsibilities</td>
<td>Routinely provided excellent leadership</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Undermined group discussions or often failed to participate</td>
<td>Respected others’ opinions and contributed to the group's discussion</td>
<td>Respected others’ opinions and made major contributions to the group's discussion</td>
</tr>
</tbody>
</table>


Reliability in the Use of Rubrics

Inter-Rater Reliability

Correlation Between Paired Readers

Discrepancy Index
Preparing for Assessment with Rubrics

Collect a range of samples of student work for use in assessment and remove identifying information.

Develop and pilot test the rubric.

Select exemplars of weak, acceptable, and strong student work.

Reviewing Application of the Rubric

Have reviewers apply the rubric and develop a shared understanding of the criteria and standards. Piloting the rubric will reduce the likelihood of discrepancy before scoring – this is calibrating the rubric.

Discuss reasons for the assignment of scores. What are the similarities and differences? Is a shared agreement possible?

For discrepancies, ask a third rater to score.

Revise the rubric as necessary to clarify.
Results...

Summarize how frequently each level of performance was observed by reviewers.

Example: number of student papers that were determined to be:
- Inadequate
- Developing Competence
- Acceptable
- Sophisticated

Drawing Conclusions

Demonstration of learning outcomes:
- Are you satisfied
- How do you know?
- If not, what might you do?

To draw conclusions about student success, there needs to be a desired standard (or level of competency, or benchmark).
- Example: 80% of student papers will be at the acceptable or sophisticated level.
Drawing Conclusions – Next Steps

How useful is the rubric?
- Does it work well?
- Could it be improved?
- How?

Data Collection:
- Did it work well?
- Could it be improved?
- How?

Developing and maintaining the instrument

Identify or develop the rubric and shape it to the contours of the assignment.

Envision possible results.

Pilot the rubric by applying it to example work.

Share the rubric with students to understand how they interpret it.

Revise and continue to refine the rubric to increase inter-rater reliability and usefulness to students.