Creating Rubrics for Assessment

“rubrics teach as well as evaluate”

SLO Flex Workshop
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Overview of Presentation

• What is a RUBRIC?
• Advantages of a RUBRIC
• Types of RUBRICS
• Sample RUBRICS
• How to Create and Use a RUBRIC
• Evaluating your Rubric

• Resources
What is a Rubric?

- Set of criteria and a scoring scale that is used to assess and evaluate students’ work.
- Often rubrics identify levels or ranks with criteria indicated for each level.
- Can have as few as two levels of performance or as many as appropriate
  - As simple as Pass/ NO pass
  - 3-5 levels work best
Advantages of Rubrics: Instructor

- Objective and consistent among all students
- Leads to insight concerning the effectiveness of instruction
- Clarifies criteria in specific terms
- Data analysis becomes easier
- Shows areas in need of improvement
- Establishes “ground rules” to resolve potential academic disputes
Advantages of Rubrics: Instructor (cont.)

- Reduces subjectivity involved in evaluating qualitative work
- Benchmarks against which to measure and document progress
- Reduces time necessary to evaluate student work
- Ensures all instructors are measuring work by same standards
- Promotes connection between student assessment and course objectives
BONUS! Rubrics Foster Dialogue

- Encourages collaboration and discussion with colleagues
- Students’ opinions on rubrics help to make them better and provide a way for students to have a direct impact on how they are being assessed
- Faculty who teach the same sections can develop and use the same rubric to score projects
- While the first few rubrics faculty create may take some time, each successive rubric becomes easier.
Advantages of Rubrics: Students

“SEE the goal to ACHIEVE the goal”

- Helps define “quality”
- Instructors expectations are clear
- Manner in which to meet the expectations are clear
- Students can better judge and revise their own work and assist their peers
- Vehicle for student feedback – promote student/faculty communication
- Promotes self assessment of their own learning and performance
- Leads to improvements in the quality of student work
Types of Rubrics

**Holistic**

- Consists of a single scale with all criteria to be considered together
- A single score is assigned
- Instructor scores the overall process or assignment as a whole, without judging component parts separately

**Analytical**

- Breaks the objective into component parts
- Each portion is scored independently using a rating scale
- Final score is made up of adding each component parts
Holistic Rubrics

- Holistic rubrics tend to be used when a quick or gross judgment needs to be made.
- Often best for formative assessments (homework assignments) to quickly review student work.
- Can be used where it is difficult to evaluate performance on one criterion independently of performance on a different criterion.
  - Ex. Writing rubric, Art rubric
<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Demonstrates complete understanding of the problem. All requirements of task are included in response.</td>
</tr>
<tr>
<td>4</td>
<td>Demonstrates considerable understanding of the problem. All requirements of task are included.</td>
</tr>
<tr>
<td>3</td>
<td>Demonstrates partial understanding of the problem. Most requirements of task are included.</td>
</tr>
<tr>
<td>2</td>
<td>Demonstrates little understanding of the problem. Many requirements of task are missing.</td>
</tr>
<tr>
<td>1</td>
<td>Demonstrates no understanding of the problem.</td>
</tr>
<tr>
<td>0</td>
<td>No response/task not attempted.</td>
</tr>
</tbody>
</table>
**Table 3:**  
*Math Performance Task – Scoring Rubric: Data Analysis*

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Makes accurate estimations. Uses appropriate mathematical operations with no mistakes. Draws logical conclusions supported by graph. Sound explanations of thinking.</td>
</tr>
<tr>
<td>3</td>
<td>Makes good estimations. Uses appropriate mathematical operations with few mistakes. Draws logical conclusions supported by graph. Good explanations of thinking.</td>
</tr>
<tr>
<td>2</td>
<td>Attempts estimations, although many inaccurate. Uses inappropriate mathematical operations, but with no mistakes. Draws conclusions not supported by graph. Offers little explanation.</td>
</tr>
<tr>
<td>0</td>
<td>No response/task not attempted.</td>
</tr>
</tbody>
</table>
Holistic Rubrics

**ADVANTAGES**
- Emphasis on what learner is able to demonstrate rather than what s/he cannot do.
- Saves time by minimizing the number of decisions grader has to make.
- Can be applied consistently by multiple graders, increasing reliability.

