

# Creating Rubrics for Assessment

*“rubrics teach as well as evaluate”*

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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 1:** *Template for Holistic Rubrics*

<u>Score</u>	<u>Description</u>
5	Demonstrates complete understanding of the problem. All requirements of task are included in response.
4	Demonstrates considerable understanding of the problem. All requirements of task are included.
3	Demonstrates partial understanding of the problem. Most requirements of task are included.
2	Demonstrates little understanding of the problem. Many requirements of task are missing.
1	Demonstrates no understanding of the problem.
0	No response/task not attempted.

**Table 3:**

*Math Performance Task – Scoring Rubric: Data Analysis*

Name \_\_\_\_\_

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

# 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:**

<i>Beginning</i>	<i>Emerging</i>	<i>Mastery</i>
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(NO PASS)

(PASS)

# 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

## Portfolio Pass Standard

## Portfolio No Credit Standard

### Thesis

- Demonstrates clear thesis statements which assert a unified focus. There may be some awkward or mechanical sentence structure.

### Thesis:

- Fails to demonstrate a consistent understanding of thesis statements; statements are often statements of facts, not arguments.

### Organization

- Demonstrates consistent use of transitions and sense of logical essay structures.
- Main points are found in topic sentences and are related to thesis.

### Organization

- Fails to demonstrate logically organized well-structured arguments.
- Topic sentences and main points do not relate to the thesis.

### Evidence

- Contains sufficient source materials used as evidence in support of points. Sources are applicable, detailed and explained.

### Evidence

- Consistently fails to use sources to support points.
- Consistently fails to use detailed, applicable evidence to support main points.

**Essay Length** - meets prescriptive page lengths.

**Essay Length** - fails to meets prescriptive page lengths.

### Use of Written English/Grammar/Syntax

- Demonstrates consistent correct modes of expression; some vague or awkward phrases, but these do not inhibit meaning or readability.
- Contains writings that follow rules of Standard Written English; some errors, but not distracting.

### Use of Written English/Grammar/Syntax

- Extremely difficult to read and understand. Word choice is inappropriate or incorrect.
- Contains numerous and distracting grammar and sentence boundary errors. Meaning is inhibited by errors in grammar.

### Use of MLA Citation

### Use of MLA Citation



	Beginning	Developing	Accomplished	Exemplary
<b>Criteria #1</b>	Description reflecting a beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance
<b>Criteria #2</b>	Description reflecting a beginning level of performance	Description reflecting movement toward mastery level of performance	Description reflecting achievement of mastery level of performance	Description reflecting highest level of performance

<u>LIS 10</u>	Unsatisfactory	Developing (No Pass)	Accomplished (Pass)	Exemplary
<b>Selects a variety of appropriate sources</b>	No academic sources; only one type of sources appropriate to the topic; less than 5 sources	No academic sources; at least 2 types of sources appropriate to the topic; minimum of 5 sources	At least 1 academic sources; used 3 or more types of sources appropriate to the topic; minimum of 6 sources	At least 3 academic sources ; used 3 or more types of sources appropriate to the topic; minimum of 6 sources
<b>Prepares clear and accurate MLA citations</b>	Citations were less than satisfactory (more than 10 unique errors)	Some citations were satisfactory; most were not (no more than 7 unique errors)	Citations were good (no more than 5 unique errors)	Citations were virtually perfect (no more than 3 unique errors)

# 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 measurable 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*  
[http://www.aacu.org/value/rubrics/index\\_p.cfm?CFID=42278145&CFTOKEN=39338219](http://www.aacu.org/value/rubrics/index_p.cfm?CFID=42278145&CFTOKEN=39338219)
- *Large Collection of Rubrics from various colleges*  
[http://www.csub.edu/tlc/options/resources/handouts/RubricPacket\\_Jan06.pdf](http://www.csub.edu/tlc/options/resources/handouts/RubricPacket_Jan06.pdf)
- *AALHE Rubric Samples*  
<http://course1.winona.edu/shatfield/air/rubrics.htm>

# RESOURCES

Creating and Using Rubrics. (2011) *University of Hawaii, Manoa*. Retrieved from <http://manoa.hawaii.edu/assessment/howto/rubrics.htm>

Mandernach, B. J. (2003). Grading Rubrics. *Park University Faculty Development Quick Tips*. Retrieved from <http://www.park.edu/cetl/quicktips/rubrics.html#Tips%20for%20Rubric%20Development>

Marcotte, Madeleine. (2006). Building A Better Mousetrap: The Rubric Debate. *Viewpoint: A Journal of Developmental, and Collegiate Teaching, Learning & Assessment*. Retrieved from <http://faculty.ccp.edu/dept/viewpoints/w06v7n2/rubrics1.htm>

Mertler, Craig A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research & Evaluation*, 7(25). Retrieved from <http://pareonline.net/getvn.asp?v=7&n=25>