
Developing and Using Rubrics for Assessing, Grading, and Improving Student Learning

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Scoring rubrics are explicit schemes for classifying products or behaviors into categories that vary along a continuum. They can be used to classify virtually any product or behavior, such as essays, research reports, portfolios, works of art, recitals, oral presentations, performances, and group activities. Judgments can be self-assessments by students; or judgments can be made by others, such as faculty, other students, fieldwork supervisors, and external reviewers. Rubrics can be used to provide formative feedback to students, to grade students, and/or to assess programs.

There are two major types of scoring rubrics:

- Holistic scoring — one global, holistic score for a product or behavior
 - Analytic rubrics — separate, holistic scoring of specified characteristics of a product or behavior
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Rubric Examples

- Holistic Critical Thinking Scoring Rubric (Facione & Facione)
 - Holistic Critical Thinking Rubric (Portland State University)
 - Critical Thinking Rubric (Northeastern Illinois University)
 - Scoring Guide for Critical Thinking (California State University, Fresno)
 - Information Competence (CA State University)
 - Generic Dance Rubric (University of Wisconsin-Milwaukee)
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**Holistic Critical Thinking Scoring Rubric
Facione and Facione**

4	<p>Consistently does all or almost all of the following:</p> <ul style="list-style-type: none"> 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. Draws warranted, judicious, non-fallacious conclusions. Justifies key results and procedures, explains assumptions and reasons. Fair-mindedly follows where evidence and reasons lead.
3	<p>Does most or many of the following:</p> <ul style="list-style-type: none"> Accurately interprets evidence, statements, graphics, questions, etc. Identifies relevant arguments (reasons and claims) pro and con. Offers analyses and evaluations of obvious alternative points of view. Draws warranted, non-fallacious conclusions. Justifies some results or procedures, explains reasons. Fair-mindedly follows where evidence and reasons lead.
2	<p>Does most or many of the following:</p> <ul style="list-style-type: none"> Misinterprets evidence, statements, graphics, questions, etc. Fails to identify strong, relevant counter-arguments. Ignores or superficially evaluates obvious alternative points of view. 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	<p>Consistently does all or almost all of the following:</p> <ul style="list-style-type: none"> Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others. Fails to identify or hastily dismisses strong, relevant counter-arguments. Ignores or superficially evaluates obvious alternative points of view. Argues using fallacious or irrelevant reasons, and unwarranted claims. Does not justify results or procedures, nor explain reasons. Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions. Exhibits close-mindedness or hostility to reason.

(c) 1994, Peter A. Facione, Noreen C. Facione, and The California Academic Press. 217 La Cruz Ave., Millbrae, CA 94030.

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Retrieved September 2, 2005 from http://www.insightassessment.com/pdf_files/rubric.pdf

Portland State University Studies Program Holistic Critical Thinking Rubric*

Inquiry and Critical Thinking Rubric

Students will learn various modes of inquiry through interdisciplinary curricula—problem posing, investigating, conceptualizing—in order to become active, self-motivated, and empowered learners.

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 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 lead.

4—Does most the following:

- Describes events, people, and places with some supporting details from the source.
- Make connections to sources, either personal or analytic.
- Demonstrates a basic ability to analyze, interpret, and formulate inferences.
- States or briefly includes 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:

- Respond 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 many or most 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.
- Does not justify results or procedures, nor explain reasons.
- Exhibits close-mindedness or hostility to reason.

X—No basis for scoring. (Use only for missing or malfunctioning portfolios.)

*taken verbatim from Stevens, D. D., & Levi, A. J. (2005). *Introduction to Rubrics*. Sterling, VA: Stylus, pp. 122-123

