Using Rubrics to Measure and Enhance Student Performance

Sharon Karkehabadi, M.Ed.
Student Learning Outcomes Specialist

Spring 2013 Faculty Workshop Series
Office of Institutional Research, Planning, and Assessment
Northern Virginia Community College
Why Use a Rubric?

Rubrics? I never give my students rubrics! That's equivalent to cheating! I might as well write their essays for them!

College students should understand that they're expected to perform certain undisclosed outcomes. The point of learning is to keep them guessing about the criteria, so they'll work harder in their desperation not to fail. Stress facilitates success.

Besides, if I gave them a rubric, I'd have to admit that I decide their grades with a dart board.
What do you think??
Test Scores and Grades: Monitor Learning

**Test scores:** Tell students where they stand in terms of a total number of points.

Examples:
- Jane scored 80 out of 120 points or
- Bill received a higher score than 65% of the class.

**Grades:** Convey to students our judgment of their work.

Example: Their work is excellent, very good, satisfactory, unsatisfactory, or failing.

Huba and Freed, 2000
Rubrics: Promote Learning

Rubrics reveal how students’ work compares to a standard

- Provide students a clear understanding of expectations
- Communicate specific and immediate feedback
- Help students to become self-reliant, self-directed, and self-assessing learners

Huba and Freed, 2000
Background Knowledge Inventory

Have you used rubrics? How?

Have you created rubrics?

Have you used Blackboard’s rubrics function?
Student learning outcomes for today’s workshop

After attending today’s workshop, you will be able to:

1. Describe what a rubric is.
2. Discuss various types of rubrics.
3. Identify components of and steps to developing a rubric.
4. Construct a rubric.
5. Input information into Bb Rubrics
What is a Rubric?
What is a rubric?

A rubric is a scoring tool that explicitly represents the performance expectations for an assignment or piece of work.

A rubric divides the assigned work into component parts and provides clear descriptions of the characteristics of the work associated with each component, at varying levels of mastery.

http://www.cmu.edu/teaching/designteach/teach/rubrics.html
A Rubric
(as a noun)

A mechanism for assessing (scoring)
a student demonstration given the
conditions for the problem and/or task.

http://beta.aea267.k12.ia.us/cia/rubrics-in-the-classroom/
## Two Distinct Processes of Rubrics

### For Assessment

<table>
<thead>
<tr>
<th>Assire: (French) to set beside and guide</th>
</tr>
</thead>
</table>

- Promote student learning and achievement

### For Evaluation

<table>
<thead>
<tr>
<th>Evaluer: (French) to value, the process of sorting, selecting, and labeling such as grading or ranking</th>
</tr>
</thead>
</table>

- Provide accountability in order to improve the educational system

### Formative

<table>
<thead>
<tr>
<th>Summative</th>
</tr>
</thead>
</table>

### Quantitative and qualitative

<table>
<thead>
<tr>
<th>Quantitative</th>
</tr>
</thead>
</table>

---

http://beta.aea267.k12.ia.us/cia/rubrics-in-the-classroom/
Advantages of Scoring Rubrics

• Rubrics help measure higher-order skills or evaluate complex tasks.
• Rubrics help clarify vague, fuzzy goals.
• Rubrics help students understand your expectations.
• Rubrics help students self-improve.
• Rubrics can inspire better student performance.
• Rubrics improve feedback to students.
• Rubrics make scoring easier and faster.
• Rubrics make scoring more accurate, unbiased, and consistent.
• Rubrics reduce arguments with students.
• Rubrics improve feedback to faculty and staff.

(Suskie, 2009)
Rubrics improve feedback to faculty and staff by...

Finding patterns in student achievement or student error.

Providing diagnostic information about student strengths and weaknesses.

Suskie, 2009
Rubrics can be used to assess:

- Essays/Papers
- Projects
- Lab work
- Presentations
- Exam questions
- Capstone projects
- Exhibits
- Performances
- Portfolios of student work
- Artwork
- Internships
Types of Rubrics

Scoring Instruments for Performance Assessments

- Checklists
- Rating Scales

Rubrics

- Analytic Rubrics
- Holistic Rubrics

Types of Scoring Instruments

- **Checklists**: list of grading criteria that are completed/present

- **Rating Scales**: include a continuum for scoring

- **Holistic Rubrics**: overall description of the entire product/performance rather than the components

- **Analytic Rubrics**: levels of performance are described for each criterion
Checklists

Checklists are an appropriate choice for evaluation when the information that is sought is limited to the determination of whether specific criterion have been met.

