RUBRICS & SCORING CRITERIA: GUIDELINES & EXAMPLES

C. Technical Requirements of Rubrics:

- <u>Continuous</u>: The change in quality from score point to score point must be "equal": the degree of difference between a 5 and 4 should be the same as between a 2 and a 1. The descriptors should reflect this continuity.
- 2. <u>Parallel:</u> Each descriptor should be constructed parallel to all of the others, in terms of the criterial language used in each sentence.
- 3. <u>Coherent:</u> The rubric must focus on the same criteria throughout. While the descriptor for each point on the scale will be different f rom the ones before and after, the changes should refer to the variance of quality for the (fixed) criteria, not language that explicitly or implicitly introduces new criteria or a shift in the importance of the various criteria.
- 4. <u>Aptly Weighted</u>: With multiple rubrics there must be an apt, not arbitrary weighting of each criterion in reference to the others.
- 5. <u>Valid:</u> The rubric permits valid inferences about performance to the degree that what is scored is what is central to performance, not what is merely easy to see and score. The proposed differences in quality should a) reflect task analysis and be based upon samples of work across the full range of performance, b) describe qualitative, not quantitative differences in performance, and c) not confuse merely correlative behaviors with actual authentic criteria. (e.g. many speakers use note cards, but using note cards or not using note cards should not be a criterion in judging relative success in speaking effectiveness. Rather, the rubric should enable assessment of the relative smoothness and informativeness of the presentation)
- 6. <u>Reliable:</u> The rubric enables consistent scoring across judges and time. Rubrics allow reliable scoring to the degree that evaluative language ("excellent," "poo

- 2. The logic of rubric design and refinement²
 - a. Establish a first-draft of the possible criteria to be used in scoring the work.
 - 1. The criteria derive from the achievement target: if the aim is "effective writing," then the criteria might be engaging, mindful of audience, clear, focused, effective voice, etc.
 - 2. There are different types of criteria, relating to different aspects of performance, that need to be considered in designing assessments.

™impact of performance	™work quality and	d [™] adequacy of methods
	craftsmanship	and behaviors
™validity	of content	™sophistication of
		knowledge
		employed

Work: Effective Performance

a. Impact of b. Craftsmanship: c. Adequacy of Work of High Quality

Craftsmanship refer to

Process & Behavior: Methodical Performance

Processes and behaviors refer to the quality of the procedures and manner of presentation, prior to and during performance: Was the student careful? Was

bf

d. Aptness of Material: Valid Content

e. Degree of Mastery: Sophistication of Knowledge Employed

Impact refers to the success of the work, given the purposes and goals: Was the desired result achieved? Was the problem solved? Was the dient satisfied? Was the audience engaged and informed? Was the dispute resolved? Did the speech persuade? Did the paper open minds to new possibilities? Was new knowledge created? In sum: Was the work effective?

the overall polish and rigor of the work's form or appearance: Was the speech organized? Was the paper mechanically sound? Was the argument justified? Was the chart dear? Did the story build and flow smoothly? Was the dance graceful? Did the poem scan properly? Was the proof logical? Was there a clear voice in the writing? Did form follow function? In sum: Was the performance or product of high quality?

the speaker using apt

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d. Begin by trying to

"impact of performance"	refers to the success of performance, given the purposes, goals and desired results
"work qualit y and craftsmanship"	refers to the overall polish, organization, and rigor of the work
"adequacy of methods and behaviors"	refers to the quality of the procedures and manner of presentation, prior to and during performance
"validity of content"	refers to the correctness of the ideas, skills, or materials used
" sophistication of knowledge	

- ‡ makes eye contact
- ‡ modulates voice pleasantly
- ‡ uses stories and humor appropriate to audience and context
- ‡ handles audience questions gracefully

F. Making Rubrics More Authentic:

Criteria should validly, not arbitrarily, distinguish different levels or degrees of quality performance. Authentic assessment would properly balance the impact of the work with an assessment of content and process.

A subtle version of arbitrariness involves the use of criteria that are <u>necessary</u>to good performance, <u>but not sufficient</u>. Consider the following criteria typically used to assess writing in many large-scale performance tests:

Organization	Sentence Constction
Usage/Word Choice	Mechanics
Focus	Voice

Compare those work quality criteria to the following four criteria related to impact:

1. An Exercise in Rubric Criteria Critique: "What is wrong he re?"

Consider: What are the stated and implied criteria for judging narrative here? Could a student meet these criteria without creating excellent narratives? What criteria are not mentioned but should be?