Northeastern Illinois University General Education Critical Thinking Rubric

Retrieved 3/2/05 from <http://www.neiu.edu/~neassess/gened.htm#rubric>

Quality Macro Criteria	No/Limited Proficiency (D&E)	Some Proficiency (C)	Proficiency (B)	High Proficiency (A)
1. Identifies & Explains Issues	Fails to identify, summarize, or explain the main problem or question. Represents the issues inaccurately or inappropriately.	Identifies main issues but does not summarize or explain them clearly or sufficiently	Successfully identifies and summarizes the main issues, but does not explain why/how they are problems or create questions	Clearly identifies and summarizes main issues and successfully explains why/how they are problems or questions; and identifies embedded or implicit issues, addressing their relationships to each other.
2. Distinguishes Types of Claims	Fails to label correctly any of the factual, conceptual and value dimensions of the problems and proposed solutions.	Successfully identifies some, but not all of the factual, conceptual, and value aspects of the questions and answers.	Successfully separates and labels all the factual, conceptual, and value claims	Clearly and accurately labels not only all the factual, conceptual, and value, but also those implicit in the assumptions and the implications of positions and arguments.
3. Recognizes Stakeholders and Contexts	Fails accurately to identify and explain any empirical or theoretical contexts for the issues. Presents problems as having no connections to other conditions or contexts.	Shows some general understanding of the influences of empirical and theoretical contexts on stakeholders, but does not identify many specific ones relevant to situation at hand.	Correctly identifies all the empirical and most of theoretical contexts relevant to all the main stakeholders in the situation.	Not only correctly identifies all the empirical and theoretical contexts relevant to all the main stakeholders, but also finds minor stakeholders and contexts and shows the tension or conflicts of interests among them.
4. Considers Methodology	Fails to explain how/why/which specific methods of research are relevant to the kind of issue at hand.	Identifies some but not all methods required for dealing with the issue; does not explain why they are relevant or effective.	Successfully explains how/why/which methods are most relevant to the problem.	In addition to explaining how/why/which methods are typically used, also describes embedded methods and possible alternative methods of working on the problem.
5. Frames Personal Responses and Acknowledges Other Perspectives	Fails to formulate and clearly express own point of view, (or) fails to anticipate objections to his/her point of view, (or) fails to consider other perspectives and position.	Formulates a vague and indecisive point of view, or anticipates minor but not major objections to his/her point of view, or considers weak but not strong alternative positions.	Formulates a clear and precise personal point of view concerning the issue, and seriously discusses its weaknesses as well as its strengths.	Not only formulates a clear and precise personal point of view, but also acknowledges objections and rival positions and provides convincing replies to these.

California State University, Fresno General Education Scoring Guide for Critical Thinking

Retrieved 3/2/05 from <http://www.csufresno.edu/cetl/assessment/CTScoring.doc>

Scoring Level	Interpretation	Analysis & Evaluation	Presentation
4 - Accomplished	Analyzes insightful questions Refutes bias Critiques content Examines inconsistencies Values information	Examines conclusions Uses reasonable judgment Discriminates rationally Synthesizes data Views information critically	Argues succinctly Discusses issues thoroughly Shows intellectual honesty Justifies decisions Assimilates information
3 - Competent	Asks insightful questions Detects bias. Categorizes content. Identifies inconsistencies Recognizes context	Formulates conclusions Recognizes arguments Notices differences Evaluates data Seeks out information	Argues clearly Identifies issues Attributes sources naturally Suggests solutions Incorporates information
2 - Developing	Identifies some questions Notes some bias Recognizes basic content States some inconsistencies Selects sources adequately	Identifies some conclusions Sees some arguments Identifies some differences Paraphrases data Assumes information valid	Misconstructs arguments Generalizes issues Cites sources Presents few options Overlooks some information
1 - Beginning	Fails to question data Ignores bias Misses major content areas Detects no inconsistencies Chooses biased sources	Fails to draw conclusions Sees no arguments Overlooks differences Repeats data Omits research	Omits argument Misrepresents issues Excludes data Draws faulty conclusions Shows intellectual dishonesty