See Handout #1 – Checklist for Writing SLOs

From Moskal, 2000
Rating Scale

Rating scales are checklists which include rankings on the degrees to which the criteria that you are looking for are present.

See Handout #2—
Rating Scale for an Oral Presentation
Group Member Evaluation

From Suskie, 2009
Sample Rating Scale Rubric for a Solo Audition

<table>
<thead>
<tr>
<th></th>
<th>NA</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>vocal tone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>vocal technique</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>rhythm</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>diction</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>musicality</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>
Rating Scale

Shortcomings-
1. Levels are not clearly described
2. Faculty may be inconsistent in rating
3. Students don’t receive clear feedback
4. Can lack credibility (External or multiple raters can make it more credible.)

Benefits-
1. Quick and easy to create and use
2. Good for relatively minor assignments

From Suskie, 2009
Holistic Rubrics

• Score the overall quality, proficiency, or understanding of the specific content and skills without judging the component parts separately.

• Consider the criteria in combination on a single descriptive scale.

Holistic Rubrics are used when...

• Errors in some part of the process can be tolerated provided the overall quality is high (Chase, 1999).

• There is an overlap between the criteria set for the evaluation of the different factors (Brookhart, 1999).

See Handout #3 – Holistic Rubric

Holistic Rubrics

Shortcomings

• Difficult to assign scores consistently, because few students meet one description accurately.

• Does not yield feedback on students’ strengths and weaknesses.

Analytic Rubrics

• Score for separate, individual parts of the product or performance.

• Analytic rubrics result initially in several scores, followed by a summed total score - their use represents assessment on a multidimensional level (Mertler, 2001).

• Give feedback to students regarding how to improve their performance, and

• Provide descriptions at each level of performance regarding what is expected for each criterion.

Analytic Rubric

Levels of performance (scale)

Rubric design

Criterion 1
(Yes, and more!)

Criterion 2
(Yes!)

Criterion 3
(Yes, but..)

Performance descriptors

= = =
Analytic Rubrics

• Each score category should be defined using descriptions of the work rather than judgments about the work (Brookhart, 1999).

  • Judgment: "Student's calculations are good."

  • Description of work: "Student's mathematical calculations contain no errors."

See Handout #4 – Analytic Rubric

Developing Useful Rubrics
Step 1 in Developing a Rubric

Decide if the assignment is measuring the presence of criteria or the quality of criteria.

- Presence of criteria = Checklist
- Quality of criteria = Rubric
Step 2 in Developing a Rubric:

Determine what the evaluation criteria should be. 

Examine existing rubrics that are related.

• Search literature and Internet for existing rubrics – see resources.

• Consult with colleagues or work with a committee.

• See if your professional association has either a rubric bank or performance standards/criteria.

From Pickering & Yerian, 2005
Determine what the evaluation criteria should be.

- Break assignment into manageable parts.

- Use examples of students’ work to identify defining criteria and levels of competence.

- Identify observable attributes of the assignment.

- Decide on the criteria that are essential to demonstrating achievement of the assignment.

- Criteria will usually number between 3-8.
Four Questions to identify what you are looking for in student work

1. Why are we giving students this assignment? What are its key learning goals? What do we want students to learn by completing it?

2. What are the skills that we want students to demonstrate in this assignment?

3. What are the characteristics of good student work? (good presentation, good lab report, good writing, good student teaching)

4. What specific characteristics do we want to see in completed assignments?
Step 3 in Developing a Rubric

Determine what the performance levels should be and how many.

• Consider the anchors first - best and worst.
• Then determine how many different levels in between so that each level is still distinct from the next.
• Number of performance levels usually between 3-5.
• Use both qualitative terms (see next slide) and quantitative (point value) for performance levels.

