Step-by-step Rubric Design and the VALUE Project

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What is a rubric?

A rubric is a guide for evaluating student work along certain dimensions. Within the context of program assessment the dimensions can be specific skills or aspects of a learning outcome. For each dimension there are concrete descriptors for different levels of performance. Essentially a rubric takes professional judgments about qualities of student work and aligns them with a rating scale.

Rubrics can be developed for virtually any student work product, performance or behavior (e.g., written work, presentations, participation in discussions, etc.).

Rubrics are especially good for evaluating higher order skills or outcomes that are not easily measured by tests (e.g., oral communication, creativity).

Creating a rubric

A rubric that is used for the assessment of a program’s learning outcomes can be created by either an individual faculty member or by a committee. Once created, it is essential that the majority of the faculty in the program agree that it captures the range of performance on the learning outcome.

Five steps for creating a rubric:

1. Identify the learning outcome you are assessing.
2. Identify the work you will evaluate with the rubric (e.g., paper, presentation, portfolio). The performance descriptions you create will be shaped by the type of work you will be evaluating.
3. Identify the component dimensions or skills of the learning outcome.
4. Create the descriptors for each component of the learning outcome.
   - For each component describe the best work you could expect. This describes the top category.
   - Describe unacceptable work for this component. This describes the lowest category.
   - Determine the number of categories you will use, and then develop descriptions of intermediate-level work. Rubrics commonly use 3 (e.g., weak, satisfactory, strong) to 5 (e.g., unacceptable, marginal, acceptable, good, outstanding) categories; however any number that is meaningful can be used.
5. Pilot test the rubric by applying it to samples of student work; then revise the rubric as needed to eliminate ambiguities. Consider asking faculty who were not involved in the development of the rubric to pilot test it for you as they may be more able to identify ambiguities in the rubric.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Superior</th>
<th>Good</th>
<th>Adequate</th>
<th>Inadequate</th>
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<tr>
<td>Can draw appropriate conclusions.</td>
<td>Draws appropriate conclusion and thoroughly and accurately explains why the conclusion is drawn.</td>
<td>Draws appropriate conclusion, but only briefly explains why the conclusion is drawn.</td>
<td>Draws appropriate conclusion, but either does not explain or is not entirely accurate in the explanation.</td>
<td>Either draws no conclusion or draws an inappropriate conclusion.</td>
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You will most likely need to develop rubrics for your program’s learning outcomes from scratch; however it can be helpful to see how others have approached similar outcomes. The Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics assess 15 of the Association of American Colleges & Universities’ (AAC&U) essential learning outcomes and can be easily modified for use in your program.
Using rubrics for program assessment

To determine how well student learning outcomes are being achieved, many programs choose to include the evaluation of student work products, like papers, portfolios or performances, in their assessment plan. A rubric can be a very useful tool for assessing student learning as it is reflected in these products.

Using a rubric for program assessment is different than using a rubric for grading student work. For the purpose of assessment, scores for each dimension (e.g., learning outcome) are aggregated across all students. The objective is to understand the average skill level of students in the program on the particular dimension.

If you are considering using student work as part of your program’s assessment plan, the following steps can serve as a guide for how to go about using rubrics to accomplish this.

1. Determine where in the curriculum the outcome is addressed and at what level you want to assess it.
   - A curriculum map or pedagogical inventory would be very helpful in accomplishing this task.
   - To determine if improvement in student learning has occurred across the program, consider looking for courses where the outcome is introduced and for courses later in the program that emphasize the outcome.
   - To determine if students have achieved the outcome by the time they are about to complete the program, consider looking at senior level courses.

2. Look within the courses you have selected to identify student work (e.g., products or performances) that demonstrates the outcome.
   - If you want to test improvement over the course of the program, look for similar products in lower and upper division courses.
   - If you want to determine if students have achieved the outcome by the end of the program, look for products produced towards the end of the program.

3. Develop the rubric.
   - Follow the five steps for creating a rubric.

4. Consider using a sample, or representative portion, of the student work that is available for the selected work product instead of including the work of every student who submits the assignment.
   - A representative sample will give you a good understanding of student learning in your program, and require less time and effort to evaluate.