Rubrics for Assessing Information Competence in the California State University

ACRL Standard	Beginning	Proficient	Advanced
1. Determine the Extent of the Information Needed	Student is unable to effectively formulate a research question based on an information need.	Student can formulate a question that is focused and clear. Student identifies concepts related to the topic, and can find a sufficient number of information resources to meet the information need.	Question is focused, clear, and complete. Key concepts and terms are identified. Extensive information sources are identified in numerous potential formats.
2. Access the Needed Information Effectively and Efficiently	Student is unfocused and unclear about search strategy. Time is not used effectively and efficiently. Information gathered lacks relevance, quality, and balance.	Student executes an appropriate search strategy within a reasonable amount of time. Student can solve problems by finding a variety of relevant information resources, and can evaluate search effectiveness.	Student is aware and able to analyze search results, and evaluate the appropriateness of the variety of (or) multiple relevant sources of information that directly fulfill an information need for the particular discipline,
3. Evaluate Information and its Sources Critically	Student is unaware of criteria that might be used to judge information quality. Little effort is made to examine the information located	Student examines information using criteria such as authority, credibility, relevance, timeliness, and accuracy, and is able to make judgments about what to keep and what to discard.	Multiple and diverse sources and viewpoints of information are compared and evaluated according to specific criteria appropriate for the discipline. Student is able to match criteria to a specific information need, and can articulate how identified sources relate to the context of the discipline.
4. Use Information Effectively to Accomplish a Specific Purpose	Student is not aware of the information necessary to research a topic, and the types of data that would be useful in formulating a convincing argument. Information is incomplete and does not support the intended purpose.	Student uses appropriate information to solve a problem, answer a question, write a paper, or other purposes	Student is aware of the breadth and depth of research on a topic, and is able to reflect on search strategy, synthesize and integrate information from a variety of sources, draw appropriate conclusions, and is able to clearly communicate ideas to others
5. Understand the Economic, Legal, and Social Issues surrounding the Use of Information, and Access and Use Information Ethically and Legally	Student is unclear regarding proper citation format, and/or copies and paraphrases the information and ideas of others without giving credit to authors. Student does not know how to distinguish between information that is objective and biased, and does not know the role that free access to information plays in a democratic society.	Student gives credit for works used by quoting and listing references. Student is an ethical consumer and producer of information, and understands how free access to information, and free expression, contribute to a democratic society.	Student understands and recognizes the concept of intellectual property, can defend him/herself if challenged, and can properly incorporate the ideas/published works of others into their own work building upon them. Student can articulate the value of information to a free and democratic society, and can use specific criteria to discern objectivity/fact from bias/propaganda.

*Prepared by the CSU Information Competence Initiative, October 2002, based on the 2000 ACRL *Information Literacy Competency Standards For Higher Education*. For more information, see http://www.calstate.edu/LS/1_rubric.doc.

GENERIC DANCE RUBRIC ASSESSING SKILL DEVELOPMENT*

Use of Performance Skills

Novice

When performing basic locomotor and axial movement dancers show:

- undefined placement within spatial design
- limited response to rhythmic structure & tempo changes
- minimal range of dynamics and movement qualities
- sporadic concentration

Apprentice

When performing basic locomotor and axial movement dancers show:

- clear response to rhythmic structure & tempo changes
- moderate range of dynamics and movement qualities
- concentration & focus

Proficient

When performing moderately challenging movement, dancers show:

- Same as Apprentice

Advanced

When performing moderately challenging movement, dancers show:

- complexity and variety of spatial elements
- clear response to a variety of rhythmic structures & tempo changes
- broad range of dynamics and movement
- projected concentration & focus

Distinguished

When performing technically challenging movement, dancers amplify the composition by showing:

- projected artistic expression
- clarity of purpose
- sensitive stylistic nuance and phrasing

Use of Compositional Elements

Novice

In choreographing phrases, dancers show:

- minimal demonstration of the principles of space, time, and energy
- limited body movement

Apprentice

In choreographing phrases or pieces, dancers show:

- changes in use of space, time, and energy
- basic form of beg, mid, end

Proficient

In choreographing pieces, dancers show:

- purposeful approach to space, time, and energy
- forms such as ABA, rondo, canon, theme and variation
- personal expression & full body involvement

Advanced

In choreographing pieces, dancers show:

- complexity and variety of spatial elements
- forms integral to the expression of the piece
- full body movement that clearly expresses the choreographic intent

Distinguished

In choreographing pieces, dancers demonstrate sophisticated compositional awareness by showing:

- aesthetically effective use of space, time, energy, and form
- facility in use of abstract as well as literal expressions of a theme
- powerful, clear personal expression

*Rubric shared by Connie M. Schroeder, University of Wisconsin-Milwaukee on the POD listserv, April 14, 2008.

