

Appendix A:

ALL ABOUT RUBRICS

Rubrics are criterion-based rating scales that establish *a priori* criteria for evaluation.

Rubrics are the conceptualization and operationalization of the characteristics

Rubrics set the dimensions and criteria for evaluation for things like student work, project effectiveness, results of training etc.

Records presence of absence of required

Records general hierarchical categories (e.g. deficient, adequate, exemplary) (ordinal)

components. (categorical)

(possibly interval)

being measured.

Rubrics 101

(developed by Kim McGann: <u>kmcgann5@naz.edu-</u> February 2, 2010)

I. What is a rubric?

Mildly geeky answer:

Data/methods geek answer:

Practical answer:

2. What kinds of rubrics are there?

Simple checklists:

Simple rating scale:

Detailed rating scale:

Holistic rating scale:

Like detailed rating scales but they use aggregate criteria. They measure how many of a group of criteria have been met.

Describes what constitutes deficient, adequate, and exemplary performance.

3. How can rubrics make my life easier?

Less time grading:	You don't have to write the same comments out over and over again.
Less confusion from students:	Thinking of a good rubric helps ensure clarity in the assignment given to students. Students know the criteria being used to evaluate them.

Provides consistency:	If you grade at different times (awake vs. tired, cheerfully vs. grumpy, at home vs. at work) rubrics can help ensure consistency and fairness.
Identify troublesome areas:	Rubrics can make it easier to recognize patterns in learning (i.e. lots of people not doing well in one area).
Provides data for assessment:	Rubrics, especially if used over time, also happen to be good sources of data for assessment. They also make it much easier to aggregate data for class/program/dept level assessment.

4. What are the downsides of rubrics?

Don't eliminate subjectivity:	"It's just your opinion that this isn't an "adequate" analysis"
Not always appropriate to give	Some assignments require students to make decisions/selections, out ahead of time if you provide the "checklist" you've done the thinking for them.
Loss of creativity	Some students may follow the rubric as a skeleton (especially in writing) so the style may seem formulaic. This can be compensated for in the rubric itself sometimes.
Poor rubric construction	A rubric is only as good as it's design. Beware missing dimensions, poorly defined criteria or other mistakes in your rubrics. Remember to adjust; they are not set in stone!

5. Questions to ask yourself when designing a rubric.

a. What am I measuring? (dimensions)

- What are the different dimensions I am trying to measure?
- In what ways can students do "better" or "worse" on this assignment?
- What are the most important and least important characteristics I want to know about?
- What do "ideal types" for this assignment look like? (think of what the best possible outcome looks like, and the worst possible outcome. Set these as the ends of your rating scale then develop the "in between" criteria.)

b. How will I differentiate between better and worse? (criteria)

- For each dimension, what <u>criteria</u> will you use to tell "better" from "worse"?
- Is the presence or absence of a trait sufficient or do you need to measure the degree/quality of a dimension?
 - if you are going to measure "how much" of something, how will you tell the difference between "not enough", "sufficient", and "plenty?"

c. How can I check if my rubric is working well?

- If you gave your rubric to someone else in your field and asked them to do your grading, would
- they be likely to arrive at the same evaluation? (inter-coder reliability)
- Did students understanding the criteria being used to evaluate them?
- Do the outcomes (grades, other evaluations) based on your rubric match your "gut" sense of how an assignment/project etc. went? If not, why not? Was the rubric off? Were criteria unclear? Were you missing a dimension? Or is the rubric really telling you something you wouldn't have otherwise realized?

Building a Rubric

Once you have determined the criteria that you will be using in your evaluation, you are ready to construct your rubric. You may make a rubric manually using a program such as MS Word by using the "Table" tool, but below are instructions for a user-friendly (online) resource designed to construct rubrics.

Use the website: http://rubistar.4teachers.org/

*You need to take a minute (literally) and register. It's free and only asks for a name and password.

