Developing Outcomes Rubrics

What is a rubric? A rubric is a scoring guide that seeks to evaluate a student's performance based on the sum of a full range of criteria rather than a single numerical score. A rubric is an authentic assessment tool used to measure student's work.

- Authentic assessment is used to evaluate students' work by measuring the product according to real-life criteria. The same criteria used to judge a published author would be used to evaluate students' writing.

- Although the same criteria are considered, expectations vary according to one's level of expertise. The performance level of a novice is expected to be lower than that of an expert and would be reflected in different standards. For example, in evaluating a story, a first-grade author may not be expected to write a coherent paragraph to earn a high evaluation. A tenth grader would need to write coherent paragraphs in order to earn high marks.

A rubric can be created for traditional grading purposes or for assessment purposes. For the purposes of this chapter, we will look at rubrics that are used for the assessment of student learning outcomes. Because Student Learning Outcomes examine broader themes, these rubrics will be evaluating broad concepts. A grading rubric would be developed in a similar fashion, but with much more attention to the details of the concepts and skills necessary for a specific assignment.

The following example rubric gives you some idea about how rubrics can be constructed for anything at all!

	Delicious	Good	Needs Improvement	Poor
Number of Chips	Chocolate chip in every bite	Chips in about 75% of bites	Chocolate in 50% of bites	Too few or too many chips
Texture	Chewy	Chewy in middle, crisp on edges	Texture either crispy/crunchy or 50% uncooked	Texture resembles a dog biscuit
Color	Golden brown	Either light from overcooking or light from being 25% raw	Either dark brown from overcooking or light from undercooking	Burned
Taste	Home-baked taste	Quality store-bought taste	Tasteless	Store-bought flavor, preservative aftertaste – stale, hard, chalky
Richness	Rich, creamy, high-fat flavor	Medium fat contents	Low-fat contents	Nonfat contents

Why should we use rubrics?

Rubrics save time, provide timely, meaningful feedback for students, and have the potential to become an effective part of the teaching and learning process. In fact, the main reason we don't use rubrics more often is simply because most of us have been unaware of them. Rubrics were not part of our own experience as students, and most of us find that we often teach as we were taught. However, there are many reasons to use rubrics, reasons having to do not only with efficient use of time and sound pedagogy but, moreover, with basic principles of equity and fairness.

Rubrics provide timely feedback. The timing of feedback can be a vexed point between instructors and students. Faculty struggle to grade each assignment fairly and individually; students then complain that work is not handed back soon enough. Sometimes it seems as if students don't care as much about quality feedback as they do about getting their work back quickly. Time is, in fact, a very important factor in making feedback meaningful and useful to students. Feedback is most effective when given as soon as possible after the task is completed to help students make positive changes in their later work (Rucker and Thomson, 2003).

Rubrics prepare students to use detailed feedback. Researchers have found that feedback was most effective when it contained as much information as possible rather than simply evaluating the level of the work. The same study (Brinko, 1993) revealed, however, that including a description of the highest level of achievement possible was also useful to students. Balancing these two findings is the role of the rubric.

Rubrics encourage critical thinking. Because of the rubric format, students may notice for themselves the patterns of recurring problems or ongoing improvement in their work and this self-discovery is one of the happiest outcomes of using rubrics. By encouraging students to think critically about their own learning, rubrics can inspire precisely the pattern of "self-assessment and self-improvement" intrinsic to creating the kind of motivated, creative students we all want in our classes.

Rubrics help us to refine our teaching skills. How do we know if we are good teachers? How can we find out what we can do to become better ones? Standardized student evaluations are one source. Yet, the questions are often broad, and, therefore, difficult to apply. Rubrics show students' development over time and can also allow us to gain a clearer view of teaching blind spots, omissions, or strengths.

Rubrics level the playing field. Rubrics can act as wonderful translation devices. Not only do they help students understand what instructors are talking about, they also help instructors understand when and where our words are not being understood or, worse yet, are being complete misunderstood. The revelation that in an academic paper, for example, "analysis" most often means their own conclusions informed by data can be startling to them.

Many rubrics believe that rubrics improve students' end products and therefore increase learning. When teachers evaluate papers or projects, they know implicitly what makes a good final product and why. When students receive rubrics beforehand, they understand how they will be evaluated and can prepare accordingly. Developing a grid, as above, and making it

available as a tool for students' use will provide them with an outline to improve the quality of their work and increase their knowledge.

Once a rubric is created, it can be used for a variety of activities. Reviewing, reconceptualizing, and revisiting the same concepts from different angles improves understanding of the lesson for students. An established rubric can be used or slightly modified and applied to many activities. For example, the standards for excellence in a writing rubric remain constant throughout the semester; what does change is students' competence and your teaching strategy. Because the essentials remain consistent, it is not necessary to create a completely new rubric for every activity.

Learning to create rubrics is like learning anything else – it takes some time commitment to create the first one. Once the task becomes second nature, it actually saves time while creating a higher quality student product. The following steps will help you get started:

- Determine the concepts to be taught. What are the essential Student Learning Objectives?
- Choose the criteria to be evaluated. Name the evidence to be produced.
- Develop a grid. Plug in the concepts and criteria.
- Share the rubric with students before they being writing.
- Evaluate the end product. Compare individual students' work with the rubric to determine whether they have mastered the content.