See Handout #5 – Labels for Performance Levels
Step 4 in Developing a Rubric

Provide descriptions for each level.

• For holistic rubrics, write thorough narrative descriptions incorporating each criterion into the description.

• For analytic rubrics, write description of performance levels for each individual criterion.

• Be consistent with terminology and the means by which the criteria are evaluated.

• Use non-judgmental terminology.
Consistency of Attributes in Performance Criteria Descriptions

A rubric should not mention components of a criterion in one level that do not get mentioned in the other levels.

Descriptions should not “explicitly or implicitly introduce new criteria or shift the importance of the various criteria.”

“…changes [should] concern the variance of quality for the (fixed) criteria.”

(Wiggins, 1998)
Example of **Inconsistent** Performance Criteria and Correction for Science Journal

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Novice 1</th>
<th>Apprentice 2</th>
<th>Master 3</th>
<th>Expert 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Journal</td>
<td>Writing is messy and entries contain spelling errors. Pages are out of order or missing.</td>
<td>Entries are incomplete. There may be some spelling or grammar errors.</td>
<td>Entries contain most of the required elements and are clearly written.</td>
<td>Entries are creatively written. Procedures and results are clearly explained. Journal is well organized presented in a duo tang.</td>
</tr>
</tbody>
</table>

Example of **Inconsistent** Performance Criteria and Correction for Science Journal

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Novice</th>
<th>Apprentice</th>
<th>Master</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem Criteria</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Science Journal</td>
<td>Writing is messy and entries contain spelling errors. Pages are out of order or missing.</td>
<td>Entries are incomplete. There may be some spelling or grammar errors.</td>
<td>Entries contain most of the required elements and are clearly written.</td>
<td>Entries are creatively written. Procedures and results are clearly explained. Journal is well organized presented in a duo tang.</td>
</tr>
</tbody>
</table>


Suggested Correction for **Consistent** Performance Criteria

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Novice 1</th>
<th>Apprentice 2</th>
<th>Master 3</th>
<th>Expert 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breadth</strong>: The required elements are present for each journal entries (e.g. Lab Summary, Materials, Procedure, Results, Conclusion).</td>
<td>Few of the required elements are present in each journal entry.</td>
<td>Some of the required elements are present in each journal entry.</td>
<td>Most of the required elements are present in each journal entry.</td>
<td>All the required elements are present in each journal entry.</td>
</tr>
<tr>
<td><strong>Clarity</strong>: The entries are clearly written (e.g. style, grammar enhance understanding).</td>
<td>Journal entries are slightly clear.</td>
<td>Journal entries are moderately clear.</td>
<td>Journal entries are mainly clear.</td>
<td>Journal entries are extremely clear.</td>
</tr>
<tr>
<td><strong>Organization</strong>: The journal is organized (e.g. visible titles, ordered pages, etc.)</td>
<td>The journal is slightly organized.</td>
<td>The journal is moderately organized.</td>
<td>The journal is mainly organized.</td>
<td>The journal is extremely organized.</td>
</tr>
</tbody>
</table>

Guiding Questions for the Rubric Construction Process

1. Are all the performance criteria explicitly stated?
   Are the performance criteria present in the rubric those intended? Is there anything that is implicitly expected in the students’ products or performances that is not stated in the rubric?

2. Are the attributes consistently addressed from one level to the next on the progression scale?
   Does the value of the attribute vary in each level descriptor, while the attribute itself remains consistent across the scale levels?

Using Blackboard Rubrics to Measure Student Performance
Locate **Rubrics** under the Control Panel in the Course Tools Section.

Expand the Course Tools section and select **Rubrics**
Importing or Exporting a Bb Rubric

On Rubrics page select

- Export
- Import Rubric

How to Export and Import Rubrics [http://www.youtube.com/watch?v=bx38qLqyZ6U](http://www.youtube.com/watch?v=bx38qLqyZ6U)
Creating a Bb Rubric

- **Rubric Type**
- **Criteria**
  - Editing, reordering
- **Levels of Achievement**
  - Editing, reordering
  - Points/percentage
- **Description of Criteria**
  - 1000 character limit for each cell
Associating a Bb Rubric

Associate rubrics with:
- Assignments
- Test Question types: Essay, File response, short answer
- Blogs and Journals
- Wikis
- Discussion Board threads and forums

1. Select **Add Rubric** under the **Grading** section.

2. Choose a previously **existing rubric** or to **create a new rubric**.

3. **Points Possible** for rubric will be created automatically.
Grading a Bb Rubric

- Select Points
- Provide feedback on each criteria

Select the amount of points you wish to award for each criterion listed on the rubric.