- Log in and then choose a topic from the bottom of the homepage "Create a Rubric"
- Select any option from "Choose a Customizable Rubric" from the list of projects
- Provide a title for your rubric in the box labeled "Rubric Project Name"
- Go to "Creating and Editing Your Rubric" and either choose from categories/ criteria in the drop boxes or write your own when you are finished select, "submit"
- You may then choose to "download and print" (green box) in order to print and save your rubric

Rubrics: Avoiding Pitfalls

(Taken from: Tierney, Robin & Marielle Simon (2004). What's still wrong with rubrics: focusing on the consistency of performance arteria across scale levels. Practical Assessment, Research & Evaluation, 9(2). Retrieved January 27, 2010 from http://PAREonline.net/getvn.asp?v=9&n=2. This paper has been viewed 41,998 times since 1/28/2004.)

Example One: Basic Consistency

Many ready-made rubrics have basic consistency problems, meaning that the attribute or the performance criterion itself changes from level to level. Table 2 presents a task-specific rubric

for assessing a science journal. The product, a science journal, is listed as if it is a performance criterion. This provides very little guidance for students who are learning to write a science journal. The attributes are implicit, and they change from level to level. At the Novice level, the descriptors stress accuracy of spelling, organization and breadth. Organization is dropped at the Apprentice level, but breadth and accuracy of spelling remain. At the Master level, only breadth remains of the original attributes, but clarity is added. And, finally, at the Expert level, neatness is further added, along with clarity and a vague requirement for creativity. In the modified version, an effort was made to stay true to the implied intent of the original criteria. The changes involve stating the performance criteria and the attributes clearly, as well as describing the qualitative degrees of performance more consistently from level to level. The modifications make the task, criteria, and attributes clearer for students, and they broaden the possibilities for the rubric's use. Accompanied by exemplars of student work or productspecific indicators, this rubric could be used by teachers and students to assess journal writing in any content-area class. It could also be used to assess the same skills in either a formative or a summative context with respective instructions. The corrections for this example deal specifically with the performance criteria. To complete the rubric, a title, a statement of purpose, and instructions for using the rubric should also be added.

Performance Criteria	Attribute	Novice	Apprentice	Master	Expert
		Problem C	Criterion		
Science Journal	(not stated)	Writing is messy and entries contain spelling errors. Pages are out of order or missing	Entries are incomplete. There may be some spelling or grammar errors.	Entries contain most of the required elements and are clearly written.	Entries are creatively written. Procedures and results are clearly explained. Journal is well organized presented in a duotang.
		Suggested C	Correction		
The required elements are present for each journal entries (e.g. Lab Summary, Materials, Procedure, Results, Conclusion).	Breadth	Few of the required elements are present in each journal entry.	Some of the required elements are present in each journal entry.	Most of the required elements are present in each journal entry.	All the required elements are present in each journal entry.
The entries are clearly written (e.g. style, grammar enhance understanding).	Clarity	Journal entries are slightly clear.	Journal entries are moderately clear.	Journal entries are mainly clear.	Journal entries are extremely clear.
The journal is organized (e.g. visible titles, ordered pages, etc.)	Organization	The journal is slightly organized.	The journal is moderately organized.	The journal is mainly organized.	The journal is extremely organized.

Table 2: Example of Inconsistent Performance Criteria and Correction for Science Journal

Example Two: Negative/Positive Consistency

Many rubrics, such as the problematic examples presented in Tables 2 and 3, describe the lower levels of performance criteria in purely negative terms, which creates a dichotomous (negative/positive) tone in the rubric. For young learners who are progressing along a continuum, this format sends the wrong message. Students who find themselves on the lower part of the scoring rubric may not be motivated to progress with this type of feedback. The performance criteria in a classroom rubric should reflect a positive learning continuum, and should not suggest that progression from Level 2 to 3 is a leap from failure to success. This does not mean that words, such as none, not or seldom, should always be avoided in rubric design, but that their use should represent one end of a continuous and consistent scale without undue negativity. However, when rubrics are not modified to reflect a positive continuum, they may perpetuate low expectations for certain students rather than promote learning.

