

- 4.2.7 How can the teacher create and use quality rubrics?



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How can the teacher create and use quality rubrics?

- **What is a rubric?**
 - Is a scoring guide for rating proficiencies and skills that is based on a full range of criteria instead of a single numerical score.
 - Is an authentic assessment tool...real life
 - Is performance-based
 - Can analyzed products or processes

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Tracks the speaker	never	rarely	sometimes	usually	always
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- **Why use a rubric?**
 - Provides teachers and students with a criteria to judge work.
 - Allows for discrimination between good and less quality work
 - Promotes the use of valid and reliable data.
 - Is a method to informing students of what is expected of them.

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- Allows students to know how to improve their performance based on a criteria.
- Can be used as a communication instrument between the school and home.
- Can be used at almost any level
 - (preschool – college)
 - Can be used with almost any subject
 - (i.e., writing, reading, math, science, etc.)

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• What are the types (characteristics) of rubrics?

- A. Analytic v. holistic
 - 1. Analytic rubrics
 - Assess parts of a finished product
 - Allows for detailed feedback
 - Is more reliable scoring across students
 - Can be time consuming
 - Use when you want to see abilities on a continuum
 - Use when you want to provide students with detailed feedback
 - Use when the behavior is complicated
 - Use when you want students to self-assess
 - Used most often by teachers

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	Criteria				Points
	1	2	3	4	
Organization	Sequence of information is difficult to follow.	Reader has difficulty following work because student jumps around.	Student presents information in logical sequence which reader can follow.	Information in logical, interesting sequence which reader can follow.	---
Content Knowledge	Student does not have grasp of information, student cannot answer questions about subject.	Student is uncomfortable with content and is able to demonstrate basic concepts.	Student is at ease with content, but fails to elaborate.	Student demonstrates full knowledge (more than required).	---
Grammar and Spelling	Work has four or more spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.	---
Neatness	Work is illegible.	Work has three or four areas that are sloppy.	Work has one or two areas that are sloppy.	Work is neatly done.	---
References	Work displays no references.	Work does not have the appropriate number of required references.	Reference section was completed incorrectly.	Work displays the correct number of references, written correctly.	---
				Total-->	---
Analytic rubric example: Writing Sample rubric developed through http://www.teach-nology.com/web_tools/rubrics/					7

	Criteria				Points
	4	3	2	1	
Voice	The student always uses a quiet voice.	The student frequently uses a quiet voice.	The student talks in a regular voice.	The student talks in a loud voice and may make extra noises.	---
Following Directions	The student follows directions immediately.	The student follows directions.	The student follows directions with a reminder.	The student follows directions when the teacher calls his/her name.	---
Cooperation With Others	The student uses polite words when he/she cooperates with partners.	The student cooperates with partner.	The student teases their partner a little.	The student picks on partner or teases their partner a lot.	---
Job Completion	The student gets the job done quietly and quickly.	The student gets the job done.	The student needs a reminder or help to get the job done.	The student does not get the job done and is off task.	---
Treatment Of Materials	The student treats materials with care.	The student treats most materials with care.	The student treats few materials with care.	The student throws or breaks materials.	---
				Total-->	---
Analytic rubric example: Cleaning Sample rubric developed through http://www.teach-nology.com/web_tools/rubrics/					8

	Criteria				Points
	4	3	2	1	
Letter Formation	Each letter is formed correctly.	All but 1 letter are formed correctly.	80% of the letters are formed correctly.	50% of the letters are formed correctly.	---
Letter Slant	All letters have a uniform slant.	All letters have a uniform slant with 1-3 exceptions.	All letters have a uniform slant with 4-6 exceptions.	Slant of letters vary from letter to letter.	---
Neatness	There are no extra visible marks or smudges on the paper.	There are 1-2 visible marks or smudges on the paper.	There are 3-5 visible marks or smudges on the paper.	There are more than 5 visible marks or smudges on the paper.	---
Relationship To Line	All letters are located correctly in relationship to the lines.	The size of 1-3 letters are slightly larger or smaller than the space allowed by the line.	The size of 4-6 letters are slightly larger or smaller than the space allowed by the line.	The size of more than 6 letters are slightly larger or smaller than the space allowed by the line.	---
				Total-->	---
Analytic rubric example: Penmanship Sample rubric developed through http://www.teach-nology.com/web_tools/rubrics/					9

- 2. Holistic rubrics
 - Assesses the entire product
 - Assesses performance across multiple criteria as a whole
 - An overall impression of student's work
 - Is a quick methods of scoring
 - Lacks detailed information
 - Use when you want a "snapshot" of student performance
 - Use when a single dimension of quality is acceptable

<p>3 - Excellent Researcher</p> <ul style="list-style-type: none"> • included 10-12 sources • no apparent historical inaccuracies • can easily tell which sources information was drawn from • all relevant information is included
<p>2 - Good Researcher</p> <ul style="list-style-type: none"> • included 5-9 sources • few historical inaccuracies • can tell with difficulty where information came from • bibliography contains most relevant information
<p>1 - Poor Researcher</p> <ul style="list-style-type: none"> • included 1-4 sources • lots of historical inaccuracies • cannot tell from which source information came • bibliography contains very little information
Holistic rubric example: Research Taken from http://jonathan.mueller.faculty.noctrl.edu/toolbox/rubrics.htm#descriptors