**DISADVANTAGES**
- Does not provide specific feedback for improvement.
- When student work is at varying levels spanning criteria points it can be difficult to select the single best description.
- Criteria cannot be weighed.
Analytic Rubrics

• Instructor scores separate, individual parts of the assignment or performance first then sums the individual scores to obtain a final score.

• Consists of two components:
  ▪ Criteria (vital traits, key qualities, dimensions)
  ▪ Levels of Performance
Analytic Rubrics (cont.)

- Generally better to start with a smaller number of levels of performance for a criterion and then expand if necessary.

- EXAMPLE:

<table>
<thead>
<tr>
<th>Beginning</th>
<th>Emerging</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NO PASS)</td>
<td>(PASS)</td>
<td></td>
</tr>
</tbody>
</table>
Portfolio Student Learning Outcome Assessment Rubric

SLO: Students will be able to compose thoughtful, well-organized, grammatically correct short essays, using properly documented outside sources and personal observations and experiences to develop a unified thesis.

- Criteria/Primary Traits = Thesis (thoughtfulness, unity), Organization (well-organized), Evidence (outside sources, personal observations and experiences), Essay Length (short essays), Grammar (grammatically correct), MLA Style (properly documented)

- Level of Performance = Pass/ No Pass
<table>
<thead>
<tr>
<th>Portfolio Pass Standard</th>
<th>Portfolio No Credit Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thesis</strong></td>
<td></td>
</tr>
<tr>
<td>• Demonstrates clear thesis statements which assert a unified focus. There may be some awkward or mechanical sentence structure.</td>
<td>• Fails to demonstrate a consistent understanding of thesis statements; statements are often statements of facts, not arguments.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
</tr>
<tr>
<td>• Demonstrates consistent use of transitions and sense of logical essay structures.</td>
<td>• Fails to demonstrate logically organized well-structured arguments.</td>
</tr>
<tr>
<td>• Main points are found in topic sentences and are related to thesis.</td>
<td>• Topic sentences and main points do not relate to the thesis.</td>
</tr>
<tr>
<td><strong>Evidence</strong></td>
<td></td>
</tr>
<tr>
<td>• Contains sufficient source materials used as evidence in support of points. Sources are applicable, detailed and explained.</td>
<td>• Consistently fails to use sources to support points.</td>
</tr>
<tr>
<td>• Consistently fails to use detailed, applicable evidence to support main points.</td>
<td>• Consistently fails to use detailed, applicable evidence to support main points.</td>
</tr>
<tr>
<td><strong>Essay Length</strong></td>
<td></td>
</tr>
<tr>
<td>• meets prescriptive page lengths.</td>
<td>• fails to meets prescriptive page lengths.</td>
</tr>
<tr>
<td><strong>Use of Written English/Grammar/Syntax</strong></td>
<td></td>
</tr>
<tr>
<td>• Demonstrates consistent correct modes of expression; some vague or awkward phrases, but these do not inhibit meaning or readability.</td>
<td>• Extremely difficult to read and understand. Word choice is inappropriate or incorrect.</td>
</tr>
<tr>
<td>• Contains writings that follow rules of Standard Written English; some errors, but not distracting.</td>
<td>• Contains numerous and distracting grammar and sentence boundary errors. Meaning is inhibited by errors in grammar.</td>
</tr>
<tr>
<td><strong>Use of MLA Citation</strong></td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Criteria #1</td>
<td>Beginning</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Description</td>
<td>Description reflecting a beginning level of performance</td>
</tr>
<tr>
<td>Criteria #2</td>
<td>Description reflecting a beginning level of performance</td>
</tr>
<tr>
<td>LIS 10</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Selects a variety of appropriate sources</td>
<td>No academic sources; only one type of sources appropriate to the topic; less than 5 sources</td>
</tr>
<tr>
<td>Prepares clear and accurate MLA citations</td>
<td>Citations were less than satisfactory (more than 10 unique errors)</td>
</tr>
</tbody>
</table>
Weighing

A numerical value can be assigned to each point on a scale.