In Table 3, autonomy, attention and enthusiasm are implicitly used as indications of silent reading ability. Essentially, such a complex and high-referenced skill is not one that can be adequately assessed with abstract attributes and a single criterion. The suggested corrections highlight the limitations of the rubric as a tool for assessing performance criteria that rely highly on inference rather than direct observation. As shown in Table 3, it is possible to measure these attributes with frequency and amount scales, but it is questionable whether the rubric would provide an accurate assessment of a student's reading ability. The process of articulation helps ensure that rubric designers are aware of the attributes that are actually involved, and forces them to question the validity of the performances being assessed in relation to the targeted construct. This example also illustrates that it is possible to include more than one attribute for each performance criterion without compromising the statement's clarity.

Performance Criteria	Attribute	Emerging	Developing	Achieving	Extending
Problem Criterion					
Silent Reading	(not stated)	Off task and disruptive during sustained silent reading period.	Has difficulty choosing books for sustained silent reading.	Reads independently during sustained silent reading.	Chooses books with enthusiasm and reads independently during sustained silent reading.
Suggested Correction					
 If reading ability is the target, rethink the criterion to ensure that the attribute is meaningful. If learning behaviors are being measured, and autonomy and attention are the desired attributes, reword the descriptors as shown below. 					
Student reads independently and stays on task during a silent reading period.	Autonomy and Attention	Student seldom reads independently and stays on task for little of the time during a period of silent reading.	Student sometimes reads independently and stays on task some of the time during a period of silent reading.	Student usually reads independently and stays on task most of the time during a silent reading period.	Student always reads independently and stays on task all of the time during a silent reading period.

	"A"	"B"	"Ĉ	"D/F"
Attendance	Students attended all classes	Student attended all classes with one or two excused absences	Student attended a fair number of classes	Student missed a significant number of classes
Contribution	Student consistently makes meaningful contributions inside or outside of class to class dialogue	Student occasionally makes meaningful contributions inside or outside of class to class dialogue	Student rarely makes meaningful contributions inside or outside of class to class dialogue	Student never makes meaningful contributions inside or outside of class to class dialogue
Active Listening	Student is always engaged in active listening and participation even when not speaking	Student is often engaged but occasionally carries on unrelated side conversations or is otherwise distracted/disrespectful during class	Student is frequently disengaged/disrespectful when not speaking	Student is never engaged in class discussion/student is frequently disruptive/inappropriat e in class
Preparation	Student contributions always indicate that they have carefully and thoughtfully done the assigned reading	Student contribution and participation usually indicates that they have carefully and thoughtfully done the assigned reading	Student contributions and participation rarely indicate they have done the assigned reading carefully and thoughtfully	Student was never/almost never prepared for class and/or rarely/never did the assigned reading

Dr. McGann Patricipation/Attendance rubric Fall 2009

Scoring Guide Sample

The following is an example of an holistic scoring guide to evaluate student work in creating a product and presentation.

Distinguished (95 – 100 points)	Outstanding work, fully meets all requirements Exhaustive coverage Completely understands problem and has ability to apply data to the solution Shows originality
Highly Proficient (90 – 94 points)	Excellent work, meets all requirements of task, good breadth Well planned and documented Shows fine understanding and ability to apply data to the solution of the problem Shows evidence of creativity
Proficient (80 – 89 points)	Fine or good work, meets requirements of task Good breadth of coverage, fairly well planned and documented Shows a good understanding and ability to apply data to the solution of new problems Could show more evidence of creative thinking
Suggests Proficiency (70 – 79 points)	Fair work, meets many requirements of task Fair breadth of coverage with some gaps Shows uneven understanding with some, but not complete, ability to apply data to the solution of the problem Needs to fill gaps
Suggests Lack of Proficiency (65 – 69)	Uneven work, meets some requirements of the task Poor breadth of coverage with a number of gaps in coverage Little understanding and ability to apply data to problem solving Needs to improve in significant areas
Lacks Proficiency (below 65 points)	Poor work, meets few if any requirements of the task Little or no breadth of coverage Little understanding and makes no significant attempt to apply data to solution of the problem