If you wish, you can provide feedback along with the score, but this is not required.
Grading a Bb Rubric

- Raw Total
- Change the number of points
- Additional feedback

The "Raw Total" adds up the points you have awarded above. You can also provide more general feedback in this box.

When you are done grading/writing feedback, click "Save."
Blackboard Rubrics

- Associating Rubrics (Blackboard Learn+)
  http://ondemand.blackboard.com/r91/movies/bb91_course_tools_associate_rubric.htm
- Blackboard Rubrics
  http://help.sset.jhu.edu/download/attachments/10485887/Rubrics.pdf?version=3&modificationDate=1330115722593
- Creating a Rubric (Blackboard Learn+)
  http://ondemand.blackboard.com/r91/movies/bb91_grade_center_creating_a_rubric.htm
- Creating a Rubric (Missouri State University)
  https://experts.missouristate.edu/display/bb9/Creating+a+Rubric
- Grading with Rubrics (Blackboard Learn+)
  http://ondemand.blackboard.com/r91/movies/bb91_course_tools_grade_with_rubrics.htm
- How to Export and Import Rubrics http://www.youtube.com/watch?v=bx38qLqyZ6U
- Rubrics in Blackboard Learn 9.1 http://www.youtube.com/watch?v=BpAgcy5zuW8
- Rubrics: Creating and Using in Blackboard (David Denton and David Wicks, Seattle Pacific University)
  http://www.youtube.com/watch?v=yhmxz8V3V8k
- Sharing Rubrics (Blackboard Learn+)
  http://www.blackboard.com/Platforms/Learn/Products/Blackboard-Learn/Features/Sharing-Rubrics.aspx
- Using Blackboard Rubrics (Justin Keel) http://www.slideshare.net/jkeel/using-blackboard-rubrics
Developing a Rubric Using the Four Steps Activity
Activity - Step 1 for All Rubrics

1. Decide if one is measuring the presence of criteria or the quality of criteria.

To evaluate: chocolate chip cookies
= Quality of criteria
# Activity – Step 2 for an Analytic Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of chocolate chips</td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td></td>
</tr>
<tr>
<td>Richness (flavor)</td>
<td></td>
</tr>
</tbody>
</table>
## Activity – Step 3 for an Analytic Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor 1</th>
<th>Needs Improvement 2</th>
<th>Good 3</th>
<th>Delicious 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of chocolate chips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richness (flavor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Activity – Step 4 for an Analytic Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor 1</th>
<th>Needs Improvement 2</th>
<th>Good 3</th>
<th>Delicious 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of chocolate chips</td>
<td>Too few or too many chips</td>
<td></td>
<td></td>
<td>Chocolate chip in every bite</td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td>Texture resembles a dog biscuit</td>
<td></td>
<td></td>
<td>Chewy</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Burned</td>
<td></td>
<td></td>
<td>Golden brown</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>Store-bought flavor, preservative aftertaste – stale, hard, chalky</td>
<td></td>
<td></td>
<td>Home-baked taste</td>
<td></td>
</tr>
<tr>
<td>Richness (flavor)</td>
<td>Nonfat contents</td>
<td></td>
<td></td>
<td>Rich, creamy, high-fat flavor</td>
<td></td>
</tr>
</tbody>
</table>
## Activity – Step 4 for an Analytic Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor 1</th>
<th>Needs Improvement 2</th>
<th>Good 3</th>
<th>Delicious 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of chocolate chips</td>
<td>Too few or too many chips</td>
<td>Chocolate in 50% of bites</td>
<td>Chips in about 75% of bites</td>
<td>Chocolate chip in every bite</td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td>Texture resembles a dog biscuit</td>
<td>Texture either crispy/crunchy or 50% uncooked</td>
<td>Chewy in middle, crisp on edges</td>
<td>Chewy</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Burned</td>
<td>Either dark brown from overcooking or light from undercooking</td>
<td>Either light from overcooking or light from being 25% raw</td>
<td>Golden brown</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>Store-bought flavor, preservative aftertaste – stale, hard, chalky</td>
<td>Tasteless</td>
<td>Quality store-bought taste</td>
<td>Home-baked taste</td>
<td></td>
</tr>
<tr>
<td>Richness (flavor)</td>
<td>Nonfat contents</td>
<td>Low-fat contents</td>
<td>Medium fat contents</td>
<td>Rich, creamy, high-fat flavor</td>
<td></td>
</tr>
</tbody>
</table>
## Analytic Rubric – Check for Consistency