[from the National Assessment of Education Progress (NAEP) Portfolio Assessment (1992) A rubric used to judge the quality of stories in 4th and **§t**ade writings:]

Narrative Scoring Guide: 4th & 8th Grade Writing

G. Rubric Samples:

- 1. Holistic Rubrics
 - a. From an Advanced Placement U. S. History Essay Question

"I am not, nor have evereteen, in favor of bringing about in any way the social and political equality of the white and black races."

How can this 1858 statement by Abraham Lincoln be reconciled with his 1862 Emancipation Proclamation?

- 13-15 Clear argument regarding question of reconciliation; sophisticated understanding of Lincoln's views on race, and slavery; solid understanding of historical context of 1850's and 1860's (may emphasize one period); factual documentation may contain inconsequential errors.
- 10-12 Addresses question of reconciliation; understanding of Lincoln's views on race, slavery; understanding of historical context of 1850's and 1860's (may emphasize one period); factual documentation may contain minor errors.
- 7-9 Attempts to address question of reconciliation; discussion of Lincoln's views and historical context of 1850's and 1860's may be uneven; limited factual documentation; some errors.

4

c. Rubric for OperEnded Math Problem[sr om California CAP math report (1989)]

Demonstrated Competence

6 Exemplary Response: Gives a complete response with a clear, coherent, unambiguous, and

d. From the North Carolina State Department of Public Instruction, 10th grade writing assessment:

RUBRICS & SCORING CRITERIA

- 3 This response exhibits some progression of ideas and events and provides some elaboration and support. The elaboration may be flawed, but it has relevance to the requirements of the prompt. Papers scored "3" have generally organized pattern but contain minor flaws. The papers are generally coherent although minor weaknesses in coherence may be present. Although the se papers are focused on the prompt, some may not address all aspects of the prompt. Some papers may tend to summarize at times, and other may have a list-like quality but may have concrete, supporting details. In some responses, a sense of audience and persuasive tone may exist.
- 2 There is evidence that the writer has seen the prompt and responded to it, although the response may be unclear. Some responses may have little or no sense of connection between a controlling idea and supporting details rele vant to development. Other responses may have a sense of focus but may lose it. Some "2" responses may be extended lists or lists with some extension. The writer has some sense of organization, but the composition may be too sparse for a higher score point. Some of the compositions may not directly address all

e. Heritage High School (Littleton, Co.) SeniorEessay

(Using a reading prompt and scoring rubric from the Colorado State placement exam)

- 9-8 The upper range responses satisfy the following criteria:
 - a. Summarythe summary should identify main id ea [of the reading].
 - b. Focus of agreementAgreement and/or disagreement may be complete or partial but writer must make clear what he/she is agreeing/disagreeing with. Specifically, 8-9 papers must address author's thesis, not substance abuse gerrelly.
 - c. Support for agreement/dis
 - d. Style and coherend these papers demonstrate clear style, overall organization, and consecutiveness of thought. They contain few repeated errors in usage, grammar, or mechanics.
- 7 This grade is used for papers which fulfill basic requirements for the 9 -8 grade but have less development, support, or analysis.
- 6-5 Middle range papers omit or are deficient in one of these four criteria:
 - a. Summary- Summary absent or incomplete, listing only author's thesis
 - E) RFXV RIDJUHHPHQ/WW/at@he.w/mDeu/ls/abg/ree/inhg/Qiis%agreeing with is not clear

2. Analytic Trait Rubrics:

c. Mathematics Problem-Solving - from CLASS work in North Carolina

Criteria:

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‡ 0DWKHPDWLFDO,QVLJ ‡ $FFXUDF\

‡ 0DWKHPDWLFDO 5HDVF‡ 4XDOLW\ RI 3UHVHQWDV

‡ (IIHFWLYHQHVV ,QYH
Solution
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Mathematical Insight

- 5 Shows a sophisticated understanding of the underlying mathematics involved. The concepts, formulae, techniques, and/or tools used go beyond the uses typically found at this level of experience. Grasps the essence of the problem: applies mathematically apt and powerful tools to solving it. The work shows that the student is able to move from the particulars and generalize to models.
- 4 Shows a thorough understanding of the underlying mathematics involved. The concepts, formulae, techniques, and tools that are used are appropriate and adequate for solving the problem. Grasps the essence of the problem and applies mathematically apt tools to solving it.
- 3 Shows an adequate understanding of the underlying mathematics involved. Work reveals control over appropriate algorithms, formulae, concepts, etc. but has some difficulty in seeing beyond the particulars of the problem to more powerful and inclusive models, formulae, or generalizations. There may be gaps or an absence of some needed concepts, formulae, algorithms that are necessary for solving the problem, but they should be m inor.
- 2 Shows a limited understanding of the underlying mathematics involved. General