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Rubric for Team Work

Criteria	4	Level of Achievement	Λ
Griteria	Exemplary	Satisfactory	Unacceptable
Group Functioning	/		
Attending	Most, if not all, members attend all meetings.	Most members are present at most meetings. When members have to be absent they inform and/or seek the agreement of the team.	Many members frequently miss meetings and do not inform the team.
Participating	There is a clear definition of tasks to be accomplished, anticipating future needs. All members take an active role. Tasks are defined by the group and assigned to all members. The team engages in follow-up activities to monitor progress.	Tasks are defined informally, and most but not all members understand them. Most members contribute. Follow-up is sporadic.	Tasks are not defined, and few members participate actively. There is no follow-up.
Defining Members' Roles	Every member's role on the team is defined and understood by all. Each team member can explain the role of others.	Members' roles are defined informally and may not be completely understood by all. Some members may not be able to explain the role of others.	There is little understanding of who does what.
Making Collective Decisions	Clear procedures for making decisions are established and documented. Decisions, the process by which they were made, and the involvement of members are also documented.	Decision-making procedures are established informally, leading to inconsistency in implementation and a failure to involve all members in decision making.	Because there is no decision-making process, decisions are made by individuals, and they do not reflect the thinking or the desires of the team.
Team Member Support	Every team member is treated with respect. All members listen to all ideas. The work of each person is acknowledged. Members feel free to seek assistance from others or to ask questions.	There is a general atmosphere of respect for team members, but some members may not be heard as much as others. Acknowledging others' work is serendipitous rather than planned. Some members may not feel free to turn to others for help.	The team atmosphere is competitive and individualistic rather than cooperative and supportive.
Managing Conflict	Conflicts are consistently resolved through open discussion and compromise.	Members are generally able to resolve conflicts through open discussion and compromise.	Conflicts that arise are either not dealt with or cannot be resolved.

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	Level of Achievement		
Criteria	4	2	0
	Exemplary	Satisfactory	Unacceptable
Process Management			
Meeting Regularly	Weekly or biweekly meetings are scheduled and held at defined times.	Meetings are schedule sporadically to keep the project going.	Meetings are rare.
Establishing Goals	Realistic, prioritized, and measurable goals are agreed upon and documented.	Goals are established, but some may be too general or unquantifiable. Priorities may be unrealistic. Documentation may be incomplete	Clear goals are not formulated or documented.
Keeping Meeting Notes	Written minutes summarize attendance, discussions, and actions. Minutes are distributed electronically within two days of the meeting.	Minutes summarizing attendance, discussion, and actions are written and distributed but not consistently. Some minutes are more complete than others.	Minutes are either nonexistent or sketchy, containing little beyond attendance lists.
Adjusting	When working to achieve goals, the team is able to adjust plans as needs arise. There is a clear understanding of the nature of min-course corrections and why they were needed.	The team is not always able to adjust as needed to meet goals. Realization of the need for mid-course corrections sometimes comes too late.	The team seems to be thrashing about. Activity plans (if they exist) are unfocused, and thus there is no ability to adjust and make corrections.
Timely Submission of Work Assignments and Reports	Team is self-motivated and can complete work assignments and reports in a timely manner without being reminded.	Work assignments and reports are submitted but are sometimes late.	Work assignments and reports are submitted inconsistently. The team is no self-motivated and needs constant chasing to get the work submitted.

Jiles, Huba, Others. Material Sciences and Engineering, CRCD Project (8/24/00)

The effectiveness of each of the following in conveying the production's meaning or theme	Notes
Pace and rhythm	
Stage presence and business	
Stagecraft: Costume, lighting, set and sound designs	
Creative vision and risk-taking	
"Sparkle" and audience engagement	
Total integrated production effect	

A Structured Observation Guide for a One-Act Play

Suskie, L. (2009) Assessing Student Learning: A Common Sense Guide (2nd ed.). San Francisco: Jossey-Bass.

Rating Scale Example

Using information Effectively Assessment Program Scoring Guide for Student Assignments

Thank you for participating in Towson's assessment of student learning in the Using Information Effectively requirement of our General Education curriculum. Please see the attached memo for information on completing this scoring guide.