Rubrics have many strengths:

- Complex products or behaviors can be examined efficiently.
 - Developing a rubric helps to precisely define faculty expectations.
 - Well-trained reviewers apply the same criteria and standards.
 - Rubrics are criterion-referenced, rather than norm-referenced. Raters ask, “Did the student meet the criteria for level 5 of the rubric?” rather than “How well did this student do compared to other students?” This is more compatible with cooperative and collaborative learning environments than competitive grading schemes and is essential when using rubrics for program assessment because you want to learn how well students have met your standards.
 - Ratings can be done by students to assess their own work, or they can be done by others, e.g., peers, fieldwork supervisions, or faculty.
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Rubrics can be useful for grading, as well as assessment.

Rubrics can be useful for grading, as well as assessment. For example, points can be assigned and used for grading, as shown below, and the categories can be used for assessment. Faculty who share an assessment rubric might assign points in different ways, depending on the nature of their courses, and they might decide to add more rows for course-specific criteria or comments.

Notice how this rubric allows faculty, who may not be experts on oral presentation skills, to give detailed formative feedback to students. This feedback describes present skills and indicates what they have to do to improve. Effective rubrics can help faculty reduce the time they spend grading and eliminate the need to repeatedly write the same comments to multiple students.

Analytic Rubric for Grading Oral Presentations				
	Below Expectation	Satisfactory	Exemplary	Score
Organization	No apparent organization. Evidence is not used to support assertions. (0-4)	The presentation has a focus and provides some evidence which supports conclusions. (5-6)	The presentation is carefully organized and provides convincing evidence to support conclusions. (7-8)	
Content	The content is inaccurate or overly general. Listeners are unlikely to learn anything or may be misled. (0-8)	The content is generally accurate, but incomplete. Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic. (9-11)	The content is accurate and complete. Listeners are likely to gain new insights about the topic. (12-13)	
Delivery	The speaker appears anxious and uncomfortable, and reads notes, rather than speaks. Listeners are largely ignored. (0-5)	The speaker is generally relaxed and comfortable, but too often relies on notes. Listeners are sometimes ignored or misunderstood. (6-7)	The speaker is relaxed and comfortable, speaks without undue reliance on notes, and interacts effectively with listeners. (8-9)	
Total Score				

Alternative Format 1

Weights are used for grading; categories (Below Expectation, Satisfactory, Exemplary) are used for assessment. Individual faculty determine how to assign weights for their course grading.

Faculty may circle or underline material in the cells to emphasize criteria that were particularly important during the assessment/grading, and they may add a section for comments.

Analytic Rubric for Grading Oral Presentations				
	Below Expectation	Satisfactory	Exemplary	Weight
Organization	No apparent organization. Evidence is not used to support assertions.	The presentation has a focus and provides some evidence which supports conclusions.	The presentation is carefully organized and provides convincing evidence to support conclusions	30%
Content	The content is inaccurate or overly general. Listeners are unlikely to learn anything or may be misled.	The content is generally accurate, but incomplete. Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic.	The content is accurate and complete. Listeners are likely to gain new insights about the topic.	50%
Delivery	The speaker appears anxious and uncomfortable, and reads notes, rather than speaks. Listeners are largely ignored.	The speaker is generally relaxed and comfortable, but too often relies on notes. Listeners are sometimes ignored or misunderstood.	The speaker is relaxed and comfortable, speaks without undue reliance on notes, and interacts effectively with listeners.	20%
Comments				

Alternative Format 2

The faculty member checks off characteristics of the speech and determines the grade based on a holistic judgment. The categories (Below Expectation, Satisfactory, Exemplary) are used for assessment. Individual faculty might add scores or score ranges (see original example) or a “Weight” column (see Alternative Format 1) for grading purposes.