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor 1</th>
<th>Needs Improvement 2</th>
<th>Good 3</th>
<th>Delicious 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of chocolate chips</td>
<td>Too few or too many chips</td>
<td>Chocolate in 50% of bites</td>
<td>Chips in about 75% of bites</td>
<td>Chocolate chip in every bite</td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td>Texture resembles a dog biscuit</td>
<td>Texture either crispy/crunchy or 50% uncooked</td>
<td>Chewy in middle, crisp on edges</td>
<td>Chewy</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Burned</td>
<td>Either dark brown from overcooking or light from undercooking</td>
<td>Either brown from overcooking or light from being 25% raw</td>
<td>Golden brown</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>Store-bought flavor, preservative aftertaste – stale, hard, chalky</td>
<td>Tasteless</td>
<td>Quality store-bought taste</td>
<td>Home-baked taste</td>
<td></td>
</tr>
<tr>
<td>Richness (flavor)</td>
<td>Nonfat contents</td>
<td>Low-fat contents</td>
<td>Medium fat contents</td>
<td>Rich, creamy, high-fat flavor</td>
<td></td>
</tr>
</tbody>
</table>
## Converting to Grade for Course

**Sample grades and categories**

<table>
<thead>
<tr>
<th>Rubric Score</th>
<th>Grade</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>A+</td>
<td>Excellent</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>6</td>
<td>B+</td>
<td>Good</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>C+</td>
<td>Fair</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Fair</td>
</tr>
<tr>
<td>2</td>
<td>U</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>1</td>
<td>U</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>0</td>
<td>U</td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

*From Mertler, 2001*
Enhancing Your Rubric

Validity and Reliability
Enhancing Your Rubric’s…

Validity

1. Validity means that your measuring instrument [i.e., rubric] actually measures the property it is supposed to measure.

Reliability

2. Reliability refers to the confidence we can place on the measuring instrument [i.e., rubric] to give us the same numeric value when the measurement is repeated on the same object.

Ajai S. Gaur and Sanjaya S. Gaur in 'Statistical Methods for Practice and Research: A guide to data analysis using SPSS,' p. 31.
Improving the Validity of Your Rubric

<table>
<thead>
<tr>
<th>Content</th>
<th>Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do the evaluation criteria address any extraneous content?</td>
<td>1. Are all of the important facets of the intended construct evaluated through the scoring criteria?</td>
</tr>
<tr>
<td>2. Do the evaluation criteria of the scoring rubric address all aspects of the intended content?</td>
<td>2. Is any of the evaluation criteria irrelevant to the construct of interest?</td>
</tr>
<tr>
<td>3. Is there any content addressed in the task that should be evaluated through the rubric, but is not?</td>
<td></td>
</tr>
</tbody>
</table>

Testing Your Rubric

- Use a rubric to evaluate your rubric.

- Ask a colleague/peer to review the rubric and provide feedback.

- Ask a student(s) to test drive the rubric on an assignment/project and provide feedback.

- Test out on a few student samples.

- Do a small pilot by applying it to a small sample.