- B. General v. task specific
 - 1. General rubrics
 - Uses criteria that are general
 - Can be used across different tasks
 - Provides feedback that may not be specific enough
 - Used when you want to assess student reasoning
 - Used when students are working on different tasks

- 2. Task specific rubrics
 - Are uniquely prepared for specific tasks
 - Are more reliable for given tasks
 - Can be difficult to develop for all tasks
 - Used when you want to assess student knowledge
 - Used when you want more reliable and valid scores

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- How are rubrics developed?
 - 1. Determine the purpose and objectives of the rubric first
 - Clearly articulate what students are to learn.
 - Identify behavioral objectives to use in developing the rubric.

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- 2. Identify qualities for the highest score
 - Look at the products of previous students
 - Brainstorm with other teachers
 - List the dimensions or features of particular skills that are important
 - Use scope and sequences guides (district materials, textbooks, etc.) such as...

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- Reading
 - Summarize
 - Integrate
 - Synthesize ideas within and between texts
 - Use knowledge of text structure and genre to construct meaning:
 - main ideas
 - summaries
 - themes
 - interpretations
 - literacy devices
 - multiple perspectives
 - Identify and use reading strategies
 - Apply and transfer to new situations, problems, text
 - Contributing skills
 - decoding
 - structural
 - analysis
 - vocabulary
 - study skills
- (http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Create_Rubric/Step_1/Dimensions_of_Scoring/dimensions_of_scoring.html#math)

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- 3. Select analytic or holistic scoring
- 4. If analytic, develop scoring schemes for each factor.
 - Use a scale (continuum) from best to worst
 - 0=Unable to perform
 - 1=Beginning step (acquisition)
 - 2=Nearing proficiency (fluency building)
 - 3=Proficient (Maintenance)
 - 4=Advanced (Generalization)

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- 5. Define criteria for lowest level.
- 6. Contrast lowest and highest to develop middle level.
- 7. Contrast other levels for finer distinctions.
 - Determine the evidence you will observe performance.
 - Ensure that evidence is observable and measurable
 - Does it pass the "stranger test" where someone else will know the meaning of the scale?
- 8. Put the information on a grid and use it.

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– 9. Make modifications over time by asking yourself...

- Does the rubric directly measure what you want it to?
- Does the rubric cover important dimensions of student performance?
- Is the scale objective and free of bias?
- Is there a clear basis for assigning scores at each scale point?
- Can the rubric be understood by students and parents?
- Is the rubric useful, feasible, manageable and practical?
- Are all of the objectives measured through the scoring criteria?
- Is any of the scoring criteria unrelated to the objective?

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• Validity and reliability when using rubrics

– 1. Validity

- Is the process of collecting evidence to support the appropriateness of the inferences made by the assessment

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– Types of validity

- A. Content-related
- B. Construct
- C. Criterion
 - » (see Module 4, Session 1, Objective 3 for details)

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– A. Content related validity

- Does the rubric measure the content of interest?
- Does the rubric measure an adequate number of samples from the content domain?

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– B. Construct related validity

- Does the rubric measure the overall construct?
- Does the rubric measure only the construct of interest?
 - Unnecessary factors unrelated to the construct of interest should be eliminated

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– C. Criterion related validity

- Does the rubric assess performance on a given task that can be generalized to other, more relevant activities?
- Is the rubric assessing real world tasks?

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– D. Consequential evidence

- What will be the consequences of using this rubric?
- How will the use and interpretation of the rubric scores impact the lives of students?

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• Checking for the validity of rubrics

- 1. State the assessment purpose and the objectives
- 2. Develop scoring criteria for each objective
- 3. Reflect on the following:
 - Are all of the objectives measured through the scoring criteria?
 - Is any of the scoring criteria unrelated to the objective?

» (Checking for validity is integrated as one develops rubrics and is reflected in the previous materials.)

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– 2. Reliability of rubrics

- Reliability refers to how well the rubric provides consistent scores

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– Rater reliability

- A. Interrater reliability
 - Consistency of scores between two independent raters
 - Does the student receive the same score when assessed by two different raters using the same rubric?
- B. Intrarater reliability
 - Consistency of scores assigned by the same rater at different points in time
 - Does the student receive the same score when assessed by the same raters using the same rubric at different times?

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- How can the reliability of a rubric be increased?
 - 1. Develop behavioral definitions for all aspects of the rubric.
 - 2. Have independent raters use the rubric with the behavioral definitions.
 - 3. After the using the rubric, raters meet to discuss differences of interpretation
 - 4. Refine the rubric and behavioral definitions if necessary based on discussion.
 - 5. Repeat numbers 2-4 until consistency is reached.

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