Fiction-writing content rubric example

Criteria	4	3	2	1
Plot: What and Why	Both plot parts are fully developed.	One of the plot parts is fully developed and the less developed part is at least addressed.	Both plot parts are addressed but not fully developed.	Neither plot parts are fully developed.
Setting: When and Where	Both settings parts are fully developed.	One of the setting parts is fully developed and the less developed part is at least addressed.	Both setting parts of the story are addressed but not fully developed.	Neither setting parts are developed.
Characters: Who Described by behavior, appearance, personality, and character traits	The main characters are fully developed with much descriptive detail. The reader has a vivid image of the characters.	The main characters are developed with some descriptive detail. The reader has a vague idea of the characters.	The main characters are identified by name only.	None of the characters are developed or named.

In the above example, the concepts include the plot, setting and characters. The criteria are the who, what, where, when, and why parts of the story. The grid is the physical layout of the rubric. Sharing the rubric and going over it step-by-step is necessary so that students will understand the standards by which their work will be judged. The evaluation is the objective grade determined by the instructor.

The rubric shown above is called an analytic rubric. **Analytic** rubrics identify and assess components of a finished product. **Holistic** rubrics assess student work as a whole. Generally, when you are assessing student learning outcome you will use a **holistic** rubric and when you are grading a paper you will use an **analytic** rubric. An example of a holistic rubric follows:

Fiction Writing Content Rubric – Holistic

5 – The plot, setting, and characters are developed fully and organized well. The who, what, where, when and why are explained using interesting language and sufficient detail.

4 – Most parts of the story mentioned in a score of 5 above are developed and organized well. A couple of aspects may need to be more fully or more interestingly developed.

3 – Some aspects of the story are developed and organized well, but not as much detail or organization is expressed as in a score of 4.

2 – A few parts of the story are developed. Organization and language usage need improvement.

1 – Parts of the story are addressed without attention to detail or organization.

Here are some terms to use when developing your rubrics:

- Needs improvement, satisfactory, good, exemplary
- Beginning, developing, accomplished, exemplary
- Needs work, good, excellent
- Novice, apprentice, proficient, distinguished
- Numeric scale ranging from 1 – 5
- Complete to incomplete
- Many to some to none
- Always to generally to sometimes to rarely

Three Level Rubric

Criteria	Exemplary	Competent	Developing

Four Level Rubric

Criteria	Exemplary	Accomplished	Developing	Beginning

Developing Rubrics
The Outcomes Program (TOP)
Waubonsee Community College

Scoring Guide Rubric

Criteria	Description of highest level of performance	Comments	Points

Leading a Class Discussion Scoring Guide Rubric

Category	Qualities of best work	Points	Comments
Preparation	Handed out ahead of time Focus questions – during or before reading	3	
Content	Focus of readings: explained and clear Type of readings: topics of general interest Topics relevant to course	4	

Discussion/debate methods	Teaching methods
	   Engage students – motivating
	   Variety of methods used
	   Introduced clearly
	   Balanced; small/large groups
	   All voices heard
	Guide but don't dominate discussion
	Summarize the discussion
	Discussion with different viewpoints, not a presentation
		5	

Discussion questions	Questions asked
	   Challenging
	   Thought provoking
	   Understandable
	   Encourage participation
	   Encourage students to refer to text, cite sources
		5	

Communication skills	Facilitators demonstrate good communication skills
	   Eye contact
	   Active listening
	   Paraphrasing
	   Summarizing
	   Redirecting the questions
		3	

Holistic Critical Thinking Rubric

6 (Highest) – Consistently does all or almost all of the following:
- Accurately interprets evidence, statements, graphics, questions, etc.
- Identifies the salient arguments (reasons and claims) pro and con.
- Thoughtfully analyzes and evaluates major alternative points of view.
- Generates alternative explanations of phenomena or event.
- Justifies key results and procedures, explains assumptions and reasons.
- Fair-mindedly follows where evidence and reasons lead.
- Makes ethical judgments.

5 – Does most of the following:
- Accurately interprets evidence, statements, graphics, questions, etc.
- Thinks through issues by identifying relevant arguments (reasons and claims) pro and con.
- Offers analysis and evaluation of obvious alternative points of view.
- Generates alternative explanations of phenomena or event.
- Justifies (by using) some results or procedures, explains reasons.
- Fair-mindedly follows where evidence and reasons leads.

4 – Does most of the following:
- Describes events, people and places with some supporting details from the source.
- Makes connections to sources, either personal or analytic.
- Demonstrates a basic ability to analyze, interpret, and formulate inferences.
- States or briefly include more than one perspective in discussing literature, experiences, and points of view of others.
- Takes some risks by occasionally questioning sources or by stating interpretations and predictions.
- Demonstrates little evidence of rethinking or refinement of one's own perspective.

3 – Does most or many of the following:
- Responds by retelling or graphically showing events or facts.
- Makes personal connections or identifies connections within or between sources in a limited way. Is beginning to use appropriate evidence to back ideas.
- Discusses literature, experiences, and points of view of others in terms of own experience.
- Responds to sources at factual or literal level.
- Includes little or no evidence of refinement of initial response or shift in dualistic thinking.
- Demonstrates difficulty with organization and thinking is uneven.

2 – Does most or many of the following:
- Misinterprets evidence, statements, graphics, questions, etc.
- Fails to identify strong, relevant counter arguments.
- Draws unwarranted or fallacious conclusions.
- Justifies few results or procedures, seldom explains reasons.
- Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.

1 (lowest) – Consistently does all or almost all of the following:
- Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
- Fails to identify or hastily dismisses strong, relevant counterarguments.
- Ignores or superficially evaluates obvious alternative points of view. Argues using fallacious or irrelevant reasons and unwarranted claims.