Math: Effectiveness and Inventiveness of Solution

- 5 The solution to the problem is effective and inventive. The essential details of the problem and the real-world context are fully addressed. The work reveals a clear understanding of how the "ideal" mathematical results may or may not be the most apt in the context of this problem: the real-world variables and implicit premises have been carefully and fully explored. The solution is creative in many possible ways: an unorthodox approach, the thoughtful juggling of conflicting variables, the bringing in of mathematics in ways not likely seen as apt by most students, etc.
- 4 The solution to the problem is effective. The details of the problem and the real-world context are clearly addressed. The work reveals a clear understanding of how the "ideal" mathematical results may or may not be the most apt in the context of this problem. Most, if not all ,of the real -world variables and implicit premises have been carefully and fully explored.
- 3 The solution to the problem is not fully effective. Some important assumptions and facts have not been considered in the solution and methods. EITHER the work does not reveal a clear understanding of how the "ideal" mathematical answer relates to the practical aspects and constraints of this context (the more obvious real-world variables ar e considered, but some implied variables are not addressed); OR the solution is ineffective as a result of the mathematical facts and principles involved not being used or understood. (An inventive but ineffective response should be given a "3".)
- 2 The solution to the problem is ineffective, due to weak mathematical understanding of the problem and/or weakness in relating the mathematical calculations and models to real-world constraints and considerations.
- 1 The solution to the problem is incomplete and ineffective.

Math: Accuracy of Written Work

(Note that <u>missing</u> formulae or reasoning are <u>not</u> scored here; they are scored in "mathematical knowledge" and "mathematical reasoning".)

- 5 The work is accurate throughout. All calculat ions are correct, provided to the proper degree of precision/measurement error, and properly labeled.
- 4 The work is mostly accurate and complete. All importu2(d)-2-3(er)3(l)5(y l)5(a)2(b)-3(el)5(1f 12

Math: Quality of Presentation

5 The student's performance is very persuasive and unusually well-presented. The essence of the research and the problems to be solved are summed up in a highly engaging and efficient manner, mindful of the audience, context, and the purpose of the presentation. There is obvious craftsmanship in the final product(s): effective use is made of supporting material (visuals, models, overheads, video, etc.) and of team members (where appropriate). The audience is confident that the presenter understands what he/she is talking about and understands the listeners' interests.

4 The student's performance is persuasive and well presented. The essence of the research and the problems to be solved are summed up in a clear manner, mindful of the audience, context, and purpose of the presentation. The products are thorough and clear, if lacking in some elegance or neatness. EITHER the use of supporting material

d. From Nyack, NY English Department "Writing Handbook 1994 -95".

CLARITY		5	4	3	2	1
STRUCTURE						
	Opening	Catches rea attention; introduces characters/ setting		Appropriate, bu catchy; introdu characters/set	ices	Inappropriate; does not introduce characters/setting
Mechanics	Sequence of Events	Clearly established relations between events		Unclear relationships between events		Events are confusing/out of order
	Closing	Completes the story effectively		Completes the satisfactorily	story	No real closing
	Grammar) H Z Q R grammatica errors		Some gramma errors	itical	Many grammatical errors
	Usage)HZQR errors	XVD	\$bi me usage e	rrors	Many usage errors
	Spelling)H Z Q R errors	VSH	Soonle Spelling	errors	Many spelling errors
	Neatness	Clearly writ no errors; t		Handwritten; s cross-outs; diff to read		Handwritten; many cross-outs very difficult to read
CONTENT						

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CONTENT (continued) U 6(2)		5	4	3	2	1
LANGUAGE	Purpose/ Audience	Language appropriate to purpose/ audience	appropria	nguage not ate to audience	Languaç appropri purpose	
	Details	Extensive, specific	;		teporno-	5(pr)B/a