- Use multiple raters to norm the rubric.
Improving the Reliability of Your Program Rubric

1. Evaluators should meet together for a training session.
2. Examined and scored one or more examples of student work.
3. Discuss the scores and make decisions about conflicts that arise. Weigh criteria based on importance.
4. More than one faculty member should score the student work.
5. If two faculty members disagree significantly (more than 1 point on a 4 point scale) a third person should score the work.
6. If frequent disagreements arise about a particular item, the item may need to be refined or removed.
7. Provide sample/anchor papers to instructors with completed rubrics.

http://www.web.virginia.edu/iaas
Using Rubrics to Improve Student Learning
Using Rubrics to Engage Students & Improve Student Learning in Your Class

1. Hand out the grading rubric with the assignment so students will know your expectations and how they'll be graded.
2. Use a rubric for grading student work and return the rubric with the grading on it.
3. Develop a rubric with your students for an assignment or group project.
4. Have students apply your rubric to some sample products before they create their own.
5. Have students exchange paper drafts and give peer feedback using the rubric.
6. Have students self-assess their products using the grading rubric and hand in the self-assessment with the product.

Using Rubrics to Improve SLOs:

Collecting, Reviewing, Interpreting Data

• To collect data:
  • Consider pre-programming an Excel spreadsheet so data can be consolidated and analyzed easier and participants can discuss results immediately.

• To review the data:
  • Average scores across raters (if you used two raters).
  • Aggregate those scores across students for each criterion.
  • Aggregate total score across students.
  • Review frequencies for each criterion. (How many students scored at each level?)
  • Present data in user-friendly way and discuss what the data means.

• To interpret data:
  • Determine how good is good enough. (Target achievement level)
    • At least 80% of the students score at least 3 or above.
    • No more than 5% of students are at the “unsatisfactory” level and at least 80% are at the “good” level.
  • The average score for each criterion must be at least 3 (out of 4).
Educating with Rubrics can...

• **Reveal the standards** of your discipline or field.
• **Benchmark quality** of work for students to aspire too.
• **Help students identify and set standards and attributes of “good” work.**
• **Open channels of communication** with faculty and between students.
• **Teach students how to give and receive feedback.**
• **Encourages reflection on consequences of performing at a certain level in a real-life setting.**

Huba and Freed, 2000
Rubrics can…

“Rubrics can form the basis for many important conversations with our students and colleagues… we can discuss progress towards learning goals [criteria] and engage in improving teaching and learning.

Handout #6: Guidelines for Effective Feedback

Handout #7: Suggestions for Analyzing Assessment Data.

Huba and Freed, 2000
Questions?
ASSESSMENT LOOP RESOURCES

LEARN MORE

- Welcome
- For Students
- Program Evaluation
- Student Learning Outcomes
- Assessment Loop Resources
- Reports
- Resources & Links
- Staff
- Contact Us

Assessment Cycle of Continuous Improvement
The loop represents the continuous nature of assessing student learning outcomes. Assessment is comprised of several steps. Click on any step to access information and resources on that topic.
Sample Rubrics


• Examples of Rubrics (Carnegie Mellon) [http://www.cmu.edu/teaching/designteach/teach/rubrics.html](http://www.cmu.edu/teaching/designteach/teach/rubrics.html)

• [iRubrics](http://www.rcampus.com/rubricshellc.cfm?mode=gallery&sms=publicrub)

• [Rubistar](http://rubistar.4teachers.org/index.php?screen=NewRubric&section_id=8#08)

• Rubrics for Assessment (University of Wisconsin, Stout) [http://www.uwstout.edu/soe/profdev/rubrics.cfm](http://www.uwstout.edu/soe/profdev/rubrics.cfm)

• Sample Rubrics (Association for the Assessment of Learning in Higher Education) [http://course1.winona.edu/shatfield/air/rubrics.htm](http://course1.winona.edu/shatfield/air/rubrics.htm)
References

- Zelna, C. Rubrics 101: A Tool to Assess Learning. NC State University.
Contact Information

Sharon Karkehabadi, M.Ed.
Student Learning Outcomes Specialist
Office of Institutional Research, Planning, and Assessment
703-764-7390
skarkehabadi@nvcc.edu
Using Rubrics to Measure and Enhance Student Performance

Sharon Karkehabadi, M.Ed.
Student Learning Outcomes Specialist

Spring 2013 Faculty Workshop Series
Office of Institutional Research, Planning, and Assessment
Northern Virginia Community College