Analytic Rubric for Grading Oral Presentations			
	Below Expectation	Satisfactory	Exemplary
Organization	<ul style="list-style-type: none"> <input type="checkbox"/> No apparent organization. <input type="checkbox"/> Evidence is not used to support assertions. 	<ul style="list-style-type: none"> <input type="checkbox"/> The presentation has a focus. <input type="checkbox"/> Student provides some evidence which supports conclusions. 	<ul style="list-style-type: none"> <input type="checkbox"/> The presentation is carefully organized. <input type="checkbox"/> Speaker provides convincing evidence to support conclusions
Content	<ul style="list-style-type: none"> <input type="checkbox"/> The content is inaccurate or overly general. <input type="checkbox"/> Listeners are unlikely to learn anything or may be misled. 	<ul style="list-style-type: none"> <input type="checkbox"/> The content is generally accurate, but incomplete. <input type="checkbox"/> Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic. 	<ul style="list-style-type: none"> <input type="checkbox"/> The content is accurate and complete. <input type="checkbox"/> Listeners are likely to gain new insights about the topic.
Delivery	<ul style="list-style-type: none"> <input type="checkbox"/> The speaker appears anxious and uncomfortable. <input type="checkbox"/> Speaker reads notes, rather than speaks. <input type="checkbox"/> Listeners are largely ignored. 	<ul style="list-style-type: none"> <input type="checkbox"/> The speaker is generally relaxed and comfortable. <input type="checkbox"/> Speaker too often relies on notes. <input type="checkbox"/> Listeners are sometimes ignored or misunderstood. 	<ul style="list-style-type: none"> <input type="checkbox"/> The speaker is relaxed and comfortable. <input type="checkbox"/> Speaker speaks without undue reliance on notes. <input type="checkbox"/> Speaker interacts effectively with listeners.

Alternative Format 3

Combinations of Various Ideas. As long as the nine assessment cells are used in the same way by all faculty, grading and assessment can be done simultaneously.

Analytic Rubric for Grading Oral Presentations				
	Below Expectation 1	Satisfactory 2	Exemplary 3	Weight
Organization	<ul style="list-style-type: none"> ❑ No apparent organization. ❑ Evidence is not used to support assertions. 	<ul style="list-style-type: none"> ❑ The presentation has a focus. ❑ Speaker provides some evidence which supports conclusions. 	<ul style="list-style-type: none"> ❑ The presentation is carefully organized. ❑ Speaker provides convincing evidence to support conclusions 	20%
Content	<ul style="list-style-type: none"> ❑ The content is inaccurate or overly general. ❑ Listeners are unlikely to learn anything or may be misled. 	<ul style="list-style-type: none"> ❑ The content is generally accurate, but incomplete. ❑ Listeners may learn some isolated facts, but they are unlikely to gain new insights about the topic. 	<ul style="list-style-type: none"> ❑ The content is accurate and complete. ❑ Listeners are likely to gain new insights about the topic. 	40%
Delivery	<ul style="list-style-type: none"> ❑ The speaker appears anxious and uncomfortable. ❑ Speaker reads notes, rather than speaks. ❑ Listeners are largely ignored. 	<ul style="list-style-type: none"> ❑ The speaker is generally relaxed and comfortable. ❑ Speaker too often relies on notes. ❑ Listeners are sometimes ignored or misunderstood. 	<ul style="list-style-type: none"> ❑ The speaker is relaxed and comfortable. ❑ Speaker speaks without undue reliance on notes. ❑ Speaker interacts effectively with listeners. 	20%
References	<ul style="list-style-type: none"> ❑ Speaker fails to integrate journal articles into the speech. 	<ul style="list-style-type: none"> ❑ Speaker integrates 1 or 2 journal articles into the speech. 	<ul style="list-style-type: none"> ❑ Speaker integrates 3 or more journal articles into the speech. 	20%