DEVELOPING READER

- Step 7 Demonstrates understanding through discussion, re-telling, and/or extensions. May compare or contrast his/her experiences with story. May make connections with other literature. Makes predictions using book language and story structure. May read new text word by word but shows some evidence of phrasing. Self corrects most errors that interfere with meaning. Comments upon patterns, characters, plot and setting with prompts. Chooses new, as well as familiar books. Begins to analyze words and make connections (word family patterns, beginnings, endings compound words). Is moving toward independence.
- Step 8 Reads fluently with expression most of the time. Uses a variety of strategies when reading. Recognizes which errors are important to self-correct. Demonstrates understanding of material read in a variety of ways: discussion, re-tellings, changes in expressions, rate, inflection when reading aloud, and through book extensions. Makes good predictions using prior knowledge. Makes good use of reading time; often chooses to read. Views self as a reader; often takes risks. Usually selects appropriate reading materials. Makes some generalizations about patterns, characters, plot, setting, and genre. Retellings include some of the following elements: setting, sequence of events, main idea, characters, and conclusion.

EXCEPTIONAL READER

Step 9 Reads fluently with proper intonations and expression. Uses a wide variety of strategies automatically. Rarely makes miscues. Good comprehension of what is read. Demonstrates invo-1(e-1(o-1(d [(i2n)6(v)-1(o-1(e-111 q 120.6 400.2 44 Tm [n0 12 f

SCORING RUBRIC First Grade

STANDA RD:

Literacy: Reading

Students will be able to construct meaning when reading in all subject areas for the purposes of becoming inf ormed, performing a task, and enjoying literature.

INDICATOR :

Students will integrate reading strategies to bring meaning to written language and to analyze content.

	In Progress Pre-emergent Reader	Basic Emergent Reader	Proficient Early Reader	Advanced Fluent Reader	
Criteria: The specific behaviors, products, and qualities we look for in judging student work.	These characteristics indicate th e child is learning about communication: He/she takes an active part by listening and discussing stories. Can listen to stories. Knows how to turn pages. Demonstrates beginning of book. Demonstrates end of book. Uses pictures to help with words. Can rely on memory to retell. Uses pictures to tell story. Shows interest in books. Can name some letters. Can write name.	These characteristics indicate the child is learning that a book tells a story: Initiates reading. Can find cover, author, title, and titl e page. Knows first and last words in a sentence. Has left-to-right movement in sentence. Can identify a word in sentence. Can identify a letter in word. Has 1:1 correspondence. Can match words that are the same: here, went, this, we, here. Can recognize similarities in words: me, my, mouse. Can guess a caption for a picture. Can identify some high - frequency words. Knows how story begins and ends. Starting to decode words. Can rely on memory for reading	These characteristics indicate the child's becoming a reader by learning to read for meaning: Can sit for a while and read. Can use cueing strategies (meaning, structure, visual). Can take risks in reading. cory 4(g)-3(t)7(o d)-1 93d		.0003 Tc 0.0

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Level	Pupils should be able to:
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4	‡ 3URGXFH SLHFHV RI ZULWLQJ LQ ZKLFK WK to present subject matter in a structured way (e.g., title, paragraphs, verses); in which punctuation is generally accurate; and where evidence exists of ability to make meaning clear to readers.
	‡ : ULWH VWRULHV ZKLFK KDYH DQ RSHQLQJ of events and a resolution.
	2 U J D Q L-chiro Qo RogQcal writings in orderly ways.
	‡ % HJLQ WR XVH VRPH VHQWHQFH VWUXFWXU characteristic of speech (e.g., subordinate clauses).
	\$WWHPSW LQGHSHQGHQW UHYLVLQJ RI WKH the changes made.

‡ :ULWH LQ D YDULHW\ RI IRUPV H J QRW

Level Pupils Should Be Able to:

ULWH LQ D YDULHW \ Rplurp&selsP, showRogJsdDneUDQJH
 ability to present subject matter differently for different specified audiences.

‡ 0 D N H X V H R I O L W H U D U \ V W \ O L V W L F I H D W X U for emphasis or the deliberate repetition of words or sentence patterns.

[‡] 6 K R Z V R P H D E L O L W \ W R U H F R J Q L] H Z K H Q S and revising are appropriate, and to carry these processes out.

[‡] 3 U R G X Fstruc Zule Coprocess of writing, some of which handle more demanding subject-matter (e.g., going beyond first -hand experience).

‡ 0 D N H D P R U H D V V X U H G D Q G V H O H F W L Y H X V grammatical and lexical features appropriate for topic and audience...

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