If one criteria is more important than another, apply more weight (multiple the point by a number greater than 1).

- 4 Criteria (content, organization support, conventions) - if you want to emphasize content, multiple the organization by 2.
- Scales of uneven length – shorter scales would count less than the longer ones. Organization, support and content rated on a 6 point scale and spelling and punctuation rated on a 3 point scale)
Analytic Rubrics

**ADVANTAGES**
- Provides useful feedback on areas of strength and weaknesses
- Criterion can be weighed to reflect the relative importance of each criteria.

**DISADVANTAGES**
- Takes more time to create and use than a holistic rubric.
- Unless each point for each criterion is well-defined, instructors may not arrive at the same score.
Where to Begin...

- Identify a measureable SLO or learning objective
- Decide what meeting the outcome looks like
- Articulate exactly what you are looking for and how you will know it has been met
- Look to the course objectives or SLOs as possible “criterion”
Where to Begin... (cont.)

- Develop or adapt an existing rubric
- Keep it short and simple
- Decide if you wish to develop a holistic or analytic rubric
- Determine the levels of performance
Where to Begin... (cont.)

- Share it with students prior to the assessment
- Assess, Measure, Evaluate
- Consider “norming session” with faculty
- Use the rubric on an assignment, provide feedback, reflect and continuously improve.
Levels of Performance

*How many levels of performance should I use?*

- The number of levels varies; no specific number is standard
- A rubric can have as few as two levels (like a checklist)
- Apply the rubric one or more times, and then re-examine the number of levels that best serve your needs.
- As the number of levels increases, and those judgments become finer and finer, the likelihood of error increases.
Using a Rubric

“SEE the goal to ACHIEVE the goal”

- Rubric can be used to assess a student, course, or a program
- Helps define excellence
- Bridge between teacher expectations and assessment
- Useful for both the students and the instructor
- Provides a common language to discuss learning
- Provides rationale for measuring and evaluating
Great Tool for Program Assessment

- Use in classes and aggregate data across sections
- Internship supervisors can be invited to use rubric in assessing how well their intern meets a PSLO; data from all interns can be aggregated
- When two instructors use the same rubric, the reliability of the rubric can be tested for use by multiple instructors.
  - Identifies program strengths and areas for improvement
  - “Double duty” out of grading by using common rubric that is used for grading and program assessment
Evaluating Rubrics

- Colleague review
- Student review -- is it clear to them?
- Align/match standards?
- Manageable?
- Consider imaginary student performance on the rubric.
Evaluating Rubrics

- Does the rubric relate to the outcome(s) being measured?
- Does it cover important criteria for student performance?
- Does the top of the rubric reflect excellence?
- Are the criteria and scales well-defined?
- Can the rubric be applied consistently by different scorers?
Arguments against Rubrics

“I once gave extra credit to a student who realized that without providing a shred of meaningful content she could meet all the requirements of a state writing rubric he posted in his classroom. As required she used the word “persuade” and two synonyms, composed a clear topic sentence and closing sentence, and made no spelling or grammatical errors. But she did it without saying anything coherent.”

- Sharing rubrics with students will encourage formulaic writing
- They don't always take outside circumstances into account
- Can be too analytical for artistic projects
Modifying Existing Rubrics

Why reinvent the wheel?

• University of Hawaii, Manoa – Rubric Bank
  http://manoa.hawaii.edu/assessment/resources/rubricbank.htm

• AACU - Valid Assessment of Learning in Undergraduate Education (VALUE) Rubrics

• Large Collection of Rubrics from various colleges
  http://www.csub.edu/tlc/options/resources/handouts/Rubric Packet_Jan06.pdf

• AALHE Rubric Samples
  http://course1.winona.edu/shatfield/air/rubrics.htm
RESOURCES