Suggestions for Using Rubrics in Courses

1. Hand out the grading rubric with the assignment so students will know your expectations and how they'll be graded. This should help students master your learning outcomes by guiding their work in appropriate directions.
2. Use a rubric for grading student work and return the rubric with the grading on it. Faculty save time writing extensive comments; they just circle or highlight relevant segments of the rubric. Some faculty include room for additional comments on the rubric page, either within each section or at the end.
3. Develop a rubric with your students for an assignment or group project. Students can then monitor themselves and their peers using agreed-upon criteria that they helped develop. Many faculty find that students will create higher standards for themselves than faculty would impose on them.
4. Have students apply your rubric to some sample products before they create their own. Faculty report that students are quite accurate when doing this, and this process should help them evaluate their own products as they are being developed. The ability to evaluate, edit, and improve draft documents is an important skill.
5. Have students exchange paper drafts and give peer feedback using the rubric, then give students a few days before the final drafts are turned in to you. You might also require that they turn in the draft and scored rubric with their final paper.
6. Have students self-assess their products using the grading rubric and hand in the self-assessment with the product; then faculty and students can compare self- and faculty-generated evaluations.

Rubric Category Labels

- Unacceptable, Developing, Acceptable, Exemplary
- Unacceptable, Marginal, Meets Expectations, Exceeds Expectations
- Novice, Developing, Proficient, Expert
- Beginner, Developing, Accomplished, Mastery
- Below Basic, Basic, Proficient, Advanced (AAC&U Board of Directors, *Our Students Best Work*, 2004)

Creating a Rubric

1. Adapt an already-existing rubric.
 2. Analytic Method
 3. Expert-Systems Method
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Managing Group Readings

1. One reader/document.
 2. Two independent readers/document, perhaps with a third reader to resolve discrepancies.
 3. Paired readers.
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Before inviting colleagues to a group reading,

1. Develop and pilot test the rubric.
 2. Select exemplars of weak, medium, and strong student work.
 3. Develop a system for recording scores.
 4. Consider pre-programming a spreadsheet so data can be entered and analyzed during the reading and participants can discuss results immediately.
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Inter-Rater Reliability

- Correlation Between Paired Readers
 - Discrepancy Index
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Scoring Rubric Group Orientation and Calibration

1. Describe the purpose for the review, stressing how it fits into program assessment plans. Explain that the purpose is to assess the program, not individual students or faculty, and describe ethical guidelines, including respect for confidentiality and privacy.
2. Describe the nature of the products that will be reviewed, briefly summarizing how they were obtained.
3. Describe the scoring rubric and its categories. Explain how it was developed.
4. Explain that readers should rate each dimension of an analytic rubric separately, and they should apply the criteria without concern for how often each category is used.
5. Give each reviewer a copy of several student products that are exemplars of different levels of performance. Ask each volunteer to independently apply the rubric to each of these products, and show them how to record their ratings.
6. Once everyone is done, collect everyone's ratings and display them so everyone can see the degree of agreement. This is often done on a blackboard, with each person in turn announcing his/her ratings as they are entered on the board. Alternatively, the facilitator could ask raters to raise their hands when their rating category is announced, making the extent of agreement very clear to everyone and making it very easy to identify raters who routinely give unusually high or low ratings.
7. Guide the group in a discussion of their ratings. There will be differences, and this discussion is important to establish standards. Attempt to reach consensus on the most appropriate rating for each of the products being examined by inviting people who gave different ratings to

explain their judgments. Usually consensus is possible, but sometimes a split decision is developed, e.g., the group may agree that a product is a “3-4” split because it has elements of both categories. You might allow the group to revise the rubric to clarify its use, but avoid allowing the group to drift away from the learning outcome being assessed.

8. Once the group is comfortable with the recording form and the rubric, distribute the products and begin the data collection.
 9. If you accumulate data as they come in and can easily present a summary to the group at the end of the reading, you might end the meeting with a discussion of five questions:
 - a. Are results sufficiently reliable?
 - b. What do the results mean? Are we satisfied with the extent of student learning?
 - c. Who needs to know the results?
 - d. What are the implications of the results for curriculum, pedagogy, or student or faculty support services?
 - e. How might the assessment process, itself, be improved?
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Standards: How Good Is Good Enough?

Examples:

1. We would be satisfied if at least 80% of the students are at level 3 or higher.
 2. We would be satisfied if no more than 5% of students are at level 1 and at least 80% are at level 3.
-