5. Apply the rubric.
   - Ideally more than one rater would independently apply the rubric.

6. Once you have applied the rubric, aggregate rubric scores across students for each outcome or skill on the rubric using frequencies or mean scores.
   - If you had two or more individuals independently apply the rubric, you will first need to average their scores for each student on each dimension of the rubric.

7. Present data in a way that is user-friendly for your program’s faculty and then discuss what the results mean for your program.
   - A user-friendly presentation of rubric data can mean putting it into a table, a graph, or a paragraph—whatever makes the most sense for you and your discipline.
   - It is very helpful to have a criterion or standard of success in mind when you start the discussion of results. For example, you might say that the average score must be above a 3 on a 4-point scale, or you might say that 75% of your students must fall in the ‘superior’ range of your rubric.

8. Once the faculty as a group has decided what the results mean, you can look for ways to improve any areas of concern.
**Written communication:** Students will effectively express information in writing using conventions and forms appropriate to the intended audience.

<table>
<thead>
<tr>
<th></th>
<th>Accomplished 4</th>
<th>Proficient 3</th>
<th>Developing 2</th>
<th>Novice 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context &amp; Purpose</strong></td>
<td>Demonstrates a clear and effective understanding of context, audience, and purpose that is responsive to all elements of the assignment and focuses all elements of the work.</td>
<td>Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assignment.</td>
<td>Demonstrates inconsistent awareness of context, audience, purpose. May not address all elements of the assignment.</td>
<td>Demonstrates minimal attention to context, audience, and purpose. Does not address assignment.</td>
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<tr>
<td><strong>Thesis/Central Idea</strong></td>
<td>Thesis/central idea is clearly communicated, worth developing, and engaging.</td>
<td>Presents a thesis/central idea that can be developed.</td>
<td>States thesis/central idea that is weak, or too broad to be developed.</td>
<td>Attempted thesis/central idea is unclear</td>
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<tr>
<td><strong>Organization &amp; Coherence</strong></td>
<td>Uses a logical structure appropriate to paper’s subject, purpose, and audience. Sophisticated transitional sentences often develop one idea from the previous one or identify their logical relations. It guides the reader through the chain of reasoning or progression of ideas.</td>
<td>Shows a progression of ideas and uses fairly sophisticated transitional devices (e.g., may move from least to more important idea).</td>
<td>May list ideas or arrange them randomly rather than using any evident structure. May use transitions, but they are likely to be sequential (first, second, third) rather than logic based.</td>
<td>May have random organization, lacking internal paragraph coherence and using few or inappropriate transitions.</td>
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<td><strong>Support &amp; Development</strong></td>
<td>Uses appropriate, relevant, and compelling content to support ideas, convey understanding of the topic and shape the whole work.</td>
<td>Content is appropriate and relevant so that ideas are supported sufficiently. Work is generally shaped through support.</td>
<td>Demonstrates use of supportive content but assumes that supportive content speaks for itself and needs no application to the point being discussed, or inconsistently supports ideas with content.</td>
<td>Often uses ineffective or inappropriate content (e.g., opinions, examples, or clichés) to support points, or offers little evidence of any kind.</td>
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<tr>
<td><strong>Style</strong></td>
<td>Uses words with precise meaning and an appropriate level of specificity. Sentences are varied, yet clearly structured and carefully focused, not long and rambling.</td>
<td>Primarily uses words accurately and effectively. Sentences are primarily clear, well-structured, and focused, though some may be awkward or ineffective.</td>
<td>Word choice is sometimes vague, imprecise, or inappropriate. Sentence structure is generally correct, but sentences may be wordy, unfocused, repetitive, or confusing.</td>
<td>Misuses words; employs inappropriate language. Contains many awkward sentences; sentence structure is simple or monotonous.</td>
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<td><strong>Mechanics</strong></td>
<td>Almost entirely free of spelling, punctuation and grammatical errors.</td>
<td>May contain some errors, which may annoy the reader but not impede understanding.</td>
<td>Contains several mechanical errors, which may temporarily confuse the reader but not impede overall understanding</td>
<td>Contains either many mechanical errors or a few important errors that block the reader’s understanding and ability to see connection between thoughts.</td>
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