I. For which UIE course was this assignment completed?

O ART 100	O HISTIOO	O MCOM 100
O COMM 100	O IDHP 100	O MUSC 100
O COSC 111 OR 112	O IDHP I IO	O OCTH 211
O COSC 119	O IDLA 100	O PHIL 102
O DANC 220	0 IDNM 101	O POSC 100
O EMF 100	O INST 100	O PSYC 100
O ENGL 152 OR 153	O ISTC 201 OR 202	O SOCI 100
O GEOG 230	O LAST 100	O THEA 125 OR 126

Please indicate the student's skill in each of the following respects, as evidenced by the assignment, by darkening the appropriate bubble. If this assignment is not intended to elicit a particular skill, please fill in the "Not applicable" bubble.

-								
		Outstanding	Very good	Adequate	Marginally adequate	Inadequate	Not applicable	
2.	Identify potential sources of information related to this field of study.	0	0	0	0	0	0	
3.	Find information that's appropriate for and relevant to this field of study.	0	0	0	0	0	0	
4.	Use information to answer questions and/or solve problems.	Ο	0	0	Ο	0	0	
5.	Explain information and ideas clearly in writing.	Ο	Ο	0	0	0	0	
6.	Explain information and ideas clearly through oral communication.	Ο	0	0	0	0	0	
7.	Explain information and ideas clearly through visual communication (e.g., slides, Web site, poster).	0	0	0	0	0	0	
8.	Organize information in writing to present a sound central idea supported by relevant material in a logical order.	0	0	0	0	0	0	
9.	Organize information orally to present a sound central idea supported by relevant material in a logical order.	0	0	0	Ο	0	0	
10.	Organize information visually (e.g., through slides, Web site, poster) to present a sound central idea supported by relevant material in a logical order.	0	0	0	0	0	0	
11.	Use technology to analyze and summarize information and/or communicate it to others.*	0	0	0	0	0	0	
12.	Use the work of others accurately and ethically.	Ο	0	0	0	0	0	
13.	What grade are you awarding the assignment?	0	0	0	0	0	0	
14.	If you had to assign a final course grade for this student today, what would it be?	0	0	0	0	0	0	

*Technology can include word processing, spreadsheets, slides, Cook library online catalog, etc.

	Well Done (5)	Satisfactory (4-3)	Needs Improvement (2-1)	Incomplete (0)
Organization	Clearly, concisely written. Logical, intuitive progression of ideas & supporting information. Clear and direct cues to all information.	Logical progression of ideas & supporting information. Most cues to information are clear and direct.	Vague in conveying viewpoint and purpose. Some logical progression of ideas and supporting information, but cues are confusing or flawed.	Lacks a clear point of view and logical sequence of information. Cues to information are not evident.
Persuasiveness	Motivating questions & advance organizers convey main idea. Information is accurate.	Includes persuasive information.	Includes persuasive information with few facts.	Information is incomplete, out of date, and/or incorrect.
Introduction	Presents overall topic. Draws in audience with compelling questions or by relating to audience's interests or goals.	Clear, coherent, and related to topic.	Some structure but does not create a sense of what follows. May be overly detailed or incomplete. Somewhat appealing.	Does not orient audience to what will follow.
Clarity	Readable, well-sized fonts. Italics, boldface, and indentations enhance readability. Test is appropriate length. Background and colors enhance readability.	Sometimes fonts are readable, but in a few places fonts, italics, boldface, long paragraphs, color, or background detract.	Overall readability is difficult with lengthy paragraphs, too may fonts, dark or busy background, overuse of boldface, or lack of appropriate indentations.	Text is very difficult to read. Long blocks of text, small fonts, inappropriate colors, or poor use of headings, indentations, or boldface.
Layout	Aesthetically pleasing. Contributes to message with appropriate use of headings and white space.	Uses white space appropriately.	Shows some structure but is cluttered, busy or distracting.	Cluttered and confusing. Spacing and headings do not enhance readability.

A Descriptive Rubric for a Slide Presentation on Findings from Research Sources

Adapted with permission for a rubric developed by Patricia Ryan, Lecturer, Department of Reading, Special Education, and Instructional Technology, Towson University.